INTISARI

Jalan merupakan suatu prasarana yang fungsinya sangat vital dan digunakan sebagai penunjang kebutuhan hidup manusia. Seiring dengan bertambahnya tahun, kondisi perkerasan jalan mengalami penurunan dan terjadinya kerusakan jalan. Seperti halnya pada lokasi tinjauan penelitian yaitu Jalan WR Supratman terdapat jenis kerusakan yang beragam. Dengan demikian diperlukan evaluasi kondisi perkerasan jalan agar jalan tetap pada kondisi yang optimal sesuai dengan umur rencana jalan.

Penelitian dilakukan secara *visual* dengan peralatan seperti mistar ataupun meteran pita untuk mengukur dimensi kerusakan yang diolah menggunakan 2 (dua) metode analisis yaitu metode *Pavement Condition Index* dan *International Roughness Index* serta ditentukan jenis penanganan yang sesuai berdasarkan kedua metode tersebut.

Hasil analisis berdasarkan metode *Pavement Condition Index* adalah untuk *section* A = 71,44 (*satisfactory*); *section* B = 65,55 (*fair*); *section* C = 64,10 (*fair*); dan *section* D = 74,43 (*satisfactory*). Sedangkan berdasarkan metode *International Roughness Index* diperoleh nilai untuk *section* A = 5,5096 m/km (sedang); *section* B = 7,3471 m/km (sedang); *section* C = 7,7104 m/km (sedang); dan *section* D sebesar 6,1302 m/km (sedang). Dari kedua metode analisis tersebut, didapatkan juga persamaan korelasi yaitu $y = 0{,}0014x^2 - 0{,}241x + 16{,}930$ dengan nilai $R^2 = 0{,}3436$ dan $R = -0{,}586$ atau 59%. Jenis pemeliharaan yang diajukan berdasarkan nilai PCI yaitu pada *section* A, B, C diperlukan penanganan *Global Preventive* dengan metode *fog seal* atau *slurry seal/micro surfacing,* sedangkan pada *section* D berupa *Localized Preventive* dengan metode *crack sealing*. Sedangkan, penanganan atau perbaikan yang diajukan berdasarkan nilai IRI yaitu pemeliharaan berkala berupa pelapisan tipis aspal (*overlay*).

Kata kunci: Jalan, Kerusakan Jalan, *Pavement Condition Index*, *International Roughness Index*, Pemeliharaan Jalan

ABSTRACT

Roads are an infrastructure whose function is very vital and is used to support the needs of human life. As the years increase, the condition of road pavements has decreased and road damage occurs. As is the case at the location of the research review, namely WR Supratman Road, there are various types of damage. Thus, it is necessary to evaluate the condition of the road pavement so that the road remains at an optimal condition in accordance with the life of the road plan.

The research was carried out visually with equipment such as crossbars or tape meters to measure the dimensions of damage processed using 2 (two) analysis methods, namely the Pavement Condition Index and International Roughness Index methods and determined the appropriate type of handling based on these two methods.

The results of the analysis based on the Pavement Condition Index method are for section A = 71,44 (*satisfactory*); *section* B = 65,55 (*fair*); *section* C = 64,10 (*fair*); and *section* D = 74,43 (*satisfactory*). Meanwhile, based on the International Roughness Index method, the value for section A= 5,5096 m/km (moderate); *section* B = 7,3471 m/km (moderate); *section* C = 7,7104 m/km (moderate); dan *section* D sebesar 6,1302 m/km (moderate). From the two methods of analysis, a correlation equation was also obtained, namely $y = 0.0014x^2 – 0.241x + 16.930$ with an R^2 value of 0.3436 and an R of -0.586 or 59%. The type of maintenance proposed based on PCI values, namely in sections A, B, C, is required to handle Global Preventive with the fog seal method or slurry seal/micro surfacing, while in section D it is in the form of Localized Preventive with the crack sealing method. Meanwhile, the handling or repair proposed based on the IRI value is periodic maintenance in the form of thin layering of asphalt (overlay).

Key words: Road, Road Damage, Pavement Condition Index, International Roughness Index, Road Maintenance