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تجريد

قدم هذا البحث على إجراء تقييم حالة الرصف لطريق الجيلي- شندی بطريق مسح العيوب. إجراء التقييم يتألف من منهجية لتقييم الرصف من حيث أنواع و مستويات شدة و كميات مختلفة من العيوب و الجمع بين هذه المعلومات لوضع معيار تقييم الرصف. معيار تقييم الرصف هو معيار عددي بين 0 و 100 أستخدم للإشارة لحالة الطريق 0 الطريق قسم إلى وحدات عينية لجمع البيانات الميدانية 0 استنادا إلى عدد وحدات العينة في القطاع تم اختيار عدد معين من وحدات العينة لفحصها 0 نوع و مستويات شدة عيوب الرصف في كل من وحدات العينة تم تسجيلها 0 معيار تقييم الرصف لكل وحدة عينة مختبرة تم حسابها 0 الحسابات شملت كميات و كثافة العيب لكل وحدة عينة مختبرة 0 قيم الحسم تم تحديدها و طرحها من 100 لإعطاء قيمة معيار تقييم الرصف 0 معيار تقييم الرصف لكل القطاع تم تحديدها استنادا إلى قيم وحدات العينة 0 لاتخاذ قرارات فعالة بشأن نوع العلاج اللازم ، ينبغي أن يؤخذ التقييم الهيكلي للرصيف بعين الاعتبار 0 شمل التقييم الهيكلي تجربة اختراق المخروط 0 تحديد معيار تقييم الرصف و قوة طبقات الرصف ي قود إلى الصيانة المثلى.

ABSTRACT

This research provided a procedure to evaluate (Elgaili–Shendi Highway) pavement condition in relative to surface distresses condition. The procedure consist of a methodology to evaluate pavement distresses in terms of types, severity levels and amounts of different distresses and combined these informations to develop a standard pavement condition index (PCI).The pavement condition index is a numerical index between 0 and 100 and was used to indicate the condition of the highway. The highway was divided into sample units for field data collection. Based on the number of sample units in the total section, a certain number of these sample units were selected to be tested. The type and severity levels of pavement distresses in each sample units were recorded. The PCI of each tested sample unit were calculated. The calculations were involved the distress quantities and the distress densities for each tested sample unit. Deduct values were determined and subtracted from 100 to give the PCI value. The PCI of the total section was determined based on the sample units values. To make effective decisions about the type of treatment needed, the structural evaluation of a pavement should be taken into consideration. The structural evaluation included Dynamic Cone Penetrometer (DCP) test. Determination of pavement condition index and pavement layers strength lead to the perfect maintenance.

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