AASHTOWare® Update
Subcommittee on Materials

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By:
Tony Bianchi, AASHTO Project Manager
Tim Lindberg, Trns•port Vice Chair, SCDOT
AASHTOWare Product Update

• DARWin-ME
  – Tony Bianchi

• Trns•port – Materials Efforts
  – Tim Lindberg
What Is AASHTOWare?

- AASHTOWare is software developed, supported and maintained through an economical, not-for-profit, pooled-fund process known as “AASHTOWare Cooperative Software Development” program.
- www.aashtoware.org
Who uses AASHTOWare?

• 50 state highway agencies, plus the District of Columbia and Puerto Rico license one or more AASHTOWare products
• 3 Canadian provinces, numerous foreign countries, counties, cities, universities, and consulting firms
DARWin-ME

- Mechanistic Empirical Pavement Design Software
- To replace DARWin 3.1 which is based on empirical equations developed from the AASHO Road Test from 50 years ago
- Based on NCHRP 1-37A study to develop the new AASHTO Mechanistic Empirical Design Guide and its related research grade software
- Need to move research software (release 1.0) to production grade software
DARWin-ME (cont.)

- MEPDG software transferred to the AASHTOWare Program
- DARWin Task Force prepared a project solicitation to raise necessary funds - issued June 2008
- Seeking funding from 18 member agencies @ $100,000 each ($1,800,000) which can be split equally between FY09 and FY10
- Canadian provinces interested - partially due to SI unit inclusion
- Project solicitation closes November 1, 2008
- Sole source contract with NCHRP contractor: ARA
Benefits of Participation

• Supporting the joint development effort
• Source code for funding agencies
• Eligible to nominate individual for appointment to the DARWin Task Force to guide development work (not all nominees will be appointed)
• Cost savings of working together
• Continued coordination of design guide and software
Questions

• Please contact:
  – Vicki Schofield, AASHTO Project Manager
    vschofield@aashto.org or 202-624-3640
Trns•port SiteManager

• Presented by:
  – Tim Lindberg (SCDOT)
    • Vice Chair of the Trns•port Task Force
    • Chair of the Trns•port Materials Technical Review Team
SiteManager Materials

- SiteManager version 3.9a
  - Released June 2008
- Laboratory Information Management System (LIMS) - NEW
  - Manage Lab workflow attributes for individual labs and users
  - Manage the Samples and Tests based upon the workflow attributes
- Materials Management
  - Establish Material, Producer/Supplier/Manufacturer, Laboratory, Qualifications, other reference data
  - Sampling & Testing entry & tracking
- Integration with Construction Management
  - Establish Item/Material relationships
  - Maintain Global and Contract specific Sampling and Testing Requirements and frequencies
  - Report Contract Sampling and Testing deficiencies
LIMS Functionality

- Developed by NYSDOT through use of AASHTOWare
- Contractor: Info Tech Inc.
- Multi-year, multi-million dollar effort
- Client/server platform
- Software contributed to AASHTOWare Trns•port for inclusion in generic product
- Prime example of member agencies working together for the benefit of all
LIMS integrates with SiteManager’s security and tracked qualifications:

- User and group security
  - User Security
  - Group Security

- Technician/inspector sampling and testing certifications
  - Sampler Qualifications
  - Tester Qualifications
  - Material User

- Agency and third-party laboratory testing qualifications
  - Qualified Labs
LIMS integrates with SiteManager’s Materials Management component:

• Material codes and descriptions
  – Material Detail

• Approved sources of materials
  – Producer/Supplier
  – Producer/Supplier Materials

• Requirements for testing materials
  – Sampling & Testing Requirements

• Material templates
  – Custom Materials Test Templates
  – May include ‘calls’ for results from other test templates.
LIMS provides features that allow you to...

- Integrate material management and lab management
- Restrict access to samples and tests
  - Based on qualifications and lab units
- Assign default tests
- Define sample testing workflow
  - Include alternative workflows
  - Include test-triggered events
- Establish material sample “chain of custody”
  - Keeps record of all labs that received sample
  - Keeps record of all edits to test data
LIMS provides features that allow you to...

• Maintain test queue
  – Assign qualified testers
  – Cancel tests or add more tests
  – Assign due dates
  – Indicate priority

• Customize and save window layout and data views
  – View data in a grid
  – Choose column and sort order
  – With easy-to-use filters, tailor how to display data

• Maintain sample queue
  – View all sample test results in a grid
  – Authorize samples
LIMS provides features that allow you to...

• Access inquiry-only LIMS data
  – Control access with group security
  – Display sample and test data/remarks

• Audit and track
  – Track sample and test status in LIMS workflow
  – View prior test results
  – Audit changes made to user records
  – Use established reference data from SiteManager

• Configure the LIMS system
  – Adjust system parameters and code tables
web Transport Development
What is web Trns•port?

• An initiative to move Trns•port from the client/server environment to the web environment
• Microsoft.NET, Agile development methodology
• Technical Review Teams (TRTs) organized for estimation, preconstruction, construction, materials, and civil rights
• Being developed in phases that correspond to functional areas of a project, i.e. preconstruction, construction, etc.
• Visit the preview site and the forum on Cloverleaf www.cloverleaf.net
web Trns•port projects

• web Trns•port Preconstruction™
  – Replaces functionality of PES/LAS
  – Production release – Fall 2008

• web Trns•port CRLMS™
  – Civil Rights and Labor Management System
  – Development started June 2007
  – Beta testing – January 2009
  – Production release – May 2009

• Upcoming web Trns•port projects
  – Construction, Materials, Estimation, Contract Monitoring
Materials Technical Review Team

- Formed in 2007 to develop requirements for web Trns•port Materials functionality
- Participants from LA, MI, MN, NY, OK, SC, TX
- 3 on-site meetings held to date
- Next on-site meeting scheduled for November 2008 in Gainesville (Info Tech HQ)
- Conference calls between face to face meetings
- Project solicitation - Spring 2009
Questions

• Please contact:
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