

Heavy Vehicle Simulator International Alliance (HVSIA) Meeting
August 11-13, 2014
Florida Department of Transportation, State Materials Office
Gainesville
Meeting Minutes

Monday, August 11

- Tim Ruelke, Director, FDOT Office of Materials, welcomed the group.
- Louw du Plessis provided a background of HVSIA
- Jamie Greene provided the FDOT program update
 - Projects included FHWA sponsored wide-base tire study, a fiber-reinforced polymer bridge deck, benefit of prime coat, PG 76-22 (ARB) evaluation, and a 4.75 mm preservation treatment.
- NavneetGarg provided the FAA program update
 - HVS being used to develop new specifications for P-401
 - Information on FAA facility, HVS-A (airport version), and acceptance tests
 - Future research will include WMA, SMA, RAP, polymer modified binders, HMA shear failure, HMA overlays of flexible and rigid pavements
- Louw du Plessis provided the CSIR program update
 - History and analysis of ultra thin concrete pavements
- Greg Norwood provided the ERDC program update
 - Current research includes WMA and geogrids
- Luis Guillermo Loria Salazar provided the Costa Rica program update
 - Status of the first set of experiments, a comparison of thick vs. thin HMA layers and granular vs. CTB
- David Jones provided the California program update.
 - Provided a history and major milestones of the program
 - Current research includes full-depth reclamation and permeable interlocking concrete pavers
 - Other work includes PMA, continuing refinement of CalME, high RAP/RAS content, LCA/LCCA, cyclist ride quality, and quiet pavements
- A site visit to the Dynatest HVS manufacturing facility was made after lunch.
 - The South Korean HVS was ready for shipment
 - The Mexico and Saudi Arabia machines were also at the facility

Tuesday, August 12

- Bob Briggs (Dynatest) provided an update on the India, South Korea, and China programs
 - India has had equipment issues
 - South Korea HVS will ship next week
 - Indonesia HVS shipped last October (Indonesia planned to attend, but did not make it)
 - The Saudi Arabia HVS will be factory tested next week and prepared for shipment
 - Some parts for the Virginia HVS structure have been ordered
- Francisco Javier Carrion Viramontes (IMT) provided an update on the planned Mexico program

- Cost-benefit ratio is important, other benefits include evaluation/validation/improvement of structural designs, vehicle-pavement interactions, new materials, model calibration, rehab and maintenance strategies
- Brian Diefenderfer provided an update for the planned Virginia program
 - Anticipated research includes increasing recycled content (RAP/RAS, in-place pavement recycling, rejuvenators), bridge component testing, jointed concrete overlay options, rehab options for secondary systems, SMA vs. dense-graded mixtures
- Workshop 1 (Jeremy Lea, UC-Davis) - HVS Program Set Up Needs from A to Z: facilities, support equipment, staffing, operation, budgets, etc.
 - Program initiation, facility, supporting equipment, database, training, staffing, budgeting, project identification, test track construction, HVS testing
 - It appears that more recent emphasis has been placed on facility testing rather than roadway testing (CSIR still performs roadway testing)
 - It was discussed if this presentation should be transformed into a paper that new HVS programs or those that are considering a program could use. It was decided this would be a significant effort and the presentation could be placed on the HVSIA and AFD40 websites as a reference
 - Safety issues should also be added the HVS manual
- Workshop 2 (Jeremy Lea, UC-Davis) – Use of HVS Data to Calibrate/Verify ME Models and Analytical Models
 - An overview and thoughts on future directions (reliability concepts) were provided
 - Data storage and a database was emphasized so that previous studies could be readily used
- Workshop 3 (Jamie Greene, FDOT) – Instrumentation: Trends, Advances, and Challenges
 - An overview of common instrumentation and installation methods was provided
 - New and emerging instrumentation was discussed
 - Availability of some instrumentation was a concern

Wednesday, August 13

- Executive Committee meeting (Bouzid Choubane)
 - Meeting minutes are sent separately)