1. Introduction

Fast Transport on Request (FTR) is proposed in the Netherlands as an alternative relief, if not a real solution, to the strongly rising parking and congestions problems that this small country faces. The private car is steadfast favourite, however, and will be so in the (near) future, ceteris paribus (Steg, 1996, SCP, 2005). There is no ground to embrace the view that without particular, drastic changes a dramatic “modal shift” from car to Public Transport (PT) will occur. Within the category PT the bus is inferior to the train as far as comfort perception and travel preferences are concerned (Steg, 1996, 2003). FTR is not presented as a bus, but still… at first sight FTR seems not to be the remedy, yet, at least not without degrading the private car as a mode of transport.

2. Pitfalls

In spite of the increasing congestion and other discomfort by the increasing traffic on the road, car use has only risen, both in number of rides and in vehicle-kilometres (SCP, 2005), in contrast to PT. Both PT-kilometres and transfers were more or less constant during the last ten years. There is no sign, nor trend of a revolution to perceive. The obvious disadvantages of the abundant car use have (until now) evolved gradually, have stealthily come upon us, reason why there are lots of complaints but no major changes (SCP, 2005). Passengers, clients for FTR will not appear as a “deus ex machina”, they either have to transfer from the car to FTR or come from other PT, in this case almost exclusively the train. In the past much research is conducted on the relationship between preferences, perception and usage of PT and private automobile, which steadily leads to the formation of the image that PT comes off worst.
An indestructible principle is that the daily travel time is (almost) constant, about 65 minutes (SCP, 2005, Van Wee, 2006). The idea that people will do their utmost to shorten their travel time drastically is not based on research, although the idea is attractive of course. Incidentally, much of daily transport is social and/or recreational (i.e. all transport save professional and commuter traffic), in fact almost half of it (SCP, 2005), which does not contribute to the conviction that travellers are inclined to shorten their travel time strongly anyway.

According to Elhorst & Oosterhaven (2005) modal shift from car to PT will show only a limited gain, at least for the distance Groningen – Amsterdam Zuidoost & Schiphol. However, that is only the case at real high speed, i.e. over 180 km/h until perhaps 250 km/h, with 2200 to 2800 individuals / trips per day. At lower speed, such as that of a fast intercity, i.e. 140-160 km/h, the expected modal shift from car to PT is in the order of 600 individuals / trips per day.

Problem with the concept “travel on demand” is that the demands must be served as fast and adequate as possible, while at the same time no empty chairs should remain, at least as few as possible. Surely outside the rush hours this is highly unlikely. Moreover, FTR will have to start and end somewhere, the “Zuiderzeelijn” (Groningen – Amsterdam & Schiphol), for instance, has a beginning and an end. Even when FTR includes a limited local service, these begin and terminal points will as a rule not be close to both begin and terminal point of the trip itself, even for the “Zuiderzeelijn”. The concomitant pre- and/or after-transport is an impediment to the choice for the PT-option, the car has an automatic lead in that case, in time and comfort.

Finally, the success of a PT-facility such as FTR is dependent on the reliability and the accuracy of the predicted departure and arrival times, amongst others. Travellers accept delays with their car much easier than with PT (Steg et al. 2006). As long as FTR is amidst daily traffic, the reliability will not be high. Additionally, the speed of FTR will necessarily be low in the beginning, before the “sprint tracks” are installed, since the FTR “sprint cars” make use of the normal roads. Starting FTR will be difficult.

3. Opportunities

This does not mean that there are no chances at all, or that the concept in itself is bad. Travel on demand may have the future, as some of the scientific research in the past few years testifies (e.g. Chorus, Molin & Van Wee, 2005). However, it is also demonstrated that still much has to be done before the so-called chain-mobility is realized (e.g. Dicke & Brookhuis, 2006).

It seems obvious that if car driving is becoming much more expensive, for instance, by road pricing or toll-collection, the shift to alternative transport will be made easier. However, pricing of kilometres driven or of road use will hardly influence modal shift to PT (Steg, 2003, Steg et al., 2006), but the desired exchange between modalities could be facilitated if specific policies that aim at harmonising mode, time, place and money could be developed and implemented. That has financial consequences, but could be funded by toll-collection. Research indicates that car drivers prefer to spend the collected tolls to lower fuel tax but surprisingly enough they are not entirely negative towards spending it to PT (Steg et al., 2006).
At the moment a growing interest is observed, in some of the (bigger) cities in Europe, to strongly improve Public Transport and lower the user cost. For instance, some Belgian cities (e.g. Hasselt, Gent) demonstrate what could be established in the Netherlands as well, in terms of short waiting times, solving congestion, decreasing pollution, increasing comfort etc. There are indications for a modal shift, a decrease in car use within the area of dense PT-networks, which in due course could lead to a change in habits. One of the present problems is habit, using the car automatically (it is at the front door anyway), which limits the chances to a modal shift, to FTR. To compete with the car the PT-networks must be relatively cheap, dense and frequent, which are necessary provisions for a successful FTR as well.

4. Conclusions

Due to the general constancy in travelling time in the Netherlands, FTR will generate extra travelling only at high speed, i.e. the 180-250 km/u version. Until then FTR will have to compete with existing transport, i.e. car and train. Additionally, due to the general constancy in the numbers of movements in the Netherlands, FTR will displace the car as a transport mode only if the car becomes unattractive within reasonably short time. The present potential of passengers is not easily estimated, but will not be high until the upgrading to higher speed. Considering the attention, effort and funds that the authorities are planning to spend to “the road” between now and the near future, the transfer from the car to (long distance) PT will be low, at least until “door to door” facilities are strongly improved.

Opportunities in that sense can perhaps be realized by balancing car pricing- and PT improvement measures. A project such as Fast Transport on Request only has a realistic and fair chance to success if sufficient flanking measures are taken. The past has taught us that single measures in traffic and transport seldom lead to major improvements.

References


