



County and City Bridge Improvement Program (CCBIP) Bridge Priority Report

Bridge Priority Report Overview

In support of the Kentucky Transportation Cabinet (KYTC) Department of Rural and Municipal Aid County-City Bridge Improvement Program (CCBIP), the Department of Highways has provided Bridge Priority Reports (BPR) for local agencies. These reports summarize information for all locally owned bridges within the agency jurisdiction based on the National Bridge Inspection Standards (NBIS) Reports. Ratings are based on several factors, including 1) Overall Bridge Condition, 2) Risk to the transportation network and 3) Mobility to assign a cumulative Priority Index (PI) score. The figure to the right lists the factors that are considered within the Priority Index and each of the underlying measures. Based on the Priority Index, bridges are assigned to three Project Tiers.

- Tier 1: Highest priority indicating significance due to bridge condition, transportation risk and/or mobility.
- **Tier 2:** Medium priority indicating moderate condition, risk and mobility issues, or a mix of high and low ratings for these factors.
- **Tier 3:** Low priority indicating low condition, risk or mobility concerns.

Priority Index Factors

Condition

NBI Condition Rating Health Index Age

Risk

Scour Criticality Fracture-Critical Existence of Fatigue-Prone Details Vertical Clearance Frequency of Inspection Horizontal Clearance

Mobility

Posting-weight
ADT
ADTT
Route classification- NHS
Detour length
Emergency Route Designation

What's information is contained in the BPR?

The BPR summarizes the NBIS report for each bridge structure on the local agency roadway system and identifies the Condition, Risk, Mobility Scores and overall Priority Index and recommended project tier.

The figure below shows the fields that are contained in second part of the BPR and discussed below. The full NBIS Inspection report can be obtained by contacting your local KYTC Highway District Bridge Engineer. (Contact information for the highway districts can be found here and here).



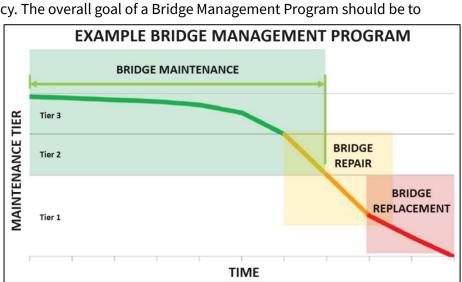
BPR Bridge Structure Information

- 1. Bridge ID-NBIS Structure ID.
- 2. Facility- Name of Road facility is located on.
- 3. Length-Bridge Length
- 4. Built- Year Bridge was built
- 5. Deck, Super, Sub- Condition rating of Deck, Superstructure and Substructure. Condition ratings are listing in the figure to the right.
- 6. Deck Area- Area of Bridge Deck
- 7. Posting Status- Posting Status of the Bridge (Open-No Restrictions, Posted for Load, Closed to all Traffic)
- 8. Bridge Condition- Determined by the lowest rating of the NBI conditions rating for Deck, Superstructure, Substructure. (Good (Rating ≥7, Fair 5-6, Poor ≤ 4).
- 9. Scour Condition- Scour Condition (See Condition Code Description to right).
- 10. Design Type Superstructure Bridge Design Type
- 11. Tier Maintenance Tier (Tier 1, Tier 2, Tier 3 described above
- 12. PI Priority Index Score (Rated from 0 (low priority) to 1 (highest priority)).
- 13. Mobility, Risk, Condition-Mobility, Risk and Condition Scores based on NBIS Inspection Report.
- 14. CO Recommendation- Maintenance Recommendations provided by KYTC Central Office. *Note: The absence of Maintenance Recommendations does not indicate that no maintenance is required.*

How do I use the BPR?

The Bridge Priority Report provides a starting point local agencies can use to understand locally owned bridges as part of a comprehensive Bridge Management Program. The Priority Index is based on readily available data from NBIS Inspection Reports, but may not reflect local system knowledge or needs, and as such should be reviewed carefully by the local road agency. The overall goal of a Bridge Management Program should be to

identify structures that are in need of
1) Cyclical and Condition Based
Maintenance (*Tier 3*) 2) Repair and/or
rehabilitation and replacement (*Tier 2*)
and 3) Major Bridge Element
replacement, rehabilitation or repair
(*Tier 1*). Specific maintenance and
repair needs for each structure can be
identified from a thorough review of
the NBIS Inspection Reports provided
by KYTC. For more information on
Bridge Management, please refer to
the FHWA Bridge Preservation Guide.



Condition Code	Description
N	Not Applicable
9	Excellent Condition
8	Very Good Condition-no problems noted
7	Good Condition-some minor problems
6	Satisfactory-structural elements show some minor deterioration
5	Fair Condition-all primary structural elements are sound but may have minor section loss, cracking, spalling or scour
4	Poor Condition-advanced section loss, deterioration, spalling or scour
3	Serious Condition-loss of section, deterioration, spalling or scour have seriously affected primary structural components
2	Critical Condition-advanced deterioration of primary structural elements
1	Imminent Failure Conditions-major deteriorations or section loss present in critical structural components
0	Failed Condition-out of service, beyond corrective action