

Implementation Activities supporting the International Technology Scan on Long-Life concrete Pavements.

In May 2006, a team of thirteen concrete pavement and materials specialist from the United States visited with Canada and five countries in Europe to identify design philosophies, materials requirements, construction practices, and maintenance strategies used to construct and manage Portland cement concrete pavements with long life expectancies. The purpose of this project under the FHWA/ISU cooperative agreement is for the National Center for Concrete Pavement Technology to provide implementation support to FHWA on the Scan Team Implementation Plan (STIP) recommendations. The requested implementation support will be on a task order basis. The STIP recommendations are summarized below as identified in the draft STIP plan.

Long-Life Concrete Pavements

STIP - Initial Recommendations for Implementation

Version 7, dated October 13, 2006

The long-life concrete pavement scan team tentatively identified the following items as having the greatest potential for implementation in the United States:

- √ Two-Lift Construction
 - The STIP Team identified that this item needs to be pursued in combination with exposed aggregate surfaces for noise reduction and/or the use of recycled concrete for economics and environmental sensitivity.
- √ Design Features Catalog
- √ Construction of High-Quality Foundations
- √ Greater Attention to Mix Design Components
 - The Shilstone concept for mix design is well known and available for use now. The STIP Team identified the use and components of

cementitious materials in the mix as one of the new areas to the US.

√ Geotextile Interlayer

√ Exposed Aggregate Surfacing

- The STIP team recommended this to be one of the implementation items, with the caveat that additional testing really needs to be done before pushing implementation to insure that we are really getting a reduction in decibels that is practical on a cost basis.

Task 1: Work plan for implementation support of two-lift paving technology.

Phase 1:

Provide technical support to states in making a coordinated application to the Highways for LIFE program to secure project approval for a two-lift paving project in approximately six states.

- Identify approximately six states that would have interest in constructing a two-lift paving project.
- Provide background material and technical support to assist the states in preparing an application to the Highways for LIFE program for building a project. The intent is to have a national coordinated program demonstrating as many features as possible.
- Facilitate regular discussions through conference calls during the application development phase to ensure coordination and that the necessary technical support and accompanying materials are available to the states.