

Reaching Travelers with Effective Information on Travel-Time Reliability

New lexicon to communicate real-time information more effectively

A key question for motorists often is, "How much extra time should I add to my trip to account for congestion?" An important task for transportation agencies is conveying information so that travelers can make informed decisions and better plan for arriving at their destination on time. Uncertain travel times frustrate motorists, sometimes more than slow travel speeds. Transportation departments need to know how to communicate travel-time reliability information that is accurate and route-specific.

Traveler Information and Travel-Time Reliability

The Solution

Developed through the second Strategic Highway Research Program (SHRP2), the lexicon is the first resource for identifying the best ways to introduce the concept of travel-time reliability to motorists and to provide information about reliability so that it is understood and useful. This new resource emphasizes that agencies should use familiar concepts and terminology, communicate the amount of buffer time needed, assist in departure time and route decision making, and consider how information needs to be different for those who frequently travel a route and for those who are only occasional users.

Another consideration is how information should be conveyed to different types of drivers with different trip purposes. Communicating with an elderly driver would be much different from communicating to a well-equipped trucker. Those who carpool may have very different information needs about a given trip's reliability than would a weekend recreational traveler. What different media to use, when to provide the information, and what to convey are important considerations when planning a messaging effort.

The lexicon and accompanying report emphasize messages and media that can effectively communicate information without increasing the risk of driver distraction. The material was developed through surveys, focus groups, and experiments that examined what combination of words, numbers, symbols, layout, lighting, color, and spacing of user information messages, along with communications channels and technology platform, best communicate information about travel time and reliability to travelers.

Connecting travelers with reliability information

FOCUS AREA: Reliability (L14)

A new lexicon describes how best to communicate information regarding travel-time reliability to motorists.

Save Lives

- Reducing reliability-related delay will also result in fewer crashes.

Save Money

- Transportation agencies save money by avoiding ineffective strategies for communicating to motorists.

Save Time

- The driving public saves time by using reliability information to avoid delays.

The Benefits

The lexicon can help a transportation agency better communicate travel-time reliability information to the traveling public. With the right information, travelers can make the best travel choices from their point of view, which may include whether or not to take a trip, and what may be the departure time, mode choice, and route choice.

Who can benefit from using these tools?

Transportation agencies and other entities that provide information to the traveling public, as well as those who are trying to better understand how to convey reliability information to travelers, will find this product helpful.

How can you learn more?

For more information about this research, contact Jimmy Chu at FHWA, jimmy.chu@dot.gov; Gummada Murthy at AASHTO, gmurthy@aaashto.org; or William Hyman at TRB, whyman@nas.edu.



About SHRP2 Implementation

The second Strategic Highway Research Program is a national partnership of key transportation organizations: the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the Transportation Research Board. Together, these partners conduct research and deploy products that will help the transportation community enhance the productivity, boost the efficiency, increase the safety, and improve the reliability of the Nation's highway system.

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