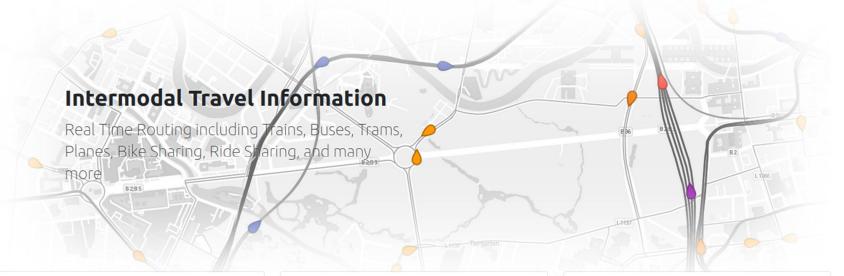




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### Multi Criteria Optimization

The algorithms behind MOTIS inherently support multicriteria Pareto optimization. When traveling, the fastest connection is not always the most desirable one for every traveller: a connection that saves one or more transfers but takes a few minutes longer might be worthwhile, too. Therefore, MOTIS is capable of computing all optimal trade-offs. All approaches implemented in MOTIS are state-of-the-art and guarantee optimality of the results.

### **Pedestrian Routing**

Based on OpenStreetMap data, the Per Pedes Routing project which was funded by the German Federal Ministry of Transport and Digital Infrastructure (mFUND project) provides personalized foot routing in MOTIS. This addresses particularly the needs of mobility-impaired persons including those with heavy luggage or a baby buggy who would like to avoid obstacles like stairs if the detour is acceptable.

### Real-Time

The data model of MOTIS can be updated according to realtime information (delays, cancellations, reroutings, additional services, etc.). This way, it is capable of computing optimal connections that work in case of service disturbances. MOTIS provides real-time journey monitoring and informs the user in case of problems with their journey (i.e. via App). Real-time data can be consumed in the standardized GTFS-RT format.

### Web and App

To demonstrate the API, MOTIS provides a web application and an Android app. Both provide capabilities for intermodal real-time routing. Everything is open source as well and can be hacked on!

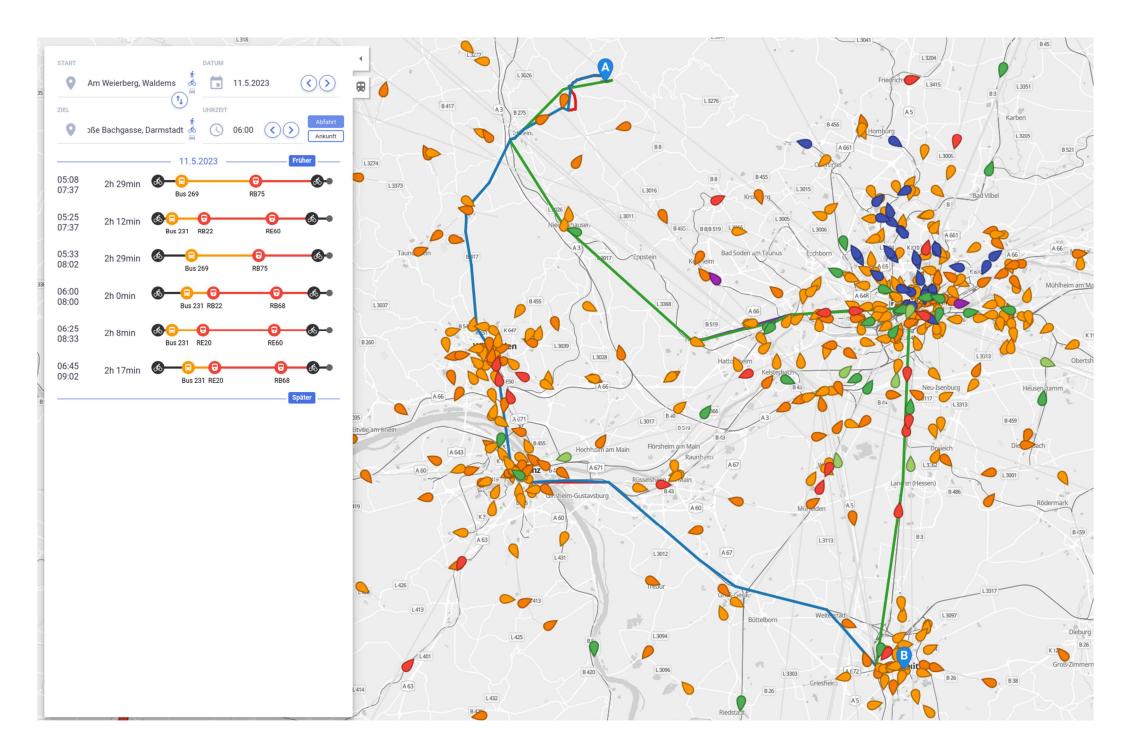
Note: currently, not all features provided by the backend are available in the user interface.

### API

All functionalities are available via a Flatbuffers / JSON API. MOTIS itself is structured into modules which use the same protocol as the external clients (such as the Android app and web application). MOTIS provides batch files for evaluations with a large number of queries as well as JSON via HTTP or WebSocket when MOTIS is operated as a server.

### Intermodal

MOTIS supports arbitrary transport modes such as public transport, walking, driving by car (own car, taxi, etc.), ride sharing, bike sharing or flights. At the core of MOTIS is a powerful state-of-the-art public transport data model and routing algorithm. All other transport modes can be addressed in a modular way without sacrificing optimality.







# Das Modellprojekt für vernetzte Mobilität in Herrenberg





## Jetzt testen

Hier geht's zum stadtnavi.

> Zu stadtnavi





## Mobilitätsplattform für Kommunen in Brandenburg

Ein Pilotprojekt der



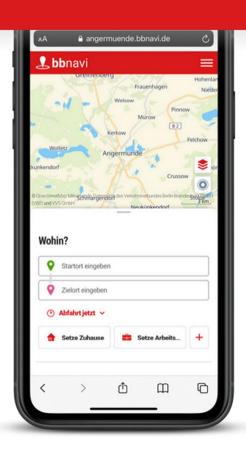
DigitalAgentur Brandenburg

Projektpartner:innen









## Übersicht zu den Pilotkommunen

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Bad Belzig

Herzberg (Elster) Bernau bei Berlin

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