

## **Chapter 1**

### **Maintenance Introduction**

#### **1.0 Introduction**

Maintenance is defined in Montana State Statute 60-1-103, MCA. Maintenance “means the preservation of the entire highway including surfaces, shoulders, roadsides, structures, and traffic-control devices necessary for the safe and efficient use of the highway.”

It is generally agreed that roads should be maintained to a standard of reasonable quality over their useful lives rather than being allowed to wear out prematurely. Preventive maintenance retards or offsets the deterioration and damaging effects of weather, aging, traffic, wheel loads and vegetation. It also helps overcome damage, vandalism, failure of materials and inadequacies in pavement design and construction. Maintenance work is labor and equipment intensive. Care must be given to identify critical maintenance needs to allow them to be scheduled when necessary.

Maintenance activities are either preventive or reactive. Preventive maintenance is doing the right thing at the right time before deterioration of the roadway occurs. Reactive maintenance is repair to the roadway after deterioration has occurred.

Maintenance activities may or may not be federal-aid eligible. Preventive maintenance activities are potentially federal-aid eligible. Reactive maintenance is not. The PvMT Management System yearly pavement condition reports helps identify whether a project is reactive or preventive.

#### **1.1 Organization**

The activities described in each subsection within Section C are provided for information, guidance, and the establishment of consistency in performing and reporting activities. The information provided is a guideline and will not, nor is intended to cover every possible combination or method for accomplishment of a particular activity.

The organization of each section is as follows:

##### **Introduction**

Each chapter begins with an introduction. The introduction provides an overview and specific information that relates to the activities within the chapter including a list of potential resources for additional information.

Each chapter is divided into the following subsections:

**Specific Activity**

The chapters will begin with the number (X.0), description and the appropriate MMS activity number.

**Activity Description** – a brief definition of the scope of the activity.

**Purpose** – a statement of the reason the activity is done.

**Timing of Maintenance** – a suggestion when the activity should be scheduled.

**Specialized Equipment** – a listing of non-standard equipment that maybe required for performing the activity. The list does not contain all possible equipment that could be used for the activity, but is the suggested list for planning purposes.

**Materials** – a listing of potential materials to perform the activity. The list is a suggestion and may not cover all potential materials or additional materials information such as: testing and sampling, storage, or special handling requirements.

**Safety and Training** – a brief overview of expectations, guidelines, and resources relevant to the activity.

**Environmental Best Management Practices** - an overview of environmental best management practices to consider when performing the activity.

**Procedures** – a description of details, recommended processes or procedures to be considered to achieve a quality result and provide a safe work environment.

As noted before, the goal of Section C is to provide the users with a fundamental guideline for the majority of maintenance activities. The guidelines in this section are not all-inclusive nor do they provide every possible scenario. They are designed to inform and provide guidance to maintenance personnel in performing routine maintenance activities.