



Highways for LIFE Program Overview PCPS Showcase

Accelerating innovation for the American driving experience

Mt Arlington, NJ
October 14, 2008



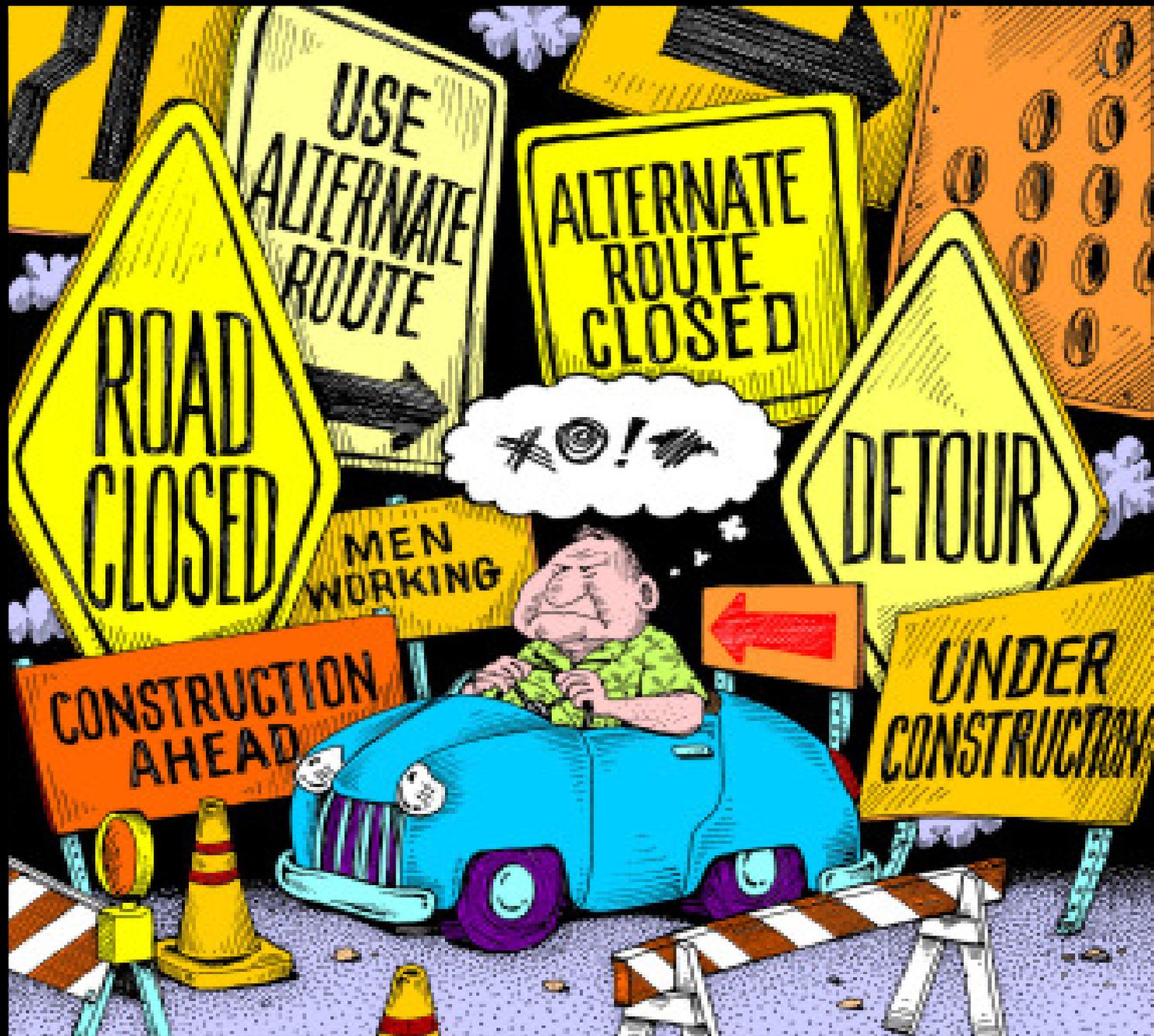


More cars and trucks
Old highways and bridges



Too many crashes and injuries







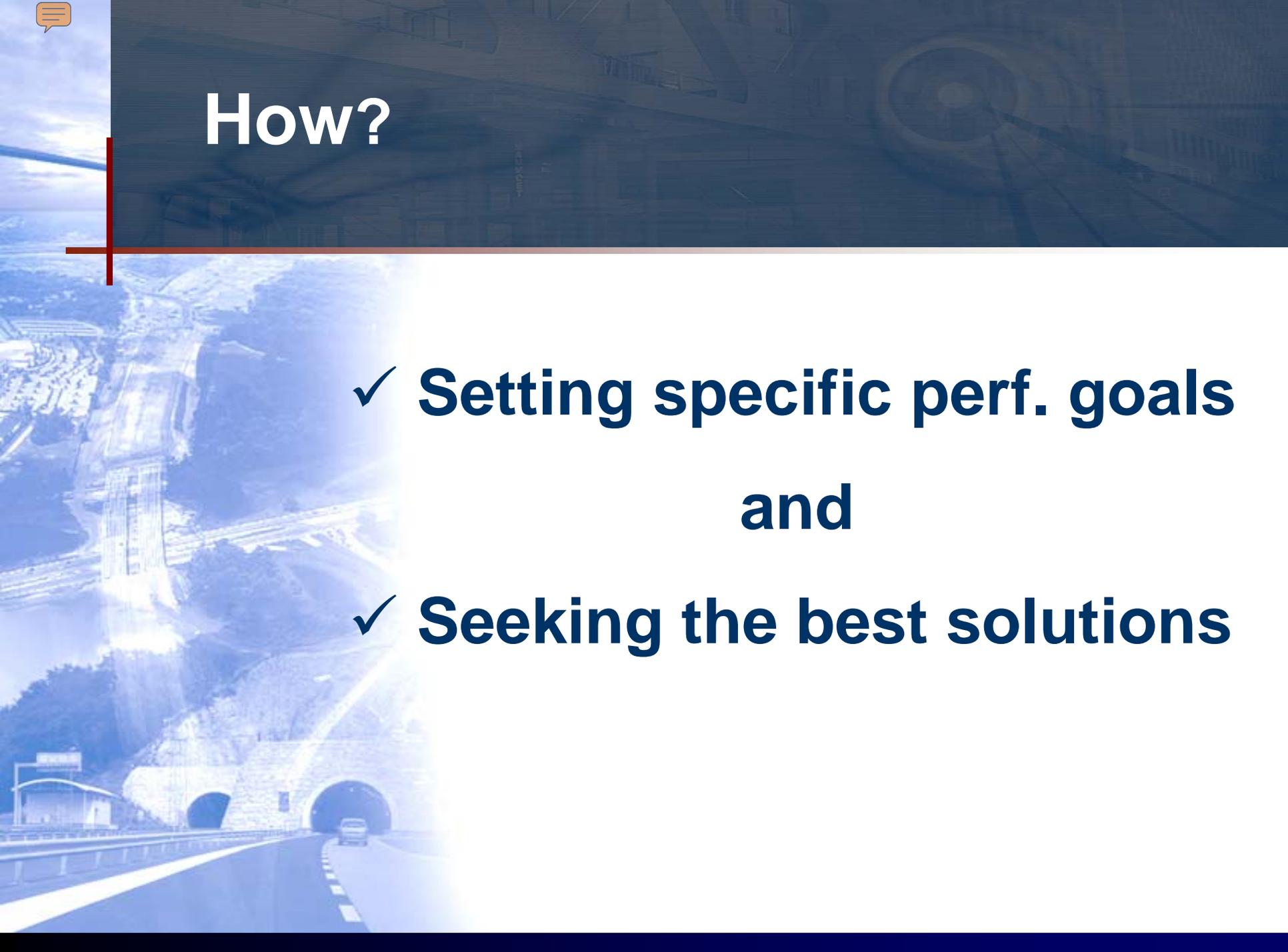
We can build highways:

Faster

With less congestion

With better safety and quality

At lower cost



How?

- ✓ **Setting specific perf. goals**
and
- ✓ **Seeking the best solutions**



Highways for LIFE

Setting Performance Goals:

- **Focus on user**
- **Set at a high level**
- **Define end results**
- **What, not How**
- **Encourage innovation**



Highways for LIFE

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**

The background of the slide features a blue-tinted image of a highway. In the foreground, a road with a white dashed line on the right side leads towards a tunnel entrance. Above the tunnel, a large bridge structure is visible, supported by multiple pillars. The sky is bright and hazy. In the top left corner, there is a small orange speech bubble icon.

Vanguard Technologies

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



Highways for LIFE

Formal Marketing Plans

- **Develop Goals**
- **Identify Target Audiences**
- **Identify Resistance**
- **Develop Rigorous Action Plan**



Highways for LIFE

- **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.*)**

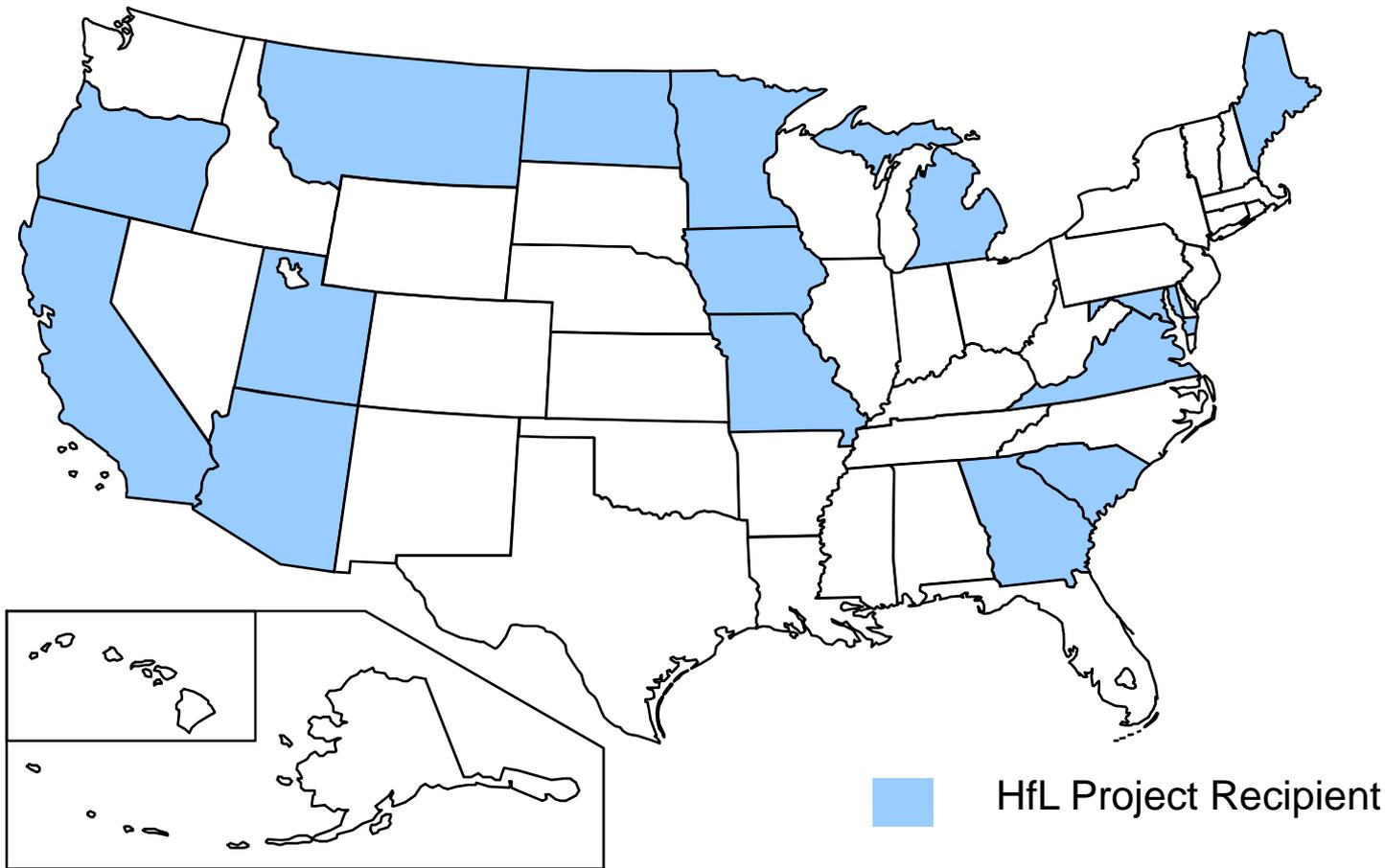


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Demonstration Projects

- Performance goals for safety, quality, construction congestion and user satisfaction
- Innovations to achieve goals

Highways for LIFE Demonstration Projects





Iowa 2006

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)





Georgia 2007

Innovations:

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

Benefits:

- Reduce construction time by 40%





Oregon 2007

Innovations:

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

Benefits:

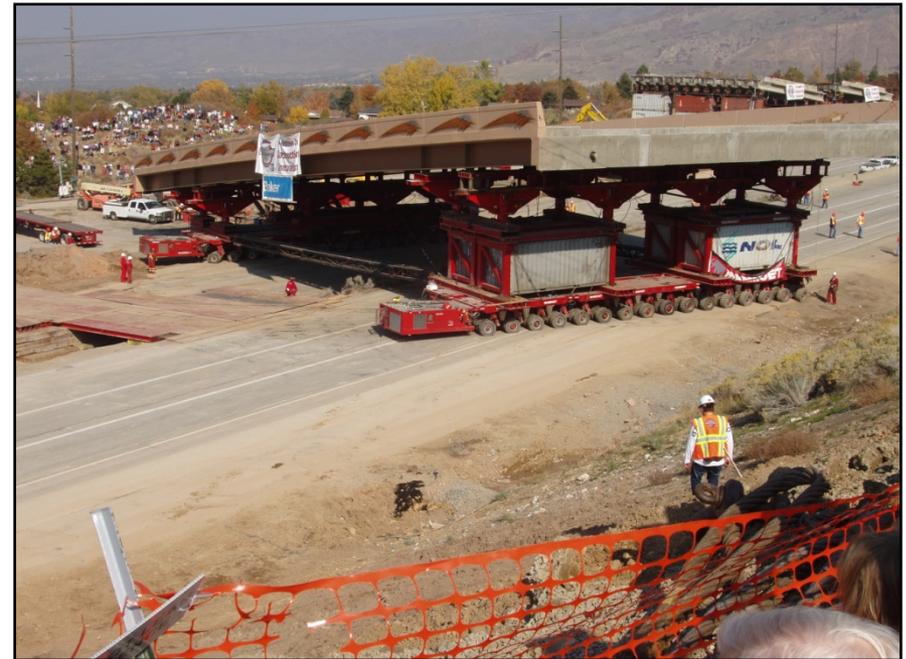
- Minimize disruption to traveling public



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



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





Highways for LIFE Demonstration Projects

***Last
call!***

**FY 08 incentive
funds not
available.**

**FY 09 solicitation
is open.**

**Waive match
option is open.**



Highways for LIFE

Demonstration Projects

**One-day
workshop**

Seeking the Best Solutions

- ✓ **Performance Goals**
- ✓ **Innovations to achieve goals**
- ✓ **Performance contracting**

Building a successful HfL project



Highways for LIFE

Accelerating innovation for the American driving experience

Contact your Division Office

www.fhwa.dot.gov/hfl

www.pdshowcase.net



U.S. Department of Transportation
**Federal Highway
Administration**