



West Virginia Division of Highways Policy: **Core Maintenance Plans**

Issued by the Commissioner of Highways

Policy No: DOH 5.15

Issue Date: 07/15/2010

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1.0 PURPOSE

The purpose of this policy is to explain the Core Maintenance Plan and its emphasis on the performance of essential “core” activities of road maintenance.

2.0 SCOPE

This policy applies to Operations Division employees, District employees, and District Annual Plan employees.

3.0 DEFINITIONS

- 3.1 **CMP**: Core Maintenance Plan
- 3.2 **Core**: Essential or most important part
- 3.3 **Core Maintenance Plan**: Concept that has been established to place emphasis on the performance of the essential “core” activities of road maintenance including mowing, patching paved roadways, ditching paved roadways, ditching and blading unpaved roadways, and snow removal and ice control.
- 3.4 **SRIC**: Snow Removal and Ice Control
- 3.6 **Mowing Cycle**: The times per year a specific the vegetation along a highway right-of-way is scheduled for mowing to be completed by a maintenance organization during the performance period of May – September and the possible performance of March, April, October, and November. The number of times will vary based off the function and designation of the route.
- 3.7 **Paved Roads**: All roads with low bituminous (tar and chip), HMA, concrete, or brick surface.
- 3.8 **Unpaved Roads**: All roads not considered Paved Roads that are not unimproved or primitive roads.

4.0 INTRODUCTION

Importance: The Core Maintenance Plan (CMP) concept has been established to place emphasis on the performance of the essential “core” activities of road maintenance. The core activities as defined by the CMP are mowing, patching paved roadways, ditching paved roadways, ditching and blading unpaved roadways, and snow removal and ice control (SRIC). These activities comprise the core of any successful highway maintenance program and are to be monitored through the planning, scheduling, and execution of the Core Maintenance Plan and Annual Plan. The importance of planning all maintenance activities and of performing the work in accordance with these plans cannot be over emphasized.

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5.0 OBJECTIVE

To ensure that the performance of the CMP activities is consistent statewide, the State Highway Engineer will require, through the Director of the Operations Division, that each County/Expressway Supervisor plan and schedule at least 70% (note: the actual percentage of the resources used to complete the plans can differ based on the organization and conditions present) of the organization's Annual Plan resources for Core Maintenance activities. Prior to the preparation of each Annual Plan, the Director of the Operations Division will designate those maintenance performance activities approved to be included in the CMP. Performance criteria for these activities are contained individually in the Operations Manual and Maintenance Performance Standards. The remaining 30% of the Annual Plan resources are to be devoted to other maintenance activities and responses to citizen's request for assistance.

6.0 PLANNING

6.1 BASIS OF PLAN

- A. The Director, Operations Division, with assistance from the GTI Section, will provide each Deputy District Engineer with an electronic copy of the most recent Roadway Inventory Report for maintenance organizations within their respective district. This report will identify, at a minimum, each route within the respective organization by route number, classification, surface type, and length. The CMP shall consist of five (5) individual core maintenance activity sub-plans: patching paved roadways, ditching paved roadways, ditching and blading unpaved roadways, mowing, and SRIC plans. Each county and expressway maintenance organization CMP shall include all routes identified on the Roadway Inventory Report. Each route shall be scheduled in the organization's Core Maintenance Plan at the following frequency.
 - 1. All paved roads in an organization shall be listed for patching a minimum of one time per calendar year. All pothole patching shall be scheduled and completed before the end of May each year.
 - 2. All paved roads in an organization shall be listed for ditching a minimum of one time in a three-calendar-year period, with the first year of the three-year cycle starting January 1, 2020.
 - 3. All unpaved roads shall be listed for stabilization a minimum of two times per year. They should be ditched and bladed, activity 262, a minimum of one time per year and bladed, activity 263, one time per year aggregate will be added as needed. There is no need to distinguish between the two in the plan.
 - 4. Based on classification of the road, excluding unimproved and primitive, all roads in an organization shall be listed for mowing three times (primary), two times (paved secondary), or once per calendar year (unpaved secondary), respectively.

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- B. The County/Expressway Supervisor must prepare the CMP based on actual maintenance funding levels and the CMP must be flexible enough to allow for variations in weather, manpower, and equipment.

6.2 FORMAT OF PLAN

- A. The Deputy District Engineer, or designee, is to prepare the CMP with the direct assistance of the County/Expressway Supervisor and various district maintenance personnel, as required. One plan for the patching activities, one plan for the ditching paved roadway activities, one plan for the ditching/blading unpaved roadway activities, and one plan for the mowing activities shall be prepared. The CMP is to be entered into the GIS database provided by the Director, Operations Division and GTI Section. No exceptions will be permitted.
- B. The individual CMP for each activity group will be entered for an entire calendar year.
- C. The planned accomplishment date of the core maintenance activities on individual routes, or segments of routes, will be further broken-down to one of two periods within each month. The periods will be either the "first half" of the month (1st thru 15th) or the "second half" of the month (16th thru 30th/31st).
- D. SRIC plans are to be submitted separately for review to the Director, Operations Division, or designee, by the first day of October each year.

6.3 PERFORMANCE REQUIREMENTS OF PLAN

- A. All CMP activities are to be performed according to policy and procedures in the Maintenance Manual, the Maintenance Performance Standards, and to the following criteria.
 - 1. Patching All Paved Roads: Reviewed and patched, as needed, at least once a calendar year. All potholes patched before the end of May each calendar year.
 - 2. Ditching for Paved Roadways: Reviewed and cleaned, as needed, at least once every three calendar years.
 - 3. Ditching/Blading for Unpaved Roadways: Reviewed, ditched, and bladed, as needed, at least twice every year.
 - 4. Mowing for Non-Expressways:
 - a. Primary roads are to be mowed a minimum of three times per calendar year with two passes made on each side of the roadway, where possible. This includes one pass behind the ditch prior to Memorial Day, a second time prior to the Fourth of July, and a third time prior to Labor Day.

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- b. Paved secondary roads are to be mowed a minimum of two times per calendar year with two passes on each side of the roadway made where possible, including one pass behind the ditch.
- c. Unpaved routes are to be mowed a minimum of one time per calendar year with one pass on each side of the roadway behind the ditch.

5. Mowing for Expressways:

- a. A mowing cycle is to be completed every four weeks, as needed, May through September. The first mowing cycle is to be completed by Memorial Day. The final cutting is to be planned so there will be no vegetation higher than eight inches in the medians over the winter. At no time should the vegetation be mowed shorter than six inches, except at scenic overlooks or rest areas.
- b. Prior to Labor Day, all mowing is to be performed in the clear zone of the roadway.
- c. After Labor Day, mowing is to include reasonable mowable areas within the right-of-way that lie outside the regular mowing limits. This mowing is to improve the general appearance of the roadside and control brush and tree growth.

- B. The Maintenance Performance Standards include a month/seasonal performance schedule for each maintenance activity. The County/Expressway Supervisor should review and become familiar with the Maintenance Performance Standards as a tool to assist in the task of planning.
- C. These Performance Requirements of the Plan represent the minimum annual planning frequency requirement for these Core Maintenance Activities. Additional Core Maintenance defined work may be required as road conditions change through out the calendar year.

6.4 PLAN REVIEW

County/Expressway Core Maintenance Plans will be reviewed and approved by the Deputy District Engineer to ensure they are realistic and based upon the District's goals. The Deputy District Engineer approves copy of the activities of each maintenance organization's CMP in the GIS database for review by the Director, Operations Division, or designee, to assure the plan meets the overall aims and objectives of the Department.

6.5 PLAN SUBMITTAL

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- A. The Core Maintenance Plan will be prepared by the County/Expressway Supervisor on or before November 1, reviewed and approved by the Deputy District Engineer by November 15, and entered into the GIS database for review by the Director, Operations Division, or designee, on or before December 1.
- B. Adjustments to the CMP may be necessary once annual plan allocations are finalized for the organization. Adjustments shall be made by the Organization Supervisor, reviewed by the Deputy District Engineer, and entered into the GIS database for review by the Director, Operations Division, or designee.
- D. Field Crews may use paper copies to schedule work and track completion but all updates and adjustments to the CMP are to be entered into the GIS database either at the organization or the district.

7.0 SCHEDULING ACTIVITIES AND ADJUSTING SCHEDULES

- 7.1 Weekly Work Schedules, [Form OM-41](#), are to be utilized by County/Expressway Supervisors in scheduling maintenance resources and maintenance activities, both core and non-core maintenance, on a weekly basis. The preparation of a weekly work schedule allows the County/Expressway Supervisor to achieve maximum use of available resources for a weekly period that can generally be successfully planned.
- 7.2 The preparation of Weekly Work Schedules should always include planned alternate activities. Alternate activities afford the County/Expressway Supervisor a degree of flexibility that is required for successful management. The Division of Highways (DOH) Administrative Operating Procedures, Section Five (5), should be referenced for specific procedures and details regarding the preparation of Weekly Work Schedules.
- 7.3 When prolonged inclement weather occurs, the need to perform emergency work or other external factors, significantly interrupts or adversely affects an organization's CMP. The Deputy District Engineer shall work with the County/Expressway Supervisor to revise the organization's CMP. The revised CMP shall adhere to the guidelines contained herein, and once approved by the Deputy District Engineer and submitted to the Director, Operations Division, will replace the existing CMP in its entirety.

8.0 DOCUMENTATION OF WORK PERFORMED

County/Expressway Supervisors are to ensure that the completion of core maintenance activities is documented weekly, or more frequently, as required. Entering data into the GIS database will be performed at a minimum bi-weekly. All activities may be marked inspected, not needed, if the site is reviewed and no work needs to be performed.

9.0 MONITORING PROGRESS OF ACHIEVING GOALS

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- 9.1 Monitoring of the progress made by a maintenance organization toward achieving the goals of the CMP is paramount to the success of the CMP. Monitoring increases the efficiency and effectiveness of the organization and helps ensure success of the CMP. Through monitoring any necessary corrective action can be taken in a timely manner, sound practices can be fostered, and areas for improvement can be identified.
- 9.2 The Deputy District Engineer is to ensure each organization's CMP is reviewed weekly. The date and time of those reviews shall be recorded along with any pertinent comments, kept with, and made a part of the organization's CMP.

10.0 SUBMITTAL OF DOCUMENTED WORK PERFORMED

The County/Expressway Supervisor is to enter updates of completed CMP work into the GIS database within five (5) working days the end of the "first half" and "second half" of each month. The Deputy District Engineer, or designee, will review the updated GIS database for completed CMP activities and approve in the database on or before the tenth day of each month, and the Director, Operations Division, or designee, will review and submit it for publishing on the Public Web Map.

11.0 EVALUATION PROCESS

The Director, Operations Division, will provide form(s) to be used to evaluate each maintenance organization's adherence to their respective CMP and compliance to directives regarding the CMP process. The Deputy District Engineer, or designee, shall review each organization monthly. The Director, Operations Division, or designee will evaluate and provide feedback to each maintenance organization quarterly. An annual report will be submitted to each district at the end of each calendar year.

12.0 RELEVANT MATERIALS / DOCUMENTS

- 12.1 Maintenance Manual
<https://westvirginiaot.sharepoint.com/sites/dot/highways/maintenance/default.aspx>.
- 12.2 Maintenance Performance Standards
<https://westvirginiaot.sharepoint.com/sites/dot/highways/maintenance/default.aspx>.
- 12.3 Annual Plan
- 12.4 [Form OM-41](#) Maintenance Schedule Worksheet

13.0 CHANGE LOG

February 14, 2022 –

- Changed format per policy and procedure work group.
- Reviewed and edited. Made corrections to spelling, punctuation, and better word/sentence flow.

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- Added the following sections: Purpose, Scope, Definitions, and Relevant Materials/Documents.
- Created hyperlinks to forms, manuals, and standards mentioned throughout policy.
- Changed Maintenance Director to Operations Director throughout policy.
- Changed patching to potholes patching being completed prior to the end of May.