

INTISARI

Perkerasan jalan merupakan komponen pokok di bidang transportasi. Kondisi perkerasan mempengaruhi kenyamanan, keamanan dan keselamatan pengguna jalan. Namun, kondisi perkerasan semakin lama semakin berkurang akibat faktor internal maupun eksternal. Upaya pemeliharaan dan perbaikan perkerasan diperlukan untuk menjaga kinerja perkerasan mencapai umur layanan rencana. Metode PCI (*Pavement Condition Index*) digunakan untuk mengevaluasi kinerja perkerasan serta menentukan upaya pemeliharaan dan perbaikan.

Penelitian ini membahas evaluasi kondisi perkerasan dan penentuan upaya perbaikan di Jalan Tentara Pelajar, Surakarta. Jalan tersebut merupakan jalan kolektor primer di Surakarta yang mengalami kerusakan memprihatinkan. Lalu lintasnya ramai dan dilalui berbagai jenis kendaraan. Jalan sepanjang 1267 m dibagi menjadi 3 *section*. Setiap *section* tersusun dari beberapa unit sampel. Survei dilakukan pada seluruh unit sampel. Survei meliputi tipe kerusakan, tingkat kerusakan dan kerapatan. Hasil survei dianalisis untuk mendapatkan nilai PCI. Nilai PCI menentukan penanganan yang dipilih.

Berdasarkan hasil penelitian, nilai PCI tiap *section*, yaitu : *section 1* = 31,37 (*very poor*), *section 2* = 30,08 (*very poor*), dan *section 3* = 44,34 (*poor*). Sedangkan, nilai PCI ruas = 33,74. Upaya pemeliharaan dan perbaikan ruas ini, ialah : *hot recycling*, *cold recycling*, *hot in-place surface recycling*, ataupun *cold in-place surface recycling*.

Kata kunci : kondisi perkerasan, Jalan Tentara Pelajar, nilai PCI, pemeliharaan dan perbaikan jalan

ABSTRACT

Pavement is a main component in transportation. Pavement conditions affect comfort, security and safety of road users. However, the condition of pavement progressively reduced due to internal and external factors. Pavement maintenance and repairs required to keep pavement performance reaches the age of service plans. PCI method (Pavement Condition Index) used to evaluate performance and determine pavement maintenance and repair efforts.

This study discusses pavement condition evaluation and determination of improvement on Jalan Tentara Pelajar, Surakarta having damaged concern. Traffic crowded and traversed the various types of vehicles. The road has 1267 m along and divided into 3 sections. Each section is composed of several units of the sample. The survey was conducted on the entire sample unit. The survey includes the type of damage, the extent of damage and density. The survey results are analyzed to obtain the value of PCI. PCI determine the value of the selected treatment.

Based on the research results, the value of PCI for each section, namely: section 1 = 31.37 (very poor), section 2 = 30.08 (very poor), and section 3 = 44.34 (poor). Meanwhile, the value of PCI segment = 33.74. Type of maintenance and improvement on this road are hot recycling, cold recycling, hot in-place recycling surface, or cold in-place recycling surface.

Keywords: pavement conditions, road Student Army, the value of PCI, maintenance and repair of roads