



Highlights of [GAO-10-248](#), a report to congressional committees

## Why GAO Did This Study

The 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users authorized the Department of Transportation to establish a highway research program to address future challenges facing the U.S. highway system. In 2006, the Second Strategic Highway Research Program was established to conduct research in four areas—safety, renewal, reliability, and capacity. The Transportation Research Board manages this program in cooperation with the Federal Highway Administration and others.

The legislation also required GAO to review the program no later than 3 years after the first research contracts were awarded. This report provides information about the process for selecting the program's projects for funding, the projects' status, and what, if any, research was eliminated because of funding and time constraints. To address our objectives, GAO reviewed the program's authorizing legislation, analyzed studies and reports related to the program and its projects, and interviewed officials from relevant transportation agencies and organizations.

GAO is not making recommendations in this report. The Department of Transportation and the Transportation Research Board reviewed a draft of this report and provided technical clarifications, which we incorporated, as appropriate.

View [GAO-10-248](#) or [key components](#). For more information, contact David Wise at (202) 512-2834 or [wised@gao.gov](mailto:wised@gao.gov).

## HIGHWAY RESEARCH

### The Second Strategic Highway Research Program Addresses the Four Required Areas, but Some Anticipated Research Was Not Funded

#### What GAO Found

The program's oversight committee funded research projects based on the recommendations of its four technical coordinating committees of experts (one for each of the four research areas), which considered the input of other experts and factors, such as available program funds and time frames. Prior to the program's establishment, detailed research plans were developed by panels of experts in 2003 that identified 106 possible research projects. However, these research plans were significantly modified on two occasions—in 2006, when less funding and time were provided for completing the program than had been assumed in 2003, and in 2008, when about \$20 million in additional program funding became available. On both occasions, the program's oversight committee relied on experts to prioritize and recommend projects for funding. As a result of this process, 56 of the 106 projects either evolved into, or were partially merged with, one or more of the currently funded projects, while 50 projects were eliminated entirely.

As of December 31, 2009, the program's oversight committee had allocated about \$123 million of the approximately \$171 million available to fund 85 projects in the four research areas of highway safety (40 percent), renewal (26 percent), reliability (16 percent), and capacity (17 percent). These funding allocations closely followed the overall funding percentages recommended by the Transportation Research Board in 2001. Of the 85 funded projects, 11 were completed, 52 were ongoing, 22 were anticipated, and all of the projects were expected to be completed by 2013. The outcomes are expected to vary by research area, ranging from useful data sets and related analyses to improved technologies, guidelines, and techniques for advancing the goals of each research area. Among other outcomes, the program staff expects

- the safety research will produce the largest, most comprehensive database on driver behavior available to date and, thus, provide the foundation for significant improvements in highway safety;
- the renewal research will produce a variety of tools and techniques to promote rapid and durable highway renewal;
- the reliability research will develop methods to provide highway users with relatively more consistent travel times between locations; and
- the capacity research will provide strategies for better decision making in highway planning processes to increase the capacity of U.S. highways.

Because of funding and time constraints, 50 of the 106 research projects identified in 2003 were eliminated entirely from funding, while many of the remaining 56 projects had one or more portions of their planned research eliminated. Overall, most of the funded projects are for applied research, but many of the implementation-related activities identified in 2003 were eliminated. While activities to (1) translate research results into products, (2) train and disseminate research findings, and (3) provide technical support for implementing the research are often needed to widely implement research results, program staff are hopeful that other researchers will initiate some of the eliminated research activities after the program's completion.