TIG:

Driving Innovation for Transportation

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Presentation Overview:

- How TIG Works
- Projects related to Construction
- How you can get involved
What does TIG do?

Promotes Focus Technologies that are:

• used by a DOT
• market-ready
• high pay-off
How does TIG work?

- Two Tier System
  - Executive Committee (top DOT executives)
  - Lead State Teams
How does TIG work?

- Executive Committee (top DOT executives)
  - Solicit and Select the Technologies (Annually - 3-4 Focus Technologies, 2-3 Additional Selected Technologies)
  - Program Oversight and Management
How does TIG work?

• Types of Technologies
  – Focus Technology
    • Lead State Team is Formed
    • Dedicated budget for marketing/implementation
  – Additional Selected Technologies (AST)
    • No Team assembled
    • Produces a White Paper
How does TIG work?

• Lead State Teams
  – Formed for every Focus Technologies
    • 4-7 State DOT Subject Matter Experts
    • 1-2 FHWA
    • 1-2 Industry
TIG Projects related to Construction
TIG Focus Technologies related to Construction

- Self-Propelled Modular Transporters (SPMT)
- Construction Analysis Software Tools (CAST)
- Automated Machine Guidance (AMG)
- Precast Concrete Paving Slabs (PCPS)
Tell us about Self-Propelled Modular Transporters…

- Why SPMT? Why now?
  - Significantly reduce traffic congestion/impact
  - Open highways to traffic in minutes/hours
  - Improve quality and constructability
  - Improve work zone safety
  - Increase contractor and owner options
Tell us about Construction Analysis Software Tools…

Why CAST? Why now?

- CAST provides Information on construction options that helps agencies:
  - “Try before they buy”
  - Minimize traffic congestion during construction
  - Maximize safe mobility
  - Gather and organize data for IA and TMP, per new FHWA rule
CAST options include:

- Traffic simulation/analysis
- Construction Staging
- Construction options/cost analysis
- Combination of these options
Tell us about Automated Machine Guidance…

• Why AMG? Why now?
  – Links software with construction equipment
  – Directs the operation of machinery
  – Provides a high level of precision
  – Improves speed and accuracy
AMG also means:

- Less changes, busts, reengineering and rework
- Less labor/time to produce high quality results
- Improved worker safety
- Agencies/contractors save time and money
- Better ride quality for customers
Tell us about Precast Concrete Paving Slabs…

Why PCPS? Why now?

• Proven quality, durability and long-term performance
• Accelerate construction scheduling and sequencing
• Reduce work zone duration and size limits
• Reduce construction delays/congestion
• Economically viable
PCPS Types and products:

- Prestressed/Post-Tensioned Paving Panel
- Full-Depth Repair/Joint Replacement
- Uretek Precast Panel using High Density Polyurethane
- “Super-Slab™”
- Kwik Joint Coupling system
How can we get involved?

- Contribute to the TIG (Work with your Research Manager and Chief Engineer)
- Serve on a Lead States Team
- Submit your agency’s technology
How do I learn more?

www.aashtotig.org

Or contact:

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Thank you!