



MOBILITY DATA ANALYTICS

From Big Data to Smart Data

Every time mobility apps are used, anonymized data is generated that allows conclusions about the mobility behavior of travelers. With HAFAS.analytics, transport companies can analyze this data and derive targeted measures from it.

Where and when do we have to expect increased passenger numbers? At which stops are waiting times particularly long? Which alternative routes are used in the event of disruptions? The data owned by mobility providers already contains the answers to these questions. In addition to analyzing historical events, mobility data allows valid predictions about future traveler behavior. These predictions are based on the app users' trip requests. We calibrate and validate this data with samples from passenger counting systems or with other sensor data where available. This enables a high accuracy. In a project in Zurich with VBZ, we were able to predict the occupancy of large buses and trams (150 to 240 passengers) to within 30 passengers in 96% of all cases. In 80% of all cases, the deviation was no more than 10 passengers. Using HAFAS.analytics empowers transport companies to act proactively.

DATA SOURCES

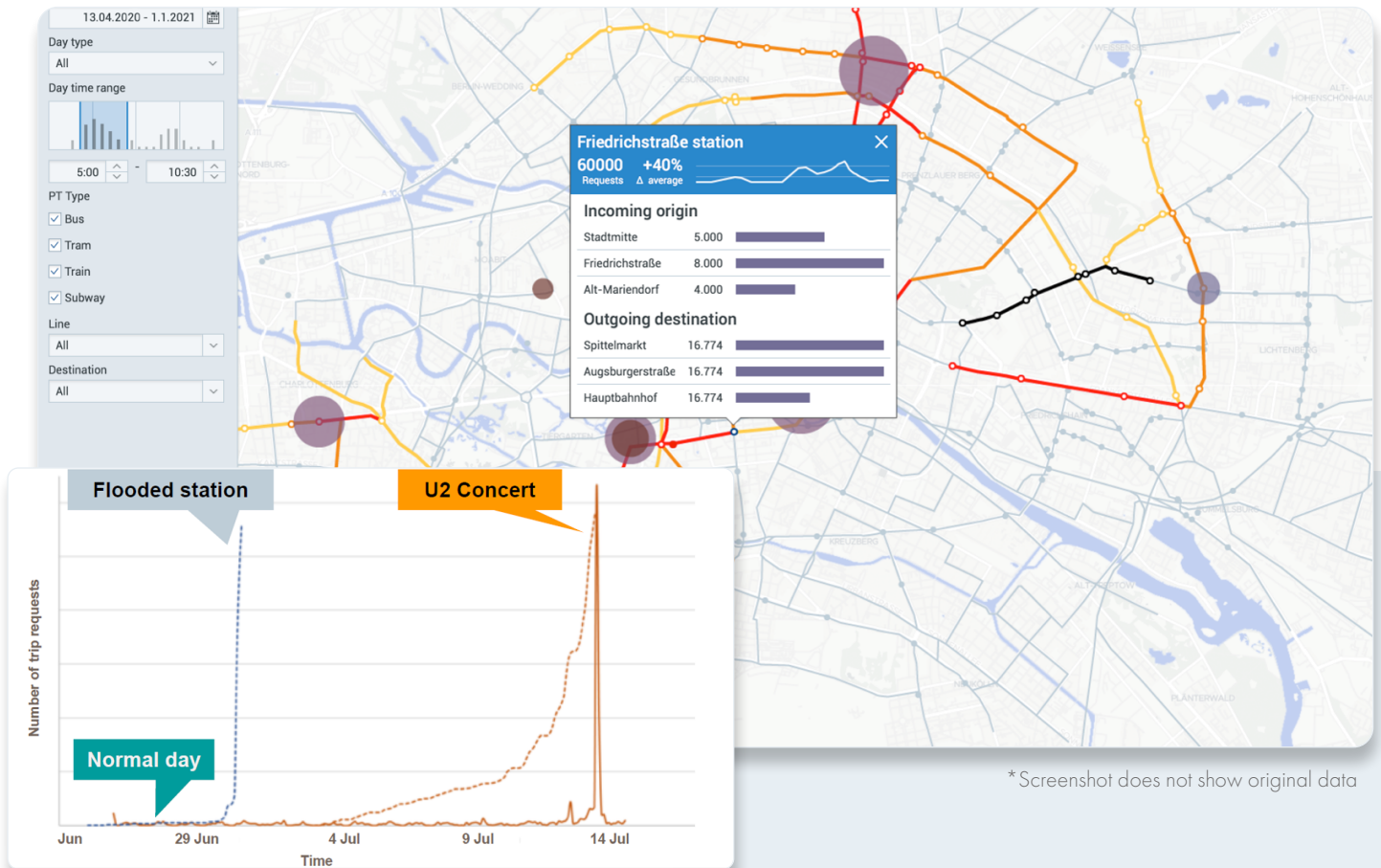
In addition to travel requests, other data sources can be included in the analysis – for example weight and real-time use of vehicles, gate signals, delay information or weather forecasts. This allows assessing the passengers' mobility behavior as precisely as possible. Our backend records and analyzes the connection requests in real time. For this reason, HAFAS.analytics is also a perfect tool for operational management.

DATA ANALYSIS

The potential of big data only unfolds when concrete measures can be derived from it. Our tools therefore have a web-based dashboard. With this, the extensive data can be easily analyzed, graphically displayed and the results can be exported, for example via CSV.

ANSWERS TO MANY QUESTIONS

- » Occupancy analytics and forecasts
- » Real-time disruption detection
- » Analysis of travelers' first and last mile
- » Quality of transfers
- » etc.



* Screenshot does not show original data



With dashboards, extensive data can be easily filtered and visualized. If, for example, disruptions due to accidents or construction sites occur, transport companies can immediately react and organize replacement services. HAFAS.analytics offers assistance in the dimensioning of these services.



Occupancy analytics allow to predict how busy public transport is likely to be. If this information is shared with passengers via the app, they can easily switch to less frequented connections. This way, capacities are used in the best possible way.

