

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATIO

BEVERLY EAVES PERDUE
GOVERNOR

November 3, 2010

Mr. John F. Sullivan, III Division Administrator Federal Highway Administration 310 New Bern Avenue, Suite 410 Raleigh, North Carolina 27601

RE: FHWA Interstate Maintenance Preservation Funds

Dear Mr. Sullivan: John

In the spirit of FHWA's "Every Day Counts," personnel from your office in cooperation with NCDOT personnel from central and field offices collaborated in developing a streamline process for a new program initiative targeted to keeping our interstates in good condition. Please find attached two documents regarding the FHWA/NCDOT Interstate Maintenance Preservation Program eligibility and environmental policy requirements for your review, approval and signature.

We are looking forward to using this source of funding in planning cost effective strategies for preserving our interstates in North Carolina. If you are in agreement, please sign and return a copy for our records.

If you have any questions or concerns, please let me know.

Sincerely,

Terry R. Gibson, P.E.

State Highway Administrator

TRG/lj

cc:

Jim Trogdon, P.E., Chief Operating Officer Jon Nance, P.E., Chief Engineer – Operations Lacy Love, P.E., Director of Asset Management

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LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

FHWA-NC DIVISION

NOV 09/

ENG COORD

FINASST

PL-2

COMP SPEC

AIR OLTY SPEC

ROW OFFCR

TE-2

TRASH

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CONGAITS

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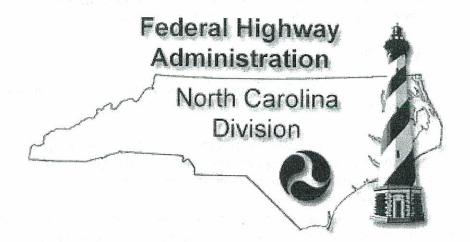
P & PD TEAM LEADER

PRECONST & ENV TEAM LEADER

QUAL COORD

MAJ PROJ ENG STRUCTURAL ENG FINANCIAL MGR FIN SPEC

Federal Highway Administration's Eligibility Requirements for North Carolina Department of Transportation's Interstate Maintenance Preservation Program



December 1, 2010

Date

John F. Sullivan, III, PE

Division Administrator

Interstate Maintenance Preservation Program Description

This document addresses interstate maintenance preservation eligibility. The Interstate Maintenance Preservation Program (IMPP) is a planned strategy of cost effective treatments to interstates; including bridges, pavements and roadside features that prevent/retard future deterioration and extends service life without increasing structural or traffic capacity. Reactive Maintenance is not eligible. The IMPP is to be used in conjunction with an effective interstate maintenance program to extend the life of bridges, pavements and roadside features.

The Interstate Maintenance Preservation Program will be managed by either NCDOT central administration and/or Division personnel depending on the type of treatments and criteria listed below with oversight by North Carolina FHWA Division Office. These projects will not require FHWA approval or certification of individual plans, specifications and estimates (PS&E) packages, nor will FHWA concur in individual project awards; however, all projects are subject to FHWA full review or spot checking.

Federal Aid Preservation Program Requirements:

To be eligible for Federal Aid Interstate Maintenance Preservation funding, preservation projects must meet the following:

- 1. Projects shall consist of any one or combination of activities included in the attached "Eligible Activities" and shall not be funded in the State Transportation Improvement Plan as a rehabilitation or replacement project.
- 2. Projects must meet the requirements for Federal-aid projects (on the State Transportation Improvement Plan, have appropriate environmental documents, permits, and be competitively bid, etc.).
- 3. Projects must be selected by the use of a systematic process such as a management system or supported by data. Systems may include; Bridge Management (BMS), Pavement Management (PMS) and Maintenance Management (MMS). Data includes, but is not limited to bi-annual and supplemental Bridge Inspection reports, Pavement Condition Surveys, Maintenance Condition Assessments and Division managed inspection programs. Systematic processes may include models, decision trees or a preventive maintenance schedule.
- 4. Projects require Right-of-Way certification.
- 5. Projects require location maps, typical sections, plans, specifications and engineer's estimate (PS&E) where applicable.
- 6. Projects authorized by FHWA.

- 7. No force account work is eligible under this program except for contract preparation, investigation, administration and/or inspection.
- 8. Strong consideration should be given to corridor-based projects and grouping of activities.
- 9. NCDOT is responsible for construction inspection, materials certification and final inspection documentation in project files.
- 10. Any identified safety upgrades discovered within preservation project limits should be reported to the State Traffic Engineer for inclusion in the Highway Safety Improvements Program.

According U.S. Code, Chapter 23, Section 116 Part D, "Preventive Maintenance. - A preventive maintenance activity shall be eligible for Federal assistance under this title if the State demonstrates to the satisfaction of the Secretary that the activity is a cost-effective means of extending the useful life of a Federal-aid highway." Should NCDOT choose to utilize an activity other than those listed in this document, the Department will request prior approval from FHWA and provide documentation that the activity extends life.

Eligible Activities - Bridge:

The following is a list of eligible interstate bridge preservation activities. Only activities listed below may be performed under this program unless prior written authorization is obtained from the State Bridge Management Engineer and the FHWA Division Bridge Engineer.

- 1. Deck joint replacement or elimination of joints (link slabs).
- 2. Painting of structural steel, including complete, spot and zone painting. Painting for aesthetics is not eligible. (When performing these activities, a paint analysis is required to determine the appropriate paint system. Where over coating is proposed, adhesion testing of existing paint is required.)
- 3. Deck Preservation including; concrete overlays, dense concrete overlays, epoxy overlays and sealers and chloride extractors. Deck replacements are considered rehabilitation and are not eligible for the IMPP. (A deck evaluation must be completed for these activities to be eligible.)
- 4. Deck washing for removal of chlorides— A deck washing program which outlines the extent and frequency is required.
- 5. Superstructure Preservation:
 - (A) Structural steel repairs in conjunction with other preservation activities. Concrete girder and diaphragm repairs in conjunction with other preservation activities.
 - (B) Bearing assembly cleaning and recoating. Bearing replacements and/or repairs.
- 6. Substructure Preservation:
 - Bent/End Bent repairs and sealing in conjunction with other preservation activities. Bent/End Bent cleaning a cleaning program which outlines the extent and frequency is required.
- 7. Scour countermeasures.

The above activities accomplished "in conjunction with other preservation activities" should not exceed the cost of the original activity without prior approval. For example, in a painting project that involves structural steel repairs, costs for the structural steel repairs should not exceed costs of painting the structure.

Eligible Activities - Pavement:

The following is a list of eligible interstate pavement preservation activities. Only activities listed below may be performed under this program unless prior written authorization is obtained from the State Pavement Management Engineer and the FHWA Transportation Engineer who will consult with the FHWA Division Pavement & Materials Engineer.

- 1. Crack sealing.
- 2. Mill and replace one lift of hot mixed asphalt for one travel lane.
- 3. Micro milling of flexible pavement.
- 4. Chip seal, fog seal or slurry seal on flexible shoulders.
- 5. Open graded friction course or ultra thin bonded wearing course on existing flexible pavement.
- 6. Clean and reseal concrete joints.
- 7. Repair expansion joints in concrete pavement.
- 8. Diamond grinding of concrete pavement.
- 9. Grooving on concrete pavement.
- 10. Stitching of broken slabs.
- 11. Slab jacking of concrete pavement (including approach slabs).
- 12. Microsurfacing of flexible or rigid pavement.
- 13. Punchout repair of CRC pavement on a programmatic basis.
- 14. Dowel bar retrofit.
- 15. Ultra thin bonded wearing course on rigid pavement.

Eligible Activities - Roadside Features (Drainage and Traffic):

The following is a list of eligible interstate roadside preservation activities. Only activities listed below may be performed under this program unless prior written authorization is obtained from the State Road Management Engineer and the FHWA Transportation Engineer who will consult FHWA Division Asset Management Program Manager.

Drainage

- 1. Replace/Repair paved lateral ditches including leveling, sealing, or removing and replacing with rip-rap paved ditches along a corridor.
- 2. Line/Repair Crossline pipes including repair or lining of crossline pipes that are damaged, rusted, or no longer functioning as intended.
- 3. Inlet Repair/Retrofit including repair of drainage inlets along a corridor, or the retrofit of open throat boxes to grated inlets.
- 4. Shoulder Drains including systematic approach of locating, inspecting and repairing of shoulder drains along a corridor.

Traffic

- 5. Pavement Markings including pavement striping on a systematic cyclical schedule.
- 6. Pavement Markers including placement of pavement markers or the repair of lenses in snow plowable markers.
- 7. Signs including the systematic cleaning/washing of signs and sign replacement to meet current design standards.
- 8. Guardrail including upgrading or replacement.
- 9. Lighting including upgrading a network of roadway lighting along a corridor.
- 10. Attenuators including upgrading or replacement.

Selection Procedure:

Division Managed

- 1. Divisions select candidate projects based on eligible activities and supporting data.
- 2. Evaluation of field conditions are made (if needed) to supplement available condition information (Inspection Reports, Deck Evaluation Reports, etc.).
- 3. Projects are let to contract based on requirements and available funding.

Central Managed

- 1. Divisions provide candidate projects to appropriate central office (State Bridge Management, Pavement Management or State Road Maintenance)
- 2. Appropriate central office evaluates each candidate and prioritizes eligible candidates using selection criteria.
- 3. Evaluation of field conditions are made (if needed) to supplement available condition information (Inspection Reports, Deck Evaluation Reports, etc.)
- 4. Projects are let to contract based on requirements and available funding.

Definitions:

Interstate Maintenance Preservation Program (IMPP) - a planned strategy of cost effective treatments to interstates; including bridges, pavements and roadside features that prevent/retard future deterioration without increasing structural or traffic capacity.

Bridge Management System (BMS) - a systematic process that provides analysis and summarizes bridge information for use in selecting and implementing cost-effective bridge construction, rehabilitation, preservation, and maintenance programs.

Pavement Management System (PMS) - a systematic process that provides analysis and summarizes pavement information for use in selecting and implementing cost-effective pavement construction, rehabilitation, preservation, and maintenance programs.

Maintenance Management System (MMS) - a systematic process that provides analysis and summarizes maintenance information for use in selecting and implementing cost-effective construction, rehabilitation, preservation, and maintenance programs.

Preservation Activity - a planned strategy of cost effective treatments that prevent/retard future deterioration without increasing structural or traffic capacity.

Routine Maintenance - Work that is performed to maintain the condition or to respond to specific conditions and events that restores the highway system to an adequate level of service.

Systematic Process - a systematic process involves defining a problem, evaluating alternatives, and selecting an appropriate alternative that promotes a course of action.