 ITS Committee Meeting  
TRB Annual Meeting – Wednesday, January 26, 2011

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About the Challenge

- Accessible via http://connectedvehicle.challenge.gov

- Concept and idea-based challenge

- Focus on the unique attributes of DSRC

- Smart ideas on how to apply advanced wireless technology can make the transportation system safer, more efficient and even greener

- Six best submissions awarded a trip to the 2011 ITS World Congress
  - Unique speaking session for the best submissions
Origin of the Challenge

- ITS Strategic Research Plan, 2010-2014 *Executive Summary*
  - ITS Exploratory Research: “to provide an avenue to solicit creative ideas for new technology options that are deserving of consideration and that further the ITS Strategic Research Plan goals for the next five years.”

- OMB “Guidance on the Use of Challenges and Prizes to Promote Open Government”
  - Outcome of President’s *Strategy for American Innovation*
  - “Increase the number and diversity of the individuals, organizations, and teams that are addressing a particular problem or challenge of national or international significance”
  - “Further a Federal agency’s mission by attracting more interest and attention to a defined program, activity, or issue of concern”
  - “Capture the public imagination and change the public’s perception of what is possible”

  - “Drive innovation by tapping into the ingenuity of the American people”
ConnectedVehicle.challenge.gov

Connected Vehicle Technology Challenge

From: U.S. Department of Transportation
Category: Energy & Environment, Personal and Public Safety, Science & Technology

Detailed description
New wireless technology enables connectivity for vehicles of all kinds—cars, trains and even bicycles. Vehicles can "talk" to each other, traffic signals, and mobile devices. What should they say?

Detailed description
America’s transportation system is among the best in the world, but Americans face crash risks, congestion, environmental impacts, and other detriments that erode our quality of life. Smart ideas on how to apply advanced wireless
Submissions and Rules

- Submissions must be received by Midnight (Eastern) on May 1, 2011
  - Description of the submitted idea may be up to 20 pages
  - Mixed media submissions are accepted (including graphics and video)
  - Submissions aren’t proposals, and not all the technical details need to be worked out
  - Emphasis on low barrier to entry to participate in this challenge
    - No special equipment or facilities needed

- Submissions are reviewed before posting on challenge.gov

- Expert judges from the DOT’s ITS Program and other stakeholders will determine 5 of the 6 best submissions
  - Public Voting will determine a popular winning submission
Submissions and Rules (2)

- Eligibility
  - Individuals who are U.S. citizens and over the age of 18
  - Non-U.S. citizens who are residing in the U.S. to attend a U.S. university
  - Teams of eligible individuals
  - Corporations and organizations based in the U.S.

- Award
  - Travel and registration for the 2011 ITS World Congress in Orlando
  - Winners may travel only within the U.S. and its territories
  - No cash equivalent or other substitutions will be awarded
What makes for a good challenge submission

- Four criteria for judging the submissions

1. **Technical and operational feasibility**
   How plausible is it that this Concept could be implemented? What needs to be overcome?

2. **Potential for widespread adoption**
   How likely is it that this Concept would be widely adopted, if it were developed?

3. **Innovation**
   To what degree is this a novel idea?

4. **Social benefit**
   How much would this idea benefit travelers or society at large?
Next stages

- Submissions are due by May 1
- Popular voting for one of the awards from May 1 to May 31
- Winning submissions to be announced July 1

- Work underway to consider the America COMPETES Law (P.L. 111-358)
  - Grants authority for cash awards for scientific and technological innovation
  - USDOT in early stages of defining policy on implementation
  - Participating in government-wide challenges working group to share best practices
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“Imagination is more important than knowledge”
Albert Einstein
Thank you

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Connected Vehicle Technology Challenge