

ABSTRAK

ITA RESTI FAUZI, 2020. Tingkat Kerusakan Jalan Raya Manding – Dasuk Dengan Menggunakan Metode *Pavement Condition Index* skripsi, Program Studi Teknik Sipil, Fakultas Teknik, Universitas Wiraraja Madura.

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Jalan merupakan prasarana dalam mendukung laju perekonomian suatu daerah. Tingkat pelayanan jalan semakin menurun akibat terjadinya kerusakan jalan sehingga berpengaruh terhadap kenyamanan, keamanan dan kelancaran berlalu lintas. Penelitian ini bertujuan untuk menilai kondisi perkerasan jalan pada ruas Jalan Raya Manding – Dasuk dengan menggunakan metode *Pavement Condition Index*.

Metode yang digunakan yaitu metode *Pavement Condition Index* (PCI). Metode ini merupakan sistem penilai kondisi perkerasan jalan berdasarkan jenis, tingkat dan luas kerusakan, dan dapat digunakan sebagai acuan dalam usaha pemeliharaan. Nilai PCI memiliki rentas 0 (nol) sampai 100 (seratus) dengan kriteria sempurna (*sempurna*), sangat baik (*very good*), baik (*good*), cukup (*fair*), jelek (*poor*), sangat jelek (*very poor*), dan gagal (*failed*).

Hasil penelitian ini menunjukkan bahwa berdasarkan analisis Metode *Pavement Condition Index* (PCI) didapatkan hasil nilai rata-rata = 86,75. Dari hasil tersebut dapat ditarik kesimpulan bahwa kondisi perkerasan pada ruas Jalan Raya manding – Dasuk termasuk kedalam kondisi Sempurna (*Excellent*) karena nilai rata-rata tingkat kerusakannya berada diantara nilai 85 – 100 dengan % tipe kerusakan seluruh segmen yaitu, tipe kerusakan 3 (*Block Cracking*) sebesar 56,03%, tipe kerusakan 7 (*Edge Cracking*) sebesar 5,245%, tipe kerusakan 11 (*Patching & Util Patching*) sebesar 11,045%, tipe kerusakan 13 (*Potholes*) sebesar 1,43%, dan tipe kerusakan 19 (*Weathering/Ravelling*) sebesar 26,26%.

Kata Kunci : Tingkat kerusakan jalan, metode *Pavement Condition Index*

ABSTRACT

ITA RESTI FAUZI, 2020. The Level of Damage in the Manding – Dasuk Highway Using the Method of Pavement Condition Index. Thesis. Civil Engineering Study Program, Faculty of Engineering, Wiraraja University Madura. (Supervisor : **DWI DWSHARIYANTO, ST, MT.** And **AHMAD SUWANDI, ST, MT.**).

Roads are infrastructure in supporting the economic pace of a region. The level of road service decreases due to road damage so that it affects the comfort, safety and smoothness of traffic. This study aims to assess the condition of road pavement on the Manding - Dasuk Highway section by using the Pavement Condition Index method.

The method used is the Pavement Condition Index (PCI) method. This method is a system of assessing road pavement conditions based on the type, extent and extent of damage, and can be used as a reference in maintenance efforts. PCI value has a range of 0 (zero) to 100 (one hundred) with perfect criteria (perfect), very good (very good), good (good), fair (fair), bad (poor), very bad (very poor), and failed (failed).

The results of this study indicate that based on the analysis of the Pavement Condition Index (PCI) Method the average value = 86.75 is obtained. From these results it can be concluded that the pavement conditions on the manding - Dasuk Highway section are included in the Excellent condition (Excellent) because the average value of the damage is between the value of 85-100 with% the type of damage to all segments namely, damage type 3 (Block Cracking)) at 56.03%, damage type 7 (Edge Cracking) at 5.245%, damage type 11 (Patching & Util Patching) at 11.045%, damage type 13 (Potholes) at 1.43%, and damage type 19 (Weathering / Ravelling) of 26.26%.

Keywords : Level of road damage, Pavement Condition Index method