The recently completed statewide Historic Bridge Inventory resulted in evaluations of National Register eligibility for over 6,000 bridges built prior to 1961. During the early phase of the project, a group of bridges on the 5-Year Capital Program was identified and excluded from the inventory. Since that time, many of these bridges were individually evaluated; however other bridges that were subsequently taken off the program remain unevaluated. Additional bridges may be unevaluated due to an excluded owner (e.g. railroad), or if identified by the Historic Bridge Database under exclusion code “21: needs individual assessment”.

Information collected for individual bridges as part of the Historic Bridge Inventory is available through the NYSDOT database for the Bridge Inventory and Inspection System known as WinBolts. Cultural Resource Coordinators have access to WinBolts either on their desktop, or through the Regional Structures Engineer, and can provide historic bridge data to the New York State Museum and other consultants as needed. Data for over 10,000 pre-1961 bridges is displayed on the Historic card. Evaluated bridges will have a code of “1-Eligible” or “2-Not Eligible” in the Historic Determination field at the top left of the screen, and an exclusion code, at top right, of “NA”. Unevaluated bridges will be indicated by code “3” in the Historic Determination field, along with a reason for exclusion. Please note that the “Historical Significance” field on the WinBolts Identification card does not always correspond to the Historic Bridge Inventory determination, and should not be used as a source for eligibility status.

These guidelines summarize procedures to apply the methodology developed under the Historic Bridge Inventory to assess individual National Register eligibility. Evaluation within the context of bridge type and sub-group is explained in greater detail in the report, Evaluation of National Register Eligibility (January 2002).

E = Consider eligible unless there is a significant integrity problem

COLLECT DATA FOR HISTORIC BRIDGE
► Identify Unevaluated bridge (WinBolts Historic card, Historic Determination = 3; bridges with Exclusion Codes 1, 6, 7, 8, 9, 10, 15, 19, and 20 do not require separate evaluation)
► Gather data from WinBolts: Year built, bridge type, span length, material, etc. are found on Identification, Structural Details, and Spans Inventory cards)
► Conduct field investigation as part of Cultural Resources Screening or Survey
► Photograph bridge (35 mm, 4”x6” color prints); note historic integrity, setting, bridge plate information

ANALYZE BRIDGE WITHIN SUBGROUP
Identify Bridge Type / Subgroup and Year Built
Arch Bridges
► Concrete Arches (deck and half-through)
► Masonry - E
► Steel - E
Beam and Girder Bridges
► Jack arches
► Plate girders
► Rigid frames
► Rolled beams
► Slabs
► T-Beams
► Timber beams
Movable Bridges
- Bascule - E
- Lift - E
- Retractile - E
- Swing - E

Truss Bridges
- Common: Pratt and Warren
- Uncommon - E: Baltimore, Bowstring Arch, Camelback, King Post, Lenticular, Parker, Pennsylvania,
  Unusual Configurations

Suspension Bridges - E

**Does the bridge represent a rare or uncommon type?**
The following sub-types are relatively rare, and should be considered eligible unless they have a significant integrity problem:
- Open spandrel concrete deck arch - E
- Half-through concrete arch - E
- Steel arch - E
- Movable - E
- Suspension - E
- Uncommon truss types - E

**Assess Historic Integrity**
To be eligible, a bridge must have sufficient historic integrity to convey its particular significance. An uncommon bridge type or rare surviving example of a type may have alterations and still be eligible, provided that the bridge retains the essential characteristics that convey its historic identity (e.g. 19th century stone arch; King Post Truss).

Alterations that may affect the integrity of historic bridges include:
- replacement of original rail or parapet
- replacement of main structural members
- adding non-original, main structural members
- widening a bridge with new structural members
- adding a concrete veneer to the original masonry superstructure
- in-filling the underside of an arch rib or girder
- removing main members that were integral to the superstructure
- removing the superstructure
- lengthening a superstructure with additional spans

**Were bridge plans standardized?**
For bridge types associated with standardized plans, determine if the bridge pre-dates the standardization period.

Standardized plans were developed for the following bridge types:

- Concrete arch
  Standardized plans for concrete arch bridges were developed ca. 1911 and came into widespread use in 1926. Filled spandrel deck arches built before 1911 (prior to standardization) or ca. 1911-26 (the early period of standardization) should be considered eligible unless they have a significant integrity problem. Post-1925 filled spandrel deck arches would not be eligible unless they possess special features.

  Due to their relatively small numbers, both pre- and post-standardized open spandrel deck arches and half-through arches would be eligible unless they have a significant integrity problem.
Beams/girders

Pre-1929 Beam and Girder bridges
Following 1908, standardized plans were used with increasing frequency statewide and had taken
firm hold by 1930. The date of standardization varies by subgroup: Jack arches 1920s; plate
girders, rolled beams, and slabs, 1909; T-beams 1910. Pre-standardized bridges that retain their
historic integrity may be eligible as uncommon or innovative examples, or as representative of the
evolution of the type.

Post-1929 Beam and Girder bridges
The implementation of standardized plans resulted in a large group of bridges that vary little from
each other. Due to the ubiquity of post-1929 beam and girder bridges, they would be not eligible
unless they possess a special feature or warrant special consideration for the following: bridges
with historical associations; bridges with high artistic value; box girders (standardized after 1929);
cantilever spans; continuous spans; prestressed concrete T-beams.

Pratt and Warren trusses
Standardization of plans for Pratt and Warren truss bridges began in 1908, and by 1926, were in
widespread use throughout the state. As examples of pre-standardized or early standardized
design, Pratt and Warren trusses built prior to 1926 would be eligible unless they have a significant
integrity problem. Post-1925 Pratt and Warren trusses show little variation and are considered not
eligible unless there is a significant variation, historical association, or high artistic value.

Does the bridge exhibit significant variations?
- multiple spans
- cantilever spans (beam and girder)
- continuous spans (beam and girder)
- prestressed concrete

Does the bridge exhibit artistic value or aesthetic treatment?
Aesthetic features may enhance a bridge’s potential for National Register eligibility. Examples of aesthetic
treatments that are present in the bridge population include:
- decorative portal
- decorative rail or parapet
- decorative panels
- masonry veneer
- decorative arch
- decorative tower or cable stays
- decorative lighting
- concrete modillions or added features

Does the bridge have any Special Recognition factors?
These factors may contribute to potential eligibility under National Register Criteria A-1 or A-2.
- Historical association
  - Depression-era funding
  - association with an individual, memorial, or bridge marker
- Considered historically important by local community
  - town/county historian, local historical society, preservation or “friends” groups
- Distinctive features or trends
  - construction material such as timber or prestressed concrete
  - support system such as cantilevered
**APPLY NATIONAL REGISTER CRITERIA**

- Evaluate National Register eligibility within context of subgroup
  Eligible bridges should meet one or more of the following criterion:
  - A-1: associated with historic event(s) or activities
  - A-2: associated with historic trends
  - C-3: represents the work of a master
  - C-4: possesses high artistic value
  - C-5: demonstrates pattern of features common to a particular bridge type
  - C-6: demonstrates individuality or variation of features within bridge type
  - C-7: demonstrates evolution of a particular bridge type

- Consider whether the bridge may contribute to an eligible historic district

**DOCUMENTATION**

- Eligible bridges: Complete NYSDOT Bridge Inventory Form
  - Cultural Resources Screening - CRC should complete form; follow screening procedures
  - Cultural Resources Survey - SED should complete form; include in CRS Report
  - Example of Suggested Wording: Applying the methodology of the 2002 Historic Bridge Inventory, BIN 2226120 is eligible under National Register Criteria A-1, C-4, and C-6. Built in 1936, this multi-span, open spandrel concrete deck arch represents a significant variation of an uncommon bridge type. The decorative lighting and parapets represent high artistic value that enhance the design. The bridge is also significant for its association with historic events through Depression-era funding for construction.

- Not Eligible bridges: No form needed
  - Cultural Resources Screening - follow screening procedures
  - Cultural Resources Survey - include photograph only with other buildings / structures recommended Not Eligible
  - Example of Suggested Wording: Based on an application of the methodology developed for the 2002 Historic Bridge Inventory, BIN 1045680 is Not Eligible. Built in 1938, this Jack Arch bridge post-dates the implementation of standardized plans, and lacks a significant historical association or aesthetic treatment to distinguish it from the large population of this type.

**SOURCES**

WinBolts Historic Card / Historic Bridge Database (see attached sample)

*Evaluation of National Register Eligibility: Task C3 of the Historic Bridge Inventory and Management Plan.*
Prepared for the New York State Department of Transportation and Federal Highway Administration by Mead & Hunt, Inc.
BRIDGE INVENTORY FORM
NEW YORK STATE DEPARTMENT OF TRANSPORTATION
DATE:________________________  PIN:________________________BIN:__________________

PREPARER/ AFFILIATION:_____________________________________________________________________

EVALUATION APPLYING METHODOLOGY OF NYSDOT 2002 HISTORIC BRIDGE INVENTORY
National Register Eligible _____   National Register Criteria ____________________      Not Eligible ____

IDENTIFICATION
1. BRIDGE NAME(S): (if known) _____________________________________________________
2. TOWN/CITY/VILLAGE (MCD): ______________________HAMLET:________________________
3. COUNTY:________________________________________________________________________
4. FEATURE CARRIED (street, route no., railroad): _________________________________________
5. FEATURE CROSSED (river, highway, railroad): __________________________________________
6. YEAR BUILT: ________________________

DESCRIPTION
7. BRIDGE TYPE: ____________________________________________________________________
7a. Number of Spans: ______________        7b. Length of Span(s): ________________________________
8. STRUCTURAL MATERIAL: a. timber __    b. stone__   c. steel __   d. concrete __   e. cast/ wrought iron __   f. other ___
8a. Abutment Material:  concrete__   stone faced__   laid-up stone ___   other______________________________
9. PHOTOS: (see attached)
10. INTEGRITY:   a. list major alterations and dates (if known):
   b. previous use ____________________      c. moved__      if so, when? ______________
11. RELATED BUILDINGS AND PROPERTY (check more than one if necessary):   a. power house __   b. railroad station __
   c. bridge operators house __    d. landscape features (specify) (i.e. stone walls, light standards) ________________________
   e. other ______________________
12. BRIDGE SURROUNDINGS (check more than one if necessary):   a. open land__   b. woodland__   c. scattered buildings__
   d. densely built-up__  e. commercial__  f. industrial__   g. residential__  h. potentially eligible historic district ____   i. other___
13. OTHER NOTABLE BRIDGE FEATURES (e.g. aesthetic treatment, multiple spans, cantilevered):

14. HISTORIC IMPORTANCE/ ASSOCIATION (include plate information):  Engineer or builder __________________________

15. LOCATION MAP: (see attached) 9/9/02