1. Welcome and Introductions
2. General NRRA Update
3. Update Ongoing Research Projects
4. Discuss Revised Scope NRRA Synthesis Project: Subgrade Design for New and Reconstructed
5. Update Determining Pavement Design Criteria for Recycled Aggregate Base and Large Stone Subbase - Task 7
6. Poll -> Should we host/organize online Unsaturated Soil Mechanics Workshop?
7. Questions/Requests
2020 NRRA Pavement Workshop, Minneapolis (May 19-21) *Postponed*

NRRA Call for Innovation Deadline May 1, 2020

Research Pays Off

April 21, 2020. *Performance Benefits of Fiber-Reinforced Thin Concrete Pavement and Overlays* by Manik Barman of University of Minnesota - Duluth
# Update Research Projects

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<td>Determining Pavement Design Criteria for Recycled Aggregate Base and Large Stone Subbase [75%]</td>
<td>MSU/ISU /UWM</td>
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<td>TAP review completed</td>
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<td>Mechanistic Load Restriction Decision Platform for Pavement Systems Prone to Moisture Variations [38%]</td>
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<td>Environmental Impacts on the Performance of Pavement Foundation Layers [5%]</td>
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<td>Permeability of Base Aggregate and Sand [10%]</td>
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<td>Improve material inputs into mechanistic design properties for reclaimed HMA Roadways [5%]</td>
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<td>Subgrade Design for New and Reconstructed Roadways [5%]</td>
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Revised Scope NRRA Synthesis Project:
Subgrade Design for New and Reconstructed

Project Overview and Goals:

The use of stabilizing techniques, such as geotextiles and geogrids or chemical treatments, to provide improved subgrade characteristics in lieu of standard excavation and backfill with higher quality soil and aggregate treatments, to extend pavement service life implemented or are being tested by NRRA States.

The lower the quality and in place strength of a subgrade the greater the potential benefit.

This research study proposes to document existing NRRA State practices for using ground improvement techniques including geotextiles, chemical treatments, or other. This study also proposes to identify any type of credit provided to the pavement sections (cost savings) within their pavement design procedures or standards that allow for reduced aggregate base or bound surfacing thicknesses. This study looks at Concrete and HMA pavement types.
Revised Scope NRRA Synthesis Project:
Subgrade Design for New and Reconstructed

Expected Tasks:

1. Perform a review of existing pavement design procedures for NRRA States. Do States appear to include ground improvement techniques such as incorporating geotextiles, geogrids, chemical treatments, or other within their process.

2. Develop questions and survey NRRA States for the following:
   a. What ground improvement techniques (that may include incorporating geotextiles, geogrids, chemical treatments, or other) technique are used in your NRRA State?
   b. What ground improvement techniques are being considered or researched by your State?
   c. Within your pavement design system or standards does your NRRA State consider a credit (reduced aggregate base or bound surfacing thickness) for the incorporation of any ground improvement technique type?
   d. Additional to be discussed with the TAP.

3. Compile survey response information
4. Compare survey response information with review of State Pavement Design practices
5. Prepare a summary report of findings.
Team interest in webinar on Unsaturated Soil Mechanics?