

The influence of route guidance system on highway 4 between Järvenpää and Mäntsälä

Kari Alppivuori, [Matti Anila](#) & [Kirsi Pajunen](#) 1995. Helsinki: Finnra reports 86/199. 55 p. + apps. 19 p. (ISBN 951-726-164-0 .ISSN 0788-3722. TIEL 3200361) (Finnish, English abstract)

The route guidance system was installed to the highway 4 to make the traffic more fluent on the road during the peak hours. The route guidance equipment guides the drivers to use an alternate route (main road 140). The field studies were made before and after the installation of the system.

Because of the guidance system the percentage of the vehicles turning to the alternative route from the Järvenpää junction was very high during the Midsummer peak hours and on Friday in August during the peak hours when people were going to their summer cottages for the weekend. In September on Friday during the peak hours the percentage of the turning vehicles was about the same before and after the installation of the route guidance system.

There were no conflicts or potential conflict situations observed on the highway 4 in Järvenpää junction or in southern Mäntsälä junction. After the installation of the route guidance system there was observed some uncertainty in the traffic behaviour (drivers stopped on the road side or came back from the off-turning ramp to the motorway).

The drivers were interviewed on the alternative road before the installation of the route guidance system and after it. The percentage of the drivers aged over 40 years, drivers on holiday or leisure time trip, drivers who came from capital region and drivers who were aiming to Lahti (about 30 km from the place of the interview) or further was higher during the after period than during the before period. With the route guidance system one can effect on the route choice of the drivers who are on holiday or leisure time trip (going to their summer cottages). It seems that drivers have partly choiced the alternative route. About a fourth of the interviewed drivers told that the reason for their driving the alternative route was the route guidance.

The average speeds of the vehicles driving through the route guidance system weighted by the traffic volumes (the average speed of the system) were higher during the after period than during the before period. After the installation of the system the vehicles were then able to get faster through the route guidance site than before.