exceeded 152 mm (6 inches). One of these two sites was rated with high serviceability (4) even though the CBR of the ABC material was 60%. Nonetheless, it is hypotheised that the coupled contribution of the subgrade and the ABC material affects the serviceability level of the pavement. In additon, these results indicated that in the case of SR 2751 and SR 2487 that were rated low, permanent resurfacing will not be sufficient repair because low serviceability can be attributed to the low strength subgrade and the absence of a competent layer of ABC having sufficient thickness to dissipate wheel loads.

In the case of the three sites constructed using Gold Hill ABC, the two sites with serviceability of 3 and 4 were plotted well to the left of the "pt=2.5" line. The CBR values of the ABC layer for these two sites were 97% and 113%, respectively, the PR-ABC values were less than 4 mm/blow and the PR-subgrade values were less than 25 mm/blow. On the other hand, SR 2352 was rated with a serviceability value of 1. For this site, the CBR value was 60%, the stone thickness was 40 mm (5.5 inches), the PR-ABC was 4 mm/bow and the PR- subgrade was less than 25 mm/blow. This site provides an example where resurfaceing should increase the serviceability index because the PR data indicated competent subgrade and subbase layers and marginally accepteable ABC layer thickness.

Depending on the quality and type of the ABC and the subgrade soil, it is possible that material degradation takes place as the number of traffic cycles increases. Accordingly, and with time, sites with high serviceability plotted on Figure 8.1 can shift to the right and upward. If no degradation in strength properties is anticipated with time, then resurfacing will be sufficient to provide high servicability for these roads. In addition, it should be noted that the DCP only measures the in-situ strength of the material at the time at which the test is made. Changes in moisture content will change the strength of both the soil and pavement layers and this aspect needs to be considered when using the DCP to evaluate pavement condition.