



Local Bridge Selection Policy

I. Objective:

The objective of this policy is to provide financial assistance to Local Public Agencies (LPAs) with relatively financially significant bridge replacement projects both On-System and Off-System. Selected on-system bridge projects will receive State cash from purchased Federal funds as described in the Federal Fund Purchase Program (FFPP) agreement. Federal legislation requires a minimum level funding received by the State of Nebraska to be used for bridges off the federal aid system. Therefore, selected off-system bridge projects will receive Federal funds.

II. Definitions

ADT – Value of average daily traffic contained in the National Bridge Inventory (NBI).

Detour Length – Minimum additional length of travel required if the bridge in question was closed. Detour route shall not include restricted bridges. The value in the NBI will be used.

Financial Significance – Ratio of proposed bridge cost relative to the projected annual highway allocation amount for the Local Public Agency. Replacement bridges with ratios higher than 0.1 will be considered financially significant; it is the NDOR's intent to periodically review this threshold.

Proposed Bridge Length - Equals existing length in NBI. However, LPA may recommend a different proposed bridge length as justified by an engineering study; see step B in the selection process. If approved by NDOR, the length recommended in such study will be used in lieu of the existing length in NBI.

Proposed Bridge Width – Equals existing out-to-out width in NBI or 31 feet, whichever is greater. However, the LPA may recommend a different proposed bridge width as justified by an engineering study; see step B in the selection process. If approved by NDOR, the width recommended in such study will be used in lieu of the existing width in NBI. The 31 feet is being used for ranking purposes only; actual width of bridge being built may not be 31 feet in width but must meet minimum design standards.

Proposed Deck Area - Equals proposed bridge length times the proposed bridge width.



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Uniform Cost per Square Foot – An assumed cost figure used for all bridges in two of the qualification criteria (financial significance and minimum proposed bridge cost). It is not used to rank bridges. After selection, cost estimates will be refined for funding purposes. At this time, \$150 per square foot will be used as representative of the cost of development and construction. It is the NDOR's intent to periodically review and adjust the Uniform Cost per Square Foot to reflect current costs.

Proposed Bridge Cost – Equals proposed deck area times uniform cost per square foot.

Structurally Deficient - As reported in NBI.

Sufficiency Rating - Based on the data in the NBI.

Fracture Critical – As reported in NBI.

Scour Critical – NBI appraisal item 113 (Scour) having a value of 3 or less.

Off-System – Public Roads, other than those on a Federal-aid System.

On-System – Public Roads, on a Federal-aid System.

III. Funding Responsibilities

Off-System - Federal funds will be made available to selected off-system bridges. The local match for off-system bridges will potentially come from the LPA, state-aid bridge funds or approved soft-match credits. No state cash funds are to be used for off-system bridge projects.

On-System - A portion of the state cash funds from purchased Federal funds will be made available to selected on-system bridges; the program size (i.e. available funds) will be determined by the Director State Engineer prior to each selection process.

Project development phases for selected on-system bridges (including preliminary engineering, environmental requirements, and right-of-way) will be funded entirely by the LPA.

It is the intention of this policy to reimburse the LPA for 100 percent of the construction and construction engineering phases for selected on-system bridges, within the agreed upon scope of the



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project. However, because there will be a finite amount of funds set aside for on-system bridges, there likely will be a capped amount for the higher-cost bridge projects. Funding dedicated to on-system bridges through this policy therefore may cover only a portion of the construction and construction engineering costs of higher-cost bridge replacement projects and the remainder shall be funded by the LPA. The threshold will be determined by the Director State Engineer prior to each selection process.

The LPA will be responsible for making payments to the contractor and the construction engineering firm, and submitting documentation to the NDOR for reimbursement. The NDOR will reimburse the LPA for 100% of eligible construction and CE costs up to the capped amount identified in the project program agreement.

IV. Project Development Requirements

Off-System – Selected Off-System will follow the standard process for local Federal-aid projects.

On-System - The LPA will develop and construct the project, including but not limited to selecting a professional engineer (PE), entering into an agreement for those PE services, following all applicable laws and regulations, advertising the project for bids, opening bids, entering into a construction contract, selecting a construction engineer (CE) and entering into an agreement for CE services. The NDOR oversight requirements are as follows:

- A. Bridge Hydraulic and TS&L Plan Review: the LPA shall submit a TS&L (Type, Size and Location) report, a hydraulic study, and construction cost estimates to NDOR for review and approval.
- B. Bridge 70% Plan Review: the LPA shall submit plans for geotechnical review.
- C. Bridge 90% Plan Review: the LPA shall submit plans for final review.
- D. Prior to local letting the construction contract, the LPA shall submit an engineer's estimate of construction costs, letting plans and specifications sealed and signed by a professional engineer licensed in the State of Nebraska, and a negotiated (not signed by the engineer or executed by the LPA) construction engineering agreement to NDOR for review and approval. The new bridge design must meet or exceed requirements of the Nebraska Minimum Design Standards and NDOR Policy for Design, Load-Rating, and Inspection of Public Road Bridges.



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V. Selection Process

NDOR will develop programs of on- and off- system projects and perform the project selection process biennially, initiating the selection process in the fall with the goal of selection being made in the spring for inclusion in the annual STIP. The program will allow the LPA sufficient time to develop the projects.

- A. NDOR will post notice of a pending selection process on NDOR's website along with the list of qualifying bridges based on Section VI Qualification Criteria.
- B. If the LPA has a bridge(s) not included on the qualified list, the LPA may perform at its own cost an engineering study (hydraulic or traffic) performed by or under the direction of, and sealed by a licensed professional engineer, that could justify increasing the proposed bridge length or width so as to be included in the qualified list.
- C. NDOR will rank the qualified bridges based on Ranking Criteria (see Section VII below) and determine which bridges may potentially be selected based on the availability of funds.
- D. NDOR will require LPA's of selected bridges to apply in writing stating their intent to replace the selected bridge.
- E. NDOR and the LPA enter into an agreement.



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VI. Qualification Criteria

The following Qualification Criteria will establish a separate shortlist of bridges to be considered for each selection process:

1. **Minimum Proposed Bridge Cost** –\$500k
2. **Structurally Deficient** - As defined above.
3. **Sufficiency Rating** - As defined above. Rating must be less than 50 to be eligible for selection. NDOR reserves the right to lower this threshold in order to adjust the number of qualified bridges being considered.
4. **Financial Significance** – As defined above.
5. **Roadway serves multiple residences, farms, ranches or developments. Roadway does not terminate into a field entrance, a driveway, single residence, farm, ranch or development.**
6. **NBIS (National Bridge Inspection Standards) Responsibilities Agreement** – The LPA must have a current signed NBIS Responsibilities Agreement prior to application.
7. **In 1- and 6-year plan** – Bridge must be in the LPAs 1- and 6-year plan.

Note that this is only a screening tool and does not guarantee selection. NDOR will verify accuracy of data within NBI for the qualified bridges. NDOR will re-evaluate and adjust, if necessary, the minimum proposed bridge cost prior to each selection cycle based on the changes in construction costs, inflation, etc.



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VII. Ranking Criteria (100 points total maximum)

The following Ranking Criteria will be used to rank the shortlist of qualified bridges and ultimately select bridges to program for funding:

1. **User Impact** (50 points maximum) - User Impact will be a variable that measures the impact on the users and will be calculated by multiplying the ADT times the Detour Length from the NDOR verified NBI data. If detour length in the NBI is listed as "99" (indicates greater than 100 miles, or is a dead end), further investigation by NDOR is required to ensure that an appropriate detour length is used.

The points will be assigned based on the following linear formulas with the maximum value for user impact being capped at 50 points.

$$\text{User Impact (On-System)} = (\text{ADT} \times \text{Detour Length (miles)} / 5000) \times 50$$

$$\text{User Impact (Off-System)} = (\text{ADT} \times \text{Detour Length (miles)} / 500) \times 50$$

2. **Bridge Posting** (35 points maximum) – As defined by NBI Inventory Item 70.

Bridge Inventory Code	Relationship of Operating Rating to Maximum Legal Load	Ranking Points
5	NO POSTING REQUIRED	0
4	0.1 TO 9.9% BELOW	7
3	10.0 TO 19.9% BELOW	14
2	20.0 TO 29.9% BELOW	21
1	30.0 TO 39.9% BELOW	28
0	> 39.9% BELOW	35

3. **Fracture Critical** (5 points or zero points) – As defined above.
4. **Scour Critical** (10 points or zero points) – As defined above.



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VIII. Reimbursement Process

Off-System - For selected Off-System bridges, the project will be programmed, developed, let, constructed and reimbursed through NDOR as a typical Federal Aid project.

On-System - For selected On-System bridges, the LPA shall provide a copy of bid documents, construction schedule, bridge load rating, and construction contracts to NDOR for review. Upon NDOR approval, NDOR will disperse 40% of the funds agreed upon under this program to the LPA. A second 40% payment may be requested by the LPA at the midway point of the construction schedule. Upon submittal of final project costs, as-built plans, and project completion certification, NDOR will reimburse the remaining 20% construction costs.

IX. Dispute Resolution - The NDOR Local Projects Engineer is responsible for managing the program and making decisions not specifically addressed in this policy.

Approved by:

 8/20/2012

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Date

 8/20/2012

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