

Building An Intermodal Ecosystem

Jürgen Ross, VBB, Head of Planning & Passenger Information
Michael Frankenberg, Siemens Mobility, Head of Intermodal Solutions & Managing Director HaCon

Mobility of the Future?



Picture Source: <https://bit.ly/2MCHqgR>



Picture Source: <https://bit.ly/2t17c7j>



Picture Source: <https://bit.ly/2yfcpdK>



Picture Source: <https://ford.to/2ji1Mdf>

SIEMENS
Ingenuity for life

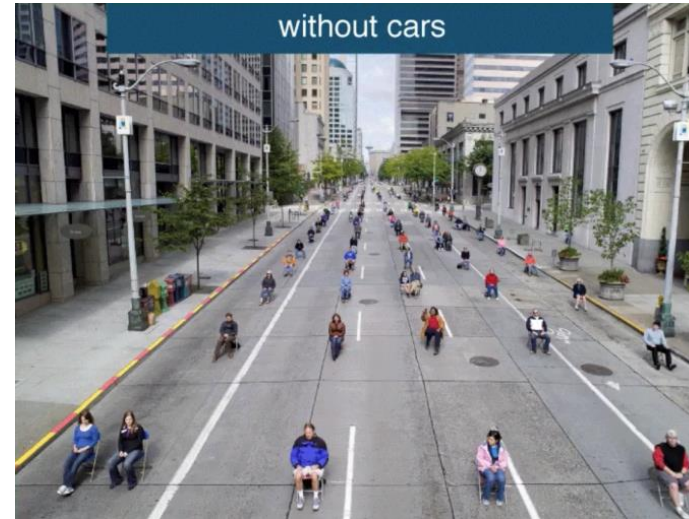


AIRBUS



Car, Bike, Bus or Train

SIEMENS
Ingenuity for life





Urban Mobility

SIEMENS
Ingenuity for life

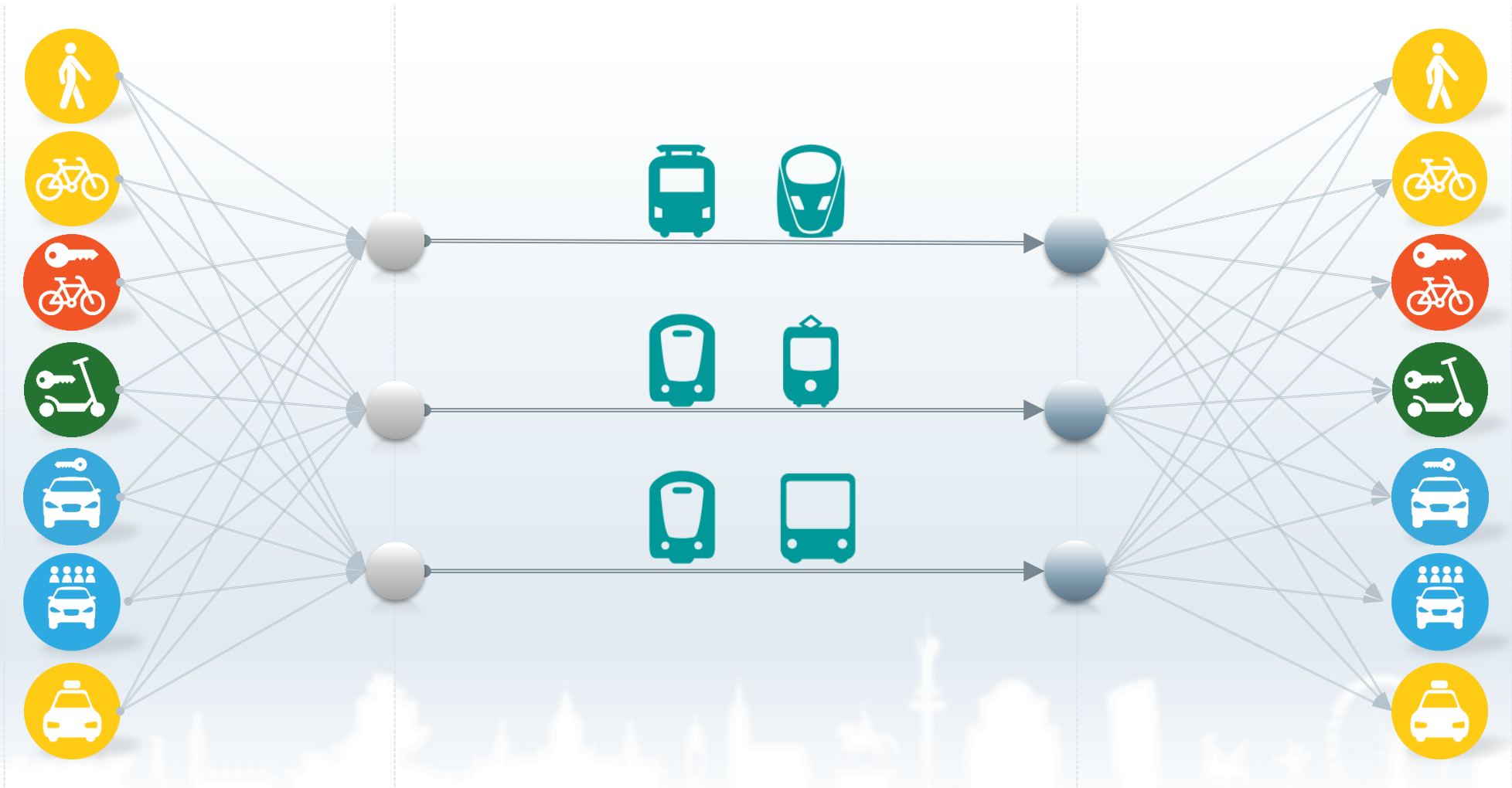


MaaS – A Jungle of Mobility Interfaces





First Mile – Last Mile



A Trip around the World...

SIEMENS
Ingenuity for life

Luxembourg



Dubai



Silicon Valley / Bay Area

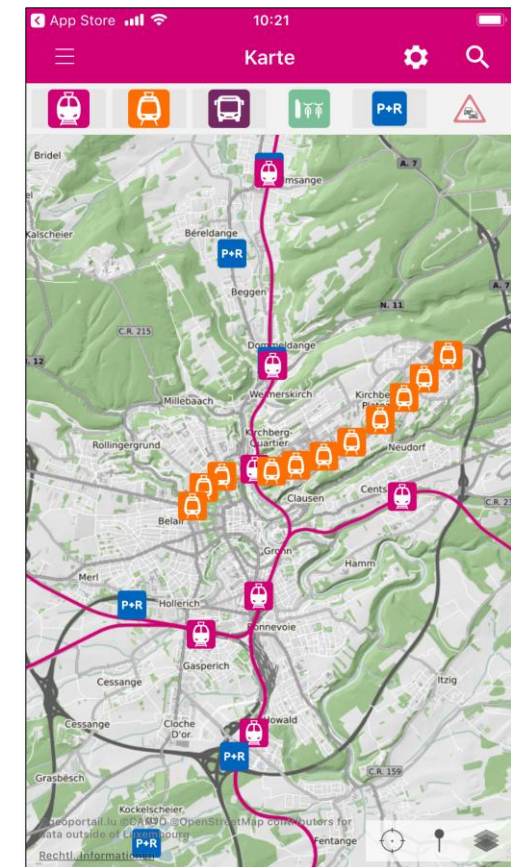
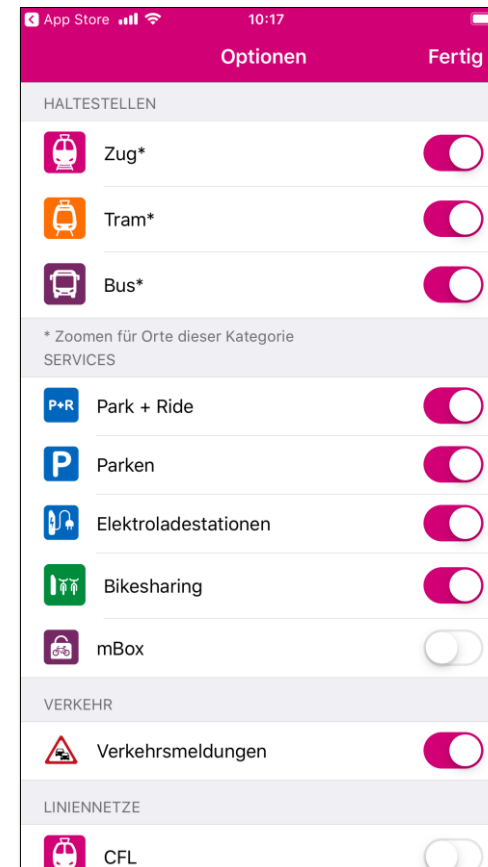
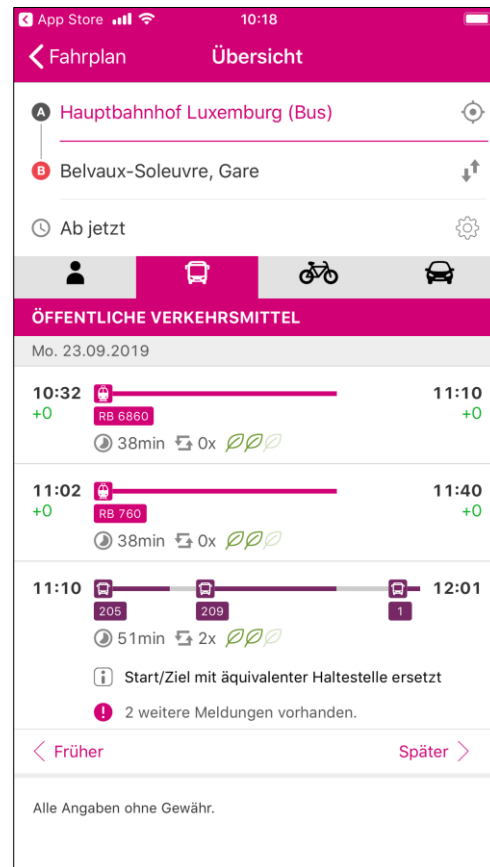
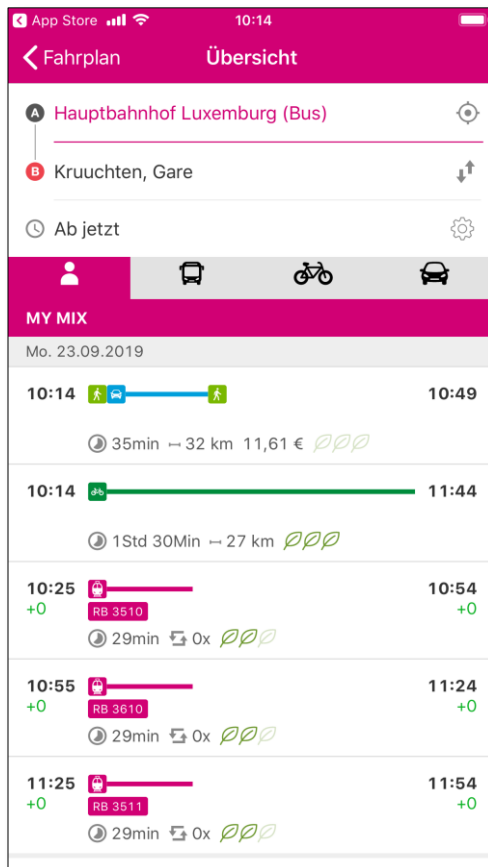


Andorra



Mobility Platform MMI Luxembourg

- Intermodal Trip Planner (PT, Car, E-Charging, CarSharing, P&R, BikeSharing)
- Comparison of CO₂-Emissions for all modes
- MyMix: User account for individual travel preferences

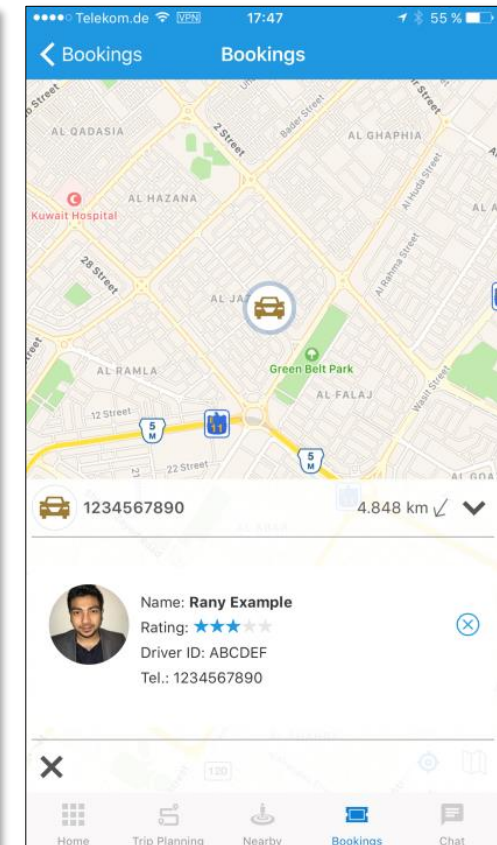
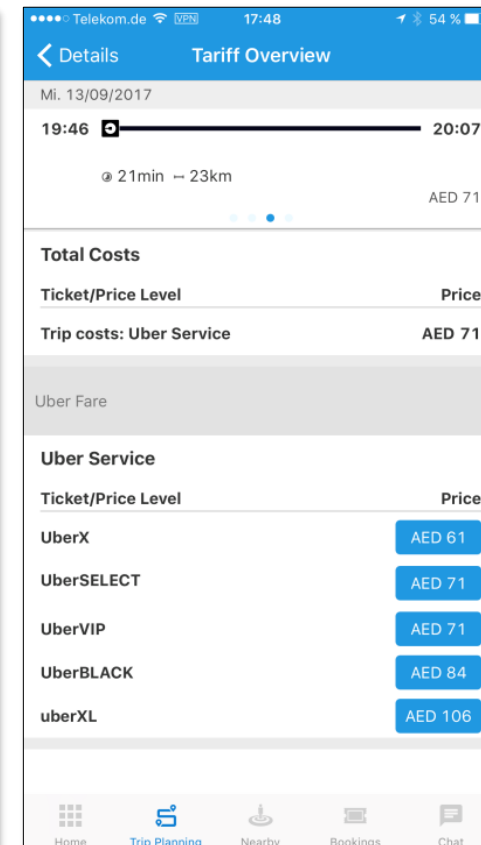
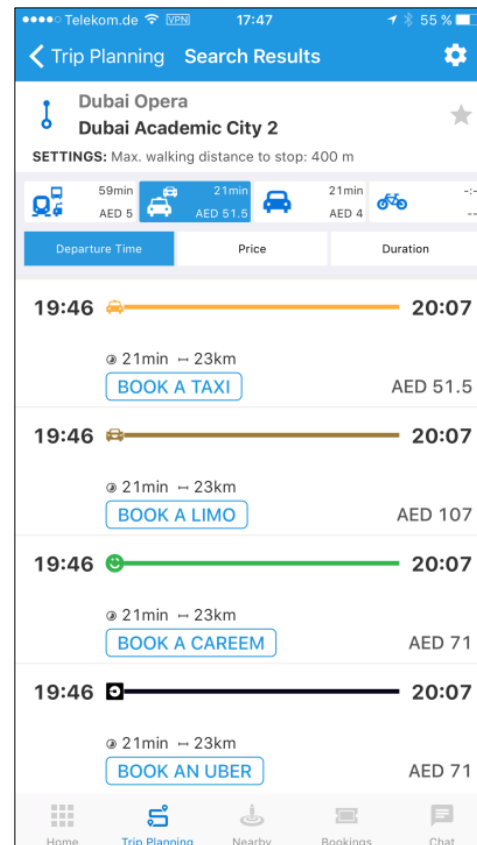
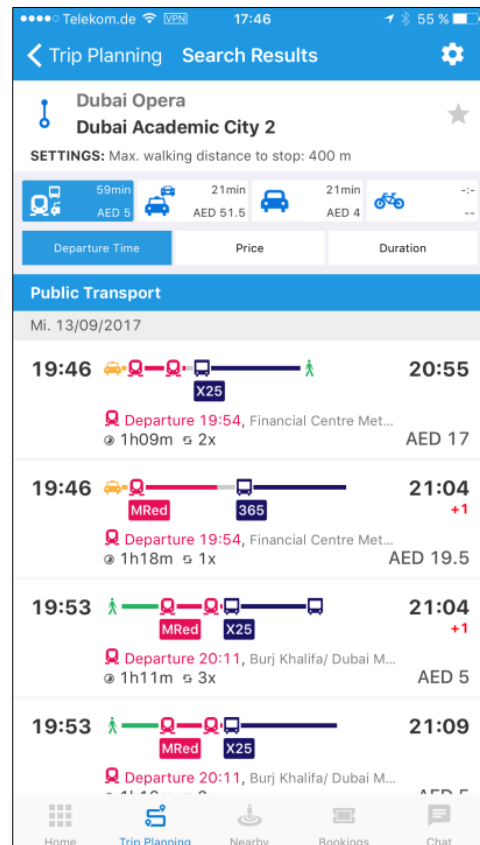
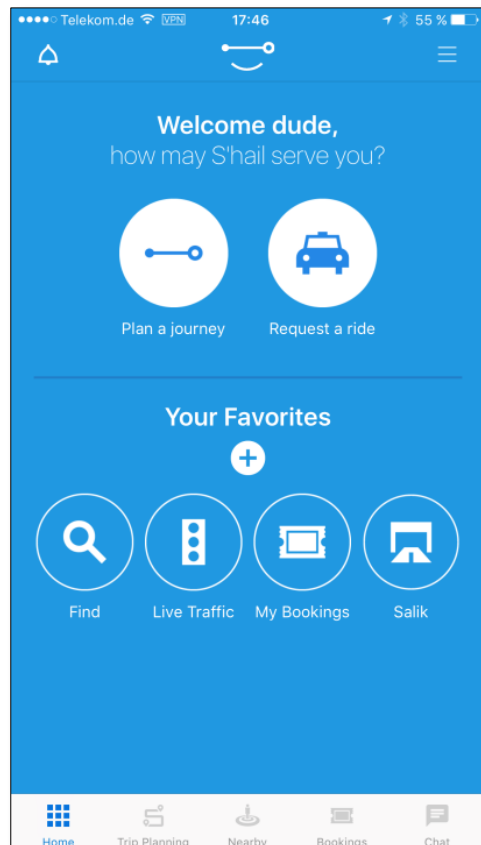


Mobility as a Service – MaaS (RTA Dubai “S’hail”)

- Public transport, Taxi, Limousine, Uber, Careem, Car
- All in one App:



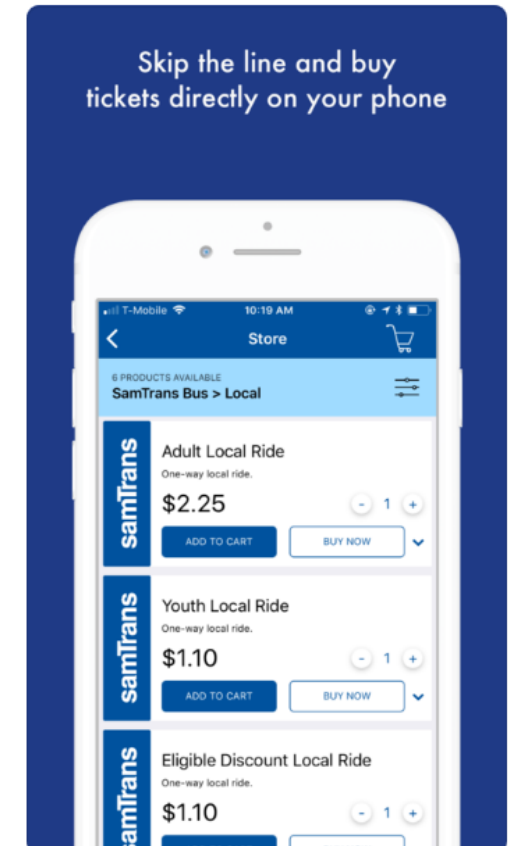
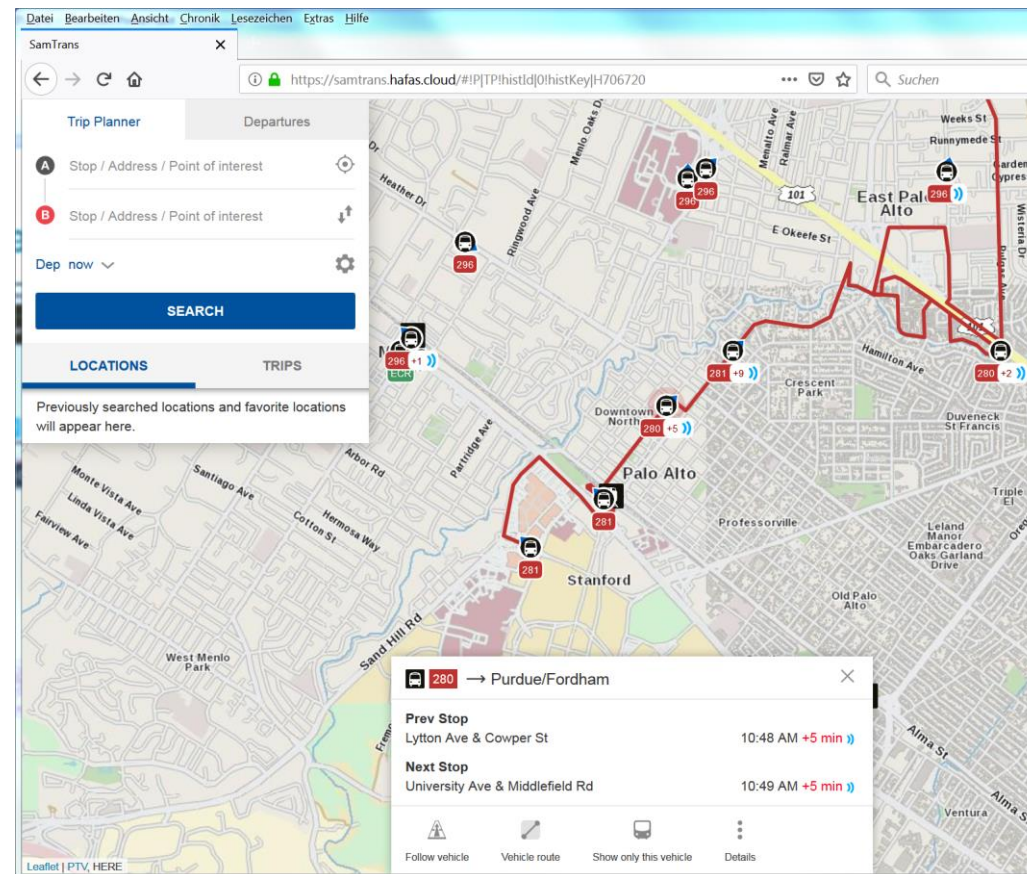
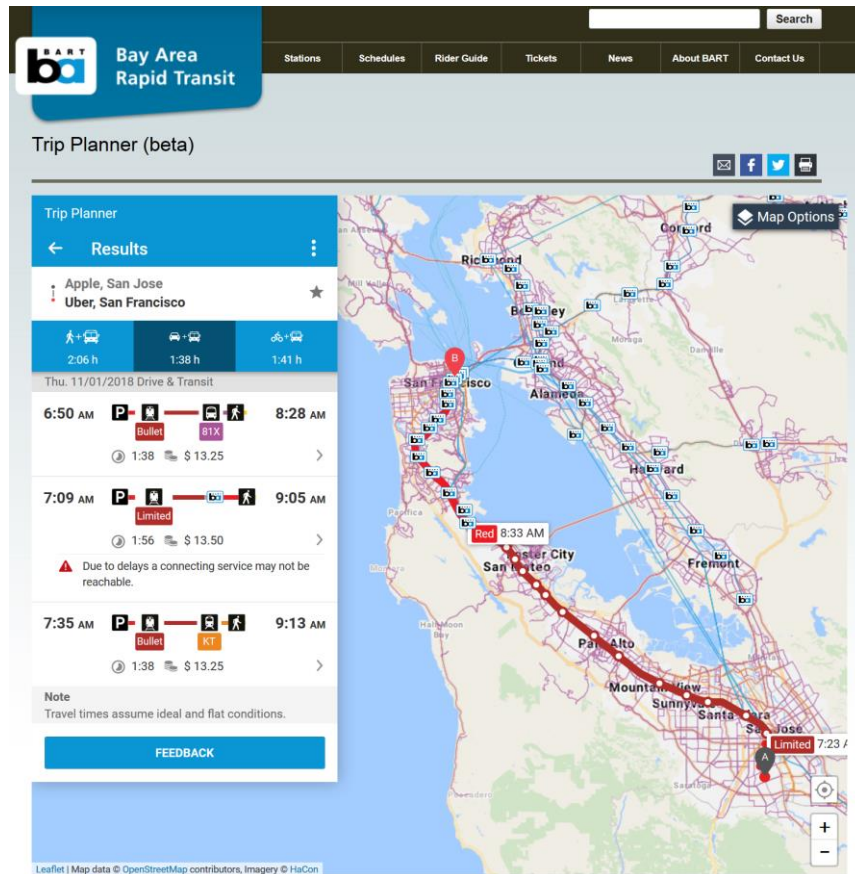
SIEMENS
Ingenuity for life



Intermodal Routing and Ticketing (Bay Area, San Francisco)



- Trip planner (BART): Door to door with public transport + car + bike
- Trip planner, live map with animated vehicles, mobile ticketing (Samtrans)



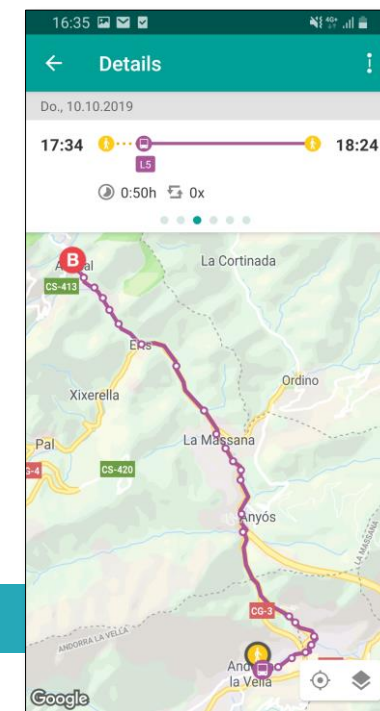
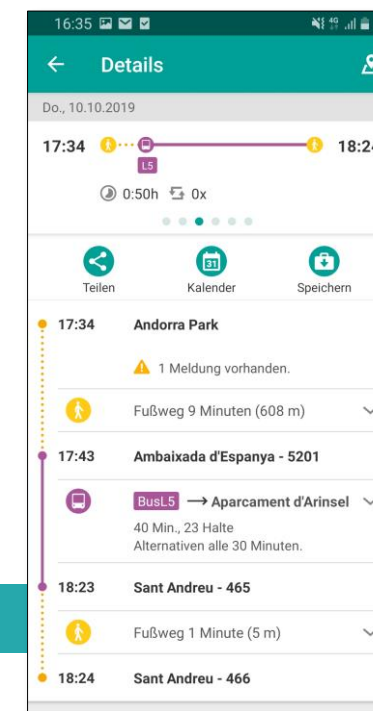
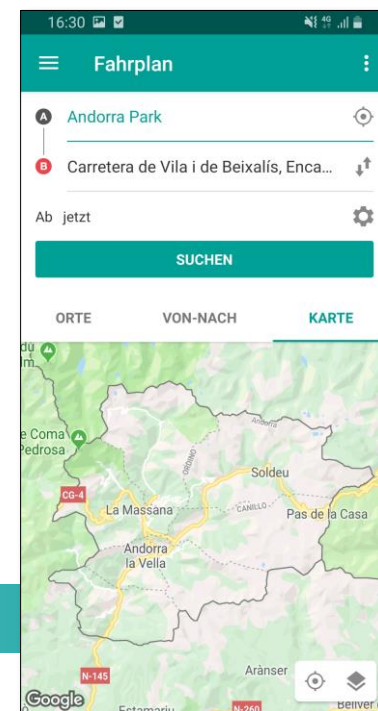


SIEMENS
Ingenuity for life

Mobility as a Service

for sustainable mobility countrywide

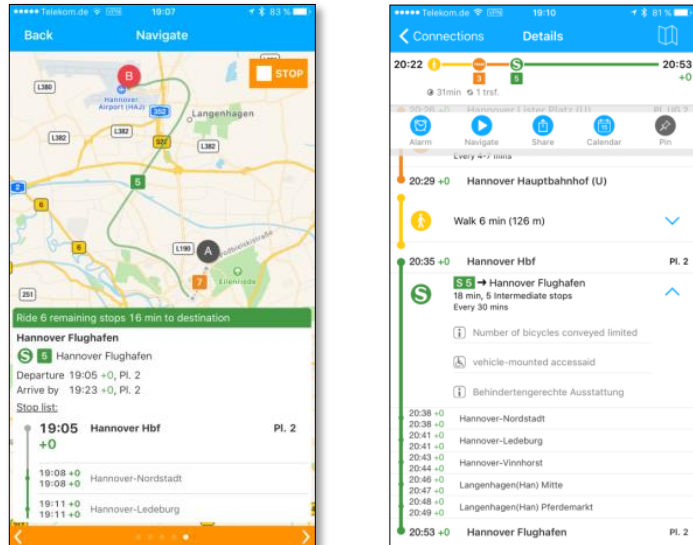
Forces Elèctriques d'Andorra



HAFAS and HAFAS Driver – Ecosystem to Digitize Mobility



Customer App



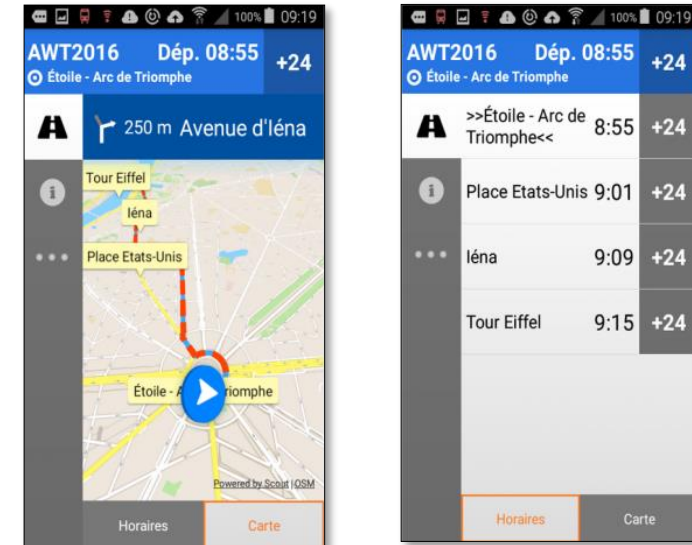
Embedded into
HAFAS IoT Cloud



Digital STOP button

“Registered” trips

Driver App



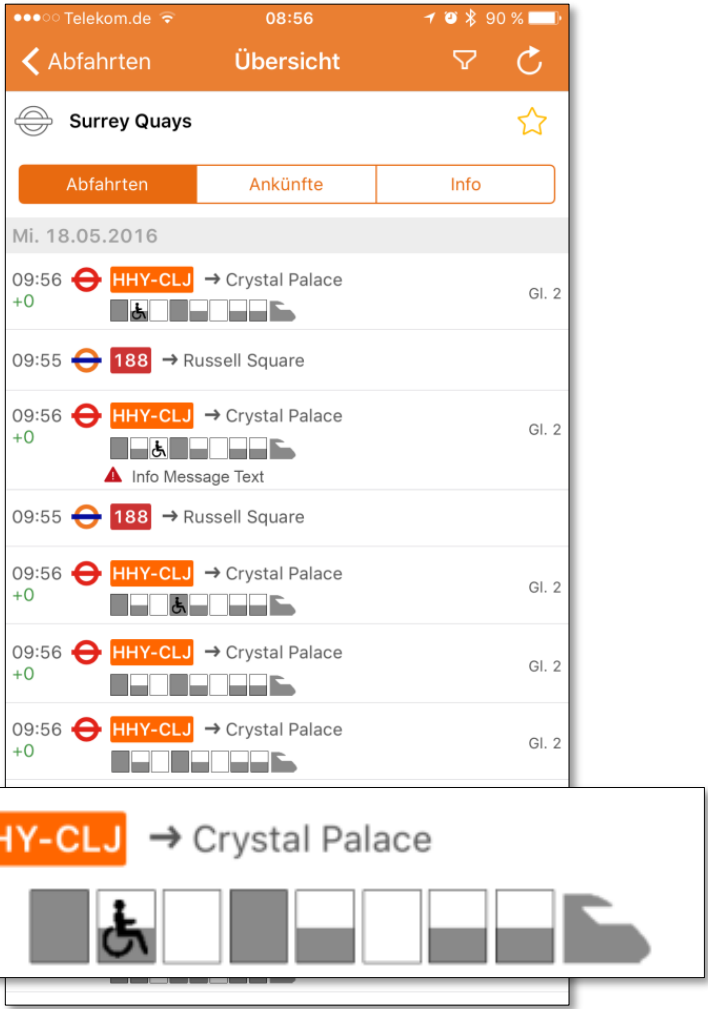
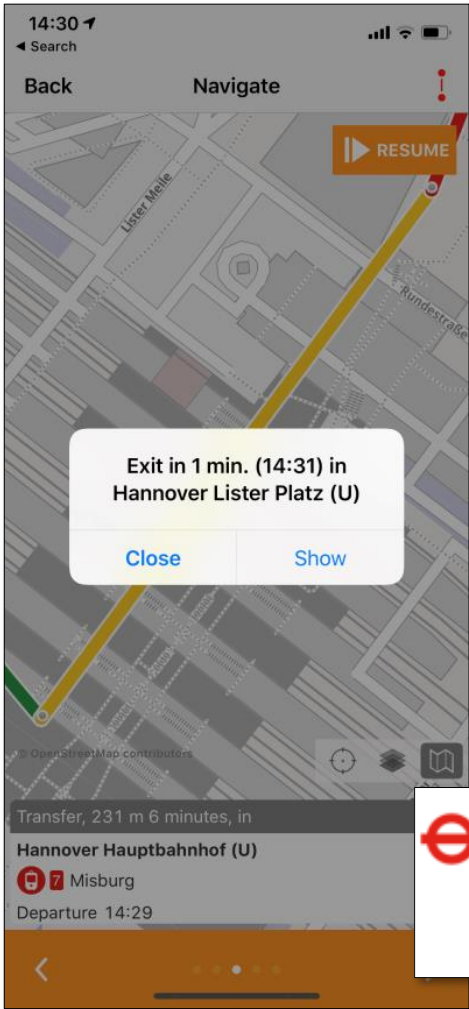
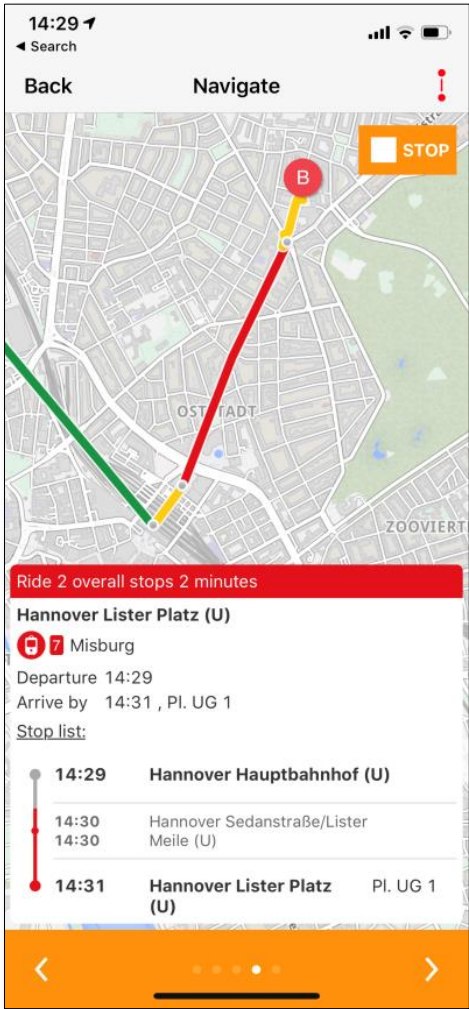
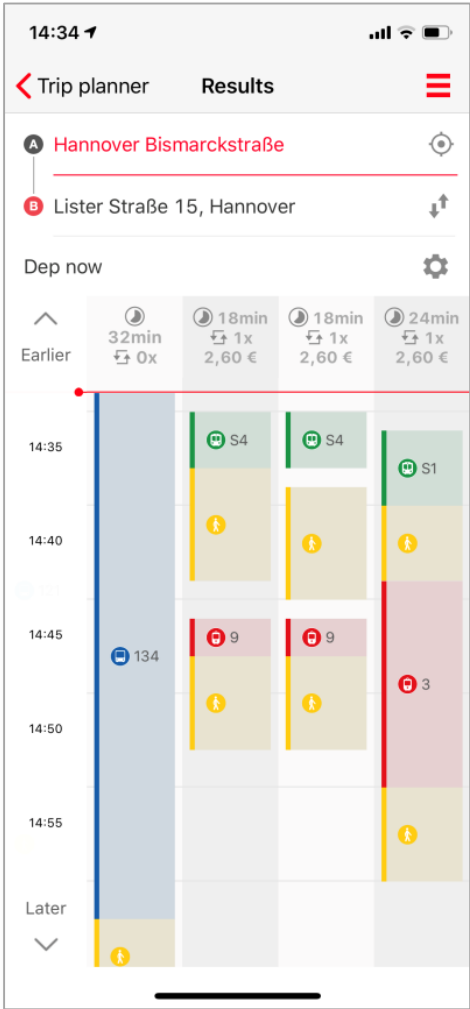
- Multimodal trip planner app
- Push notifications for commuters
- Navigation for public transport – re-routing inside
- Connected with driver app

- App-based ITCS system for bus & train
- Navigation for bus driver – re-routing
- Connection assurance integrated
- Connected with customer app

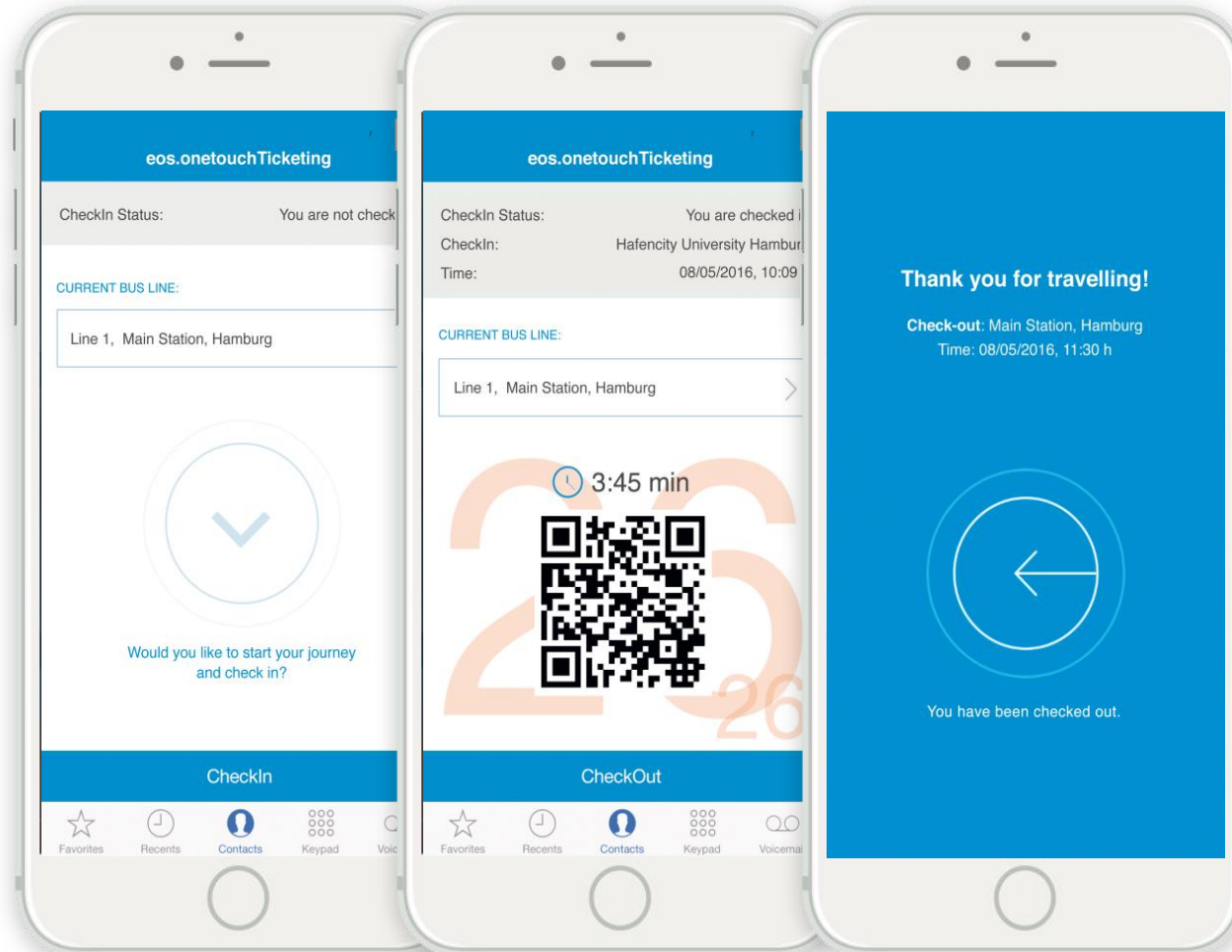
Information, Navigation, Push Notifications and Additional Content

SIEMENS

Ingenuity for life



Next Gen Ticketing: Check-in/Be-out (CiBo)



Intermodal Ecosystem at VBB

Jürgen Ross, VBB, Head of Planning & Passenger Information

Michael Frankenberg, Siemens Mobility, Head of Intermodal Solutions & Managing Director HaCon

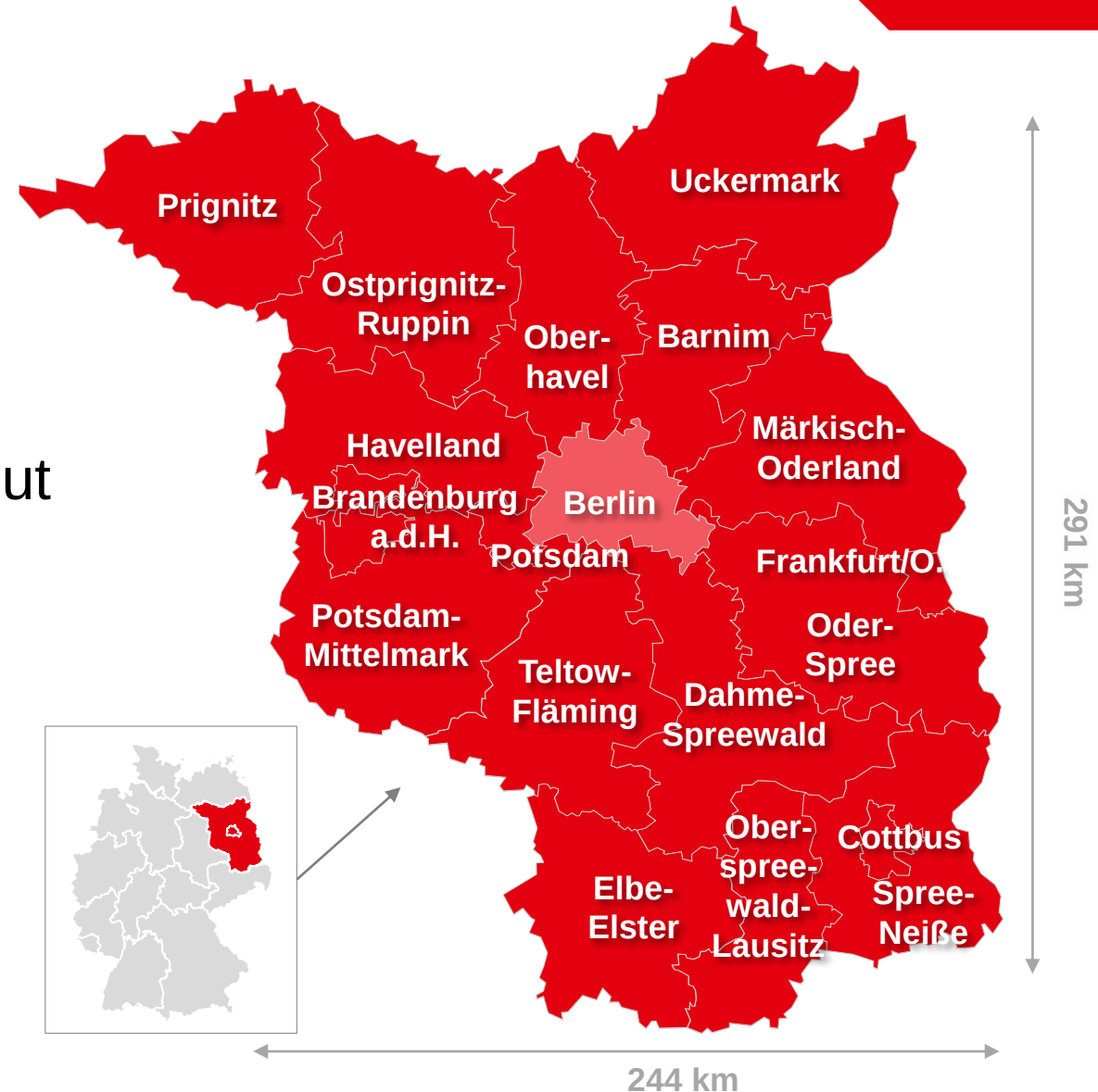
The Verkehrsverbund Berlin-Brandenburg Introduces Itself



With **30.546 km²** the VBB covers the largest transport network in Europe by area.

The VBB covers the metropolitan region **Berlin-Brandenburg** with about **6 million** inhabitants in total.

About **1,5 billion passengers** travel with public transport in the VBB area.





Berlin

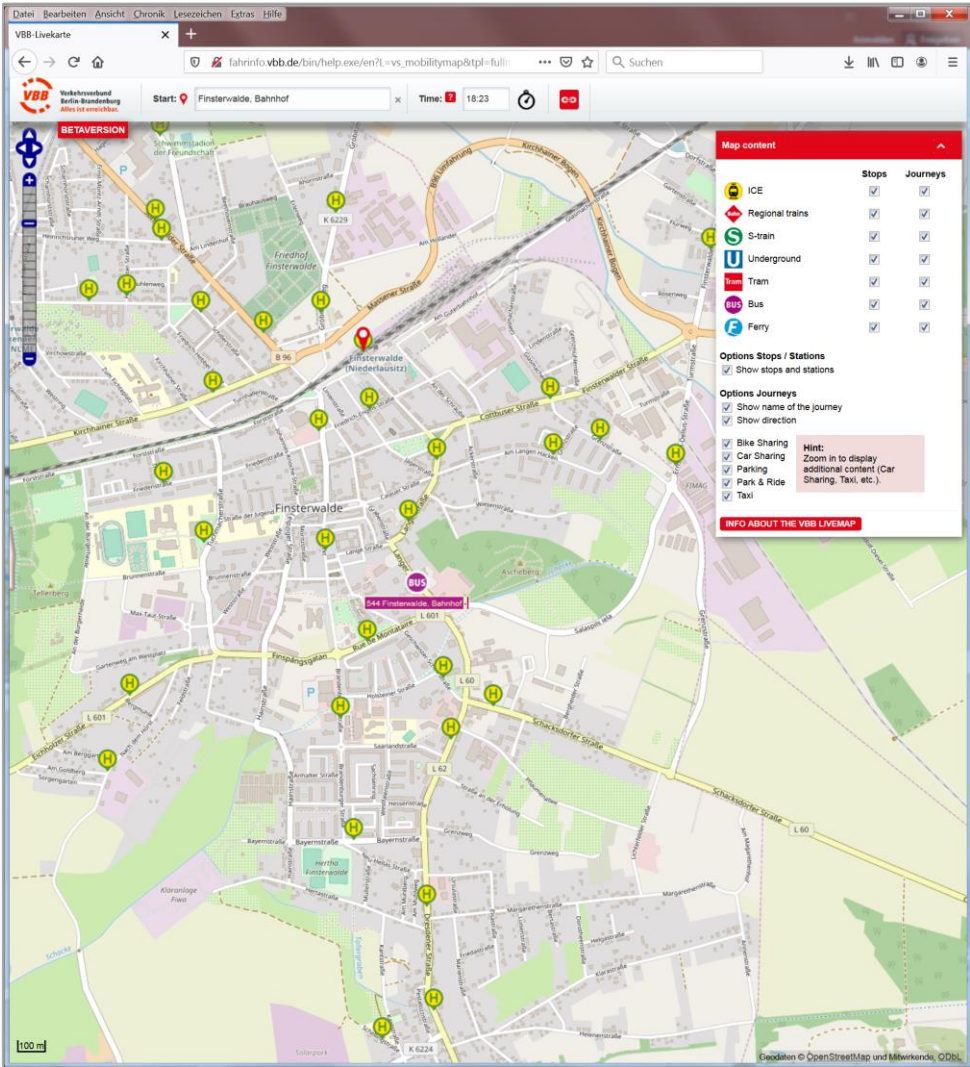
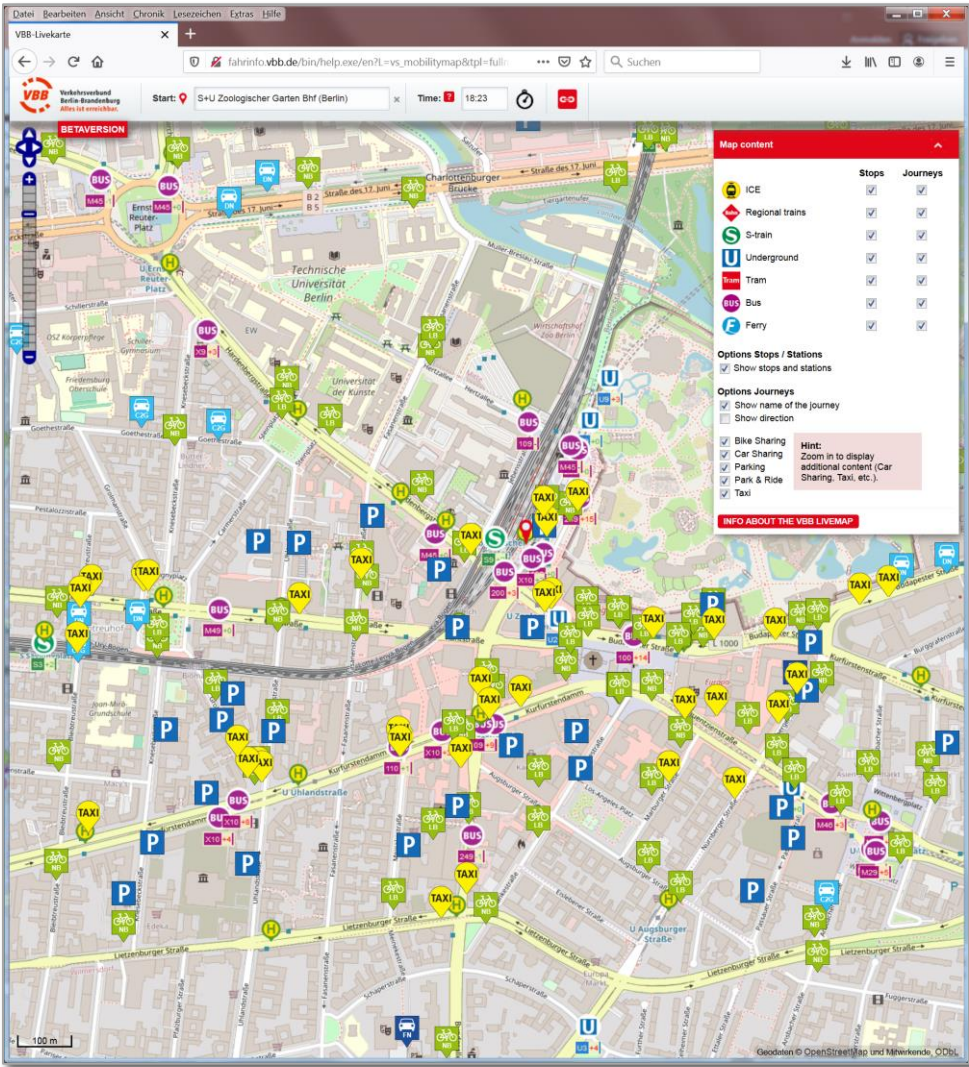
- 3,6 Mio. Inhabitants
- Area: 892 km²
- Population Density: 4.088 Inhabitants/km²
- Modal Split: 25 % ÖV / 33 % MIV
- 1,2 Mio. PKW

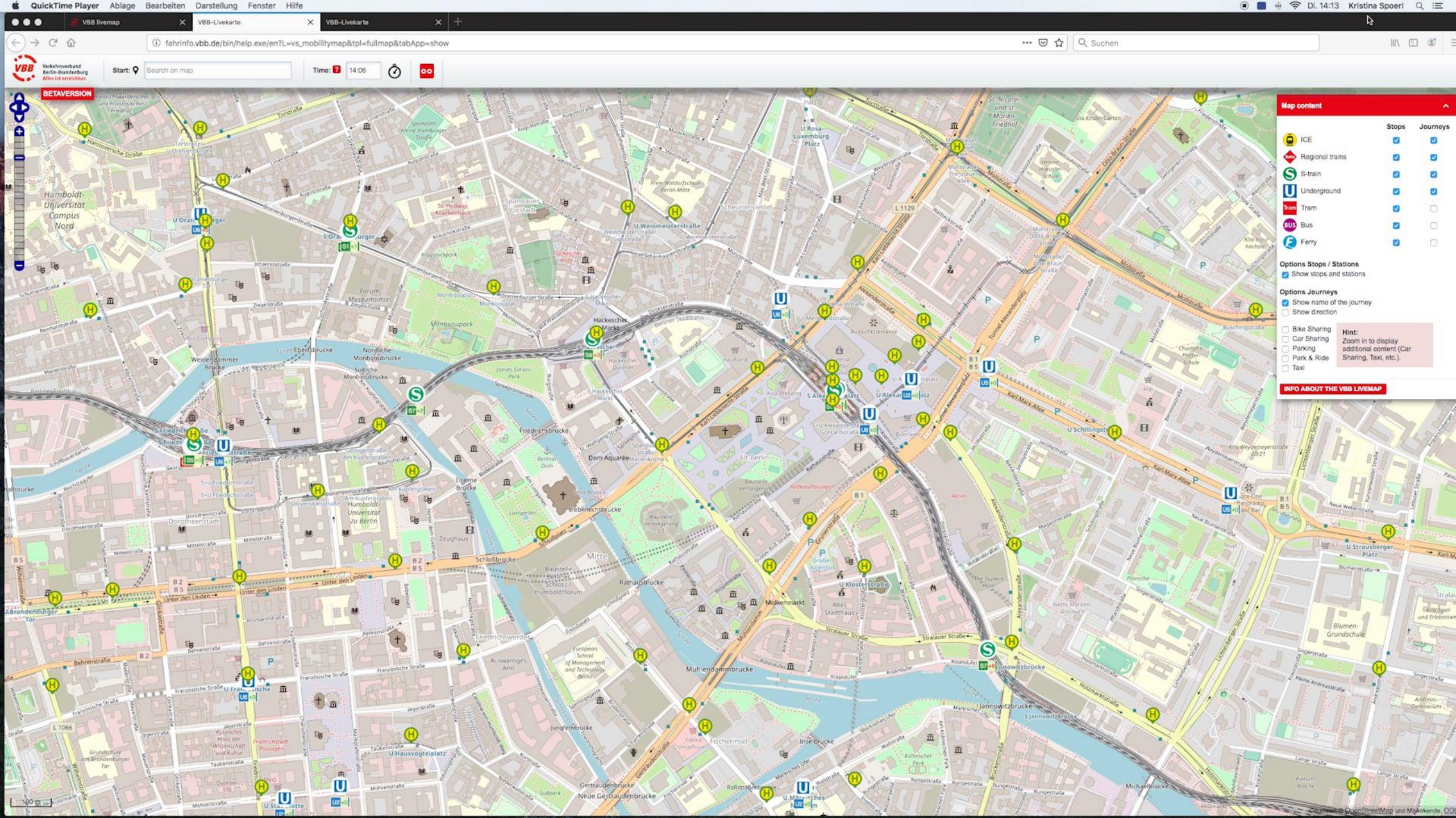


Brandenburg

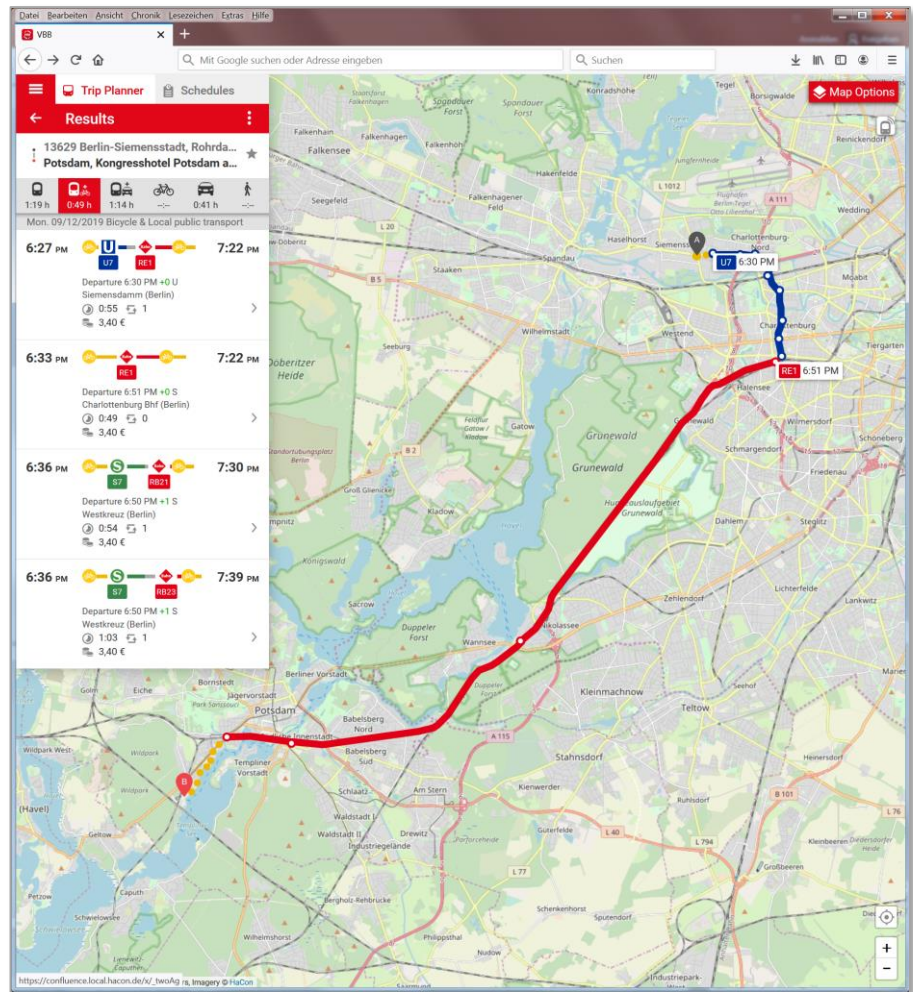
- 2,5 Mio. Inhabitants
- Area: 29.654 km²
- Population Density : 85 Inhabitants/km²
- Modal Split: 11 % ÖV / 59 % MIV
- 1,4 Mio. PKW

VBB Live Map Berlin vs. Finsterwalde

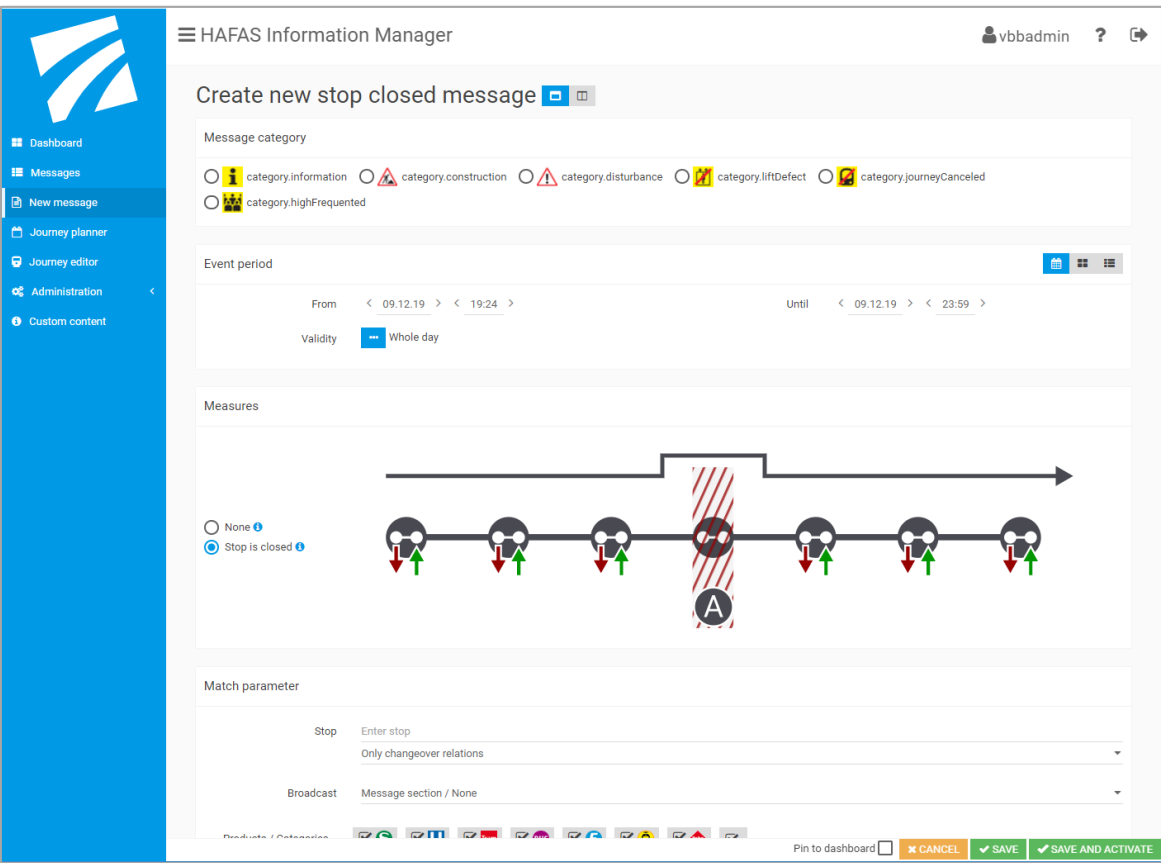




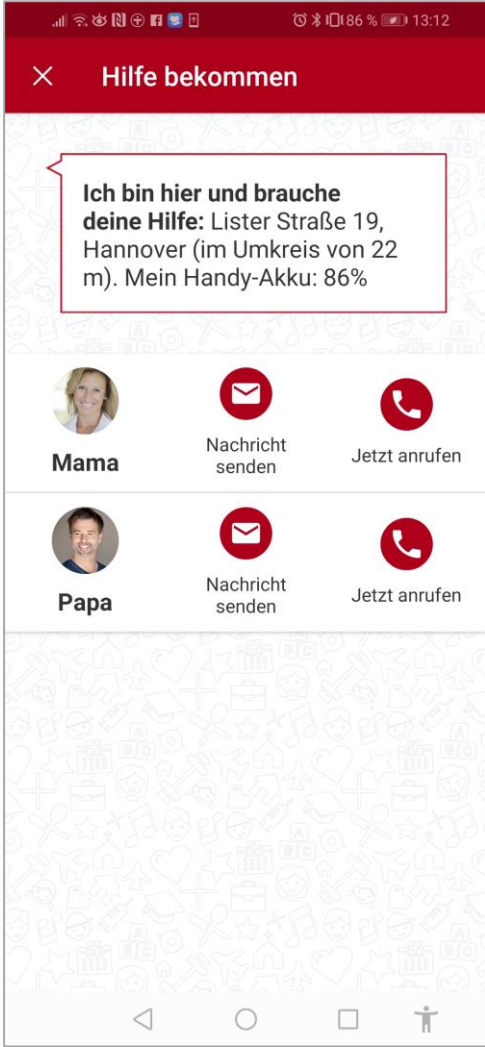
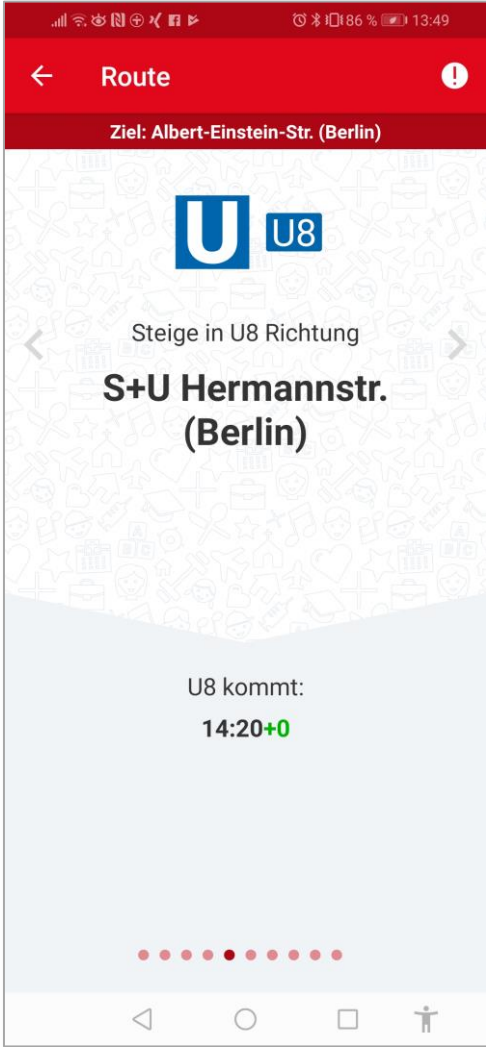
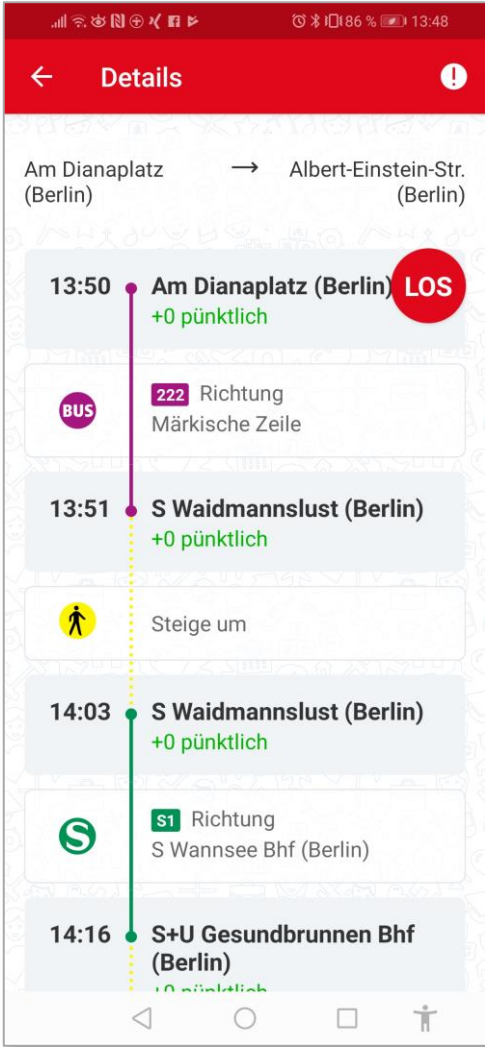
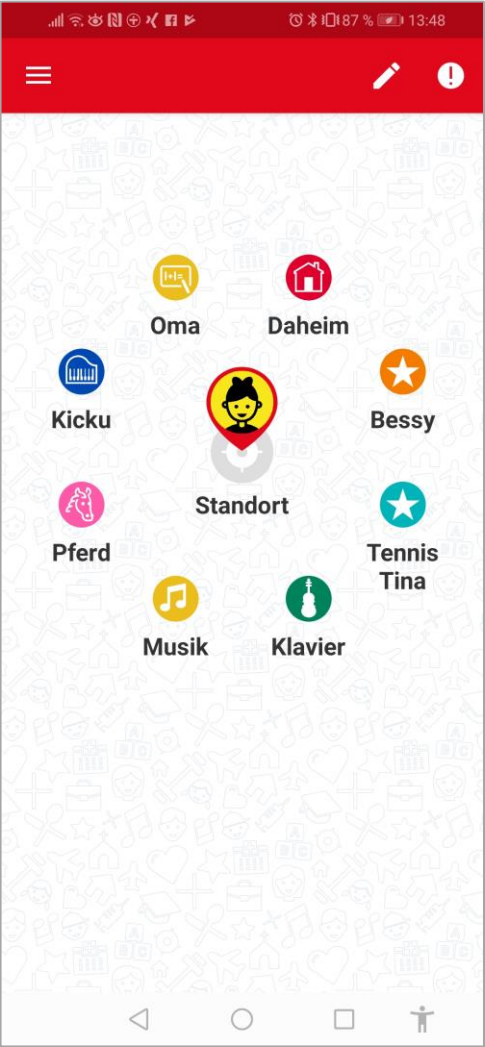
VBB Multimodal

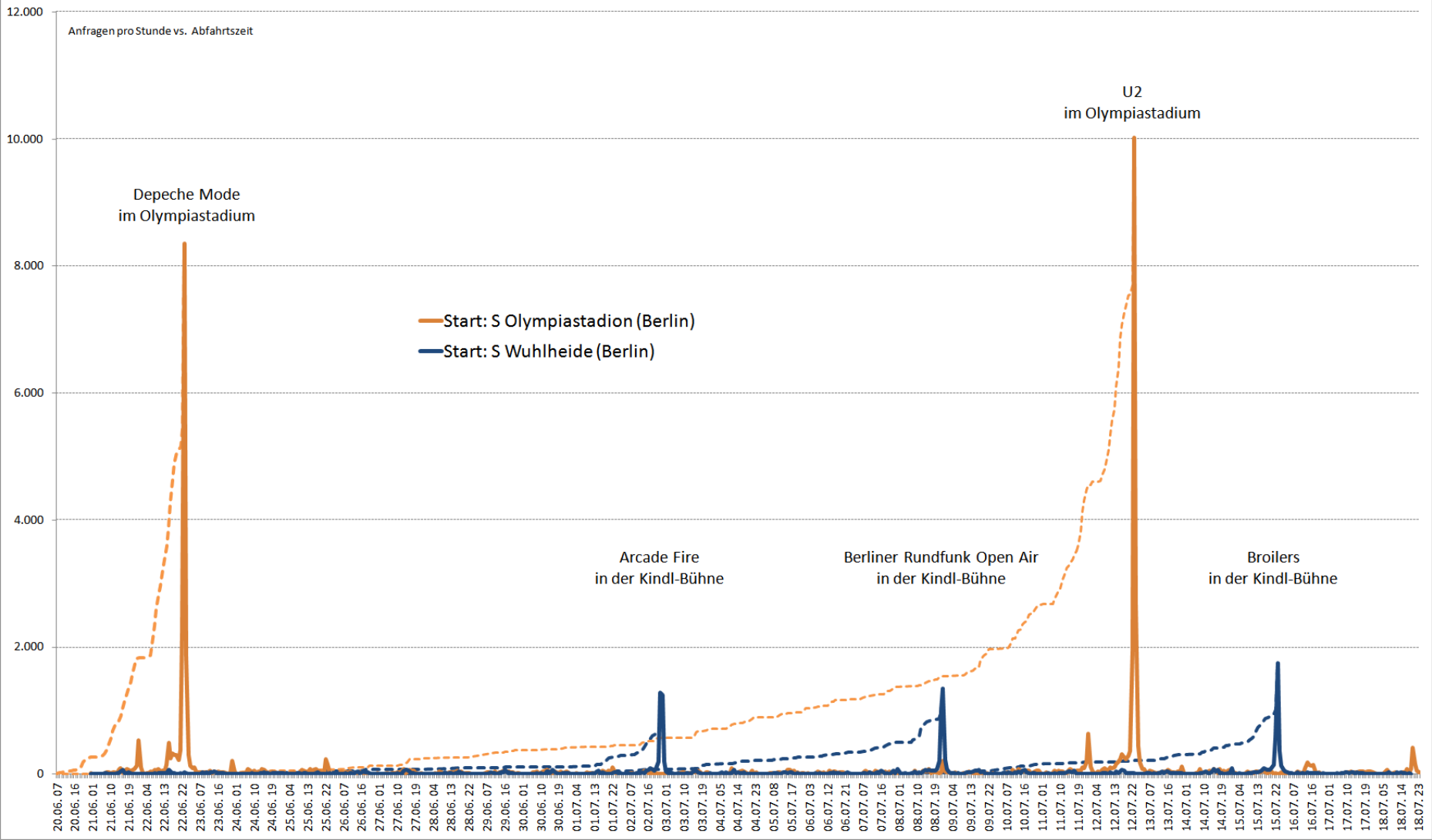


Disruption Management – HIM 3.0



KidsApp Is Live – VBB Jump

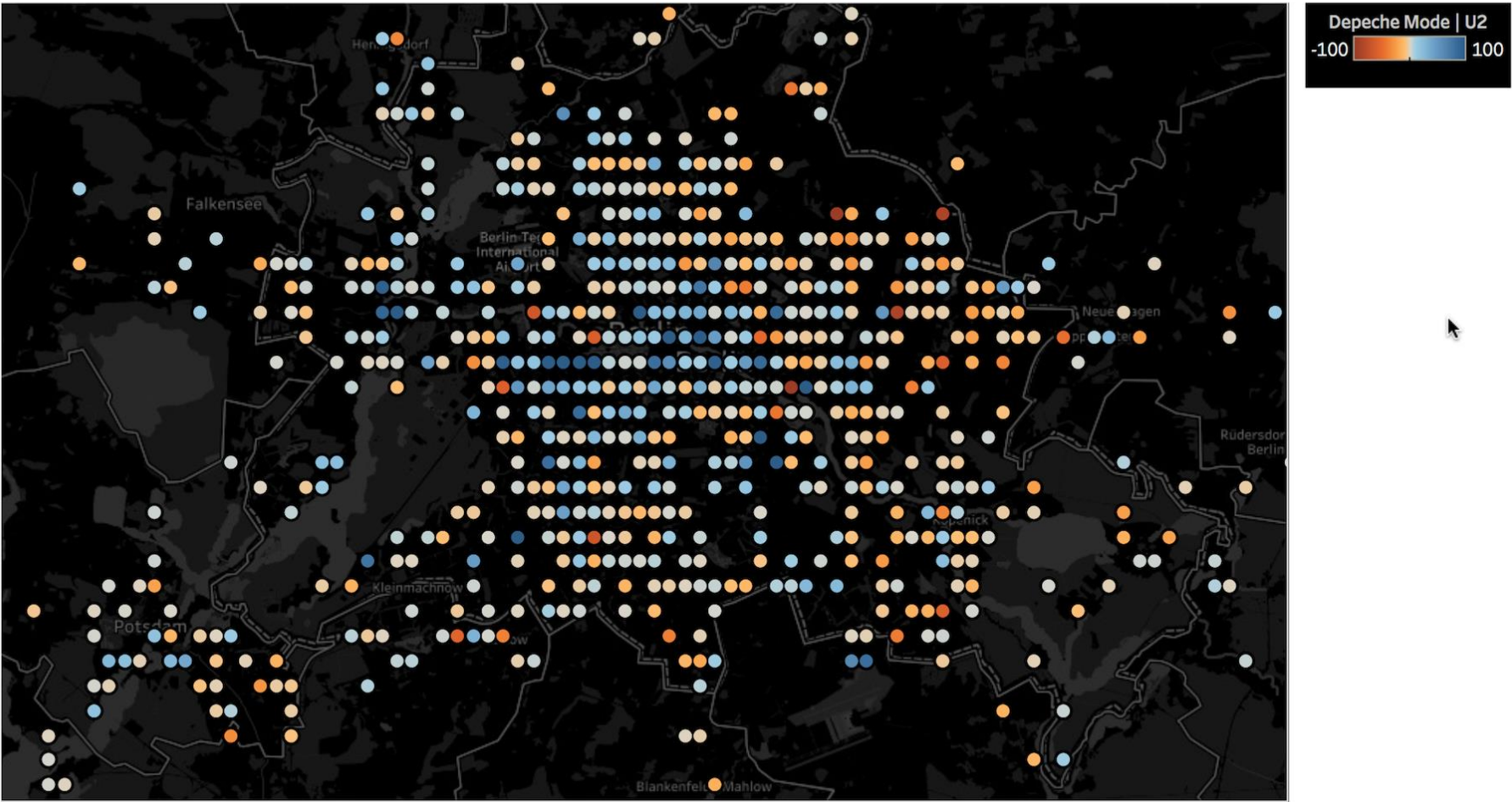




Depeche Mode Departure Traffic

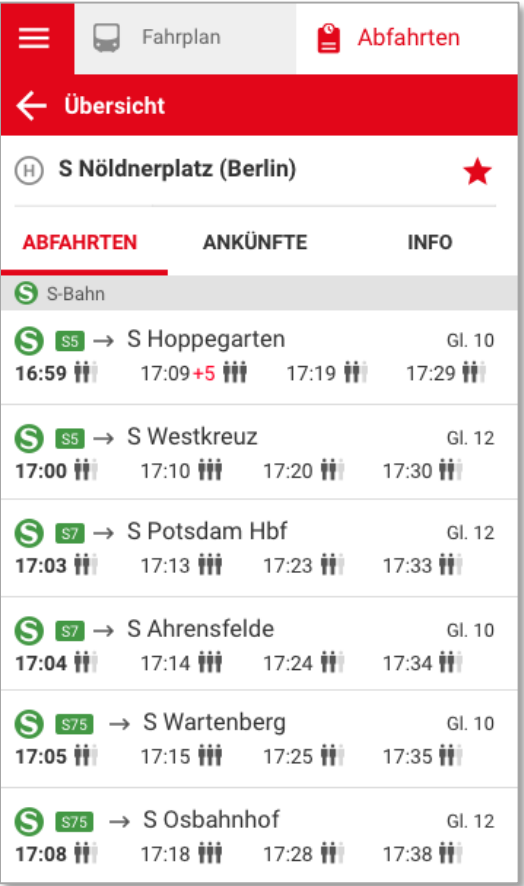
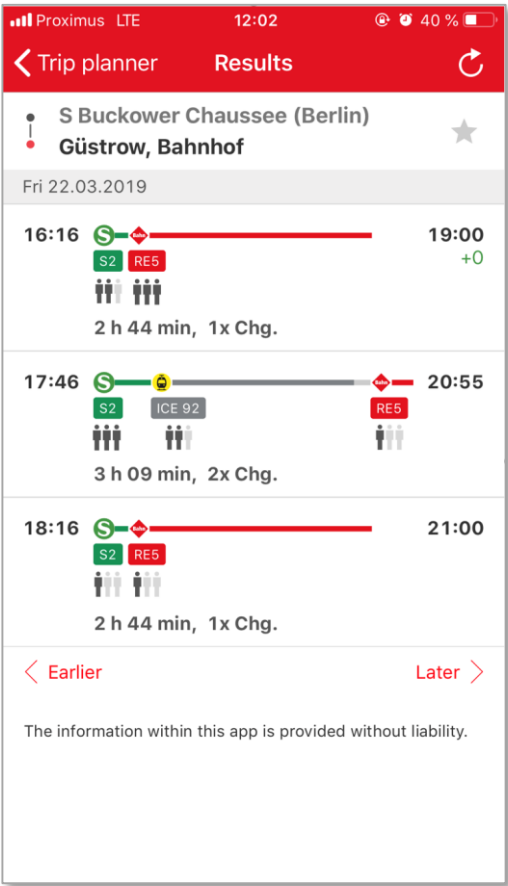
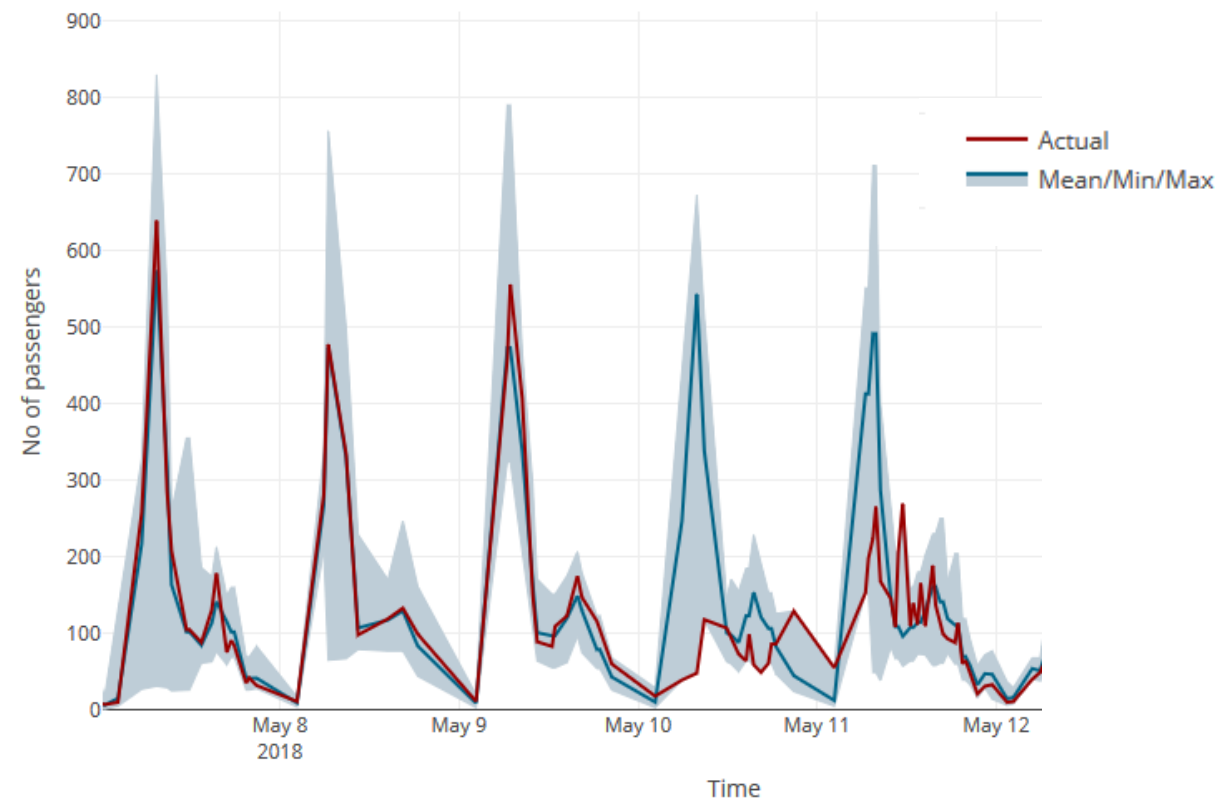


Berlin Fan Map



Map based on average of Rounded X and average of Rounded Y. Color shows sum of Diffdmu2. Details are shown for ID.

Occupancy Forecasts with HAFAS @ VBB & Protrain



SIEMENS
Ingenuity for life

