Multimodal journey planner

A trip with multiple transport modes requires them to be coordinated. The interchanges are just the physical places where the change between modes takes place. But trips have to be planned in advance. This means that a multimodal journey planner, which can provide timetables, routing, ticketing, reservation systems and other travel information, is a great addition.

A multimodal journey planner enables people to view the overall journey, all the way from a starting point to their ultimate destination. A journey may use a sequence of several modes of transport, meaning that the system must know about the various public transport services available (bus, tram, metro, train, car sharing, carpooling, bike sharing, etc.) and about transportation networks (roads, footpaths, cycle routes) for private transportation (automobile, walking, bicycle).

To obtain the best use from the journey planner, different involved parties have to participate. On the one hand, there has to be a desire to get the journey planner operational. Then, the necessary data has to be provided and kept up to date. The costs of the journey planner can be split up between the various modes involved.

Technical support IT-wise is inevitable. There are different providers of IT solutions that can be contacted to get a good system running.

Good practice

- Google Maps
- HaCon HAFAS
- Different cities and regions

Application in NODES sites

In Osnabrück an app-based multimodal journey planner has been developed and is scheduled to be released in 2015. It combines various means of transport and enables users to plan and organise their whole journey. The journey planner allows a selection of specific means of transport, referring to the individual preferences of each user. It is also possible to book a car sharing vehicle directly with the journey planner.

Potential interchange performance improvement

- improved quality of changes between traffic systems
- faster travel speed due to reduced transition times
- less waiting time due to optimised transition times

Resources

Cost indication for use of tool

The development of a multimodal journey planner generates high costs. This cost can easily add up to a 6-digit figure. There will be additional annual costs for technical support during the operation (a medium-sized 5-digit amount per year).

Other resources needed for use of the tool

It is very important to cooperate with IT experts to develop a multimodal journey planner. The availability of data is a crucial question for interchange managers for developing and improving their multimodal journey planner with information about all transport modes and mobility services present at the interchange. As a consequence, cooperation from the various interchange stakeholders in providing their own data is key.

Indication of the higher costs using the tool may generate

Distribution of costs between stakeholders

Costs could be split up between stakeholders

References

http://www.econnect-germany.de/hubs/econnect-osnabruck/

http://www.hacon.de/hafas-en?set_language=en

http://www.vvs.de/rundum-mobil/

NODES strategic objective	Contribution
Enhance accessibility and integration	++
Enhance intermodality	++
Enhance liveability	0
Increase safety and security conditions	0
Increase economic viability and costs efficiency	++
Stimulate local economy	++
Increase environmental efficiency	0
Increase energy efficiency	0