Chapter 2

Maintenance Management System

2.0 Introduction

The Maintenance Management System (MMS) is a reporting system designed to track daily maintenance activities. The system tracks labor, materials, equipment and contract cost for activities performed by route and location. The system emphasizes economic use of personnel, equipment and materials.

The basic building block upon which the MMS has been constructed is an individual activity. Maintenance activities have been subdivided to reflect the variety of duties, which are performed.

The MMS allows for:

- Planning
- Budgeting
- Scheduling
- Performing
- Reporting
- Analyzing maintenance activities

2.1 Definition

A maintenance activity is defined as a series of tasks and subtasks performed by one crew at one location of the highway system at one time to keep the highway at a specific quality level. The highway location can be a spot location or a continuous location from one reference post to another.

To ensure that 100% of field personnel’s time is accounted for in MMS, individual maintenance activities have been defined. Routine maintenance operations, material production, material handling, minor equipment maintenance and overhead activities of the field maintenance force are recorded. Major activities are separate and distinct. A listing of the maintenance activities appears in the MMS Field Manual.
2.2 Activity Code Numbers

To ensure consistent identification and reporting of each maintenance activity a four-digit activity number (XXXX) has been assigned to individual activities. The first digit indicates the type of work being done. Various types of work include the following:

- 1-Roadway
- 2-Roadside
- 3-Drainage
- 4-Bridges
- 5-Facilities
- 6-Traffic Safety
- 7-Winter Maintenance
- 8-Material production/handling/stockpiling
- 9-Equipment/supervision/overhead

The second digit indicates one of the following conditions:

1. Maintenance Activity--designed to preserve and maintain the highway and its elements.
2. Service Activity--designed to provide a safe highway.
3. Betterment Activity--designed to improve, adjust or make additions to the highway system, beyond its former condition.
4. General Activity--designed to include producing materials, acquiring equipment, planning, scheduling, supervising and approving all absences.

The final 2 digits of the 4-digit activity number are a sequential listing. This coding system was developed to permit for a maximum flexibility in the management and presentation of activity data, and at the same time to allow the expansion capabilities within the system.

2.3 Activity List

The MMS activity list indicates the assigned activity code number, activity name and work unit. The activity name has been developed and assigned to provide a brief but recognizable indicator of the activity function.

The activity work unit is a unit of measure used to determine the amount of work planned, budgeted or performed on a given activity. Where possible, the unit of work is one that physically measures the amount of work done such as a volume, area or linear measurement. When the activity is such that a physical measurement of the work is not appropriate, a quantity of material used to perform the work is used such as gallons of paint. Finally, when neither of these work units is appropriate, an employee-hour measurement is assigned to the activity.
2.4 Cost Centers

Cost Centers are used to gather costs on maintenance projects. Cost Centers are required on all state and federal funded pavement preservation, accounts receivable and major facility upgrade projects. They can be used on any major maintenance project for which costs need to be tracked.

A seven digit numbering system is used to identify specific cost centers, set up as follows:

- First two digits – Area identification number
- Second two digits – fiscal year
- Last three digits – assigned sequentially in segments depending on project type