

Route master

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Better arrival time information increases the appeal of public transport. However for buses on rural routes, the idea is not so simple to implement

Contrary to popular belief, journey time, distance or price are not the only factors that influence the decisions of the travelling public. More subjective factors such as image, comfort and safety prove to sway travellers' choice of transport mode. Furnishing passengers with information is a crucial part of this. Public transport company Hermes has made a step forwards by offering up-to-date departure information at its bus stops.

Hermes' approach can be summarised by the following phrase: focus on the customer. Passenger appeal is crucial in how they judge the quality of the service. In today's information society well-informed customers are usually satisfied customers.

The opposite is also true. Poor provision of information is a thorn in the side of the passenger. This is one of the key elements found in a study on public transport satisfaction scores by the Dutch Knowledge Platform of Traffic & Transport, a nationwide survey of the opinions of passengers on city and regional public transport.

Travellers ranked various aspects of public transport from the chance of a seat to social safety. On average, public transport scored 7.2. But an aspect like 'information on delays' is marked dramatically low at 4.2. Not surprisingly, about 35 per cent of the interviewees mention better information as 'a point of improvement'. Only reliability is mentioned more often (43 per cent).

New means of communication offer numerous possibilities to improve the provision of information. For example information can be acquired from the Internet at home, en

route through GSM, or at the bus stop itself with electronic displays. In the Brabant and Limburg provinces, Hermes selected a system that combines all these options in one. The first step was improving the supply of information at the bus stop using a dynamic bus stop information system.

So far, dynamic bus stop information systems are only applied on high-density routes in urban areas. But in rural areas, these systems have an added value – waiting for a bus in the countryside is more aggravating because of the reduced service frequency. Having no high-density routes and only a small number of passengers means cost effectiveness is often the largest obstacle. Also, dynamic bus stop information systems usually require a connection to external power. This leads to expensive installation and excavation work. The costs make rolling out those systems in large numbers unattractive.

The InfoTin system developed by Technolution overcomes these problems. The system functions wirelessly and without the need for external power. Each Hermes bus is equipped with a GF unit and a GPRS transmitter. Every 30 seconds the system transmits the vehicle current position to the Hermes traffic control centre. Arrival time can then be calculated, and sent to the bus stop display via DARC (Data Radio Channel).

On the bus stop display passengers can see the expected time for each bus service. Furthermore, the Hermes traffic control centre can show other important information, like if a bus has been delayed or a detour is foreseen in the future.

The robust display can be easily attached to existing bus stops, and a low-energy LCD display battery can last three years.

Possibilities for expansion

Nowadays everything revolves around the availability of data, and this goes beyond counting cars, bikes or passenger

There is a need to measure real travelling times to improve the reliability of public transport. InfoTin gives public transport companies the option, as the exact vehicle position on its route and the speed are known at any given moment. This is the foundation for systems ranging from traffic light manipulation to managing large traffic networks.

In addition this data can also be used to inform passengers in other ways, by means of XML (a structured way to record data).

The InfoTin dynamic information system should contribute to Limburg's goal of moving 25 per cent more passengers by public transport by 2010. Never before has such a system been applied in a rural area. ■



The InfoTin system (Vermeulen/Codesign)