



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

December 18, 1995

NBIS Bridge Inspection Interval

COUNTY ENGINEERS/SUPERINTENDENT OF HIGHWAYS
MUNICIPAL ENGINEERS
CONSULTING ENGINEERS

#95-17

The Department has obtained approval from the Federal Highway Administration to allow a 48-month interval between the routine NBIS inspections for selected bridges. The inspection interval for all other bridges will remain at 24 months. Generally, eligibility for the extended inspection interval will be applied to multi-beam and slab type structures that are in good condition. The specifics of the 4-year inspection eligibility are documented on the attached sheets titled, "NBIS Maintenance Inspections".

The intent of this new policy is to allow highway agencies to focus greater attention on structures that may be of concern from a safety and maintenance perspective. This will be achieved through an overall reduction in the amount of time bridge inspectors spend inspecting structures that are in good condition.

Approximately 6,200 local agency structures statewide are affected by this new policy. Lists of the bridges that currently qualify for the extended inspection interval are being sent to each District Bureau of Local Roads and Streets with this letter and will be forwarded to the affected local agencies by the district. The determination of eligibility for each structure will be made automatically each time the inspection information in the Illinois Structure Information System is updated.

Questions may be directed to your district office or to Tim Souther of the Local Bridge Unit, phone 217/785-8748.

Very truly yours,

A handwritten signature in cursive script that reads "Ralph E. Anderson".

Ralph E. Anderson
Engineer of Bridges and Structures

TES/bb11127

cc- District Engineers

Illinois Department of Natural Resources

Illinois Toll Commission

Metropolitan Water Reclamation District of Greater Chicago

FHWA, Illinois Division - Attn: Dan Brydl

NBIS MAINTENANCE INSPECTIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION

All bridges with an opening of 6.1 meters (20.1 feet) or more, face to face of abutments, on roads open to public travel, will receive a Safety Inspection in accordance with the National Bridge Inspection Standards (NBIS). Coding of inventory and inspection items is according to the guidelines of the Illinois Structure Information System (ISIS) as indicated in the Structure Information and Procedure (SIP) Manual. The results will be recorded on the Illinois "Bridge Inspection Report", form BM-BIR. The BM-BIR will be kept on file by the agency responsible for inspection. For structures not maintained by IDOT, inspection results in the form of numerical condition and appraisal ratings will be reported to the District on the Inspection/Appraisal Report (R104). These forms are available from the District Office.

Inspection Interval

The NBIS inspection will be performed at intervals not to exceed two years except for structures meeting criteria allowing a four year interval. The criteria is as follows:

- Structures with Material and/or Type as follows must continue to be inspected at a 24-month interval:

ITEM 43	MATERIAL	TYPE
x03		Deck Girder
x08	All	Orthotropic Deck
x09	All	Deck Truss
x10	All	Thru & Pony Truss
x12	All	Thru Arch
x13	All	Suspension
x14	All	Stayed Girder
x15-x17	All	Movable
x24	All	Thru Girder
x28	All	Segmental Box Girder
x30 -x70	All	Specific Truss Types
x00	All	Other
8xx	Masonry	All
9xx	Aluminum, Wrought Iron, Cast Iron	All
0xx	Other or Varied	
311	Steel	Deck Arch
319	Steel	Culvert

- The condition appraisal for Deck, Superstructure and Substructure, or Culvert must be "7" or greater.
- The structure must be capable of carrying Illinois legal loads at the inventory (design) stress level. (Inventory Rating = HS18 or greater for bridges or HS15 or greater for concrete culverts under fill). Eligible structures must not require any legal load restrictions.
- Vertical clearance, over or under, must be 14'-0" or greater.
- The longest span in an eligible structure may not be over 100 feet.
- Bridges will not be considered for the 48-month NBIS inspection cycle immediately following construction, reconstruction, rehabilitation, or major repairs. Only after a Routine NBIS

Inspection is performed on the normal 24-month cycle may a bridge qualify for the 48-month cycle. This inspection must be performed at least 12 months after the construction activity.

- All structures must have had one NBIS inspection since January 1, 1994.
- Annual Average Daily Traffic (AADT) must be 30,000 or less and Average Daily Truck Traffic (ADTT) must be 3000 or less (except culverts under two (2) feet or more of fill).
- The age of the structure may not exceed 50 years unless it has been reconstructed within the past 30 years.
- All structural members must possess load path redundancy; i.e. no truss or two girder type structures, tied arches, cable stayed, suspension, etc.
- The Scour Critical Analysis Rating must be "5" or higher.
- The bridge may not be on the list of Defense Highway Critical Facilities as indicated by an asterisk in the last, or 20th, field position of ISIS Item 6, Feature Crossed.
- The bridge may not be under the primary maintenance responsibility of a Federal agency.

Bridges with repair histories that indicate a strong probability of future problems should not be included among the candidates for the 4-year NBIS inspection interval. Such a determination may be made at the discretion of the individual with maintenance responsibility for any structures that otherwise fall under the eligibility guidelines. Experience with the types of structures meeting the eligibility criteria on both state and local systems gives no reason to expect such problems.

The eligibility of each structure will be reviewed following any revision of applicable inventory and inspection data. Any formerly eligible structures which no longer meet the inspection interval extension criteria will revert to a maximum 2-year interval.

The four-year inspection interval is optional, representing a *maximum* in no way precluding inspections at lesser intervals. Structures that are eligible for the 4-year NBIS inspection interval may, at the discretion of the agency with jurisdictional responsibility, be inspected at lesser intervals. Any such inspections will be entered into the ISIS by the Department. The maximum inspection interval will be kept at two years when a local agency informs the Department in writing that it wants all of its structures excluded from consideration for a four-year interval even though they may otherwise qualify.