



UNITED STATES
DEPARTMENT OF TRANSPORTATION



Connected Vehicle Technology Challenge

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”*

- U.S. DOT Open Government Plan (<http://www.dot.gov/open>)
 - *“Drive innovation by tapping into the ingenuity of the American people”*



ConnectedVehicle.challenge.gov

The screenshot shows the Challenge.gov website interface for the Connected Vehicle Technology Challenge. At the top, there is a navigation bar with 'HOME' and 'FIND CHALLENGES' buttons, a search bar with the placeholder text 'e.g.: "Apps" or "Health"', and a 'Search' button. The 'Challenge.gov' logo is in the top left, and 'Log in' and 'Sign up' buttons are in the top right. Below the navigation, the page title is 'Connected Vehicle Technology Challenge'. The challenge is attributed to the 'U.S. Department of Transportation' and categorized under 'Energy & Environment, Personal and Public Safety, Science & Technology'. A horizontal menu contains buttons for 'Details', 'Discussions (2)', 'Submissions (0)', 'Blog (0)', and 'Rules', along with a 'Post a submission' button. The main content area features a 'Detailed description' section with a list of links: 'How to enter', 'Important dates', 'Judges', 'Judging criteria', and 'Prizes'. The description text reads: '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?'. Below this is a graphic with a central square and surrounding triangles, followed by the title 'Connected Vehicle Technology Challenge' in large blue font. A 'Detailed description' section follows, starting with the text: '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'. On the right side, there is a 'Submissions' box indicating 'End in 3 months' and '55 supporters', with a prominent orange button that says 'I support this challenge!'. Below that is a 'Share' section with social media icons for '0' comments, 'Tweet', and 'Facebook', and an email icon.

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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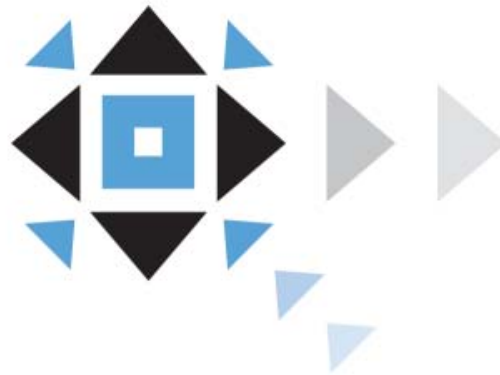
**“Imagination is more important than
knowledge”**

Albert Einstein



Thank you

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