

Verification of changes in public transport, Opava city public transport company



APPLICATION:

Optimization of public transport

BRANCH:

Transport logistics

BENEFIT:

The evaluation of the transport situation in Opava in Horni namesti near to the station Divadlo in 2004 with the view to savings in travel times, using public transports and a passengers' contentment.

About the company

The history of the Opava city public transport company has been started in 1899. Nowadays there are used trolley buses and buses. The transport system is developing with needs of the city and its

passengers. The goal is the satisfied customer - a passenger and the city.

Project targets

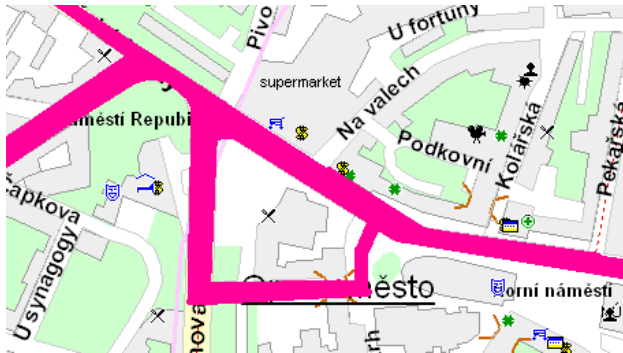
The goal of the project was the verification of the purpose of building trolley bus loop in the center of Opava near to Horni namesti by the station Divadlo. There were observed and evaluated savings in travel times, using public transport and passengers' contentment.

The project solved as a priority this problems:

- The evaluation of speed-up of passengers' transport in a main transport stream by removing interchanges.
- The evaluation of variants of continuity of individual transport links and new introduced transport links with the view to a transport speed and using of public transports.
- The evaluation of variants of depend/independent traction.
- The evaluation of the capacity of a new built station Divadlo.
- The evaluation of a space for a new trolley buses' and buses' loop.

Solution

The solving transport hub



Using this model there were tested a verified the processes in new conditions for the determined period of the year 2004. The final solution was asseses from the viewpoint of the final flow of transported people and from the viewpoint of the utilization of the individual public transports.

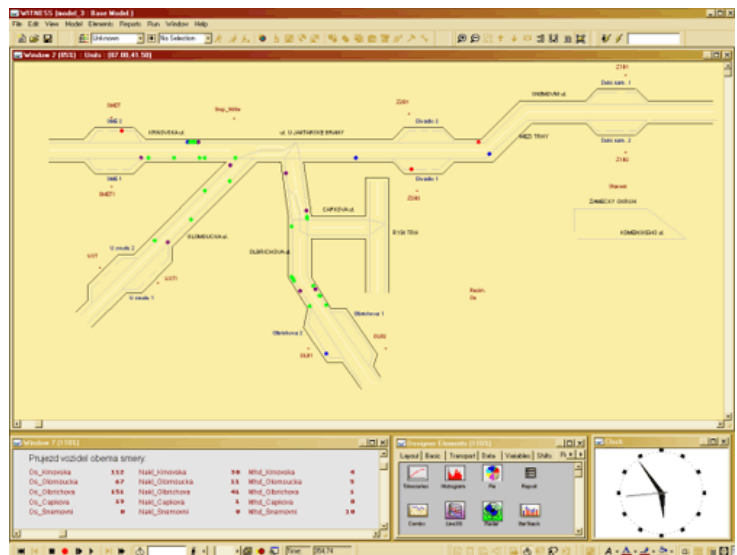
The Load of transport network (the traffic density)



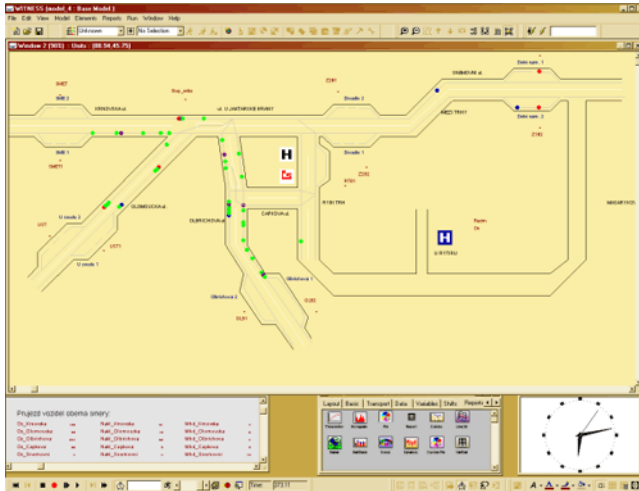
Numbers of transported persons



The dynamic model of the loop CENTRUM, Opava, the current state



The dynamic model of the loop CENTRUM, Opava - the proposed state



Results

On the basis of available information which compare bus and trolley bus transport it has been recommended to realize the building of trolley bus loop in the center of Opava. In the case of Opava it is possible to neglect usual reasons which are usually presented as obstacles of the trolley bus transport expanding (like a reconstruction of energetic site, an insufficient capacity charging stations, high cost for trolleybuses) because the Opava trolleybus network is maintained very well and the capacity of charging stations is generously sized for this network expanding.

The project implementation can help to decrease the ecological load in the city center, increase the flexibility trolleybus and bus transport in critical situations and (what is the most important task of a public transport) increase the quality of travelling due to remove transfers of passengers

which travel between the city parts. The saving was determined on bases of dynamic simulation for 3.35 minutes on average in the direct Olomoucká - Krnovská and for 4.79 minutes in the reverse direct Krnovská - Olomoucká.

The implementation of this measure has the important economical character and of the long-term viewpoint is the benefit for passengers and for the Opava city public transport company. The company could more effectively use transport capacities of public transports.

If would be impossible to realize the loop CENTRUM in a full range (trolley bus loop) we recommend at least a partially realization of bus transport. The cost savings are mainly due to savings of non-productive bus rides. The financial savings are from trolleybuses which are more effectively used and if lockouts exist from the minimalization of impossibility trolleybuses using in barriers at the city center traffic.