Choosing cleaner, GREENER CARS

Why do drivers choose environmentally responsible cars over conventional vehicles? Transport specialist Professor David Hensher aims to find out the answer in his new ARC-funded research project.

CARS MAKE A significant contribution to global warming, and in the transport sector, they are responsible for 70% of carbon dioxide emissions. As a result, it is becoming a top priority for governments to find ways to encourage people to drive greener cars, such as cars which use alternative fuel sources.

Enter Professor David Hensher, Director of the Faculty’s Institute of Transport and Logistics Studies (ITLS), who is one of the world’s foremost experts in transport decision-making. This year, he is spearheading a research project which is investigating the reasons why people choose greener cars over regular vehicles. In 2007, the project was awarded funding under the prestigious Australian Research Council (ARC) Discovery Grant program.

As part of the study, Hensher’s four-person research team will survey around 400 people about their preferences for various green options in cars. By applying sophisticated statistical models, the team will be able to paint a detailed picture of the factors that influence people to choose greener cars. They will also be able to forecast how different green vehicles of the future, such as cars powered by hydrogen fuel cells, might be received by consumers. Such information will be enormously helpful to governments as they formulate policies to encourage the supply and purchase of green vehicles. It will also provide the automobile industry with useful insights into the kinds of green cars that drivers want.

As well as providing practical help to government and industry, the research project is also important at a theoretical level because it incorporates new developments in the field of choice theory, a body of theory which models how people’s preferences influence their decisions. Discrete Choice theory was first developed in the area of transport studies and is now used across a range of disciplines, from health to agriculture.

“Until now, choice theory has essentially assumed that choices are made by one person only,” says David Hensher, a scholar who has made a major contribution to choice theory through his modelling of people’s preferences for products that do not exist yet. “We will be expanding the theory to take into account the fact that many decisions are made by more than one person. In the case of cars, more than one person can sometimes be involved in choosing the main car – for example, one person might choose based on colour and performance and another might choose on price range.”

The study on car choice is one of four new research projects by David Hensher and his ITLS colleagues that received ARC funding in 2007. Two other studies also utilise choice theory: a Discovery Grant-funded project which is investigating people’s willingness to pay to avoid car accidents, and a Linkage Grant study which is exploring how motorists respond to being levied by the government according to their accident history.

David Hensher is a Professor of Management and Founding Director of the Institute of Transport and Logistics Studies within the Faculty of Economics and Business. Considered Australia’s leading expert in the area of transport reform, he has advised a broad range of public and private sector organisations, nationally and globally, on transport matters. He has also published over 370 papers in the world’s top transport and economics journals and is one of the most highly cited economics scholars in Australia.