LMS/Bookstore Presentation

THIRD ANNUAL MEETING

APRIL 2016
Agenda

- Provide some historical numbers and accomplishments
- Tell you about the success of the State Training Sharing Program
- Review our undertakings with the new systems last year
  - TC3 Web site
  - TC3/AASHTO Training Store
  - TC3 LMS
- Total course participation since TC3 started distance learning
TC3/NHI Background

- Initially established as a pooled fund with FHWA
- TC3 met with NHI in 2006 about assisting with course developments
- Started developing WBTs in 2007 through NHI contract
- Launch first WBTs beginning of 2008 on NHI Web site
- Launched 80+ courses by 2013
TC3 Course Participants by Year

- 2008: 1009 participants
- 2009: 4193 participants
- 2010: 10682 participants
- 2011: 8854 participants
- 2012: 14076 participants
- 2013: 12122 participants
- 2014: 15291 participants
- Estimate 2015: 14000 participants

Total: 80,000+ course participants
TC3 Course Participants by Employment Type

- FHWA: 45%
- OFG: 2%
- SG: 12%
- LG: 8%
- AG: 2%
- MPO: 6%
- RPA: 1%
- ACA: 0%
- PS: 0%
- Int'l: 0%
- Other: 0%
- NHI Web Site
Contributing State Benefits

- TC3 will:
  - Offer all WBTs for free on the Training Store
  - Provide the published trainings for internal State LMSs, State intranets, and other State training needs
  - Distribute these trainings directly to the States, which guarantees that potential participants within those States can access training
  - Distribute a questionnaire that provides us with important information about each State’s technical requirements, contact information, and needs

- States will:
  - Supply quarterly participation numbers and update trainings when we provide new versions
What We Do

- Create a version of the course for State sharing
  - Generic completion slide
- Provide the courses in three formats (soon to be four)
  - Adobe Connect
  - SCORM v 1.2 (Incomplete → Complete and Pass/Fail)
  - SCORM v 2004
  - HTML5 (available but not yet requested)
- Send a test course
  - Troubleshoot issues with functionality, completion, format, etc.
- Provide courses in requested format
  - Goal: to minimize customization as much as possible
- Provide updated courses as they become available
State Sharing Update

- Prior to August 2015, we were sharing with 14 States
- Currently sharing training with 22 States (including NDSU)
- Newer States to the program
  - Welcome to AR, TN, and VT!
  - Reconnected with AL and TX
  - Maryland – had issues with multi-module courses, but now that we package into a single zip file, those issues have been resolved
  - North Carolina – was linked directly to NHI Web site, now sharing independently
  - Louisiana – needed flagger training ASAP, so we provided ours
States Currently Sharing

- States currently sharing
- States not sharing yet
Training Status

- Approximately half of our States have updated their courses (or are in the process of updating)

- A few States have not yet responded
  - We are continuing to reach out to these States via email and phone to set up a plan to distribute the updated courses

- Feedback on the updated courses has been overwhelmingly positive
  - Functionality is improved
  - Overall less system issues and less time spent testing
State Sharing Program

State Training Sharing Program (State LMSs)

State Training Sharing Participant Numbers

- Alabama 3,000+
- Nebraska 1,600+
Total Participant Numbers: 2008 to 2015

115,000 course participants through 2015
Participant Numbers

Total Participant Numbers: 2008 to 2015

- FHWA: 62%
- OFG: 6%
- SG: 1%
- LG: 1%
- AG: 4%
- MPO: 16%
- RPA: 8%
- ACA: 2%
- PS: 0%
- Int'l: 0%
- Other: 0%
TC3/AASHTO LMS – Project Overview

- A little more than one year ago we took on a tiny challenge!
  - Implement a new LMS
  - Build and implement a new training store
  - Tie into the existing identity system
  - Build and implement a new TC3 Web site (BG)
  - Update and launch 100+ Web-based trainings
How We Did It

- Chose SumTotal Maestro learning management system
- Developed overarching system goals
- Established functional requirements
- Designed system look/feel (themes, roles, permissions, groups, etc.)
- Determined system integration points
- Designed interfaces between existing systems and a new learning management system
- Designed and developed LMS pages (Home/My Learning, etc.)
- Determined registration information needed for reporting
- Determined course information needed for system display
- Created publishing and uploading standards
- Developed new course numbering system
- Created Level 1 Evaluation
- Established and integrated pricing scenarios
What We Accomplished in 2015

- System build
- User testing
- Go Live! – August 2015
- Course updates
  - Updated existing courses
  - Continue to build the WBT library with conversions
  - Added new courses
- System enhancements
What We Accomplished in 2015

- **December 2014**
  - LMS approved
  - Partial course updates

- **February 2015**
  - TC3 Annual Meeting
  - Launched LMS Work Order

- **March-Aug 16, 2015**
  - Updated 50 WBTs

- **August 17, 2015**
  - Go live!

- **May–Dec 2016**
  - Launch another 20 new courses

- **Jan–April 2016**
  - Launched 10 new courses

- **December 2015**
  - Completed enhancements

- **Sept–Dec 2015**
  - Updated another 20+ WBTs

- **June 2016**
  - Matrices/course linkage

- **July 2016**
  - Launch Mobile Job Aids and Checklists thru TC3 app

- **August 2016**
  - Subscription pricing

- **October 2016**
  - Conduct Usability Study
What We Accomplished and Planned in 2016

- Expanded the State Training Sharing Program
  - New States
  - State updates/reestablished connections with contacts
- Identified enhancements/programming
  - Ongoing fixes (remove hours from titles and rework views)
  - Subscription pricing
  - Matrices course linkage
- Continue user/LMS support
- Run initial reports from system
  - Level 1 Evaluation
  - Participant usage and demographics
Level 1 Evaluation Data – as of 3/31/16

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course was a satisfactory learning experience</td>
<td>4.18</td>
<td>513</td>
</tr>
<tr>
<td>Course content was relevant to my job</td>
<td>4.2</td>
<td>518</td>
</tr>
<tr>
<td>Course was easy to use</td>
<td>4.3</td>
<td>501</td>
</tr>
<tr>
<td>The course subject matter was well-organized</td>
<td>4.24</td>
<td>523</td>
</tr>
<tr>
<td>This training will help improve my job performance</td>
<td>4.02</td>
<td>534</td>
</tr>
<tr>
<td>Content was consistent with the course description and course objectives provided</td>
<td>4.23</td>
<td>525</td>
</tr>
<tr>
<td>Course was easy to access</td>
<td>4.15</td>
<td>502</td>
</tr>
<tr>
<td>Course navigation worked properly throughout the course</td>
<td>4.25</td>
<td>500</td>
</tr>
</tbody>
</table>
Sample of Happy Comments

- Safety Orientation - It left NOTHING out that I feel should be mentioned. It was not too long. It was more than satisfactory. I even took it in the late afternoon and it held my interest.
- Basic Materials for Highway and Structure Construction - Videos in aggregate section very helpful.
- Hot In-Place Recycling (HIR) - The course was comprehensive and well-organized. I thought it covered the topic exceptionally well. I don't have any suggestions on how it could be improved.
- Concrete Series: Design of Pavement - The course was a great overview of the material.
- Earthwork Series: Earth Materials as Engineering Materials - The course serves as refresher to Soil Mechanical in college.
- Earthwork Series: Earth Materials as Engineering Materials - It was a great refresher and reminder of soil analysis.
- Plan Reading - I think I can use 90% of the information daily.
- Concrete Series: Design of Pavement - I am a quality assurance engineer and the course aided in my understanding of base materials.
- CDL General Knowledge - Great help with trying to learn CDL material for testing.
Sample of Constructive Criticism Comments

- Plan Reading: Highway Plan Reading Basics - With my experience I feel that there are many topics to be added to this course such as structure, environment, utilities traffic control plan, etc.

- Advanced Self-Consolidating Concrete - Too technical in lesson #2 for inspectors.

- Concrete Series: Troubleshooting for Concrete Pavements - SDDOT concrete testing does not always match with AASHTO and I did not have the referenced manual. – Example of something we can go and fix.

- Earthwork Series: Earth Materials as Engineering Materials - It is not enough to tell what a soil property is, you must tell why that property is important. Add pictures or video of how the testing is done, show what happens if characteristics are not considered.
LMS User Support

- Process and procedure developed
- Dedicated support email address
- Support approach (tiered approach)
  - Tier 1
    - General questions
    - User error/user system issue
    - General – approximately 50 emails and calls
  - Tier 2
    - Action required
    - Technical – approximately another 30 emails or calls for course-level support
LMS User Support

- Critical situations – system down
  - Web services call – password expired then reset – October 2015
  - Unscheduled production Maestro service interruption – February 2016
  - Training Store updates – rollback to previous version – February 2016
  - Authentication error – clocks synced hourly – March 2016

- Maintenance/reporting
  - Evaluation reports
  - State reports
  - Industry reports
2016 Enhancements – Matrices and Course Linkage

Aggregate Bases & Subbases Inspection

<table>
<thead>
<tr>
<th>DISCIPLINES</th>
<th>LEVEL I</th>
<th>LEVEL II</th>
<th>LEVEL III</th>
<th>LEVEL IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Preparation</td>
<td>Assists in performing inspections of the surface upon which the aggregate materials are to be placed</td>
<td>Inspects subgrade or previously placed aggregate layers surface for required density and cross section in accordance with contract documents</td>
<td>Recommends acceptance or corrective action based on inspection results</td>
<td>Determines contract decisions related to surface preparation acceptance and payment</td>
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Training Store/LMS
2016 Enhancements – Matrices and Course Linkage

Browse Training

- Construction
  - Contract Administration
  - Quality Assurance
  - Environment
  - Construction Surveying & Staking
  - Utilities
  - Grading
  - Drainage
  - Aggregate Bases & Subbases Inspection

Surface Preparation
Stockpiling and Hauling
2016 Enhancements – Subscription Pricing
2016 Enhancements – Subscription Pricing

[Image of T3 Transportation Curriculum Coordination Council]

[Webpage screenshot showing subscription pricing options]

- AASHTO Training
- Free TC3 Training

Pre-Paid Trainings

- Agency Name: [AASHTO]
- E-Mail Address: john.doe@aashto.org
- Organization Type: Private Sector
- Number of Employees: 1-100
- Agency Revenue: $0-100000

Available Package Options

- Package Name: Private sector 50 training course for 20 employees
  - Code: TR-XXX-XX-2
  - Package Type: By Course
  - Course: 3 out of 50 courses
  - Original Price: $50000.00
  - Package Price: $32000.00
- Package Name: City government 50 training course for 50 employees (Credit Hours)
  - Code: TR-XXX-XX-1
  - Package Type: By Hours
  - Credit Hours: 25 out of 80 hours
  - Original Price: $62500.00
  - Package Price: $31125.00

List of available packages based on provided criteria.
New LMS Course Participant Numbers

Go live
8/17/15
Projections – How to get to 15,000

15,000+ course registrations

Training Store/LMS
### Participant Numbers

**Total Participants Since 2008**

<table>
<thead>
<tr>
<th>Source</th>
<th>Courses Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHI Web site through 2015</td>
<td>80,227</td>
</tr>
<tr>
<td>NHI Estimate 1st Quarter</td>
<td>3,000</td>
</tr>
<tr>
<td>State Training Sharing Program</td>
<td>35,148</td>
</tr>
<tr>
<td>STS Program Estimate 1st Quarter</td>
<td>1,500</td>
</tr>
<tr>
<td>New TC3/AASHTO Training Store/LMS</td>
<td>3,025</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>122,900</strong></td>
</tr>
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Next Steps

- Usability study towards the end of 2016 (password reset example)
- Complete enhancements
  - Matrices course linkage
  - Subscription pricing
- Ongoing system and user support
- Finalize reports
  - State reports
  - Industry reports
  - New registrants reports
  - Report frequency
- Survey State Training Sharing Program
- Work with BG to promote new and updated courses
Questions