## 'Performance of Recycled Asphalt Shingles (RAS) in Hot Mix Asphalt' National Pooled Fund Study TPF-5(213)

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During the sixth quarter, January 1, 2011 through March 31, 2011, the TPF-5(213) team achieved the following components on the project:

- The revised budget and corresponding time extension was submitted for approval by the research team to the Iowa State University Office of Sponsored Program Administration.
- 2. The research team reviewed the draft Caltrans draft specification and provided feedback.
- 3. Chris Williams participated in two conference calls with Illinois DOT staff to discuss their draft RAS environmental policy and specification on February 3<sup>rd</sup> and March 1<sup>st</sup>. Pending Illinois legislation, further discussion on hold. Chris Williams also presented research work on the use of recycled shingles at the Illinois Asphalt Pavement Association's annual asphalt conference in Springfield, Illinois on March 14<sup>th</sup> and 15<sup>th</sup> (paid by the IAPA).
- 4. The research team held a conference call with the Colorado DOT on February 24<sup>th</sup> working on scheduling a RAS workshop in April.
- 5. The field reports for the demonstration projects completed thus far were completed and a draft report on the results was provided to the Technical Advisory Committee (TAC).
- 6. The semi-circular bend testing was completed and a draft report on the results was provided to the TAC.
- 7. Dynamic modulus testing was completed on the Minnesota demonstration project as well as flow number for all of the demonstration projects completed thus far.
- 8. MnDOT delivered additional extracted and recovered binder samples from the demonstration projects to ISU for binder testing.
- 9. Dynamic shear and bending beam rheometer testing is in progress on the recovered binders.

Next steps for the study include:

- 1) Schedule and hold a TAC meeting;
- Hold a workshop with the Colorado DOT;

- 3) Finalize 2011 demonstration projects with California, Colorado, Illinois, and Wisconsin;
- 4) Complete a draft dynamic modulus and flow number report to share with the TAC;
- 5) Complete a draft binder characterization report on the recovered binders with the TAC;
- 6) Begin beam fatigue testing on demonstration projects that have been completed;
- 7) Potentially begin field sampling the Colorado demonstration paving project; and
- 8) Send out TPF website link for state reviews and comments.

The above accomplishments and future plans will be discussed at the next TAC meeting.