



Go Green, Save Green



National Center for Pavement Preservation



MICHIGAN STATE UNIVERSITY

DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING



U.S. Department of Transportation
Federal Highway Administration



Asphalt Emulsion
Manufacturers
Association



International Slurry
Surfacing Association

Slurry & Micro Surfacing, Chip Sealing & Crack Treatment



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ADMINISTRATOR'S MESSAGE:

The National Highway System (NHS) is extensive, with over 160,000 miles of highway pavements and over 128,000 structures, built using large quantities of asphalt, concrete, steel, and aggregate, and smaller quantities of nonferrous metals, plastics, and other materials. Much of the system was constructed in the 1960's and 70's and is in need of major rehabilitation or total reconstruction; and much of the materials used to build that system can be recycled for use in the new construction.

In order to carry out the mission of the FHWA, i.e., to “improve the quality of the Nation’s highway system,” the NHS must be properly preserved, maintained, rehabilitated, and when necessary, reconstructed. Maintenance of highways and associated structures is critical to our ability to provide the safest, most efficient roadway system possible, while simultaneously providing the greatest level of protection to the human and natural environment.

The same materials used to build the original highway system can be re-used to repair, reconstruct, and maintain them. Where appropriate, recycling of aggregates and other highway construction materials makes sound economic, environmental, and engineering sense. The economic benefits from the re-use of nonrenewable highway materials can provide a great boost to the highway industry. Recycling highway construction materials can be a cost-saving measure, freeing funds for additional highway construction, rehabilitation, preservation or maintenance.

Congress declares that it is in the national interest to promote the use of innovative technologies and practices that increase the efficiency of construction of, improve the safety of, and extend the service life of highways and bridges... The innovative technologies and practices described in paragraph (1) include state-of-the-art intelligent transportation system technologies, elevated performance standards, and new highway construction business practices that improve highway safety and quality, accelerate project delivery, and reduce congestion related to highway construction... such as... (ii) innovative construction equipment, materials, or techniques, including the use of in-place recycling technology and digital 3-dimensional modeling technologies;



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ARRA Recycling Disciplines

- Cold Planing / Milling
- Hot in Place Recycling
- Cold in Place Recycling
- Full Depth Reclamation
- Soil Stabilization



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ARRA Sub-categories within the HIR Discipline

- Surface Recycling (ie. Heater Scarification)
- Remixing
- Surface Repaving

Value of "Timely" Pavement Maintenance

Pavement Condition

Very Good

Good

Fair

Poor

Very Poor

Time for HIR

Time (Years)

0

2

4

6

8

10

12

14



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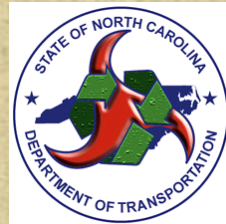
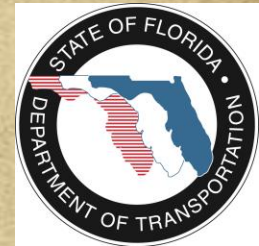
- Saves time & reduces “user delays”
- Minimizes the demand on oil & aggregate (non-renewable resources)
- Re-uses/recycles the existing materials – liquid asphalt & aggregates
- Eliminates milling dust & hassles
- Eliminates trucking pollution & traffic
- Reduces overall emissions by 65%
- Reduces carbon footprint by 80%
- Uses propane – a cleaner energy source
- Uses a dual stage incineration system to protect air quality during operation



Used by Many DOTs:



New York State
Department of Transportation



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THE RIGHT FIX

THE RIGHT ROAD

AT THE RIGHT TIME



QUALIFIED CONTRACTOR



Go Green, Save Green

KNOW YOUR CONTRACTOR



Go Green, Save Green

Thank You!



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