

Traffic monitoring in Zurich Nord



Major construction activities at the site of a highway enclosure project in Zurich's Schwamendingen district, as well as rapid urban development in the adjacent district of Zurich Nord, are having an impact on traffic volumes in the surrounding road network. EBP has now set up a system to monitor and analyze traffic data in the area with the aim of providing the city a basis for a more effective traffic management.

The realization of the Schwamendingen Highway Enclosure on federal highway A1L leads to adaptations of traffic assignment in the urban areas near the site due to different construction phases. The project's impact on local traffic has been compounded by an increase in traffic volume in the district of Zurich Nord, which is currently developing at a rapid rate. The City of Zurich is observing the traffic developments on the main roads in the area with the help of a comprehensive monitoring system.

Automated processing of traffic data

To establish the monitoring system, EBP developed an evaluation concept that is implemented at regular survey intervals throughout the year. The traffic data is generated by loop detectors embedded in the road surface, roadside radar monitoring equipment, and thermal imaging sensors, together with public transport data provided by the city authority. The data is automatically processed to provide an accurate picture of traffic load, traffic congestion, and route-completion times for public transport vehicles.

Client

City of Zurich, Department of Transport

Facts

Period	2017 - 2024
Project Country	Switzerland
Traffic data	60 test locations
Evaluated route times	18 public transport routes
Project duration	7 years

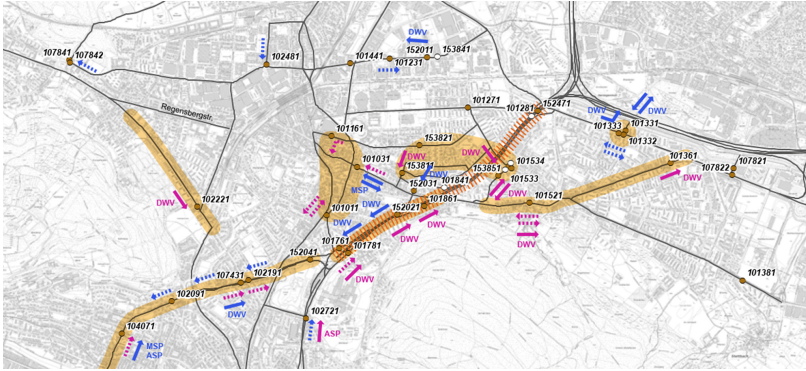
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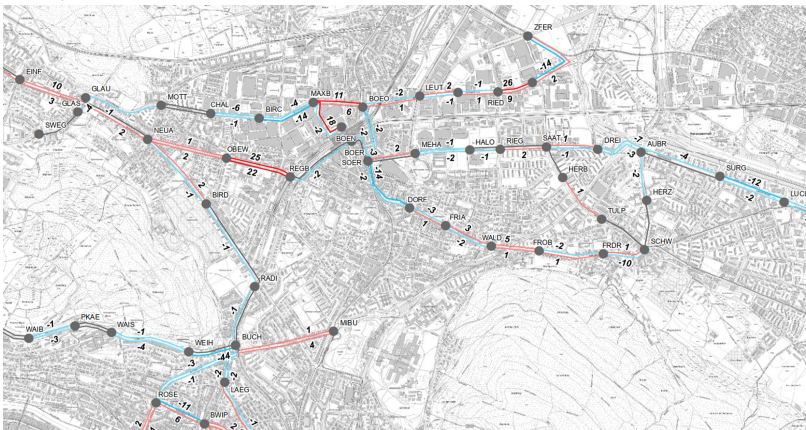
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A map is used to summarize and explain the main traffic-pattern changes.

Accessible mapping of traffic patterns

At the start of the project, we carried out an analysis of the transport system, performed test runs based on available figures, and established suitable means of data management. With this as a basis, we are drafting brief reports for each survey interval, replete with GIS maps offering accessible illustrations of changing traffic patterns. Working together with city experts, we are developing a number of proposals to improve the urban traffic management. The aim of these efforts is to manage traffic near the construction site in a manner that relieves traffic pressure on the community throughout the various construction phases. Our monitoring assignment is designed to last until 2024.



The monitoring system is also used gather and process data relating to route-completion times on major routes with mixed traffic. This enables an identification of traffic obstructions.