



STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

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Office of the
Commissioner

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Public Hearing – February 13, 2013
Transportation Committee

Testimony Submitted by Commissioner Jim Redeker
Department of Transportation

Proposed H.B. 6023 – An Act Concerning the Use of Recycled Asphalt Roofing Shingles in Road Paving Materials.

The Department of Transportation (ConnDOT) is very interested in the use of recycled materials in asphalt pavement. There are a number of different materials that can be recycled, and other states are also exploring the various alternatives.

ConnDOT has ongoing research to aid in developing the appropriate specification for the use of recycled asphalt shingles (RAS) in bituminous concrete. One challenge of incorporating RAS into asphalt pavements is that the asphalt binder used in roofing shingles is much stiffer than typical asphalt binders used in asphalt pavements. Therefore, the quantity of RAS that can be incorporated in pavements is limited so as not to adversely affect the performance of the pavement. The Department performed a pilot project on a section of Route 220 in Enfield this past construction season using a specification requiring 5% RAS. The project was successfully constructed; however, the performance and durability of the pavement needs to be monitored.

ConnDOT is also evaluating the use of recycled asphalt pavement (RAP) in asphalt pavements. RAP is a waste material, which is produced from the milling of existing bituminous concrete pavement. Hot-mix asphalt (HMA) plants are able to reuse up to 20 percent of this waste material in new pavements. The Department has ongoing research to determine if the amount of RAP can be doubled in new pavements. The use of a high percentage of RAP will likely be the most beneficial way to use recycled materials in our pavements.

The Department is also investigating the use of a bituminous concrete mix that allows both RAS and RAP; however, the challenge again is to find the proper specification that does not result in an asphalt binder that is much stiffer than desired and ultimately leads to a shorter pavement life. The Department is working to find a local partner with a suitable location for a pilot project to be done this construction season.

If the pilots referenced above prove to be successful, the permissive use of RAS and an increase in the percent of RAP will be included in the next update of the Department's Bituminous Concrete Specification.

The Department recently updated its Bituminous Concrete Specification and anticipates that the next update will occur in January 2015.

For further information or questions, please contact Pam Sucato, Legislative Program Manager for the Department of Transportation, at (860) 594-3013.