

**TRANSPORTATION RESEARCH THESAURUS (TRT)
TERM REVIEW FORM v2.0**

Date 6-22-10

Term: Reclaimed asphalt pavements

Proposed by

Citation(s)

Definition

Reclaimed asphalt pavement (RAP) is the term given to removed and/or reprocessed pavement materials containing asphalt and aggregates. These materials are generated when asphalt pavements are removed for reconstruction, resurfacing, or to obtain access to buried utilities. When properly crushed and screened, RAP consists of high-quality, well-graded aggregates coated by asphalt cement.

Asphalt pavement is generally removed either by milling or full-depth removal. Milling entails removal of the pavement surface using a milling machine, which can remove up to 50 mm (2 in) thickness in a single pass. Full-depth removal involves ripping and breaking the pavement using a rhino horn on a bulldozer and/or pneumatic pavement breakers. In most instances, the broken material is picked up and loaded into haul trucks by a front-end loader and transported to a central facility for processing. At this facility, the RAP is processed using a series of operations, including crushing, screening, conveying, and stacking.

Although the majority of old asphalt pavements are recycled at central processing plants, asphalt pavements may be pulverized in place and incorporated into granular or stabilized base courses using a self-propelled pulverizing machine. Hot in-place and cold in-place recycling processes have evolved into continuous train operations that include partial depth removal of the pavement surface, mixing the reclaimed material with beneficiating additives (such as virgin aggregate, binder, and/or softening or rejuvenating agents to improve binder properties), and placing and compacting the resultant mix in a single pass.

Reliable figures for the generation of RAP are not readily available from all state highway agencies or local jurisdictions. Based on incomplete data, it is estimated that as much as 41 million metric tons (45 million tons) of RAP may be produced each year in the United States.⁽¹⁾

<http://www.tfsrc.gov/hnr20/recycle/waste/rap131.htm>

Scope note (if needed)

Notation:

Broader term

Narrower term :

Associative relationships

Related terms:

Cross-references:

USE/UF terms Recycled asphalt pavements

Variant forms

Homographs

Usage/Warrant/Statistics (# of hits/search results for term in quotes, e.g., "automobile factories")

- Search term, variants, and/or synonyms identified if necessary
- Use a minimum of five sources

- Note currency of term usage

CATALOGS	TI	KW	SU	AB
NTL Digital Repository	0		0	
VDOT OneSearch				
DOT HQ				
FHWA	0			
NUCAT (NUTL)				
TranWeb (NUTL)	0			
NTIS	0			
TRIS Online	0	155		
UMTRI	0	0	0	
RiP	0	0	0	
VDOT		0		
WorldCat				
Google StateDOT				
Google Scholar				
Other thesauri, taxonomies, or schemes LCSH Taxonomy Warehouse				

Other/Comments

Action x_ Add _ Update _ Decline _ Remove _Park .

Type x_ Preferred term _ Non-preferred term : interchangeable with Recycled