

Evaluation of Mixtures of Recycled Concrete Aggregate and Reclaimed Asphalt Pavement Aggregate in Road Subbases

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Abstract : In Iran, utilization of reclaimed asphalt pavement (RAP) aggregate has become a common practice in pavement rehabilitation during the last ten years. Such developments in highway engineering have necessitated several studies to clarify the technical and environmental feasibility of other alternative materials in road rehabilitation and maintenance. The use of recycled concrete aggregates (RCA) in asphalt pavements is one of the major goals of municipality of Tehran. Nevertheless little research has been done to examine the potential benefits of local RCA. The objective of this study is laboratory investigation of incorporating RCA into RAP for use in unbound subbase application. Laboratory investigation showed that 50%RCA+50%RAP is both technically and economically appropriate for subbase use.

Keywords : Roads & highways, Sustainability, Recycling & reuse of materials

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