What was the purpose of the fuel use study?
Washington's gas tax is intended to support state and local highways, roads and streets. However, gas tax revenues associated with off-road vehicle (ORV) recreation and recreational use of nonhighway roads are used by the state to benefit the recreationists generating the revenue. The purpose of the 2002-03 study was to determine the relative portion of motor vehicle fuel tax revenues attributable to vehicles operating off-road and on nonhighway roads for various recreational purposes.

What is a nonhighway road?
A nonhighway road is a road not built or maintained by Washington's gas tax. These roads are typically in state and national forests and parks and are used by recreationists to get to trails, campgrounds and other recreational facilities. In the study, a nonhighway road was called a "back road" to reduce the use of technical jargon.

Were recreationists involved in designing the fuel study?
Yes. There was a committee made up of representatives from the Northwest Motorcycle Association, Washington Trails Association, Back Country Horsemen, Pacific Northwest Four Wheel Drive Association, Washington ATV Association, and Backcountry Bicycle Trail. They provided valuable advice on selection of the consultant, design of the study, data analysis, and final report.

What technical support did the study have?
The IAC staff person overseeing the study has years of experience in research, surveying and statistical consulting. In addition, IAC hired an economist with
experience in statistical analysis and surveying to provide advice on the data analysis and preparation of the final report. The consulting firm that conducted the study, Hebert Research, is an internationally recognized research and survey firm, with a team of experts that were involved in all stages of the study. The consultant was selected from firms responding to an RFP after proposals were reviewed by the advisory committee.

Was there an independent review of the study by outside experts?
Yes. Two experts in survey design, one from the faculty of the University of Washington and one from the faculty of Washington State University, reviewed proposals from the consulting firms, evaluated the proposed methodology, and reviewed the results. Both experts found the methods valid and the results credible.

Since not every vehicle owner was contacted, how can the study be accurate?
Scientifically designed public opinion and political polls are able to contact a small number of people (typically twelve hundred or less) to make valid estimates about the whole population. Similarly, the random sampling of Washington’s registered street-legal and off-road vehicles and the resulting 7,252 responses allowed the total amount of fuel used on back roads and off-road to be estimated with a high degree of accuracy.

Why didn’t you talk to people on the back roads and trails instead of mailing questionnaires to vehicle owners?
Before the survey, Hebert Research tested the questionnaire by contacting people at trailheads. However, it would have been nearly impossible to find an unbiased way to select which trails and back roads to survey and which people to talk to. In addition, this would have had to be done at sites around the state every day for an entire year to capture seasonal differences. This type of study would have cost many times more than the available amount of funding. The advisory committee and technical advisors believed that mailed surveys would produce more accurate, less biased results.

Why was gas used by people engaged in nonmotorized recreational activities counted?
Fuel consumed on back roads and off-road is taxed. Therefore the study included all fuel used on back roads, whether the vehicle was taking hikers to a trailhead, hauling a horse trailer or ORVs, or driving campers to a campground. The amount of fuel consumed on back roads was credited to the recreational activity the respondent checked on the survey.
Didn’t urban areas get more questionnaires than rural areas?
Yes. Since vehicles were selected at random from the state’s registration lists, every vehicle (cars, SUVs, pickup trucks, motorcycles, motor homes, ATVs, 4X4s) had an equal chance of being selected. This is necessary to allow accurate, unbiased estimation of the total amounts of fuel consumed on back roads and off-road. Since about one out of every 120 vehicle owners was sent a questionnaire, parts of the state with more vehicles received more questionnaires. Hebert Research used a statistical technique called “stratified sampling” to ensure that all rural counties received enough questionnaires to get meaningful data.

Were ORVs licensed as street-legal vehicles included in the study?
Yes. All ORVs, whether licensed or stickered, had an equal chance of being selected, and the fuel used both on back roads and off-road was counted.

If I haul a motorcycle to a trailhead in my pickup, is the pickup’s fuel counted?
Every pickup in the state had an equal chance of being selected. If the respondent reported using their pickup on back roads and reported engaging in ORV activities, the pickup’s fuel was credited to ORV recreation. It is unlikely, however, that the owner of a pickup and an ORV would have received a survey for both vehicles. The total statewide fuel consumption attributed to ORV recreation is the sum of the fuel used for hauling ORVs on back roads and operating ORVs on back roads, trails, cross-country, and in ORV riding areas.

Why did I get the survey during the middle of winter when I don’t use my ORV or go hiking?
The study was conducted over an entire year to capture winter as well as summer activities. Owners of vehicles had an equal chance of getting a survey any time during the year whether or not their vehicle was used during the two-week survey period.
I have an ORV but did not receive a questionnaire and nobody I know did, either.
A total of 43,000 owners of Washington’s 5.1 million registered vehicles and stickered ORVs were selected at random to receive questionnaires. This means that about one vehicle owner out of every 120 was chosen to participate. By sheer chance, several owners received questionnaires for several of their vehicles, while other owners did not receive a questionnaire nor did they know anyone who did.

I received a questionnaire for the ORV I rarely use, not the one I use every weekend.
Because of the random sampling, this can happen by chance. There was an equal chance it could have been the other way around.

Where can I get a copy of the study?
You can find a summary of the study and a copy of the full report on IAC’s website at www.iac.wa.gov