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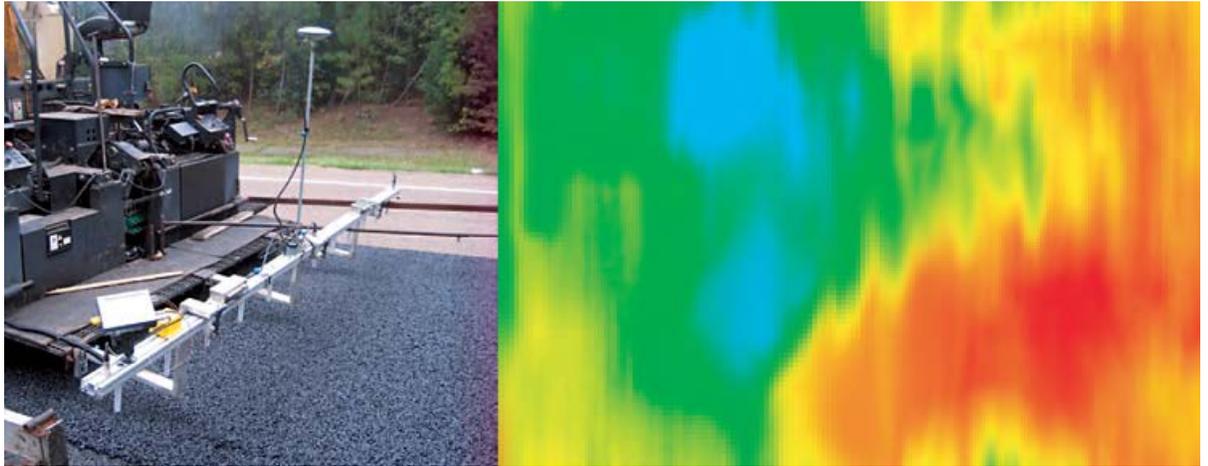
Implementation Assistance Application for Technologies to Enhance Quality Control on Asphalt Pavements (R06C)

Read the Product Page

Background

The R06C project examined two nondestructive techniques for measuring uniformity and potential defect areas in asphalt pavements during construction. Both technologies (infrared and radar) offer real-time testing of potentially 100 percent of the pavement area, providing much more inspection coverage than existing quality control methods. These new technologies improve the state of the practice for obtaining quality control data in hot- or warm-mix construction.

The infrared (IR) technology focuses on the thermal uniformity equipment, which enables inspectors and paving crews to measure the real-time mat temperature and make adjustments. The ground penetrating radar (GPR) technology provides a surface dielectric of the asphalt mixture, which when correlated from field cores, provides automated output of mat density (air voids), allowing for quicker turnaround and potentially avoiding costly and time-sensitive nuclear testing.

Products include recommendations for equipment and testing protocols for using infrared and GPR for testing the entire surface area during new hot-mix asphalt (HMA) construction, and IR guide specifications.

Leadership Endorsement

Each application submitted from an organization or agency must have the endorsement of the Chief Executive Officer or designee. The letter of endorsement is submitted **as an attachment to the application**. Guidance for creating an endorsement letter appears in the application below.

Priority Ranking

When multiple applications are submitted from an organization or agency, each application must have a designated priority ranking. Please rank all applications in one grouping including all product submissions from your agency. For purposes of ranking do not separate your organization's applications into categories for individual products, or levels of incentives such as Lead Adopter or User Incentive.

For example, if your agency submits four applications; two applications for R06C, one for C03/C11, and one for R10, your agency must rank each application in priority order from 1 to 4, with 1 as the highest priority and 4 as the lowest priority. For your convenience, you will find a box later in this application to designate the priority ranking. FHWA and AASHTO will take into consideration the agency's rankings when reviewing and evaluating the applications for implementation assistance. Your priority ranking should be expressed as "X of Y," as in "1 of 4."

Available Implementation Assistance

Two types of assistance are available depending on technology interest.

For GPR Technology

Type of Assistance: Proof of Concept

Number of Awards: 2

Funding Level: Up to $50,000 in direct funding to offset costs associated in supporting the piloting effort of the GPR Rolling Density Meter. In addition, approximately $200K for in-kind services to facilitate the contractor support and oversight of collecting data and thoroughly evaluating the product as part of the piloting effort.

For IR Technology

Type of Assistance: Lead Adopter Incentive

Number of Awards: 5-10 agencies; maximum of 10 projects

Funding Level: In-kind services valued at approximately $60,000. SHRP2 will provide temporary use of the IR equipment, and associated technical support and training. The goal is to familiarize agencies and their contractors with this quality control equipment, and ultimately encourage its routine use.

Who Can Apply: State Departments of Transportation (DOTs), State Tollway and Thruway Authorities, local agencies, and tribal agencies. Local agencies and contractors must work with their State DOTs to submit an application. **We are open to agencies applying for both a GPR Proof of Concept incentive and IR Lead Adopter Incentive simultaneously.**

Application Deadline: June 27, 2015

Requirements

1. IR - Interest in using the R06C IR technology on a specific HMA project.
2. IR - Interest in comparing the use of R06C IR technology on various mixtures and environmental conditions.
3. GPR - Interest in supporting the piloting of the R06C GPR technology on a specific HMA project(s) and on various mixtures and environmental conditions.
4. Commitment of DOT leadership to use the R06C IR and/or GPR technology on a HMA construction project.
5. Identification of one or more specific projects to use the technologies.
6. Support information needs on product evaluation activities conducted by an independent consultant for FHWA such as equipment verification and sampling.
7. Willingness to share knowledge and lessons learned on the IR and/or GPR technologies with other organizations interested in implementing R06C technology.
8. Willingness to participate in regional or national knowledge sharing events to promote the product.

SHRP2 Implementation Assistance Program
Round 4 Application Form - *Application period closes June 27, 2014.*

Technologies to Enhance Quality Control on Asphalt Pavements (R06C)

FHWA Product Lead Name: Steve Cooper, Stephen.J.Cooper@dot.gov, 443-257-7145

This SHRP2 Solution is part of Round 4 of the Implementation Assistance Program. For more information about this product or about applying for implementation assistance, visit the Implementation Assistance Program page (http://www.fhwa.dot.gov/GoSHRP2/ImplementationAssistance) or this product's application page (where this form originated) on the GoSHRP2 website.

Point of Contact:

The SHRP2 Implementation Assistance Program is designed to foster peer learning, and as a result, applicants are encouraged to share their experience implementing SHRP2 products with others. By submitting this application, your organization grants permission to FHWA to publish and distribute the name and business email address of a **staff member from the applying organization** who is familiar with the project. Please provide:

POC Name: Provide your response here.

POC Business Email Address: Provide your response here.

Questions:

1. Briefly describe the organization's past efforts to adopt solutions related to the R06C technology.

    Provide your response here.

2. Briefly describe demonstrated executive-level support for adopting the R06C technology.

    Provide your response here.

3. Describe your approach to implementing the R06C technology.

    Provide your response here.

4. Summarize the activities and resources needed to adopt the R06C technology.

    Provide your response here.

5. Describe how your organization will use the implementation assistance to support the project(s).

Provide your response here.

6. Describe any challenges you expect to encounter in implementing this product, and how you plan to address these challenges.

    Provide your response here.

Answer either question 7 or question 8, or both if you are requesting support for using both technologies.

7. Describe your organization's interest and goals for trialing the R06C IR technology. (What type of project? What do you hope to gain? Is there a specific issue you hope to resolve? How do you define success?)

    Provide your response here.

8. Describe your organization's interest and goals for supporting the proof of concept piloting of the R06C GPR technology. (What type of project? What do you hope to gain? How do you define success?)

    Provide your response here.

As a reminder:

1. Review all background information located on this product's application page.
2. Once you have completed this form and secured the required Leadership Endorsement Letter, return to application page and complete the contact information fields.
3. Upload this form and the Leadership Endorsement Letter to the page. **Be sure you are attaching the form to the correct application page.**
4. Click "Submit;" you will receive an email confirmation that includes the uploaded endorsement letter and application form.
5. Application period will close June 27, 2014.

For more information or to find this product's application page, visit the Implementation Assistance Program page on the GoSHRP2 website.