

Analysis of Present Serviceability and its Relation to International Roughness Index× (the Syrian Case)¹

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Abstract

Serviceability is an indicator that represents the level of service a pavement provides to users. This indicator is obtained by a rating made by the users, we called it Present Serviceability Rating (PSR), or by measuring on the pavement's surface then its called a Present Serviceability Index (PSI). In this research we make a physical measurements to the distresses of pavement's surface, and use the collected data to calculate (PSI) according to the AASHTO design method. We selected three highways as a field study: (Damascus-Lebanon Border, Damascus- Jordan Border, and Damascus – Homs). Also we made a rating by evaluating user's opinions to a questionnaire in order to get (PSR) and find the Relationship between (PSI),(PSR), then we measured the roughness of this selected roads to obtain the International Roughness Index (IRI), finally we used the results to define the relationship between (PSR),(IRI) and the accepted value of (IRI) within The Syrian conditions.

¹ For the paper in Arabic see pages (265-291).

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