



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**NEBRASKA DIVISION**

September 2, 2011

100 Centennial Mall North  
Room 220  
Lincoln, NE 68508  
(402)742-8460

In Reply Refer To:  
HDA-NE

Mr. Monty W. Fredrickson, P.E.  
Director – State Engineer  
Nebraska Department of Roads  
Lincoln, NE

Dear Mr. Fredrickson:

**Financial Integrity Review and Evaluation (FY10)  
NDOR Soft Match Process Review Report**

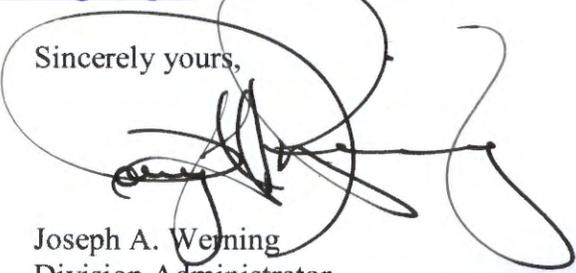
FHWA Order 4560.1B revised the Financial Integrity Review and Evaluation (FIRE) Program effective November 10, 2008. The Order requires each FHWA Division to conduct a Financial Management Review annually in response to a risk assessment of the State where the Division has oversight responsibility. During fiscal year 2010, the Nebraska Department of Roads (NDOR) Bridge Soft Match Program was selected for review.

The FHWA Nebraska Division has completed the review of the Bridge Soft Match Program. The enclosed report describes the review process and contains four findings related to the Bridge Soft Match Program. To summarize, our review found that 1) Soft Match credit amounts contained ineligible costs, 2) documentation for Soft Match calculations was inadequate, 3) documentation for non-controversial checklists was inadequate and 4) NDOR treatment of engineering costs is not in line with current written policy.

It is important that these findings be resolved in a timely manner. Due to the nature of these findings, FHWA is suspending NDOR's use and accrual of the Bridge Soft Match credits until resolution of the findings is complete and concurrence is received from FHWA.

Please review the report and provide a written response on each finding, to our office within sixty working days of receipt of this report. Should you have any questions, please contact Rich Kuzelka at (402)742-8466 or [Richard.kuzelka@dot.gov](mailto:Richard.kuzelka@dot.gov) of this office.

Sincerely yours,



Joseph A. Werning  
Division Administrator

Enclosures

# NEBRASKA DIVISION FHWA

## Financial Integrity Review and Evaluation (FY10)

### NDOR – Soft Match Process Review Report

June 2010

#### **I. Purpose**

FHWA issued Financial Integrity Review and Evaluation Program Order 4560.1a on May 19, 2006. One requirement of the Order tasks Division Offices each year to perform at least one grant financial management review of the area determined to constitute the highest material risk to the Federal-aid program as determined through the Division's annual risk assessment. One area identified by the Division's risk assessment was Locally managed projects, including the Bridges Not on Federal-Aid Highways (23 USC 144 (m)). The Program has been selected for review during the Fiscal Year ending September 30, 2010. The Program was formerly identified as the Off-System Bridge Program in 23 USC 144 (n) and is more commonly referred to as "Soft Match". For ease of identification it will be referred to as "Soft Match" in this document.

This review concentrated on two areas, (1) Nebraska Department of Roads (NDOR) administration and oversight of the Soft Match Program and (2) Local Public Agency (LPA) management and application of Soft Match to projects receiving Federal-aid. Our goal was to assess and evaluate 1) NDOR administration and oversight practices to determine if Federal-aid requirements are being fulfilled and 2) LPA project management procedures to determine if practices and controls meet Federal-aid requirements, are complete, current and followed.

The intent of the review report (for NDOR & LPAs) was to:

- Identify and evaluate officially prescribed processes and procedures.
- Determine if processes & procedures meet or exceed Federal-aid requirements.
- Determine if processes & procedures are followed.
- Verify support documentation satisfies Federal-aid requirements.
- Provide a finding or findings that oversight and administration meet requirements or recommend improvements.

Areas of project oversight and management found to be material were evaluated during the review.

#### **II. Scope**

The process reviewed consisted of activities and controls related to the proper authorization and management of Federal-aid projects to ensure that Federal funds are obligated and expended in accordance with Federal requirements. As determined appropriate, work performed by others was relied upon and incorporated into the review. The process included an examination of project management and accounting related

documents to determine that Federal and State laws, statutes, regulations and policies have been followed and projects met a minimum of Federal requirements.

The population selected for this review consisted of Local Bridge projects, using Soft Match for part of the LPA share, that were active (in FMIS) during the period October 1, 2008 through September 30, 2009 (See Preliminary Activities under Section V). This data was the most recent information available that the team could query from FMIS Business Objects for review (Only two projects using Soft Match have occurred in the time since September 30, 2009). A random sample of this population was selected for review to determine if procedures were followed and controls functioned as designed.

The review was broken down into two major areas, (1) State Oversight of the Soft Match Program and (2) actual management of the projects by the LPA. The Review Team's initial efforts were focused on State oversight. NDOR oversight of Bridge projects using Soft Match rests primarily with the Local Project Section. The Review Team obtained and analyzed information at the State and Local levels.

The review focused on material components of the NDOR and LPA systems and procedures that affect Federal-aid projects including (but not limited to):

- Does it meet the requirements set out by Section 123(e) of Surface Transportation and Uniform Relocation Assistance Act (STURAA) of 1987?
  - Off-System (local roads & minor collectors not on a Federal-aid Highway)
  - No Federal-aid funding involved
  - No approach work included
  - Normal current eligibility requirements for Highway Bridge Replacement Project (HBRRP):
    - Deficient
    - Replacement - sufficiency rating less than 50
    - Rehabilitation – sufficiency rating less than 80
  - Must be non-controversial
  - Meet Standards accepted by FHWA
    - Certified by the State
    - Applicable to bridge projects funded under 23 USC 144
  - Resulting improved bridges are not deficient
  - Bridge Construction costs are the only expenditure eligible for the credit
  - Only a minimal amount of approach work is to be applied as a credit
  - Credits for match on future bridge projects will not be made until the project is complete, inventoried, inspected and resulting data is entered into the State's bridge inventory file.
  - The amount of credit applied to federally funded bridge projects is less than or equal to 80% of the total Construction Cost
  - Funded entirely by the State and/or LPA
- Have the updated 2004 Soft Match Bridge Program Policies been implemented and met?
  - Bridge and expenses are eligible
  - Procedural requirements satisfied
  - Guidelines followed

- Credit awarded and available
- Credit used
- Does the Project Agreement?
  - Satisfy requirements for:
    - Federal Share
    - Advanced Construction
    - Obligation
  - Adequately Account for Project Costs
- Is the Soft Match?
  - Properly Applied
  - Less than total project cost
  - Eligible
  - Adequately documented to show that it has been:
    - Verified
    - Consistently Treated
    - Meets Federal Requirements

### **III. Relevant Laws, Statutes and Regulations**

- 1987 STURAA - Section 123
- 23 USC 101, 103, 106, 120, 133, 139, 144, 206, 323
- 2 CFR 225
- 23 CFR 630, 650
- 49 CFR 18, 19

### **IV. Previous Reviews**

The Division Bridge Engineering Staff and NDOR conducted a joint review of the Soft Match Bridge Program in 2004 (Attachment C). The review objective was to evaluate State procedures that determine the “non-controversial” nature of the bridge projects that were receiving this credit. The review found that County Official’s knowledge of Soft Match Bridge Program requirements was limited and procedures should be updated. The 2004 updated Soft Match procedures were attached to the joint FHWA/NDOR report.

### **V. Review Process**

#### **Preliminary Activities**

The population, selected through FMIS query, consisted of bridge projects active or completed during the period October 1, 2008 through September 30, 2009. Each project in the population had a Soft Match dollar amount (or credit) that could be applied to qualifying Federal-aid projects to reduce the amount of LPA cash match required. A judgmental sample of five projects/Counties was selected for review from a population of 48 projects with a combined total obligation of \$23,273,112 and Soft Match applied of \$3,461,269. The five projects reviewed represent 22.4% (\$5,246,616 /\$23,273,112) and 19.5% (\$674,049/\$3,461,269) of the respective totals.

Project STWD067 was initially picked as a sample project. However, initial review by the team determined it had been coded (data entry) as Soft Match in error. It was

replaced with another project in the sample. Data entry errors by NDOR Staff are rare and given the large amount of project data being entered in FMIS, the Division believes additional action, beyond re-coding the data, would not be time or cost effective.

NDOR Soft Match policy, developed as a joint effort of NDOR and FHWA, allows each LPA to build qualifying bridge ("source") structure using only local funds. In compliance with 23 USC 144 (m), 80% of the eligible costs of building each source structure are allowed to be credited as Soft Match for "local bridges" statewide. NDOR has met this requirement and has taken the additional step of designating and maintaining a pool for each LPA. The balance in each pool increases as locally funded structures are completed. Available unused funds derived from the source structures are then applied to ("use") bridge projects built using Federal aid requiring an LPA match. 23 USC Sec. 120 (a) (1) states that the "Federal share payable on any project in any State shall not exceed 95 percent of the total cost of such project". As a result, a credit from the source structure pool for an amount not to exceed 15% of the project cost can be credited to (Soft Match) and used in lieu of local funds.

For each County where a sample project was selected a listing of source and use projects, with dollar amounts, was obtained from NDOR. Two source and one use project were selected for review from each County (Cuming County had two use structures on its project). As there was no Federal-aid project number assigned to source projects the structure number was substituted for reference. Projects and source/use structures selected are:

<u>Project</u>	<u>LPA</u>	<u>Source Structure No.</u>	<u>Use Structure No.</u>
2395004	Nuckolls County	C006510410 C006522213	C006513325
7067019	Pawnee County	C006700710 C006714310	C006700405P
7021024	Custer County	C0E2170338 C0E2150125	C002124510
7077057	Sarpy County	C007702405P C007710415	C007721720
7020018	Cuming County	C002012655 C002011340	C002001725 C002001730

A checklist (Attachment A) was developed and used as a guide when reviewing the source projects.

### Field Work

The field work consisted of two phases, 1) review at NDOR and 2) review at the LPA. The FHWA Review Team coordinated the review and coverage with NDOR and LPA personnel. NDOR and LPA personnel were provided preliminary requests of support documentation to make available for review by FHWA Review Team.

Initial field review was conducted at the NDOR Local Projects Section. Documentary support reviewed included NDOR/LPA agreements, LPA Soft Match requests and

NDOR Soft Match calculations and awards. This was followed by field review at each LPA.

The Review Team reviewed files, maintained at the LPA or Engineering firms retained by the LPA to perform project design and management services, to verify Soft Match requirements were met. This would include correspondence, certifications and other required documents verifying that the project was off system, non-controversial, compliant, to replace or rehabilitate, funded, complete and no longer deficient. Soft Match calculations were re-performed to verify the amounts claimed and support documentation reviewed to verify funding entirely by the State or LPA and costs were eligible and allowable.

At each LPA entity an informal entrance meeting was held with the entity to introduce FHWA personnel and conduct general discussions concerning the review. Interviews were conducted with key personnel to determine if all controls have been identified and to evaluate their reliability and effectiveness.

The Review Team sampled structure documentation, to determine if there was satisfactory support to meet Soft Match "non-controversial" requirements. Examples of appropriate documentation include Army Corps of Engineers (USACE) and State Historical Property Organization (SHPO) permits and approvals.

## **VI. Team Members**

### Nebraska Division

Rich Kuzelka  
Financial Manager

David Mraz  
Bridge Engineer

Nicholas Finch  
Local Project Engineer

## **VII. Findings and Recommendations**

### Finding 1

Ineligible costs were included in computation of the Soft Match Credit:

- a. Two of the five projects reviewed included costs for ineligible items. Soft Match construction costs on Nuckolls County Source Structure C006522213 and Sarpy County Source Structure C0077107415 included culvert pipe and flared end section charges. These items were not part of the bridge replacement project and should not be included in the Soft Match Computation.

- b. The Review Team found one project in Pawnee County, structure C006714310, where engineer hourly rates exceeded those allowed in the Construction Engineering (CE) contract (letter) by \$440. It also found \$660 charged for "Non-contract items" hours not included in the original contract. No amendment of the higher hourly rates or additional "Non-contract items" hours was found in the files and the consultant confirmed there was no amendment. Higher rates or additional charges not covered in the original contract or through an amendment/change order are not eligible for use as Soft Match.

**Recommendation:**

- a. NDOR should determine and confirm the total amount of ineligible costs (e.g. culvert pipe and flared end section) billed on Nuckolls County project 2395004 and Sarpy County project 7077057. The amount of ineligible costs should be identified and the amounts approved by FHWA. Soft Match credit for the related "source" structures should be recalculated to remove ineligible costs and a corresponding adjustment made to the "use" project. A credit for the adjusted Federal-aid share of the "use" project should be processed through Rapid Access State Payment System (RASPS) on the next Federal-aid billing following acceptance by the FHWA Review Team.
- b. NDOR should reduce the "source" structures used as match for Pawnee County project 7067019 by the \$1,100 (\$440+\$660) of ineligible engineering costs, recalculate the Soft Match credit and make a corresponding adjustment to the "use" project. A credit for the adjusted Federal-aid share of the "use" project should be processed through RASPS on the next available Federal-aid billing.
- c. NDOR should review, revise and implement (if appropriate) processes and procedures to ensure subsequent Soft Match "source" project costs applied to "use" projects include only eligible costs. Projects initiated after October 1, 2011 should be reviewed to ensure that only eligible costs are included and amounts credited to Soft Match are calculated correctly. Any amounts determined to have been incorrectly included in the Soft Match credit on a Federal-aid project should have a credit processed through RASPS on the next Federal-aid billing following acceptance by the FHWA Review Team.

**Finding 2**

Documentation in file did not fully/adequately support Soft Match calculations:

- a. For one Pawnee source structure C006700710 neither the NDOR, County or Consultant files contained a copy of the CE contract. Without a copy of the contract we are unable to determine the validity of the amounts charged and if the amounts should be included in the Soft Match award calculations.
- b. Letting and bid support documentation was in file for the Steel purchase on structure C002012655 in Cuming County, but was not available for the

contract with the construction firm utilized on the project. Without a copy of the contract we are unable to determine the validity of the amounts charged and if the amounts should be included in the Soft Match award calculations.

- c. NDOR Soft-Match Bridge Program Policies (2004) Section VI(19) states the LPA must keep (retain) records for 3 years after the date the Soft Match source structure is complete and accepted by NDOR for Soft Match credit. On some source structure projects the review team was informed the county had destroyed payroll and vendor payment records.

Records destroyed may have been retained in compliance with the NDOR Policies. However, the NDOR Policies do not satisfy 49 CFR 18.42 requirements for retention of support records until 3 years after completion of a federally funded project. The NDOR Soft Match program builds up a pool from completed source structure construction costs (not federally funded) for application as the LPA's share of future federally funded projects. The actual application of these funds to a use structure (federally funded project) may not occur until several years after the source structure is completed. As a result, records applicable to the use structure project are not available for review by FHWA or NDOR to determine if support documentation satisfies 49 CFR 18.42.

- d. The Review Team was able to reconcile and confirm construction and CE costs documentation in LPA files. However, adequate documentation to support the 1) Soft Match amounts, 2) calculations of amounts awarded or 3) satisfaction of requirements was not found in the NDOR files. For example, in the NDOR file on Sarpy County structure C00710415 there was no support for the source structure's cost used as a basis for the Soft Match calculation and the letter to NDOR stating Soft Match requirements had been met. No evidence NDOR had reviewed the information in the Sarpy County files or used it to support the amount awarded was found.

*Note - Although the NDOR file information was lacking, the Review Team was able to reconcile Soft Match amounts awarded to supporting documentation during its review of County files. And, the Review Team was able to reconcile documentation supporting expenditures for construction and CE to Soft Match award amounts.*

**Recommendation:**

- a. NDOR should obtain a copy of the CE contract for Pawnee County source structure C00600710, verify the validity of the amounts charged and adjust the Soft Match award on use project 7067019 if necessary. If an adjustment is required a corresponding adjustment should be processed through the next RASPS billing.
- b. NDOR should obtain a copy of the letting and bid documentation for Cuming County source structure C0020122655, determine if the selection process was properly conducted, amounts charged are valid and correct, and if adjustment

of the Soft Match award on use project 7021024 is required. If NDOR is unable to obtain a copy of the contract, an evaluation and acceptance of the amounts charged should be performed using a comparison or methodology accepted by FHWA, and the Soft Match award should be adjusted as required.

- c. The Soft Match agreement between FHWA and NDOR provides that NDOR is responsible for maintaining the Soft Match balances for each LPA. NDOR should develop a retention system for records that meets or exceeds the requirements of 49 CFR 18.42. NDOR should review and update the Soft-Match Bridge Program Policies to include the record retention system developed as a requirement for the Local entities.
- d. NDOR should develop and implement procedures to insure adequate documentation to support Soft Match amounts has been provided and reconciled is provided by the LPA and verified by NDOR. Additionally, NDOR should revise the Soft Match Policy to provide additional guidance on and examples of support documentation required to qualify as Soft Match
- e. Periodic reviews should be conducted by NDOR over the next three years to verify support documentation is being maintained, modified procedures are functioning as designed and LPAs are adequately meeting Federal-aid requirements. This issue will be addressed further and resolved in the Operations review during FY11.
- f. NDOR should verify and document that processes and procedures have been implemented and are being followed.
- g. NDOR should document their acceptance of soft match credit including documentation of required submittals, reviews, inspections and formal acceptance.
- h. NDOR should review all county Soft Match project credits awarded since implementation of the Soft Match Bridge Program Policies approved July 14, 2004. The review should determine if credits awarded were eligible (Finding 1) and adequately supported (Finding 2). A report summarizing the review should be prepared and submitted for FHWA review and approval by October 14, 2011. Supporting documentation for the review should be maintained and available at NDOR. Soft Match for projects should be recalculated to remove costs that are not eligible, adequately supported or reasonable. Any amounts determined to have been incorrectly included as a Soft Match credit on a Federal-aid project should result in a credit being processed through RASPS on the next Federal-aid billing following acceptance by FHWA.

**Finding 3:**

Certified non-controversial findings or completed non-controversial checklists (implemented by NDOR in 2004) on file were not adequately supported by documentation.

The non-controversial checklist had 8 activities to be completed:

1. USACE 404 Permit obtained.
2. USACE 404 Permit completed & closed
3. Coordination with SHPO
4. Coordination with NGPC
5. Coordination with USFWS
6. No impact to public property
7. No condemnation of private property
8. No request for public hearing

The detail of the specific items missing for the selected sample is shown in attachment B. Although the non-controversial checklist was present, it often was only supported by a check mark or initials and dates. Relevant documents such as US Army Corps of Engineers 404 permits, or letters to coordinating agencies should also be included. If an item is non-applicable, a brief explanation why the item is non-applicable should be included to show the item was addressed.

**Recommendation:**

NDOR should revise and strengthen the soft match policy guidance and develop written procedures to ensure that each County maintains adequate support for the non-controversial checklist in their files. The written procedures should ensure that a credit to the Soft Match source pool occurs only after the checklist and supporting documentation is supplied by the LPA and verified by NDOR.

**Finding 4:**

Section III of the policies updated in 2004 (see Section IV above) clearly state costs for preliminary engineering, advertising and approach work cannot be applied (as local share) to Soft Match on future federally funded projects. Section VI (15) of the Soft-Match Bridge Program Policies (2004) states engineering is not an eligible credit for Soft-Match. However, NDOR Soft-Match calculations and approval correspondence clearly show that NDOR accepted and allowed Construction Engineering (CE) costs incurred on source projects as part of the Soft-Match credit applied to use projects. NDOR practice is not in line with written policy.

The Federal-aid Policy Guide's (FAPG) Additional Guidance on 23 CFR 630D (<http://www.fhwa.dot.gov/legsregs/directives/fapg/0650dsup.htm>). 23 CFR 650 D 2.a. states:

*"The FHWA has determined that for the purposes of implementing 23 U.S.C. 144(n), the term "construction" should be broadly defined. It includes most activities incidental to the development and actual replacement or rehabilitation of a highway bridge".*

Although FHWA has adopted a broad definition of Soft Match costs, the guidance also grants States the ability to limit Soft Match credits to "hard construction" activities. Through the NDOR Soft Match Bridge Program Policies (2004), soft match credit is not to be allowed for engineering costs.

**Recommendation:**

NDOR should follow written policy on the eligibility and inclusion of CE costs in the calculation of Soft Match. If NDOR determines CE is eligible and should be included in the Soft Match calculation, NDOR should amend the written policy by reviewing the Soft-Match Bridge Program Policies (2004) language in Section VI (15) and take the following corrective actions:

1. Clarify the eligibility of PE and CE costs as components of Soft Match.
2. If engineering costs are allowed, provide documentation that procurement of engineering services follows the requirements of the Brooks Act and Nebraska State Law.
3. Revise other written guidance that references Soft Match to reflect any changes in Soft Match policy.
4. Provide additional training or an update to LPA & State Staff involved in the Soft Match calculation, application and award process.

Any amendment to the Soft-Match Bridge Program Policies (2004) should be coordinated with and approved by the FHWA Nebraska Division.

**VIII. Conclusion**

Documentation lapses FHWA found during the review prevent FHWA from establishing a satisfactory confidence level in the 1) eligibility of costs included in the Soft Match source projects or 2) accuracy of the Soft Match calculations. We also were unable to find substantive evidence (at the local level) to verify adequate written procedures and controls have been created and implemented. Additionally, we were unable to establish that Federal and State level requirements were being followed or functioning.

NDOR has made changes in an attempt to improve oversight of the Soft Match program such as the LPA manual and guidance. However, those changes have not been effective due to a lack of enforcement and oversight by NDOR. For example, we found no evidence that the LPA Section has conducted field reviews of Soft Match source projects to determine if they were eligible or allowable. NDOR needs to ensure that current written policy is followed or amend written policy if necessary.

This review was designed to meet FHWA FIRE Order requirements and was not intended to address technical areas such as Engineering. However, the findings listed above (particularly 1, 2, and 4) raise issues and questions that should be evaluated by the Division's Engineering Staff. We believe a review of the 2004 Soft Match Policies and Procedures should be scheduled and completed at the earliest opportunity.

**IX. Action Plan**

NDOR should provide a written response addressing each finding within sixty working days of receiving this report. The response should include an action plan to resolve each finding and time frame for completing that action.

FHWA will work with NDOR and the LPAs to implement and monitor the action plan. We anticipate implementation of corrections would take 90-180 days and monitoring over the following three years. We recommend an annual review schedule be set up to cover a sample of projects initiated each year.

The Division's technical Staff has scheduled a review of the NDOR 2004 NDOR Bridge Soft Match Policies and Procedures during FY11. The review will evaluate whether the Policies and Procedures provide sufficient oversight and are being used effectively.



**FY10 Grant Financial Mgt Review  
Non-Controversial Checklist Support Documentation**

**Attachment B**

	EXTERNAL A & E						INTERNAL A & E								
	CUMING		NUCKOLLS		PAWNEE		CUSTER			SARPY					
	12655	11340	10410	22213	00710	14310	70338	f	50125	g	02405P	h	10415	i	
1 404 PERMIT OBTAINED	Y	Y	Y	Y	Y	Y	N	c	N	c	Y	d	N	d	
2 404 PERMIT COMPLETE	N	N	N	N	N	b	N	N	c	N	c	N	d	N	d
3 SHPO COORD	Y	Y	Y	N	N	N	N	c	N	c	N	d	N	d	
4 NGPC COORD	N	N	N	N	N	N	N	c	N	c	N	d	N	d	
5 USFWS COORD	N	a	Y	N	N	a	N	c	N	c	N	d	N	d	
6 NO IMPACT PUBL PROP	N	N	N	N	N	N	N	c	N	c	N	d	N	d	
7 NO CONDEMN PRIV PROP	N	N	N	N	N	N	N	c	N	c	N	d	N	d	
8 NO REQ FOR PUBL HEARING	N	N	N	N	N	N	N	c	N	c	N	d	N	d	

a Tech assistance ltr only

b Mainelli ltr to county says "We have submitted the COE completion notice"

Compliance Certification in file not signed

c Source projects completed 1999 & 2002, Soft Match Checklist instituted 2004

d Source projects completed 1999 & 2003, Soft Match Checklist instituted 2004

f County used external firm (Speece Lewis) for construction observation but self managed project, constructed with County personnel & equipment

g County self managed project with County personnel, constructed with County personnel & equipment

h County self managed project with County personnel

i County self managed project with County personnel

SOFT-MATCH BRIDGE PROGRAM POLICIES  
2004

I. General Description

The 1987 Surface Transportation and Uniform Relocation Assistance Act created a special program regarding off-system county bridges. The program permits a county to build a bridge on any county road not on the Federal-aid Secondary system and receive credit for 80% of eligible costs. The credit is used as a county's share of matching funds for a Federal-aid bridge replacement or rehabilitation project at another location.

II. Eligible Bridges

To be eligible for the Soft-Match Bridge Program, a bridge must meet the following requirements:

- 1) Meet eligibility requirements for HBRRP funding
  - Be classified as either "Structurally Deficient" or "Functionally Obsolete"
  - Have a sufficiency rating of 50 or less for replacement or 80 or less for rehabilitation
- 2) Be located on either a Minor Collector or Local county road
- 3) Be non-controversial

III. Eligible Project Expenses

The following construction items are eligible for Soft-Match credit:

- 1) Old structure removal.
- 2) Construction costs of the replacement structure.
- 3) Construction costs of drop-pipe culverts at bridge location.
- 4) Safety improvements.
- 5) Erosion and sediment control.

No credit is allowed for preliminary engineering, advertising for bids, approach grading, or surfacing.

IV. Soft-Match Bridge Projects

In order to qualify for credit, Soft-Match Projects must follow the procedures outlined in the *Soft-Match Program Procedures* section on pages 2 and 3 of this document. Projects must also meet the requirements of the *Guidelines for Soft-Match Bridge Projects* outlined on pages 3 – 7 of this document.

### **2.10.5 Soft-Match Bridge Program**

#### **Eligibility**

The Federal government created a special program in 1987 to improve off-system rural bridges. This program allows an LPA to use their local funds to replace or rehabilitate an existing bridge structure on any local road that is not on the Federal-aid System and receive credit for 80% of the eligible construction costs.



To be eligible for the Soft-Match Bridge Program, the bridge must: be classified as either "structurally deficient" or "functionally obsolete", have a sufficiency rating of less than 50 for replacement or 80 or less for rehabilitation, be located on either a Rural Minor Collector or a Rural Local Road, and be non-controversial.

Eligible construction expenses for Soft-Match Credit include removal of the old structure, construction cost of the replacement structure and any drop-pipe culverts at the bridge location, safety improvements, erosion and sediment control, and construction engineering. Credit is not allowed for preliminary engineering, design engineering, preparation of plans and specifications, advertising for bids, or approach grading and surfacing.

In order to qualify for credit, Soft-Match Projects must follow the procedures and guidelines shown in the current Soft-Match Bridge Program Policies document.

#### **Application**

The application process for the Soft-Match Bridge Program begins with a letter from the LPA to the NDOR Local Projects Division with notification of intent to construct a bridge qualifying for Soft-Match Credit. The Soft-Match Bridge Program Policy document on the NDOR website

V. Soft-Match Program Procedures

- 1) Local agency notifies NDOR in writing of intent to construct a bridge qualifying for Soft Match. See Appendix A, "Letter of Request for Soft Match Approval", for recommended example.
- 2) NDOR review proposed project (verify eligibility for Highway Bridge Replacement and Rehabilitation Program funding), and inform County the project is acceptable.
- 3) Local agency prepare, or causes to be prepared, design and construction plans, specifications and estimate.
- 4) Department of Roads Bridge Division will, as a courtesy, check load capacity prior to letting and construction
- 5) Project is advertised and let to contract by local agency, or built by local governmental forces.
- 6) Local agency forward bid results to NDOR's Government Affairs within 30 days of notice of award of the construction contract. All ineligible expenses shall be clearly indicated.
- 7) Local agency supervise, or cause to be supervised, construction under the direction of a licensed Professional Engineer (PE).
- 8) Local agency provide NDOR Government Affairs Division with:
  - summary of construction costs
  - amount of requested credit,
  - certification and resolution that the project has been accomplished in accordance with soft match program requirements and
  - photos of the finished structure.Local agency provide NDOR Bridge Division with
  - an updated NBIS inspection record and
  - as-built structure plans for the purpose of getting load-rated.
- 9) NDOR provide appropriate certification to FHWA and indicate soft match credit amount by letter to FHWA.
- 10) NDOR inform local agency of approval of credit and update available credit balance.
- 11) Local agency identify Federal-aid project or projects to which soft match credit is to be applied as part of the Federal-aid portion and inform the NDOR of their intent to use credit on the project. Projects must be identified at least four months prior to their scheduled letting date. A blanket letter is acceptable to request application of any available soft match credits to all future eligible federal-aid projects.

- 12) NDOR verify the availability of the Federal-aid funds and local agency soft match credit and estimated cost.
- 13) Federal-aid project advertised and let to contract by NDOR under standard procedures.
- 14) The NDOR will annually inform local agencies of the status of their soft match credit account. A copy will be provided to FHWA.

VI. Guidelines for Soft-Match Bridge Projects

- 1) A county must notify the Department of Roads in writing of their intent to replace or rehabilitate a structure qualifying for this program. This notification should include the county project number, the NBIS inventory structure number ("C00 \_\_\_\_\_") and a legal description of the project location. See the attached sample "**Letter of Request for Soft Match Approval**" (Appendix A). The structure to be constructed or rehabilitated by the county must be eligible for Federal-aid bridge replacement off-system funds. The Department of Roads must approve the project for the soft match program before the letting.
- 2) The soft match program has provisions for projects done jointly by two or more local agencies. Each local agency involved submits their intentions in writing to the Department of Roads. One county acts as the lead agency, which will send project correspondence to the Nebraska Department of Roads. The lead agency will submit to NDOR an inter-local agreement executed by all involved local agencies.
- 3) The project must be non-controversial. Non-controversial means Resource Agencies and the public do not have controversy with issues associated with the project. A checklist to assure the project is non-controversial is attached to the Certification of Compliance letter. The completed checklist shall be submitted to NDOR with the Certification of Compliance letter at the completion of the project.
- 4) The new or rehabilitated structure must meet all standards applicable to bridge projects funded under the Federal-aid Highway Bridge Replacement and Rehabilitation Program (HBRRP). The design must be in accordance with the current issue of "Standard Specifications for Highway Bridges," published by AASHTO. The project must meet or exceed the Board of Public Roads Classifications & Standards Minimum Design Standards - Rural Roads. When possible, use standardized plans prepared by the Department of Roads, unless site conditions or other factors make this undesirable.
- 5) All bridge railing and guardrail systems shall meet current AASHTO standards.
- 6) A professional engineer or professional engineers, as provided in the State's Engineers and Architects Regulation Act, will prepare plans and specifications and provide construction inspection services. This includes hydrologic and hydraulic investigations. If the County has more than one professional engineer involved in the project, the County will designate a coordinating professional. This is in

accordance with State Statute 81-3437(3)(g). All plans, including the structure design plans, must be sealed and signed, in accordance with State Statute 81-3437(3)(d).

- 7) The Program requires the local agency or agencies to follow Federal and State law concerning backwater requirements. Document water surface elevations upstream of the structure for the existing and proposed cases. If a rise of more than one foot is caused, documentation of compensation is required. Note that it is not a design requirement for  $Q_{100}$  to pass under the structure. A lesser amount is acceptable. The effects of the  $Q_{100}$  flow should be examined and designed for. In some cases, following a risk assessment, a road sag may be designed to accommodate overflow. Analyze a range of flows up to and including  $Q_{100}$  for economics and risk assessment. A typical analysis includes natural, existing, and proposed conditions. Evaluate stream degradation or aggradation. Also, evaluate contraction scour and local scour. This involves, but is not limited to, field observation together with evaluating readily available data such as historical inspection data. The proposed structure should be designed to accommodate the hydraulic conditions analyzed. Plans shall list or show the following information (note: this is the same information required on Bridge Data Sheets for Federal-aid "BR" projects):
  - $Q_{100}$  base flood,
  - $Q_{100}$  bridge base flood, i.e. that portion of  $Q_{100}$  passing through the bridge
  - $Q_{low\ road}$  overtopping flood, i.e. frequency that water overtops the road
  - $Q_{100}$  contraction scour,
  - $Q_{100}$  local scour (if appropriate include contraction and local scour values for floods greater than  $Q_{100}$  up to  $Q_{500}$ ),
  - D.A. (drainage area),
  - H.W. (high water downstream side),
  - F.L. (flow line) and
  - Low Road Elevation and grades.
- 8) Plans shall list or show the required pile loads and minimum tip elevations. Design bearing must be achieved below anticipated scour depth. Note that the use of test piles is acceptable; it is not the intent of these guidelines to require soil borings.
- 9) Department of Roads Bridge Division will, as a courtesy, check load capacity before letting and construction. This is a good check to make sure the bridge will meet or exceed Board of Public Roads Classifications & Standards Minimum Design Standards - Rural Roads.
- 10) County will forward bid results to Government Affairs Division within 30 days of the contractor notice of award. Clearly indicate any ineligible expenses. Lettings shall be in accordance with State and local law.
- 11) The coordinating PE must approve, in writing, any deviation during construction from the final plans and specifications. This would include construction errors, pile bearing, concrete strengths, new steel certification, etc.

- 12) The attached Soft Match Program Construction Inspection Checklist (Appendix D) is recommended. It is not intended to be all-inclusive, or to suggest that all listed items require action. The checklist is included as a guide to construction inspection items that typically need attention. The references cited in paragraph (4) above take precedence over the attached checklist. Use a complete, organized pile record form to document the bearing of each pile during pile driving operations. Consider using Department of Roads' DR Form 97 (Appendix E).
- 13) Within 180 days of project's substantial completion, the County will submit to Department of Roads' Bridge Division:
  - Notification that the structure was replaced or rehabilitated
  - Updated NBIS inspection record
  - As-built structure plans, for Bridge Division to calculate load-rating.
- 14) Also within 180 days after substantial project completion, the County will submit to Department of Roads Government Affairs Division:
  - A cover letter stating that the project has been completed, total costs eligible under the guidelines of the soft match program, and the amount of credit requested (80% of net county expenditures on eligible expenses). In determining the requested amount, identify all participating entity or entities (FEMA, NRD, etc.) and amounts.
  - A summary of project costs, preferably limited to one sheet (the County keeps detailed records, which are subject to audit) and possibly brief enough to be in the cover letter.
  - An executed "Certification of Compliance with attached non-controversy checklist" (Appendix B) along with a resolution(Appendix C);
  - Eight (typically) photos. Four photos from the completed structure (one in each direction), two looking at the completed structure from the road on either side and the last two shot from upstream and downstream looking at the completed structure.
- 15) As a Nebraska policy, approach work is not applied as a credit toward the project. No approach grading or approach surfacing will be allowed to count as a participating item in determining the cost of a project. Engineering and advertising are not eligible for soft match credit. Be clear about ineligible costs on the final submittal to prevent questions and confusion.
- 16) Materials such as structural steel must be traceable to origination. If structural steel is not traceable, A7 material characteristics are assumed, or stresses used for design must be determined in accordance with procedures outlined in the "Manual for Maintenance Inspection of Bridges 1983, w/Interim changes."
- 17) Credit for future matching of HBRRP projects will not be allowed for any county constructed bridge projects until:
  - an updated NBIS inspection record, which results in removal of the structure from FHWA's "Selection List," is recorded in the State's bridge inventory file,

- a load-rating determined by Department of Roads' Bridge Division that proves the structure is no longer deficient, and
  - Department of Roads' Bridge Division determines that the new or rehabilitated structure meets or exceeds Board of Public Roads Classifications & Standards Minimum Design Standards - Rural Roads.
- 18) Upon submittal of the updated NBIS inspection record, the County must also certify that the structure meets all of the requirements of the soft match program. See the attached certification form. The State, after review of all eligible costs, will notify the Federal Highway Administration and the County of the amount of credit due the County.
- 19) A County must have adequate records to support their certification that the project meets all standards applicable to their bridge projects funded under the HBRRP. The County must keep such records and make them available for Federal or State review for a period of at least three years. This period begins when the project is complete and accepted by the State for credit to match Federal-aid HBRRP funds. The County should keep permit(s), hydrology and hydraulics documentation, plans, specifications, pile driving and construction records for the lifetime of the bridge.

VII. Soft-Match Credit

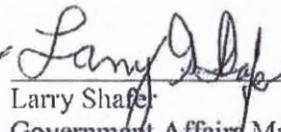
Following completion of a project and the awarding of credit, NDOR will maintain Soft-Match credit balances for each county. Counties then indicate Federal-aid bridge projects for use of their credit. These Federal-Aid bridge projects must be identified at least four months before their scheduled letting date in order to use Soft-Match credit. Counties may also state their intent to use all available credit on any future Federal-Aid bridge projects.

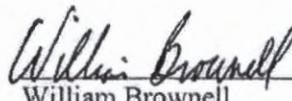
VIII. Compliance Reviews

NDOR and FHWA personnel will conduct project compliance reviews periodically.

APPROVED BY

  
Date: July 8, 2004  
John Craig  
Director  
Nebraska Department of Roads

  
Date: 7/8/04  
Larry Shafer  
Government Affairs Manager  
Nebraska Department of Roads

Concurrence:   
Date: 7/14/04  
William Brownell  
Division Administrator  
Federal Highway Administration  
Nebraska Division

example of a County's request to begin a Soft Match project

July 14, 2004

Larry Shafer, Manager  
Government Affairs  
Nebraska Department of Roads  
P.O. Box 94759  
Lincoln, NE 68509

Dear Mr. Shafer:

Subject: Federal-Aid Soft Match Bridge Program  
Letter of Request for Soft Match Approval  
Bridge No. C009720425  
Between Sec. 2 and 11 - T4N-R4E

choose one

Good County intends to [replace] [rehabilitate] the above structure, including its substructure. We ask you to concur, in writing, with the eligibility of this structure for the Soft Match Bridge Program. The County will follow the "Soft-Match Bridge Program Policies". The following information applies to this structure.

choose one

1. Sufficiency rating is below [50 for replacement] [80 for rehabilitation].
2. The project will be non-controversial.
3. The new structure will meet all standards applicable to bridge projects funded under the Federal Highway Bridge Replacement and Rehabilitation Program, the current issue of AASHTO, and Federal-aid requirements. The project will meet or exceed Board of Public Roads Classifications & Standards Minimum Design Standards - Rural Roads.
4. The coordinating professional engineer having overall responsibility for all phases of this project from design through construction is \_\_\_\_\_, P.E.
5. The County will request credit only on construction costs of the bridge, culvert, or dam structure.

We propose to construct a twin 8x6 concrete box culvert. Estimated cost is \$40,000. This is only an estimate. The County will proceed with the preparation of construction plans and specifications. We propose to let the culvert to contract. Construction is scheduled for the Fall of 1998. Bid results will be forwarded within 30 days of notice of award of the construction contract. If any of the above information changes, we will notify you immediately.

Sincerely,

Good County Hwy. Supt.

cc: Good County Board  
(Coordinating) Professional Engineer

CERTIFICATION OF COMPLIANCE

\_\_\_\_\_ County requests that 80% of the net county funds expended for eligible construction costs, including supervision of construction, of County Project No. \_\_\_\_\_, Structure No. C00\_\_\_\_\_ be applied as credit for the non-Federal share of future Highway Bridge Replacement and Rehabilitation Program projects, in accordance with the provisions of Title 23 United States Code Off-System Bridge Program. The County has complied with all provisions of the Soft Match Program and all statements made in the Letter of Request for Soft Match Approval and subsequent correspondence.

The following hereby certify that the above referenced project meets all conditions necessary to qualify for the credit mentioned above, subject to the penalties of U.S. Code, Title 18, Section 1020 (attached).

Coordinating Profession Engineer having overall responsibility for all phases of project from design through construction (affix seal and sign):

The County Board of \_\_\_\_\_ County, having met on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, hereby authorizes the County Board Chairperson and the County Highway Superintendent to sign in behalf of the County this Certification of Compliance. A copy of the resolution of authorization is attached hereto.

\_\_\_\_\_  
County Highway Superintendent

\_\_\_\_\_  
County Board Chairperson

The above appeared before me on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ and signed this certification in my presence.

WITNESS my hand and Notary Seal.

Seal

\_\_\_\_\_  
Notary Public

**Non-Controversial Checklist**

Please initial and date the activity was completed.

Initial:	Date (Month/Year):	Activity
		1. U.S. Army Corp of Engineers 404 Permit obtained.
		2. U.S. Army Corp of Engineers 404 Permit completed and closed.
		3. Coordination with State Historic Preservation Office State Historic Preservation Office Nebraska State Historical Society P.O. Box 82554 Lincoln, NE 68501-2554 Phone: 402-471-4787 in Lincoln or 1-800-833-6747 - Historic Preservation
		4. Coordination with Nebraska Game and Parks 2200 North 33 <sup>rd</sup> Street Lincoln, NE 68503 Phone: 402-471-5444
		6. Coordination with U.S. Fish and Wildlife Nebraska Field Office 203 West 2 <sup>nd</sup> Street Grand Island, NE 68804 Phone: 308-382-6468
		6. No impact to public property.
		7. No condemnation of private property.
		8. No request for public hearing.

**TITLE 18--CRIMES AND CRIMINAL PROCEDURE**

**PART I--CRIMES**

**CHAPTER 47--FRAUD AND FALSE STATEMENTS**

Sec. 1020. Highway projects

Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the costs thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction of any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report, or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to a material fact in any statement, certificate, or report submitted pursuant to the provisions of the Federal-Aid Road Act approved July 11, 1916 (39 Stat. 355), as amended and supplemented,

Shall be fined under this title or imprisoned not more than five years, or both.

(June 25, 1948, ch. 645, 62 Stat. 753; Oct. 31, 1951, ch. 655, Sec. 27, 65 Stat. 721; May 6, 1954, ch. 181, Sec. 18, 68 Stat. 76; Pub. L. 89-670, Sec. 10(f), Oct. 15, 1966, 80 Stat. 948; Pub. L. 103-322, title XXXIII, Sec. 330016(1)(L), Sept. 13, 1994, 108 Stat. 2147.)

APPENDIX C

RESOLUTION # \_\_\_\_\_

WHEREAS, the Board of Commissioners of Good County, desires to receive soft match credit for Structure No. C00 \_\_\_\_\_, and

WHEREAS, all requirements for receiving soft match credit have been met,

NOW, THEREFORE BE IT RESOLVED, that the Chairman of the Board of Commissioners and the County Highway Superintendent are hereby authorized to sign a Certification of Compliance for Structure No. C00 \_\_\_\_\_ as required to receive soft match credit.

Dated at Good City, Nebraska this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

COUNTY BOARD  
GOOD COUNTY, NEBRASKA

\_\_\_\_\_  
Chairperson

\_\_\_\_\_

\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
County Clerk

APPENDIX D

Concrete Box Culverts:

- (A) Staking.
- (B) Verify status of utilities prior to initial mobilization to site.
- (C) Inspection of foundation prior to placing reinforcement for toe walls or floor.
- (D) Inspection of reinforcement placement prior to all concrete pours.
- (E) Inspection during all concrete pours with cylinder testing and air tests.
- (F) Culvert placement (drop structures adjacent to CBC which attach to walls).
- (G) Erosion and sediment control.
- (H) Inspection during backfill.
- (I) Final inspection to verify grouting, channel shaping at ends of culvert and site cleanup. Includes site pictures and new SIA sheet.
- (J) Check validity of applications for payment and issue certificate of payment to the Owner.
- (K) Submittal of required documentation to County and Nebraska Dept. of Roads.

Multi-Span Continuous Concrete Slab Bridge:

- (A) Verify status of utilities prior to initial mobilization to the site.
- (B) Review shop drawings (if any).
- (C) Driving pile (and sheet piling, if any).
- (D) Placement of steel caps and bracing (if any).
- (E) Welding.
- (F) Painting.
- (G) Setting concrete forms.
- (H) Placing reinforcement.
- (I) Concrete pours.
- (J) Culvert placement (drop structures adjacent to abutments).
- (K) Guardrail placement.
- (L) Erosion and sediment control.
- (M) Backfilling operations.
- (N) Grouting.
- (O) Final inspection to verify grouting, channel shaping and site cleanup. Includes site pictures and new SIA sheets.
- (P) Check validity of applications for payment and issue certificate of payment to the owner.
- (Q) Submittal of required documentation to County and Nebraska Department of Roads.

Simple or Multi-Span Precast Concrete Deck Slab Bridge:

Same inspection as for Continuous Concrete slab bridge. In addition, inspection includes inspection of reinforcement placement, concrete pours, and curing procedures at the manufacturing plant for the deck slab units

Inspection includes unloading and placement of the units at the project site.

APPENDIX D

Simple or Multi-Span D.S.G. Bridges

- (A) Verify status of utilities prior to mobilization to site.
- (B) Review shop drawings.
- (C) Inspect any steel fabrication. Plant inspection is required for welded plate girder structures, and is recommended for all steel fabrication. If the contractor is willing to risk having to return rejected items to the plant, inspection at the job site is an option.
- (D) Driving piling.
- (E) Sheet pile driving.
- (F) Placement of steel caps and bracing (if any).
- (G) Setting steel girders.
- (H) Welding.
- (I) Painting.
- (J) Setting concrete forms.
- (K) Placing reinforcement.
- (L) Concrete pours.
- (M) Culvert placement (drop structures adjacent to abutments).
- (N) Erosion and sediment control.
- (O) Backfilling operations.
- (P) Grouting.
- (Q) Final inspection to verify channel shaping and site cleanup. Include site pictures and new SIA sheets. Check validity of applications for payment and issue certificates.
- (S) Submittal of required documentation to County and Department of Roads.

Inspection is limited to critical phases in order to keep the costs down. Inspection and construction requirements are in accordance with:

“Standard Specifications for Highway Construction, State of Nebraska, Department of Roads, 1997, and all subsequent amendments.”

