Next Generation Trns•port

2006 Subcommittee on Construction
San Juan, Puerto Rico
Jim Johnson, Trns•port Task Force Chair
Florida DOT
Overview

- Trns•port Strategic Goals
- What is NGT?
- NGT Roadmap
- NGT Phase 1 Progress
- NGT Impact on Construction Users
- New Initiatives
- Agency Involvement
Trns•port Strategic Goals and NGT

- Align with the AASHTOWare strategic direction
  - Web services, web-based clients, XML
- Eliminate unnecessary boundaries
  - Unified data and security models and business rules
- Bring Trns•port’s value to a broader audience
  - Web-based access, support for multiple devices
- Reduce agency Total Cost of Ownership (TCO)
  - Easier deployment, support, training, integration, use
Trns•port Strategic Goals and NGT (cont.)

• Provide architecture that meets the needs of current and future customers
  – Flexible, loosely coupled Services-Oriented Architecture
  – Improved reporting capabilities

• Build a consistent, unified data model
  – Also unify business rules and security model

• Enable easier integration with other systems
  – Web service interfaces based on industry standards

For more information, see Trns•port 2005-2010 LRWP
What NGT is

- Rewrite from the ground up
- Business scope
  - Meet same business needs as Client/Server Trns•port
  - Remove obsolete features and features never used
- Technical scope
  - Microsoft Windows servers
  - Microsoft .NET Framework
  - Oracle and DB2 databases
  - Standard web browsers supporting CSS and Javascript
- Interfaces to C/S modules (Temporary)
NGT Roadmap
NGT Roadmap

<table>
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<tr>
<th>Phase</th>
<th>Increment</th>
<th>AASHTO Fiscal Year</th>
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This plan is tentative and is subject to change due to factors such as funding availability.
Phase 1 Objectives
NGT Phase 1 Project

• Implement Trns•port proposal, letting, and award business functions and release to all licensees when functionally equivalent to C/S PES/LAS, as determined by the TTF

• Status to date
  – Monthly posting of software on preview site
  – 24,000 acceptance tests; 1,200 GUI tests
  – Data migration built-in

• Initial preconstruction workflow completed
  – Project and proposal definition
  – Bid processing
  – Key reports (Detail Cost Estimate, Proposal)
  – Capture more data in next sprints
## Project List

### 395 Projects

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Impact on Construction Users
Impact on Construction Users

- Rewrite Means Capture of Current Business Rules
- Architecture – Business Rules Uniquely Placed
  - Can be changed without future major rewrite
  - Allows Customization by Licensing Agency
- WEB Application
  - Transportable Across Different Platforms
  - Lower End User Hardware Cost
  - Distribution of Software Streamlined
Impact on Construction Users

• NGT Design
  – Greater Agency Customization
    • GUI Interface
    • Reports
    • Business Rules Modification/Addition
  – No ‘Re-install’ of New Releases
  – Unified Data Model (one entry per data field)
New Initiatives
New Initiatives - Civil Rights & Labor Management System (CRLMS)

• Solicitation Package has been approved by SCOJD
  – Solicitation scheduled for August through October
  – Project Start – November 2007

• Technical Review Team (TRT) from Project Participants

• Project Scope
  – Time - 18 Month
  – Cost - $3,726,000

• Compatible with NGT
  – Won’t require license of other Trns*port Modules
  – Licensees will get Entire Trns*port database
New Initiatives – CRLMS Functions

• Contract-related Information
  – DBE Goal Setting on Contracts
  – Bidders Data
  – DBE Commitments
  – Subcontract and Supplier Quotes
  – Approved Subcontract Data
  – Prompt Payments
  – Completed Contract Data
New Initiatives – CRLMS Functions

• Vendor-related Information
  – Vendor Data, Addresses, Officers / Staff
  – Work Classes
  – Financial Data
  – DBE Certifications

• Employee-related Data
  – Payroll Data and Tracking
  – Wage Decision Information
  – On-the-Job Training Program(s)
  – Trainees
New Initiatives – CRLMS Functions

• Reports / Analyses
  – Semi-annual and Annual Reports on DBE Commitments and Subcontracting
  – Program Goal Setting
  – Market Availability
  – Market Utilization
  – FHWA Form 1391
  – FHWA Form 1392
New Initiatives – NGT Materials

• Michigan Initiative – Funds Availability
• Start of SiteManager Materials in NGT Environment
• Looking for Other Participants
• Functions – Identified Additional Functions Beyond SiteManager
Agency Involvement
How Can Agencies Help?

- Agency business expert participation
- Preview software site & test case repository
- Use Cloverleaf NGT user forum
- Submit backlog items
- Respond to surveys (e.g., impact assessment)
- Be a beta site – installations and user data
- Champion solicitations
- Accelerate the schedule by providing funding
How You and Your Agency Can Help

• Due to the agile methodology approach, your involvement NOW can directly influence Trns\porte value to your agency

• Provide input and feedback
  – Test drive the working software
  – Suggest improvements and features
  – Participate in the forum
Summary

• Great progress with usable software in place
• Agile mitigates risk and maximizes quality, efficiency
• Modern services oriented architecture
• Test driven development and open source
• TTF in charge of scope and monthly software validation
• User participation is important to success
Where to Get More Information

http://www.cloverleaf.net/ngt

- Trns•port 2005-2010 Long Range Work Plan
- Next Generation Trns•port Phase 1 Work Plan
- Next Generation Trns•port Roadmap
- Annual Trns•port Maintenance, Support, and Enhancement Work Plan
Contacts

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Questions