

# Public Transport Optimisation Heidelberg

Service upgrades, optimisations for bus and LRT, prioritisation concepts for LRT with the aim to minimise public subsidies and maximise economic efficiency



Transport planning, technical assistance & operations

Client: RNV GmbH

End: 2011



The City of Heidelberg and the local public transport operator RNV GmbH asked TTK to optimise the PT network in order to increase its attractiveness for passengers. The work was divided into three major tasks:

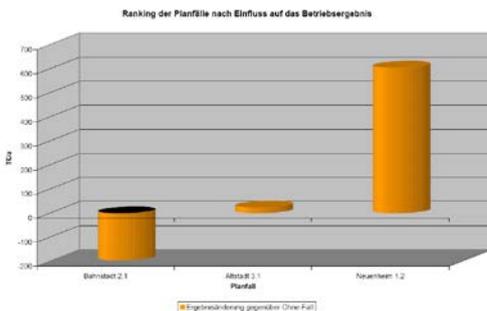
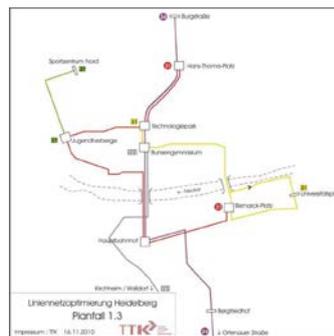
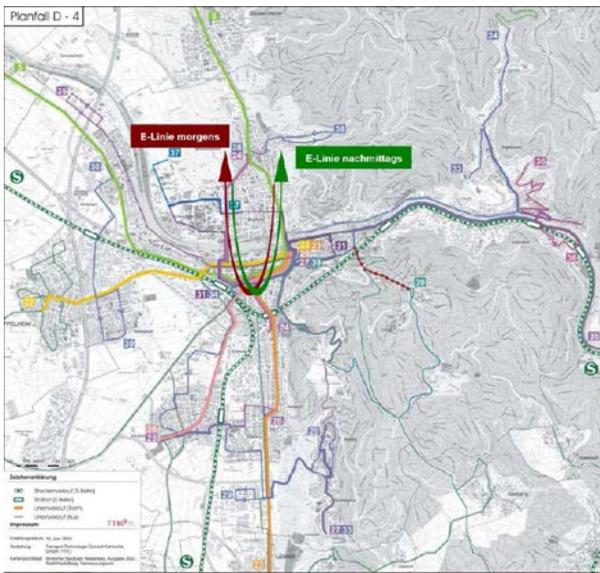
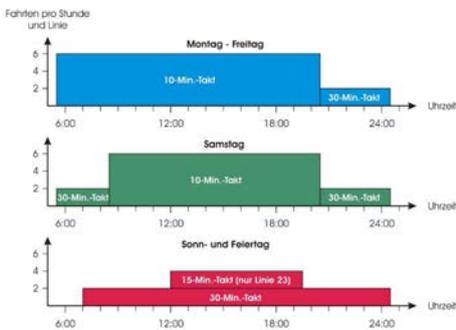
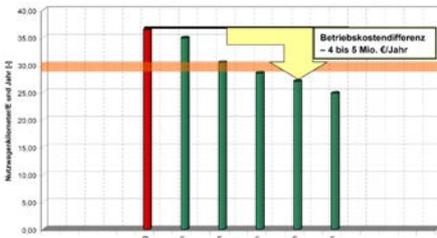
- Short-term view (lines and schedule),
- Prioritisation for LRT,
- Mid-term view (extensions of the LRT network as well as business case for LRT extension into the historic city centre).

An extensive analysis of the whole PT system showed a significantly higher service level than in other cities with a comparable number of inhabitants. This in turn creates a low commercial network speed and leads to economic inefficiency.

Several scenarios were studied which included the reduction of parallel bus services and service frequencies of LRT lines from 5 to 10 minutes but also new PT corridors. The transport and economic impacts (e.g. travel times and operational costs) of the scenarios were evaluated. Finally, against the background of the inefficiently high PT service level a potential economic gain of 3 Mio. €/a without loss of service attractiveness was shown.

Looking at where commercial speed could be upgraded led to results supporting the major finding of the study: Quality instead of Quantity increases attractiveness and saves money.

As far as the mid-term scenarios are concerned the study showed that its specific topographic situation makes Heidelberg an ideal city for rail-bound PT as the backbone of the urban transport system. Line extensions into the Neuenheimer Feld (university hospital), through the new central suburb BahnStadt (former railway area) as well into the historic city centre would be able to replace most of the bus lines, increase transfer-free trips and hence lead to a significantly higher passenger demand. The positive business case for the extensions to the historic city centre supported this result.



Source of figures: TTK