The need to reduce private vehicle use has led to the development of soft measures aimed at re-educating car users through information processes that raise their awareness regarding the benefits of environmentally friendly modes, encouraging them to voluntarily change their mode choice behaviour (level-of-service characteristics being equal). It has been observed, though not scientifically demonstrated, that these measures can produce changes, being the result of mindful decisions. However, in some cases, as demonstrated by numerous environmental psychology studies such measures are not sufficient to overcome the effect of cognitive dissonance, one of the main factors hindering change. In fact it is not unusual to find discrepancies between attitudes and behaviour in travel behaviour research. The objective of the present work is to understand the relationship between awareness, attitude and behaviour in the context of mode choice and to measure the effect of awareness after the implementation of a soft measure after controlling for individual environmental attitudes. Using a dataset gathered in two weeks, before and after individuals are informed of the benefits of using park and ride (P&R) instead of their car, we estimated a hybrid mode choice model.