

EVALUASI PERKERASAN JALAN MENGGUNAKAN METODE PCI (PAVEMENT CONDITION INDEX) DAN SDI (SURFACE DISTRESS INDEX) PADA RUAS JALAN BAREGBEG-CIILAT KABUPATEN CIAMIS

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ABSTRAK

Ruas Jalan Baregbeg-Ciilat merupakan jalan yang menghubungkan antara Kecamatan Sukadana dan Kecamatan Baregbeg, sekaligus jalan alternatif antara Kecamatan Rancah ke pusat Kabupaten Ciamis. Penelitian ini bertujuan untuk mengevaluasi kondisi permukaan perkerasan jalan secara fungsional berdasarkan dua metode, yaitu metode *Pavement Condition Index (PCI)* dan metode *Surface Distress Index (SDI)*. Penilaian kondisi jalan ini digunakan sebagai dasar untuk mengetahui kemungkinan faktor penyebab kerusakan dan jenis penanganan pemeliharaan jalan. Survei dilakukan sepanjang 5 km terdiri dari 50 unit sampel atau segmen, dengan panjang tiap segmen sebesar 100 m dan lebar 4 m. Berdasarkan dari hasil penilaian kondisi perkerasan jalan dengan menggunakan metode *Pavement Condition Index (PCI)* yaitu sebesar 60 % permukaan perkerasan memiliki kondisi sempurna, 34 % permukaan perkerasan memiliki kondisi sangat baik, dan sebesar 6 % permukaan perkerasan memiliki kondisi baik. Dengan perhitungan menggunakan metode *Pavement Condition Index (PCI)*, didapat nilai rata-rata *PCI* sebesar 88 menunjukkan kondisi permukaan jalan dalam kondisi sempurna. Pada penilaian kondisi permukaan jalan dengan metode *SDI (Surface Distress Index)* memiliki nilai kerusakan permukaan jalan 100 % dalam keadaan baik dan tidak terdapat kondisi permukaan sedang, rusak ringan, maupun rusak berat. Dari hasil perhitungan menggunakan metode *SDI* didapatkan nilai rata-rata *SDI* sebesar 6,7 dengan kondisi baik.

Kata kunci: Penilaian Kondisi Jalan, *Pavement Condition Index (PCI)*, *Surface Distress Index (SDI)*

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EVALUATION OF PAVEMENT CONDITION USING PCI (PAVEMENT CONDITION INDEX) AND SDI (SURFACE DISTRESS INDEX) METHODS ON BAREGBEG-CIILAT ROAD, CIAMIS REGENCY

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ABSTRACT

The Baregbeg-Ciilat Road section is a road that connects Sukadana and Baregbeg Districts, as well as an alternative road between Rancah District and the center of Ciamis Regency. This study aims to evaluate the road pavement surface condition method functionally based on two methods, namely the Pavement Condition Index (PCI) and the Surface Distress Index (SDI) method. Research on road conditions is used as a basis for identifying possible factors causing damage and types of road maintenance measures. The survey was conducted along 5 km consisting of 50 sample units or segments, with each segment being 100 m long and 4 m wide. Based on the results of the road pavement condition assessment using the Pavement Condition Index (PCI) method, 60% of the pavement surface is in perfect condition, 34% of the pavement surface is in very good condition, and 6% of the pavement surface is in good condition. By calculating using the Pavement Condition Index (PCI) method, an average PCI value of 88 is obtained indicating that the road surface is in perfect condition. In the condition of the road surface assessment using the SDI (Surface Distress Index) method, the road surface damage value is 100% in good condition and there are no moderate, lightly damaged or heavily damaged surface conditions. From the results of calculations using the SDI method, the average SDI value is 6.7 in good condition.

Keywords: *Road Condition Assessment, Pavement Condition Index (PCI), Surface Distress Index (SDI)*

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