

ANALISIS TINGKAT KERUSAKAN JALAN PERKERASAN KAKU MENGGUNAKAN METODE *PAVEMENT CONDITION INDEX*

(Studi Kasus Jalan Raya Padang – Solok STA 13+800 – STA 23+800)

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Abstrak

Jalan Raya Padang – Solok merupakan jalur lalu lintas provinsi Sumatera Barat yang banyak dilalui oleh kendaraan bermotor maupun kendaraan yang bersumbu empat atau lebih. Pada jalan raya Padang - Solok terjadi kerusakan di beberapa titik pada ruas jalan yang dapat menyebabkan terjadinya kecelakaan lalu lintas yang bisa membahayakan bagi pengguna jalan, membuat kemacetan yang dapat memperlambat waktu tempuh pengguna jalan. Tujuan penelitian ini adalah untuk mengetahui jenis-jenis kerusakan jalan, tingkat kerusakan jalan, mengetahui nilai kondisi perkerasan jalan serta mengetahui jenis program pemeliharaan jalan. Berdasarkan hasil penelitian jenis kerusakan jalan yang terjadi tambalan kecil (*patching small*) 19,9%, tambalan besar (*patching large*) 4,91, retak lurus (*linier cracking*) 18,57%, pelepasan (*popouts*) 1,61%, Keausan akibat lepasnya agregat di sudut (*spalling corner*) 7,71%, keausan atau lepasnya agregat sambungan (*spalling joint*) 5,13%, retak sudut (*corner crack*) 16,68%, penurunan bahu jalan (*shoulder drop off*) 0,33%, patahan (*faulting*) 5,13% dan remuk (*punchout*) 22,35%. Nilai *Pavement Condition Index* (PCI) dari semua segmen jalan Padang-Solok Sta 13+800 – Sta 23+800 adalah 84 dengan kategori sangat baik (*very good*). Program pemeliharaan Jalan Raya Padang Solok Sta 13+800 – Sta 23+800 adalah pemeliharaan rutin, dimana pemeliharaan rutin diperlukan pembersihan jalan dari rontokan batuan atau tanah, penambalan permukaan, penutupan retakan.

Kata Kunci : Kerusakan Jalan, Perkerasan Kaku, *Pavement Condition Index* (PCI)

ANALYSIS DAMAGE ROAD RIGID PAVEMENT USING PAVEMENT CONDITION INDEX METHOD (Case Study Highway Padang – Solok STA 13+800 – STA 23+800)

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Abstract

Padang – Solok highway is a traffic lane in the province of West Sumatra that is mostly traversed by motorized vehicles or vehicles with four or more axes. On the Padang - Solok highway there is damage at several points on the road that can cause traffic accidents that can be dangerous for road users, creating congestion that can slow down the travel time of road users. The purpose of this study was to determine the types of road damage, the level of road damage, determine the value of road pavement conditions and find out the type of road maintenance program. Based on the results of the study the type of road damage that occurred patching small 19.9%, patching large 4.91, linear cracking 18.57%, popouts 1.61%, Wear due to loss of aggregate at an angle (spalling corner) 7.71%, wear and tear or aggregate connection (spalling joint) 5.13%, corner cracking 16.68%, shoulder drop off 0.33% %, faulting 5.13% and punchout 22.35%. The Pavement Condition Index (PCI) value of all segments of the Padang-Solok road Sta 13 + 800 - Sta 23 + 800 is 84 with a very good category. Padang Solok Highway Maintenance Program Sta 13 + 800 - Sta 23 + 800 is routine maintenance, where routine maintenance is required to clean the road from falling rocks or soil, surface fillings, crack closure.

Keyword : Road Damage, Rigid Pavement, Pavement Condition Index (PCI)