【習作二】

※Pavement Condition Index (PCI)
※Pavement Distresses
※Demo of MicroPaver Program

一、 試說明新的PCI**法**(ASTM Standard Test Method, D5340-93)**與舊法之差異，以及為何做此修正之主要原因。**

二、 The following distress data was measured on a jointed concrete airport pavement:

Blow-up (Low severity) = 45%
Corner break (Medium severity) = 30%
Joint spalling (High severity) = 50%
Transverse cracking (Low severity) = 3%
Durability cracking (Medium severity) = 5%

Evaluate the condition of the pavement by examining the distress and computing the PCI. Please refer to class handouts for the deduct curves. (a) First please use the old PCI calculation method (as discussed in class) to evaluate the pavement condition. (b) If the last two distress densities increase to 8% and 10%, respectively, evaluate the pavement condition again. (c) Do you see any problem with that? Why? (d) Then, use the new PCI procedure (ASTM Standard Test Method, D5340-93) and repeat previous process again. Do you see any advantages of the new procedure over the old one?

三、 依新的PCI**計算法**(ASTM Standard Test Method, D5340-93)**，請您將上題鋪面破壞之資料輸入**MicroPaver**程式中，並利用其**PCI**之計算功能，將所得之結果列印出來，並與手算之結果相互比較。**

四、 如補充講義之附圖 Figure A-3, A-8**所示剛性與柔性鋪面之現況調查資料，其**PCI**值之計算可能是依舊法而得，您是否可依新的**PCI**計算法**(ASTM Standard Test Method, D5340-93)**推算其值(以手算的方式)？請您將此資料輸入**MicroPaver**程式中，並利用其**PCI**之計算功能，將所得之結果列印出來，並比較之。**