

# Recycled/Reclaimed Asphalt Pavement (RAP)

## Report Key Points

December 3, 2008

The 2007-09 Transportation Budget, section 221 (8) contains a provision requiring the Washington State Department of Transportation to report to the Joint Transportation Committee recommendations on increasing the use of recycled asphalt at the state and local level.

### Approach Taken

A task force was assembled with representatives from Cities, Counties, WSDOT, and the Paving Industry. Existing documents were reviewed, surveys developed and distributed and the results analyzed.

### What We Learned From Agencies

- Over 92 percent of the agencies who responded allow and use RAP in their HMA mixes.
- Over 98 percent of the agencies who responded allow and use RAP in some application on their public works projects.
- Less than two percent of the responding agencies prohibit the use of RAP in any application, citing negative experiences as the reason.

### What We Learned From Asphalt Suppliers

- Approximately 33 percent of the responding asphalt plants do not use RAP in their HMA.
- Three of the nine responding asphalt plants report they have city and county customers that do not allow RAP in HMA.
- One plant is not equipped to use RAP in HMA production. That plant is also the only plant that says it can't use all the RAP they accumulate in a normal construction season.
- Responses to the last question tell us that the primary source of RAP is ground asphalt pavement from public works projects. Some plants comment that they also accept material from private contractors.

### Current Contracting Requirements

The Standard Specifications for Road Bridge and Municipal Construction published by WSDOT and used extensively for public works construction in the State of Washington detail the requirements for use of recycled asphalt and other materials. The specifications allow for up to 20 percent of the asphalt mix to be from recycled sources (the contractor is responsible to meet all other pavement mix design and placement requirements). Allowable uses of recycled pavement and other materials such as concrete, glass, and steel furnace slag is included in these specifications.

### Recommendations

- Continue the Local Agencies Task Force's development of Hot Mix Asphalt (HMA) training on the use of HMA in general, and the benefits of using Recycled Asphalt Pavement (RAP) as part of the HMA program.
- Continue researching different types of recycled products that can benefit both the environment and budgets of all agencies that perform public works projects.
- Continue researching Warm Mix Asphalt (WMA) and other technologies that can potentially utilize a larger portion of RAP to virgin material, as well as lower overall energy consumption during paving operations.
- No legislation is necessary to insure use of all available RAP due to the risk of increased production costs.