Pavement Condition Survey and Rating Procedures

3-1. Introduction

An important component of PAVER is the pavement condition survey and rating procedures. Data obtained from these procedures are the primary basis for determining M & R requirements and priorities. This chapter explains how to conduct a condition survey inspection and how to determine the Pavement Condition Index (PCI). It is essential to have a thorough working knowledge of the PCI and condition Survey Inspection techniques.

3-2. Pavement Condition Rating

Pavement Condition is related to several factors. These include structural integrity, structural capacity, roughness, skid resistance/hydroplaning potential, and rate of deterioration. Direct Measurement of these factors requires expensive equipment and highly trained personnel. However, these factors can be assessed by observing and measuring distress in the pavement.

a. PCI. The pavement condition rating is based on the PCI, which is a numerical indicator based on a scale of 0 to 100. The PCI measures the pavement's structural integrity and surface operational condition. Its scale and associated ratings are shown in figure 3-1.

b. Determination of PCI. The PCI is determined by measuring pavement distress. The method has been field tested and has proven to be a useful device for determining M & R needs and priorities.

3-3. Pavement Inspection

a. General. Before a pavement network is inspected, it must be divided into branches, sections, and sample units as described in chapter 2. Once this division is complete, survey data can be obtained and the PCI of each section determined.

b. Inspection procedures for jointed concrete pavements. There are two methods which may be used to inspect a pavement. Both methods require that the pavement section be divided into sample units. The first method--entire section inspection--requires that all sample units of an entire pavement section be inspected. The second method--inspection by sampling--requires that only a portion of the sample units a section be inspected. For both methods, the sample units must be assigned unit numbers.

PCI	Rating
100	EXCELLENT
85	VERY GOOD
70	GOOD
55	FAIR
40	POOR
25	VERY POOR
10	FAILED
0	

Army Corps of Engineers PCI scale and condition rating