Highways for LIFE
Program Overview
PCPS Showcase

Accelerating innovation for the American driving experience

Mt Arlington, NJ
October 14, 2008
More cars and trucks
Old highways and bridges
Too many crashes and injuries
We can build highways:

- Faster
- With less congestion
- With better safety and quality
- At lower cost
How?

- Setting specific perf. goals
- Seeking the best solutions
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Setting Performance Goals:

• Focus on user
• Set at a high level
• Define end results
• What, not How
• Encourage innovation
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Seeking the best solutions:

• Benchmarking
• Team approach
• Be innovative
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Program Elements:

• Technology Transfer
• Technology Partnerships
• Demonstration Projects
• Communication
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Technology Transfer Actions

• Workshops/open-houses
• Vanguard Technologies
• Technical Briefs
• Webinars (Two-Lift, Precast Pavements)
• Toolkit DVD’s (PBES, RSA, PCPS, HfL)
• Display Booth
Vanguard Technologies

- Prefabricated bridge elements and system (PBES)
- Road safety audits (RSA)
- Making work zones work better
- Precast concrete pavements system (PCPS)
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Formal Marketing Plans

- Develop Goals
- Identify Target Audiences
- Identify Resistance
- Develop Rigorous Action Plan
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• Videoconference
• DVD of videoconference
• Marketing plan
• Regional showcases (3)
• Webinars
• Toolkit DVD
• Rotational assignment
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Technology Partnership

• All-Weather Pavement Marking System (3M Co.)

• Intelligent Asphalt Compaction Analyzer (Haskell Lemon Construction Co.)

• Aggregate Imaging System (Pine Instrument Co.)

• Automated Pavement Marker Placement System (Stay Alert Safety Services)

• Asphalt Binder Cracking Device (EZ Asphalt Tech, LLC.)
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Demonstration Projects

• Performance goals for safety, quality, construction congestion and user satisfaction

• Innovations to achieve goals
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Demonstration Projects

HfL Project Recipient
Innovations:
• Prefab bridge elements
• High performance concrete
• High performance steel
• Self consolidating concrete
• Innovative contracting
• Assembled a multifaceted team

Benefits:
• 50% reduction in time for bridge construction
Minnesota 2006

Innovations:
- Full road closure
- Innovative contracting
- Intelligent Compaction
- Lightweight Deflectometer
- Real-time ITS

Benefits:
- Reduce construction time by 80% (5 months vs. 2 year)
Innovations:

• Design / build
• Performance contracting
• Prefab bridge elements
• Real-time ITS

Benefits:

• Reduce construction time by 40%
Maryland 2007

Innovations:

• Full road closure
• Precast, prestressed bridge elements
• Integral abutments
• Innovative contracting

Benefits:

• Project complete within 60 days versus 1 year
Innovations:

• Work zone safety technologies
• Self propelled modular transporter
• Prefab bridge elements
• High performance concrete
• Innovative contracting
• Context sensitive solutions

Benefits:

• Minimize disruption to traveling public
Utah 2007

Innovations:

• Total prefab bridge
• Self propelled modular transporter
• Construction manager contractor
• Work zone traffic technologies
• Silica fume concrete deck

Benefits: Traffic was interrupted for 48 hours only
California 2007

Innovations:

• Precast concrete pavement systems
• CA4PRS Software
• Dynameq Software

Benefits:

• Longer lasting pavement
• Optimize construction sequence, reduce impact to users
Virginia 2007

Innovations:
- Modular precast pavements (both prestressed and jointed systems)
- Innovative contracting
- Elaborate MPT technologies (ITS)
- I-66 & US 50 Ramp

Benefits:
75% reduction in construction impacts to traffic
Florida 2009

- Daytona International Drive, Access to Speedway
- Approximately 15 at grade intersections or business accesses
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Demonstration Projects

FY 08 incentive funds not available.
FY 09 solicitation is open.
Waive match option is open.
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Demonstration Projects

One-day workshop

 Seeking the Best Solutions
✓ Performance Goals
✓ Innovations to achieve goals
✓ Performance contracting

Building a successful HfL project
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Accelerating innovation for the American driving experience

Contact your Division Office
www.fhwa.dot.gov/hfl
www.pdshowcase.net