

# 再生瀝青混凝土路面改善策略之研究

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## 摘要

Aggregate is an important engineering material in construction industry. In order to protect natural resources, it is generally restricted to excavate aggregate in a river. Since the shortage of aggregate is getting more serious, it is important to consider the use of recycled aggregate material.

It is not a good practice to add asphalt concrete to the existing damaged asphalt pavement. When the damaged asphalt concrete road is to be renewed, its pavement is generally required to plane to a certain designed depth. The scraped material is then transported back to the asphalt concrete storage yard by the contractor. If it could not be used again, a great amount of scraped material will be accumulated year after year. Only a small portion of the scraped material has been used at the road base, while a lot of them are dumped by the hill side or along the river bank, causing serious environmental problems. It is imperative to utilize the recycled material and new asphalt effectively, through quality construction in order to make the recycled asphalt concrete pavement better than the new asphalt concrete pavement.

This study first collects the types of failure in the recycling asphalt concrete pavements in the northern part of Taiwan and then studies their characteristics to determine the causes of failure. Furthermore, through expert interview, the improving strategies are proposed to construct the recycled asphalt concrete pavement. It is hoped that the obtained results can help the contractor build quality recycled asphalt concrete roads.

**關鍵字** : Recycled Material, Recycled Asphalt Concrete, Types of Failure