

The next generation of journey planner

Passenger information to go



Reseinformation för miljömässigt hållbar stadstrafik

HaCon Ingenieurgesellschaft mbH
Stephan Sünderkamp

HaCon – the timetable company

- Software solutions for timetables
 - Creating, Editing, Controlling
 - Publishing, Maintaining
- Established in 1984
- Based in Hannover
- 190 employees
- 75% software developers



Railway Customers

- DB - Germany
- SNCF - France
- SBB - Switzerland
- ÖBB - Austria
- PKP - Poland
- CFL - Luxemburg
- DSB - Denmark
- SNCB - Belgium
- NS - Netherlands
- Irish Rail - Ireland
- ADIF - Spain
- UIC, Railteam, Network Rail, TOCs

Other public transport solutions

- Sweden - Samtrafiken
- Rejseplanen - Denmark
- CdT - Luxemburg
- USA, Great Britain, Ireland
- Germany, Austria, Switzerland
- Italy, Columbia
- Denmark, Norway, Sweden
- New Zealand, Israel

Other

- Nokia, Navteq, Car industry,
- DB Schenker, Vessel operator



Numbers

50.000.000

computed journeys daily

20.000.000

App-Downloads

10.000.000.000

yearly ticket revenue in € based on HAFAS computations

25

countries

7

Top 10 Apps in
AppStore Rewind

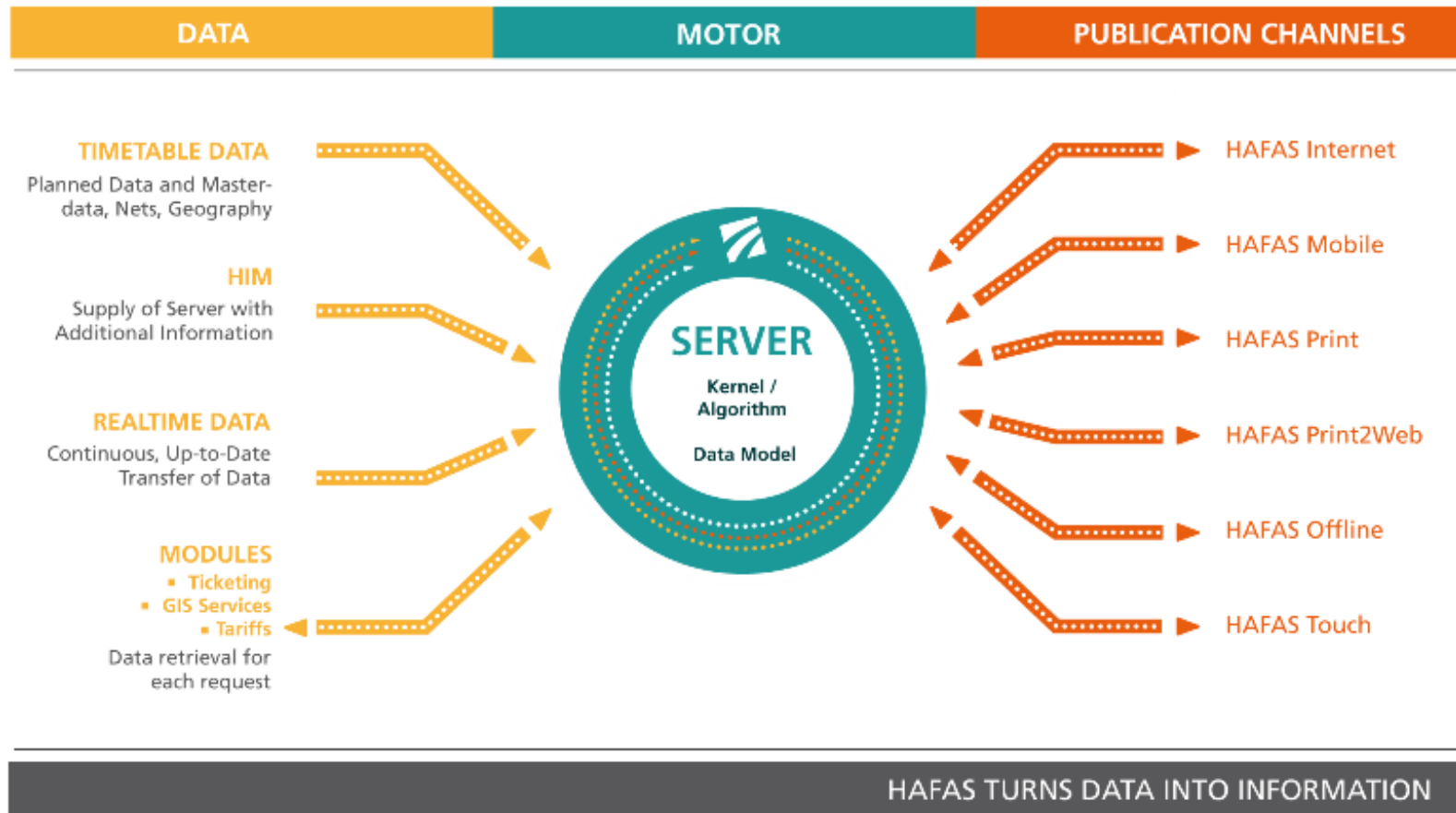
150

regions

5.000.000

stops

From data to information



Journey Planner SL, Samtrafiken, Västtrafik

The screenshot shows the SL website's journey planner. At the top, there are navigation tabs: "Resenär", "Företagare", "Om SL", and "Visitor". Below these are menu items: "Planera resa", "Välja biljett", "Resegaranti & resevillkor", "Frågor & svar", and "Mitt SL". The main content area is titled "Reseplanerare" and includes a search form with "Från" (Centralen (Stockholm)) and "Till" (Tekniska högskolan (Stockholm)). There are radio buttons for "Jag vill tidigast åka" (selected) and "Jag vill senast vara framme". A "Sök resa" button is at the bottom right. On the left, there is a sidebar with "Mitt SL" and options like "Skapa konto" and "Logga in".

The screenshot shows the resrobot website's journey planner. The header includes the "resrobot" logo and the tagline "Hitta den smartaste resan från dörr till dörr.". The search criteria are "Göteborg Brunnsparken - Barnhusgatan 1-8, Stockholm" and "Byt färdriktning". The date is "torsdag 21 november" and the time is "06:00 - 20:00". A "Sök ny resa" button is in the top right. Below the search criteria, there are icons for "FÄRDMEDEL" and a slider for "ANTAL BYTEN" (0 to 5+). A tooltip shows "Göteborg Centralstation - Stockholm Centralstation" with "06:35 - 09:50" and "DU RESER MED Snabbtåg 422 mot Stockholm Centralstation". Below this, there are three search results with columns for "+", "Tid", "RESTID", "BYTEN", and a route diagram.

	Tid	RESTID	BYTEN	Route Diagram
+	06:24 - 10:07	3:43	0	Walking -> Bus -> Walking
+	07:15 - 10:18	3:03	3	Walking -> Bus -> Train -> Bus -> Walking
+	07:15 - 10:25	3:10	2	Walking -> Bus -> Train -> Walking

The screenshot shows the Västtrafik mobile app's journey planner. The search criteria are "Från Carl Skottsbergs Gata 2, 413 19 Göteborg" and "Till Liseberg Station, Göteborg". The date is "onsdag, 17 oktober 2012, 16:08". Below the search criteria, there are three search results with columns for "Avg.", "Ank.", "Res...", "Byten", and "Om".

Avg.	Ank.	Res...	Byten	Om
16:10	16:40	0:30	1	--
Buss 42	Buss 63	Annedalskyrkan, Göteborg	400 m	0:05
Liseberg Station, Göteborg				
16:13	16:40	0:27	1	--
Spårvagn 13	Buss 63	Sahlgrenska Huvudentré, Göteborg	750 m	0:10
Liseberg Station, Göteborg				
16:13	16:51	0:38	1	--

The screenshot shows the Västtrafik mobile app's home screen. The title is "Hem". There are six icons: "Sök resa", "Nästa tur", "Trafikläge", "Favoriter", "I närheten", and "Om". Below the icons, there is a section for "Förslag: förbindelser" with two suggestions: "Göteborg C, ... Vägförvaltning, ..." and "Göteborg C, ... Fregatten, ...".

The screenshot shows a notification banner from the Västtrafik mobile app. The banner text is "Reseplanerare" and "Trip update: Lidköpings Resecentrum, Lidköping - Skövde Resecentrum, Skövde.". There is a "slide to show" button at the bottom.

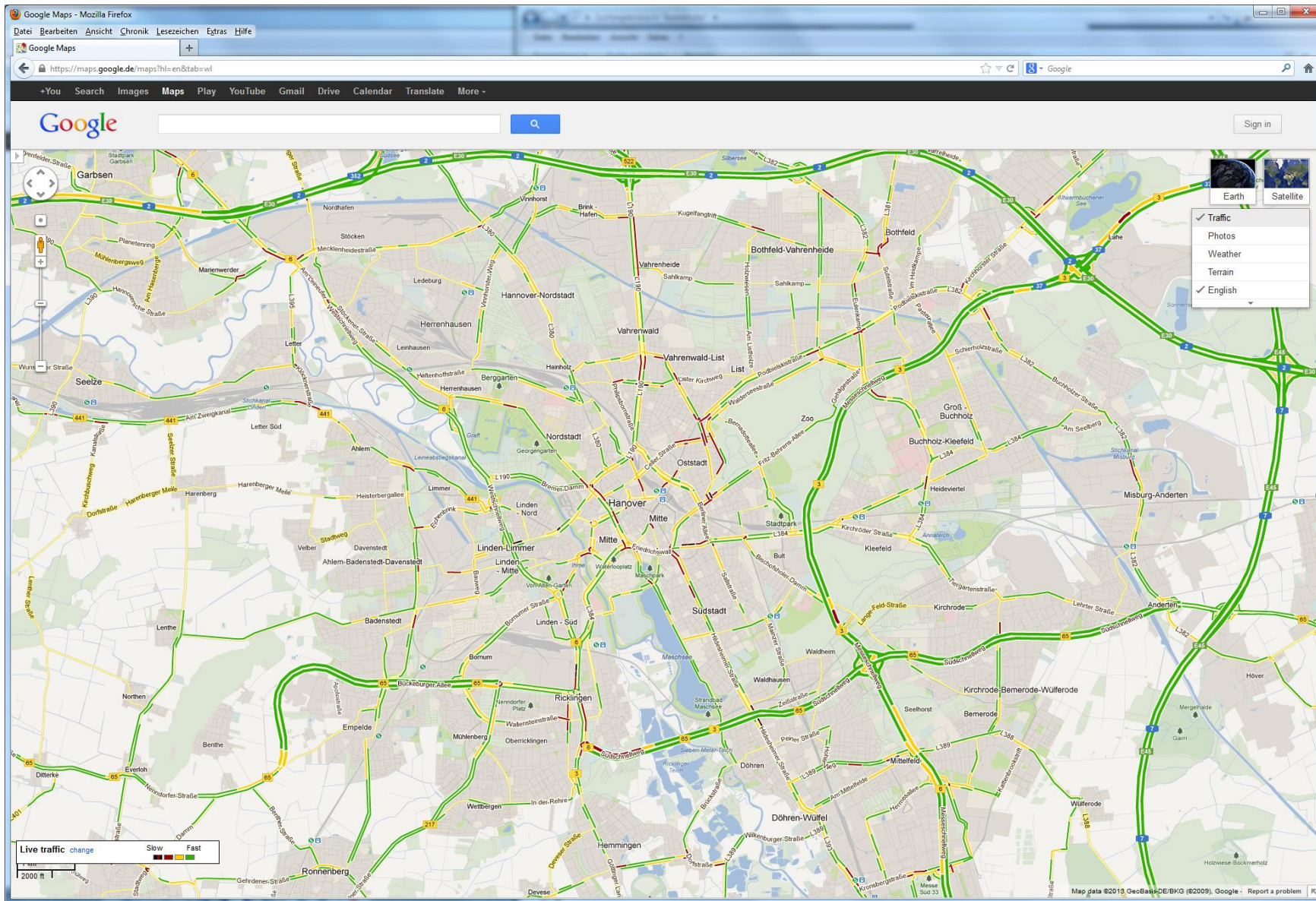
The next generation of journey planner...

- ...driven by available technology
- ...driven by the availability of data
- ...driven by changes in mobility

Goal:

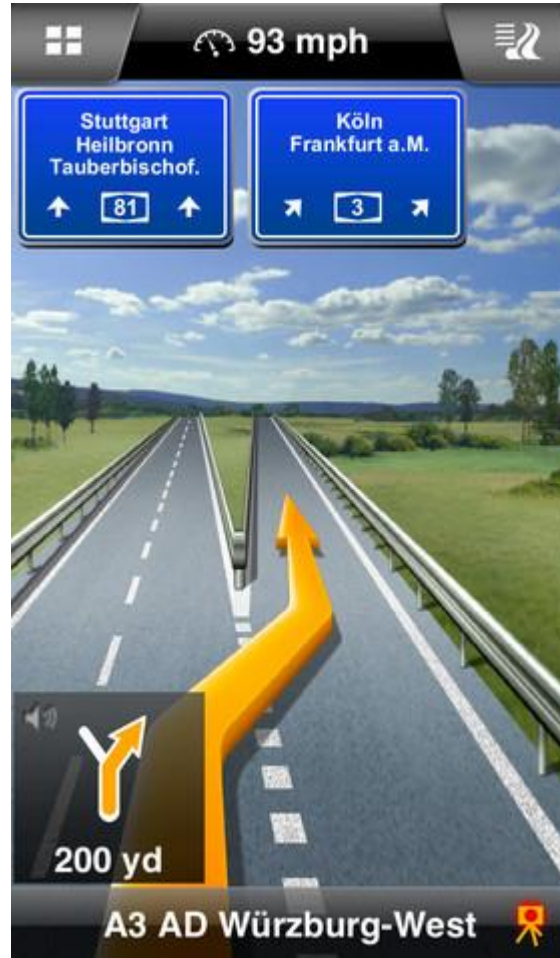
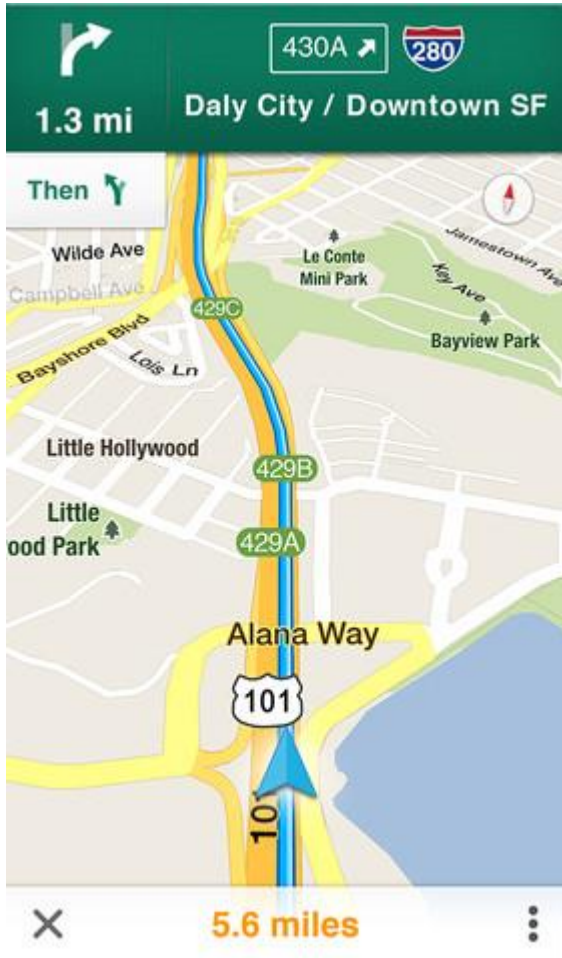
Making an even more complex system easier to use!

Google Maps with floating car data

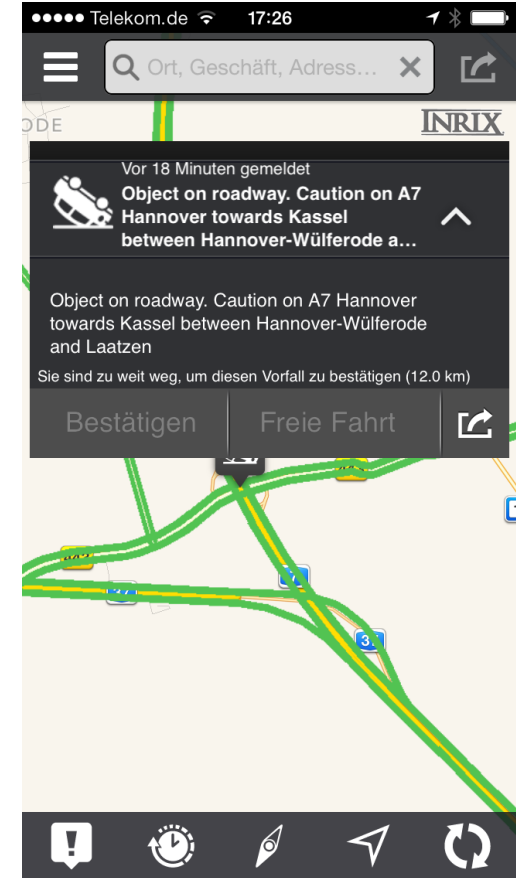
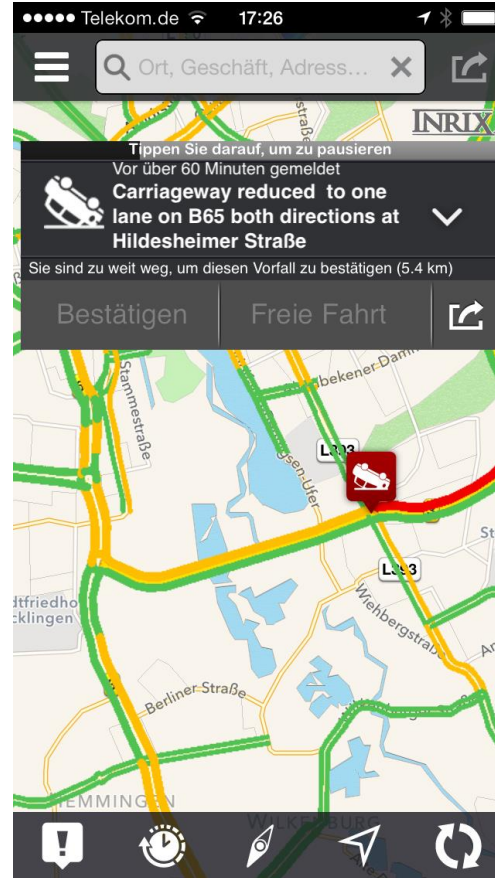


Car navigation with realtime data

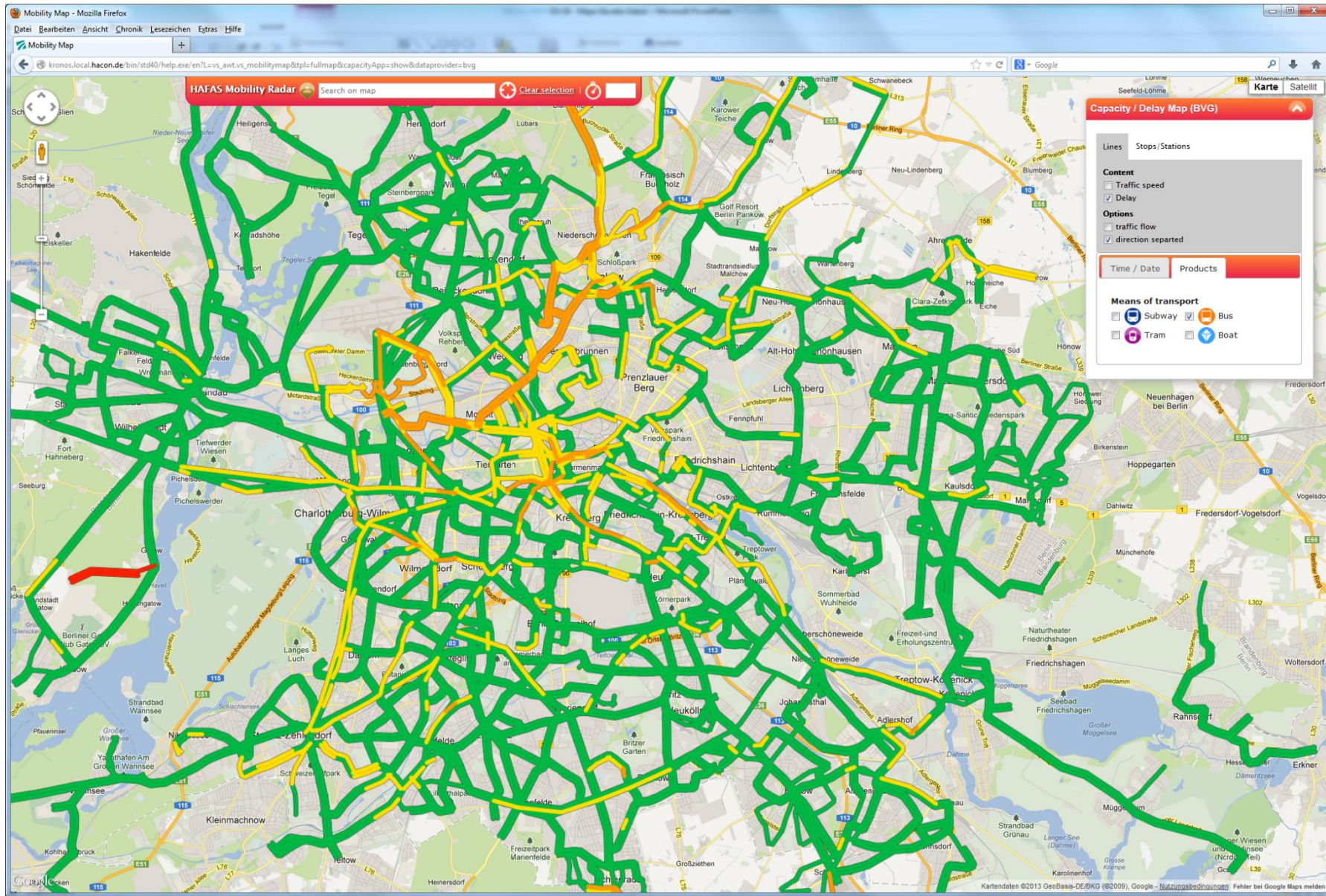
Navigation system



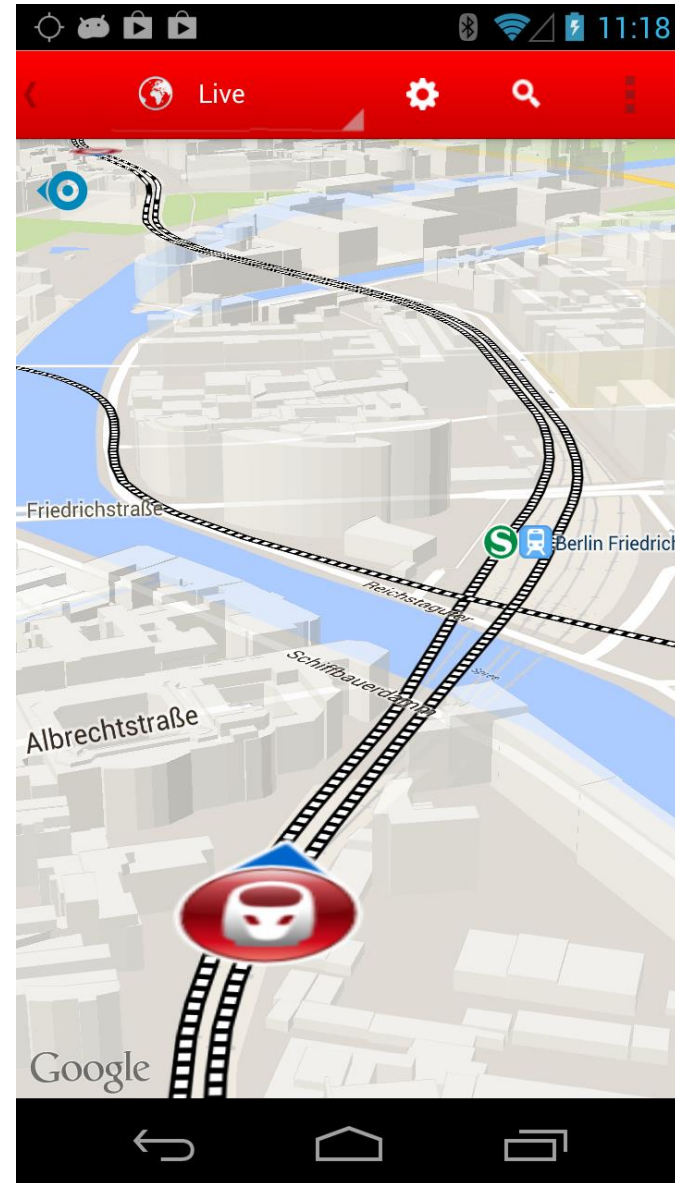
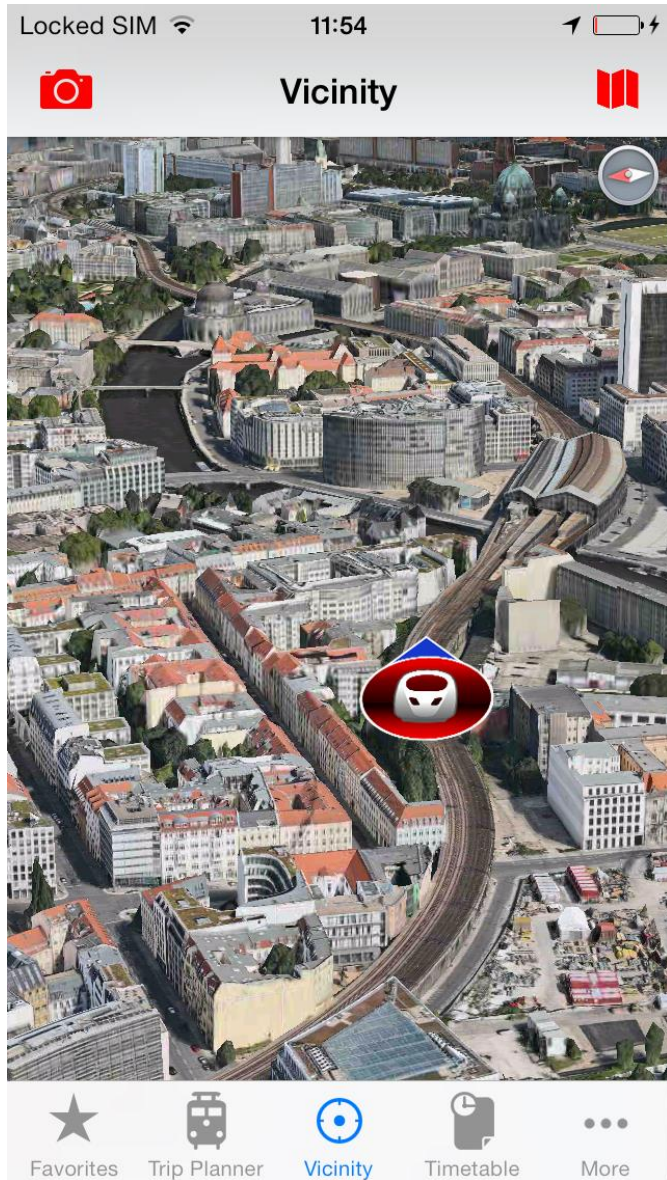
Community driven content



Map with realtime data of public transport

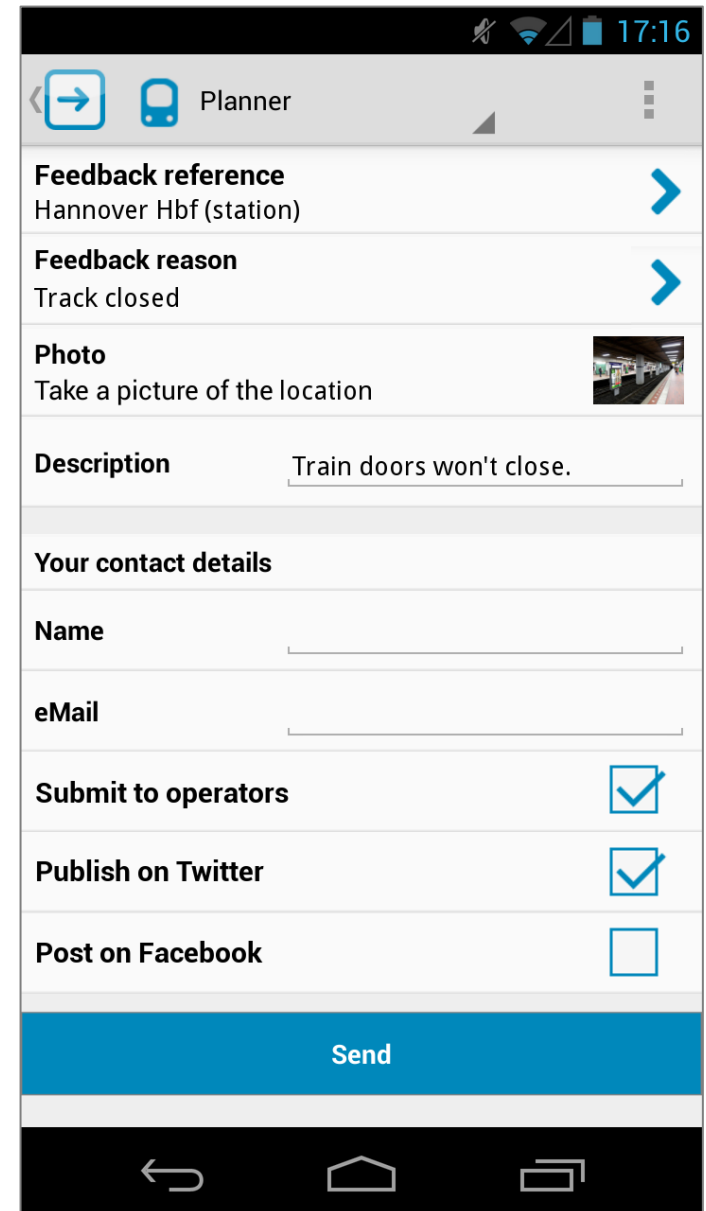


3D Follow Me Mode



Community driven content

- Feedback for sections
 - Trains
 - Stations
 - Regions
- Messages for friends as well as operators
- Providing additional information for fellow passengers



The screenshot shows a mobile application interface for submitting feedback. At the top, the status bar shows the time as 17:16. The app header is titled 'Planner' and includes a back arrow and a train icon. The form fields are as follows:

- Feedback reference:** Hannover Hbf (station) with a right-pointing arrow.
- Feedback reason:** Track closed with a right-pointing arrow.
- Photo:** Take a picture of the location, with a small photo thumbnail showing a train platform.
- Description:** A text input field containing 'Train doors won't close.'
- Your contact details:**
 - Name:** An empty text input field.
 - eMail:** An empty text input field.
- Submit to operators:** A checkbox that is checked.
- Publish on Twitter:** A checkbox that is checked.
- Post on Facebook:** An unchecked checkbox.

A large blue 'Send' button is located at the bottom of the form. The bottom of the screen shows the standard Android navigation bar with back, home, and recent apps icons.

Simple realtime system with smartphones



Smart VMS – App for the driver

HAFAS Smart VMS

Ausgewählte Fahrt: 7493130

Strecke Abbringer Zubringer Nachrichten

Aktuelle Station **Osnabrück Hauptbahnhof/Z**
Abfahrt nach Plan **12:00**

An/aus	Fahrt	Warten bis
✓ 11:58	7010013	
✓ 11:59	7732029	
✗ 11:51 +12	IC 148	

Recke Schulzentrum
Osnabrück Strothesiedlung
Berlin Hbf

Zeit für Umstieg: 5 Minuten
Warten empfohlen bis 12:04, nicht ab 12:10

Warten bis **12:04**
+4 Minuten

Aktuelle Position unbekannt

Ausgewählte Fahrt: 3087126

Strecke	Abbringer	Zubringer	Nachrichten
Station			An/Ab
Bad Dürrenberg Salzbergwerk			12:15 +3
Bad Dürrenberg Knappensteig			12:16 +3
Bad Dürrenberg Johann-Jakob-Weg			12:17 +3
Bad Dürrenberg Zillstraße			12:18 +3
Hallein Fuchsturm			12:19 +3
Hallein Stirneiskeller			12:21 +3
Hallein Kornsteinplatz			12:23 +3
Hallein Hafner			12:25 +3
Hallein Bahnhof (Westseite)			12:26 +3 12:30 +0
Hallein Stadtpark			12:31 +0
Hallein Steiner			12:32 +0
Hallein Europastraße			12:34 +0
Hallein Maraltstraße			12:35 +0
Hallein Krankenhaus			12:36 +0

Aktuelle Position unbekannt

Live timetable – where are the trains and busses?

S-Bahn Stuttgart | Live Fahrplan - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

UB S-Bahn Stuttgart | Live Fahrplan +

s-bahn-stuttgart.hafas.de/bin/help.exe/dn?tpl=livefahrplan

Aktuelle Pünktlichkeit

Linie	Fahrten	bis 3 Min.	bis 6 Min.
S1	7	71.0%	86.0%
S2	4	50.0%	100.0%
S3	4	100.0%	100.0%
S4	2	100.0%	100.0%
S5	2	100.0%	100.0%
S6	4	20.0%	50.0%
S60	0	-	-

Information: Angegebene Pünktlichkeit bezieht sich auf die aktuelle Situation und alle im Live-Fahrplan dargestellten Fahrten.

Letzte Aktualisierung: 12:30

S-Bahn Stuttgart

Live Fahrplan 12:30:44

- Fahrziel anzeigen
- Fahrten ohne Echtzeitinfos ausgrauen
- Echtzeitinformationen darstellen

Nur Fahrten ab Min.

Verspätung

Linien

- S1
- S2
- S3
- S4
- S5
- S6
- S60
- Gesamt

→ aktuelle Linienpünktlichkeit ausblenden

Positionen hochberechnet aus aktueller Verspätungslage. Alle Angaben ohne Gewähr.

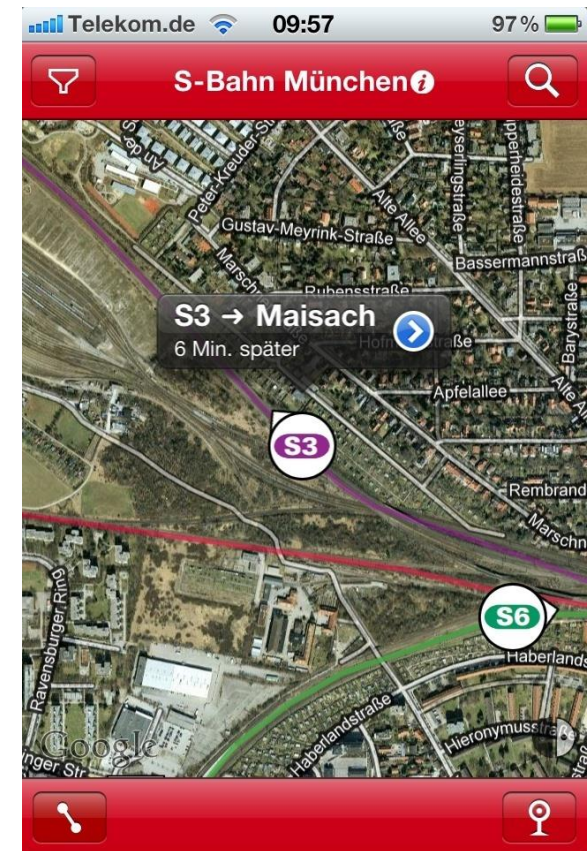
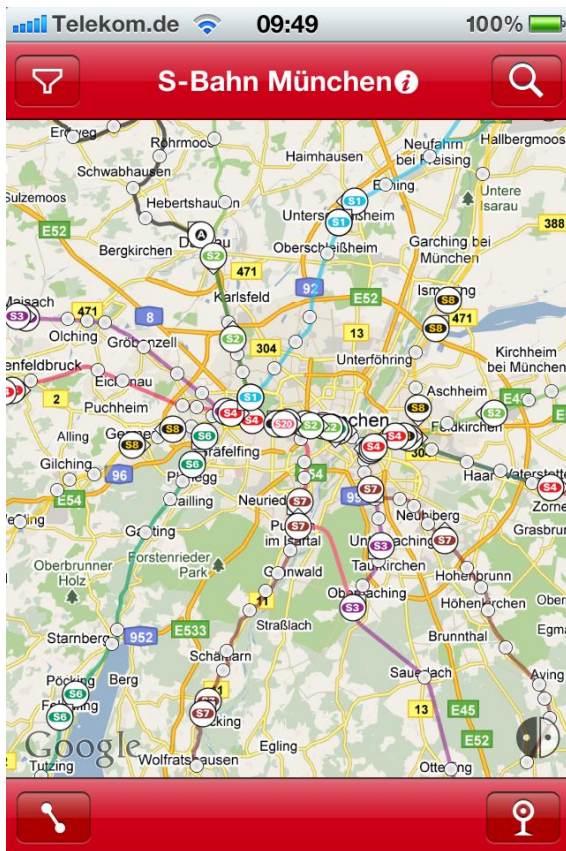
Informationen zu unseren Fahrplänen und Baustellen erhalten Sie in unserer Übersicht.

© S-Bahn Stuttgart (Impressum)
Software: HAFAS von HaCon

Live timetable - apps

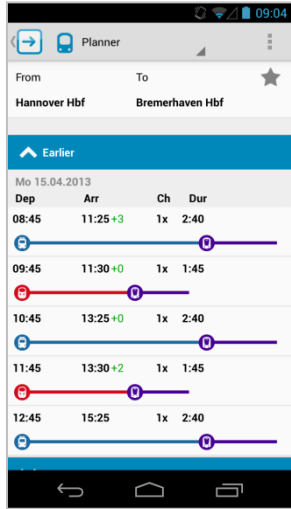
➤ Interactive timetable

➤ For iPhone, iPad, Android, Windows Phone, ...

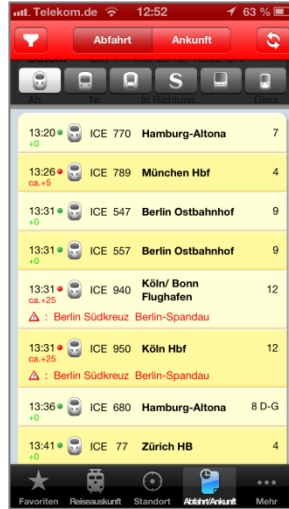


Main features - Apps

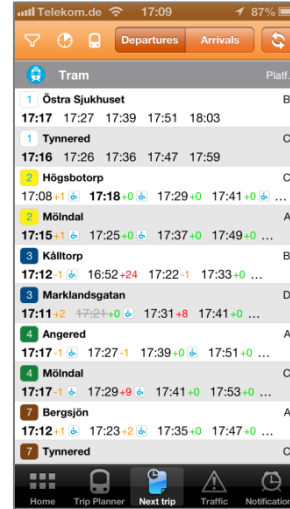
Journey Planner



Departure View



Grouped departures



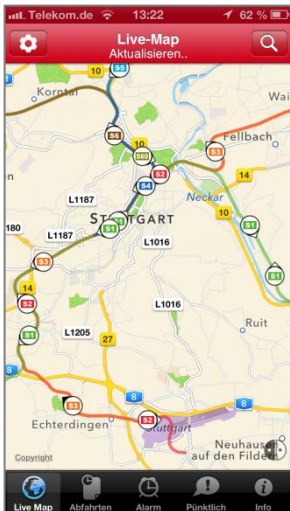
Augmented Reality



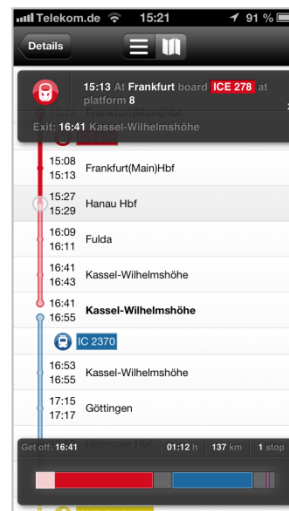
Mobility Radar



Live Timetable



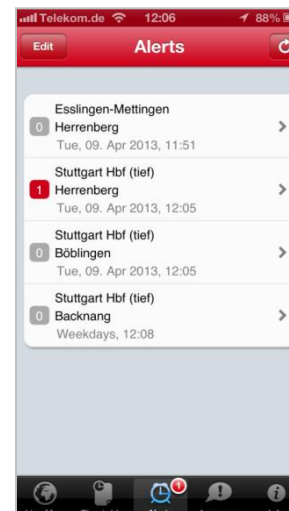
Navigation



Indoor guidance



Subscription



Ticketing



How to Inform Passengers

☞ Pull

- User can check if new information is available
- e.g. web based journey planner, departure board



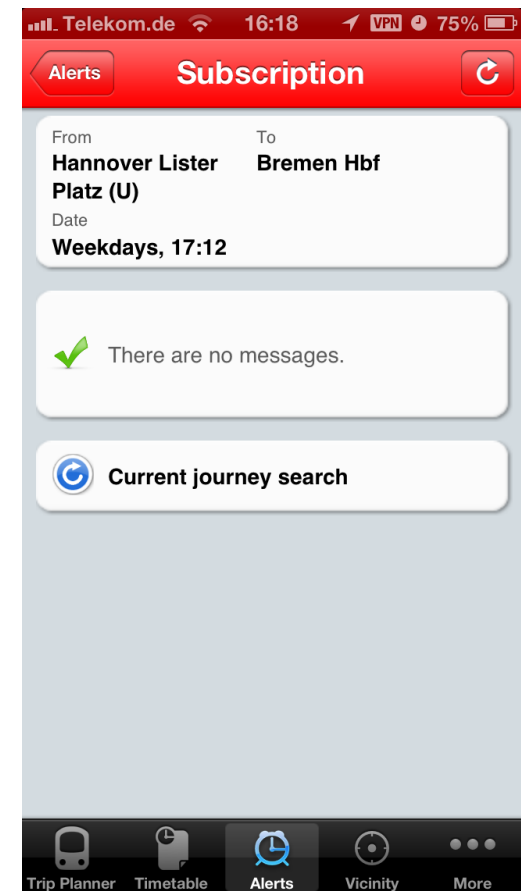
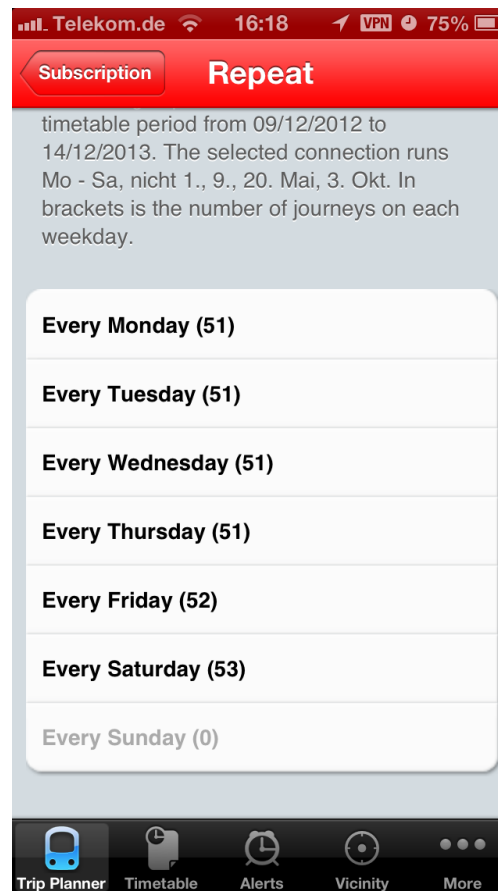
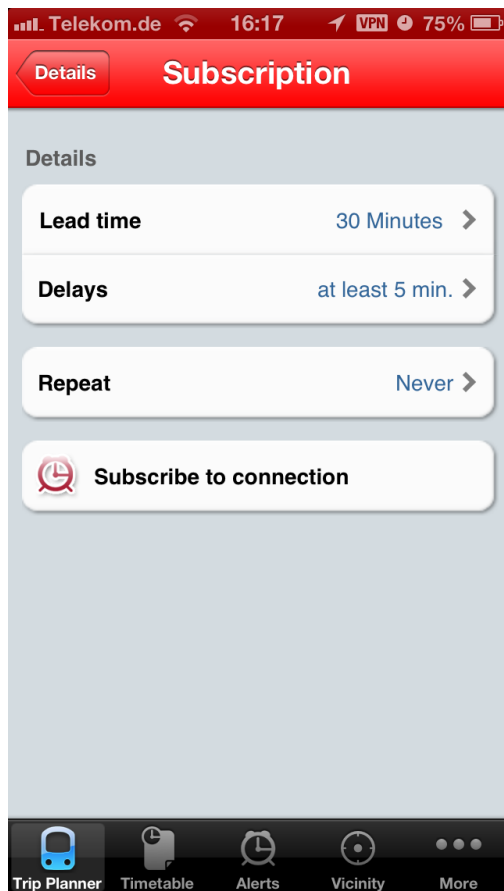
☞ Push

- User can subscribe individual alerts
- User will be informed if a problem occurs
- data base and trigger required
- Subscription for
 - delays
 - cancellations
 - interruption of frequency (e.g. no tram within 15 minutes)
 - disruption messages (from HAFAS Information Manager HIM)



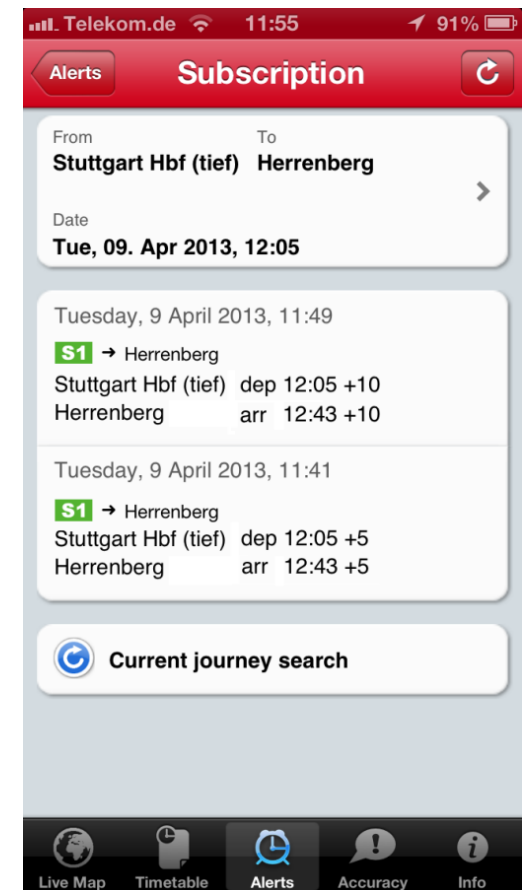
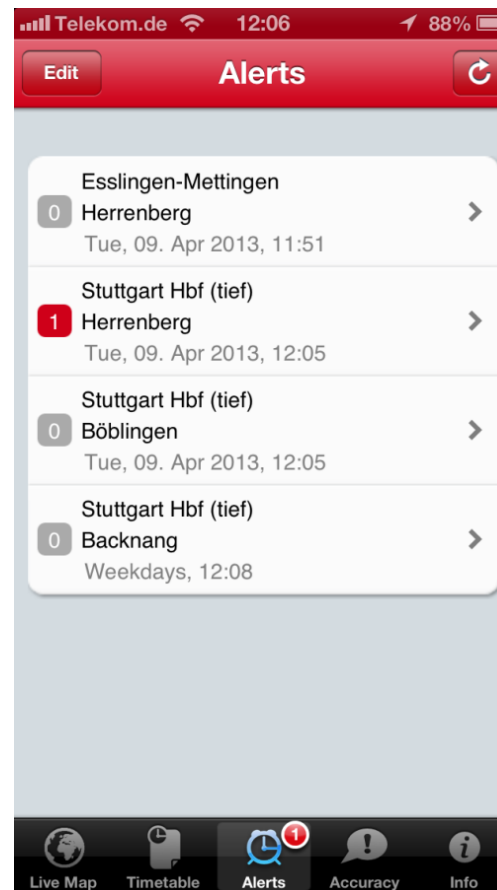
Success factors for Apps – be up-to-date

- Subscribe a connection
- Optional: choose day patterns
- Current status overview

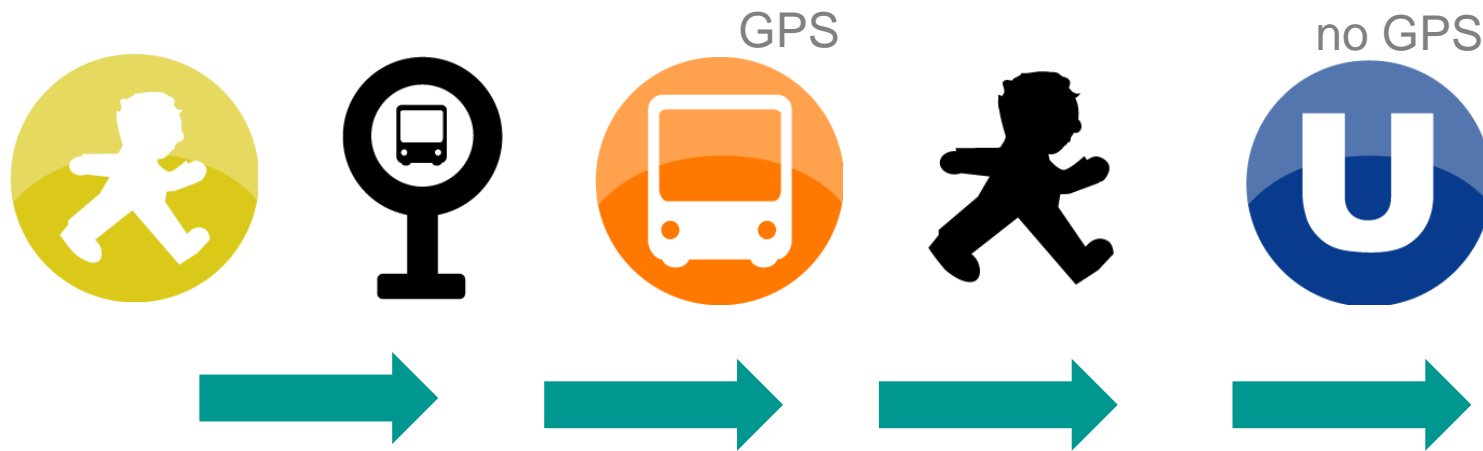


Push Notification Service App – Alarm

- Hopefully: Nothing happens – silence
- Alarm in case of problems
- Information on current state and alternatives



Navigation system for public transport



Navigation

- to public transport
- within public transport vehicles with GPS
- within public transport buildings
- within public transport vehicles without GPS

Navigation – from my train or bus to my destination

- Computation of real-time alternative
- Information on interchange status
- My bus or train as a start
- Take context of user into account

Details Alternatives

From Hannover Hbf To Saarbrücken Hbf

Date Today, Wed, 7 November 2012

State from Wednesday, 7 November 2012, 19:24

Position in ICE 671 between Kassel-Wilhelmshöhe and Frankfurt(Main)Hbf

Arr.	Dur.	Changes
17:41	22:19 +1	4:38 - 1

ICE 671 EC 216

Alternative connections

17:41	23:16 +0	5:35 + 1
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ICE 671 ICE 1594

Earlier Later

Connections

Favorites Trip Planner Vicinity Timetable DB Tickets

Alternatives Details

Date Today, Wed, 7 November 2012 Duration 5:35

17:41 Platf. 4 Hannover Hbf

ICE 671

20:00 +20 Platf. 6 Frankfurt(Main) Hbf

20:54 +0 Platf. 8

Connecting service will probably be reached.

ICE 1594

23:16 +0 Platf. 5 Saarbrücken Hbf

Save to calendar

Bordrestaurant

Favorites Trip Planner Vicinity Timetable DB Tickets

Trip Planner

From ICE 671 To Saarbrücken Hbf

Traveler Profile 1 adult 2nd class

Query according to current traffic situation. OFF

Search

No warranty for accuracy of information.

2.2.7.2

Favorites Trip Planner Vicinity Timetable DB Tickets

Trip Planner Routes

From ICE 671 To Saarbrücken Hbf

Date Today, Wed, 7 November 2012

State from Wednesday, 7 November 2012, 19:43

Position in ICE 671 between Kassel-Wilhelmshöhe and Frankfurt(Main)Hbf

Arr.	Dur.	Changes
23:11 +0	7:24 +	1

ICE 671 RE 3316

Stay in ICE 671 Saarbrücken Hbf

Earlier Later

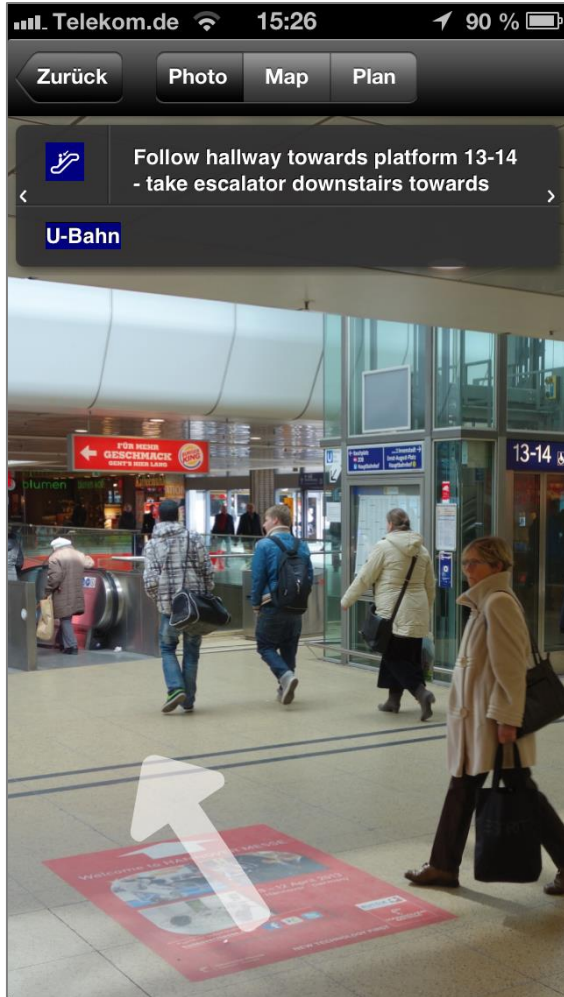
Connections

Direct connection / all connections should be reached in time. Please note any possible delays for direct connections.

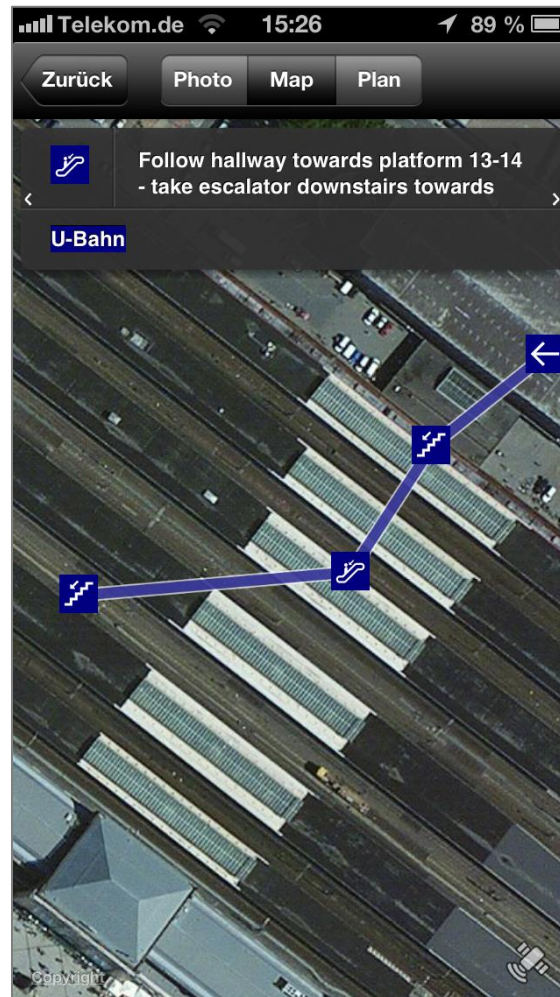
Favorites Trip Planner Vicinity Timetable DB Tickets

Navigation and guidance – indoor – Hannover Hbf

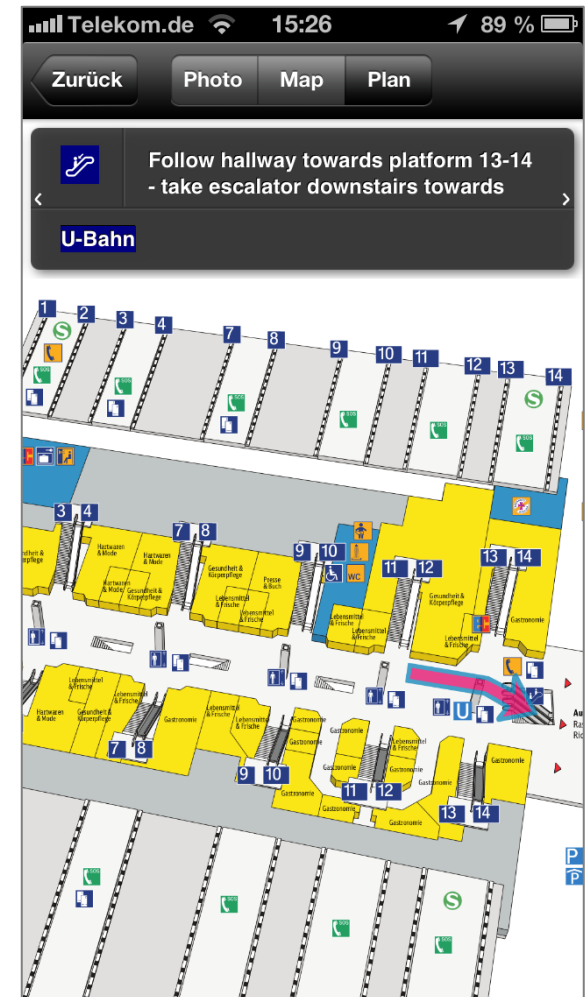
Photo



Map

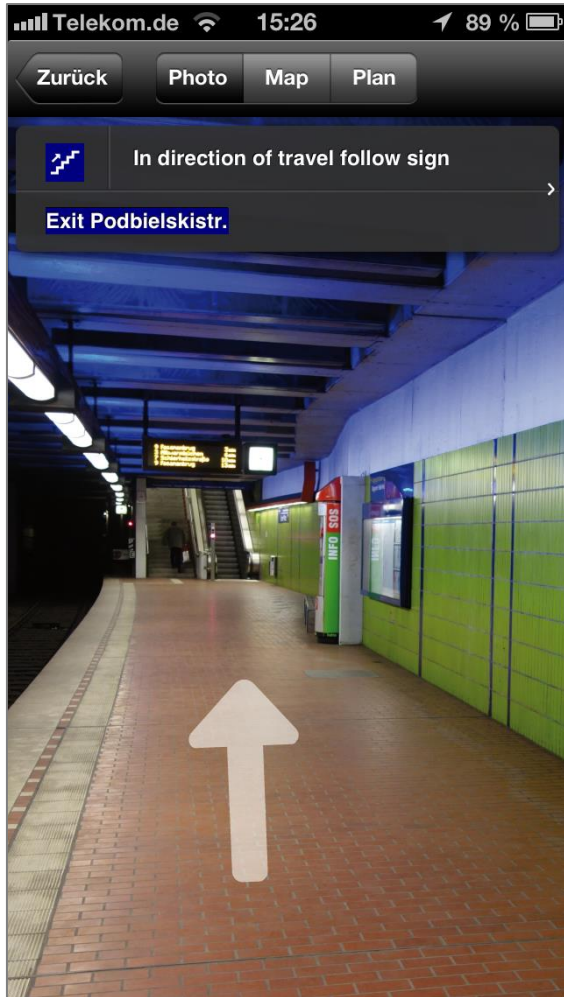


Plan

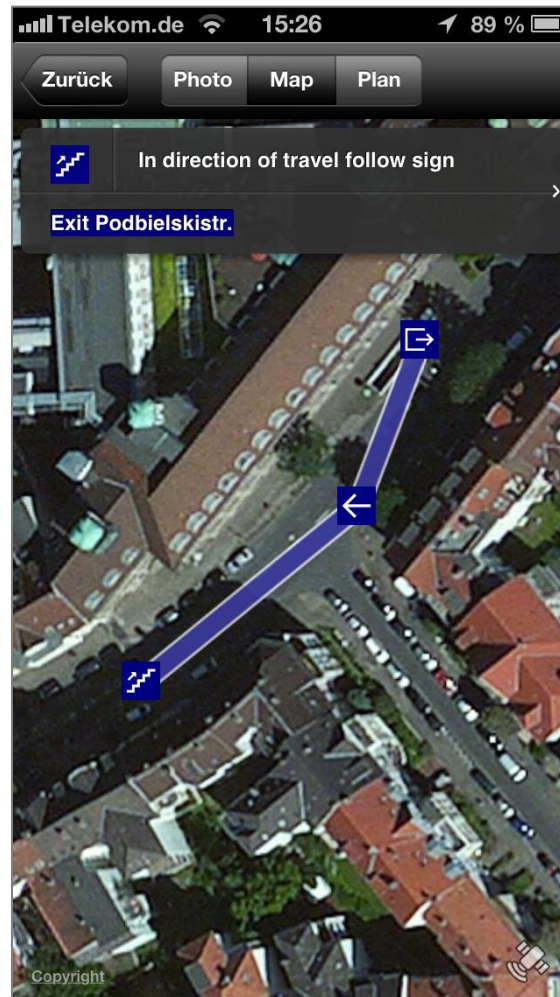


Navigation and guidance – indoor – Lister Platz

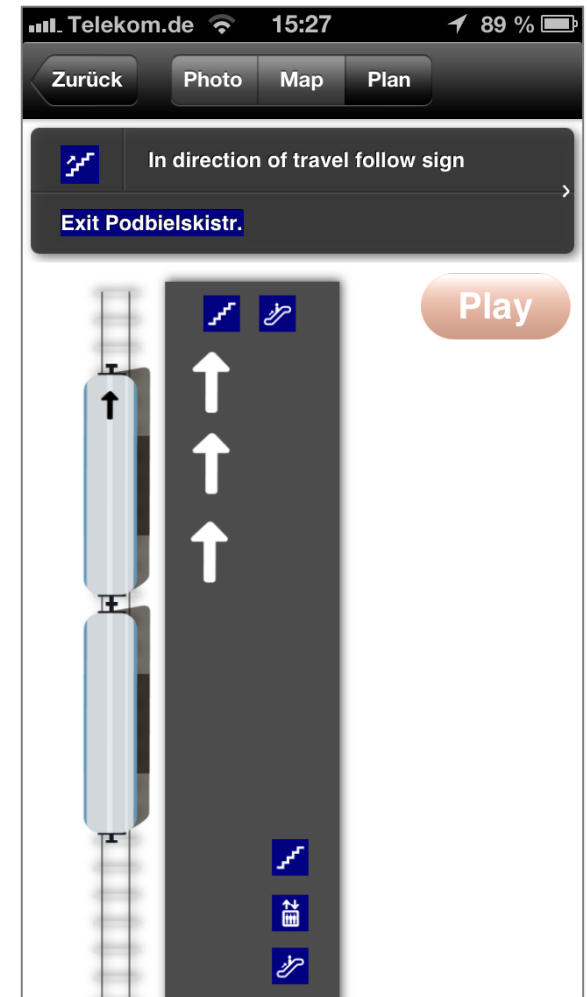
Photo



Map




Plan



Different routes






➤ Normal request - no limitation

Hofheim am Taunus Bahnhof
Frankfurt (Main) Galluswarte 24.09.09 ab 08:10
an 08:36 0:32 1        375 m, 9 Min.

➤ Wheelchair with helping person

Hofheim am Taunus Bahnhof
Frankfurt (Main) Galluswarte 24.09.09 ab 08:10
an 08:41 0:36 1      387 m, 7 Min.

➤ Wheelchair

Hofheim am Taunus Bahnhof
Frankfurt (Main) Messe 24.09.09 ab 08:10
an 08:38 0:50 1      1480 m, 26 Min.

Västtrafik – barrierfree

	Avresa	Prel. avr.	Ankomst	Prel. ank.	Restid	Byte	Linje	Information	Pris
	17:17	17:22	17:23	17:24	0h 6min	0	6	Turen är ca 1-5 minuter se	PRIS
	17:19		17:25		0h 6min	0	13	Fordonet saknar Hållplats	PRIS

Resväg Karta Tillgänglighet Pris

Resväg Information

17:19 Wavrinskys Plats, Läge C

Spårvagn 13 mot Brämregården via Skånegatan Fordonet saknar Hållplatsutrop i högtalare och Rullstolsplats.

17:25 Korsvägen, Läge E

SMS E-post Bevaka resa Skriv ut Skicka till kalender

	17:28		17:34		0h 6min	0	13	Fordonet saknar Hållplats	PRIS
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Mobility is changing

➤ Many alternative mobility concepts....let's combine

German Mobility Patterns

Changes in the mobility patterns of young people (16 – 28)

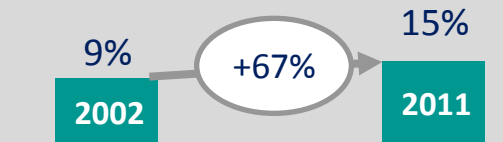


Source: InnoZ/infas 2012

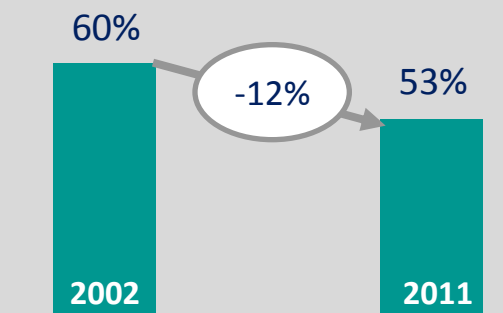
Modal Split PT (trips)



Modal Split Bike (trips)

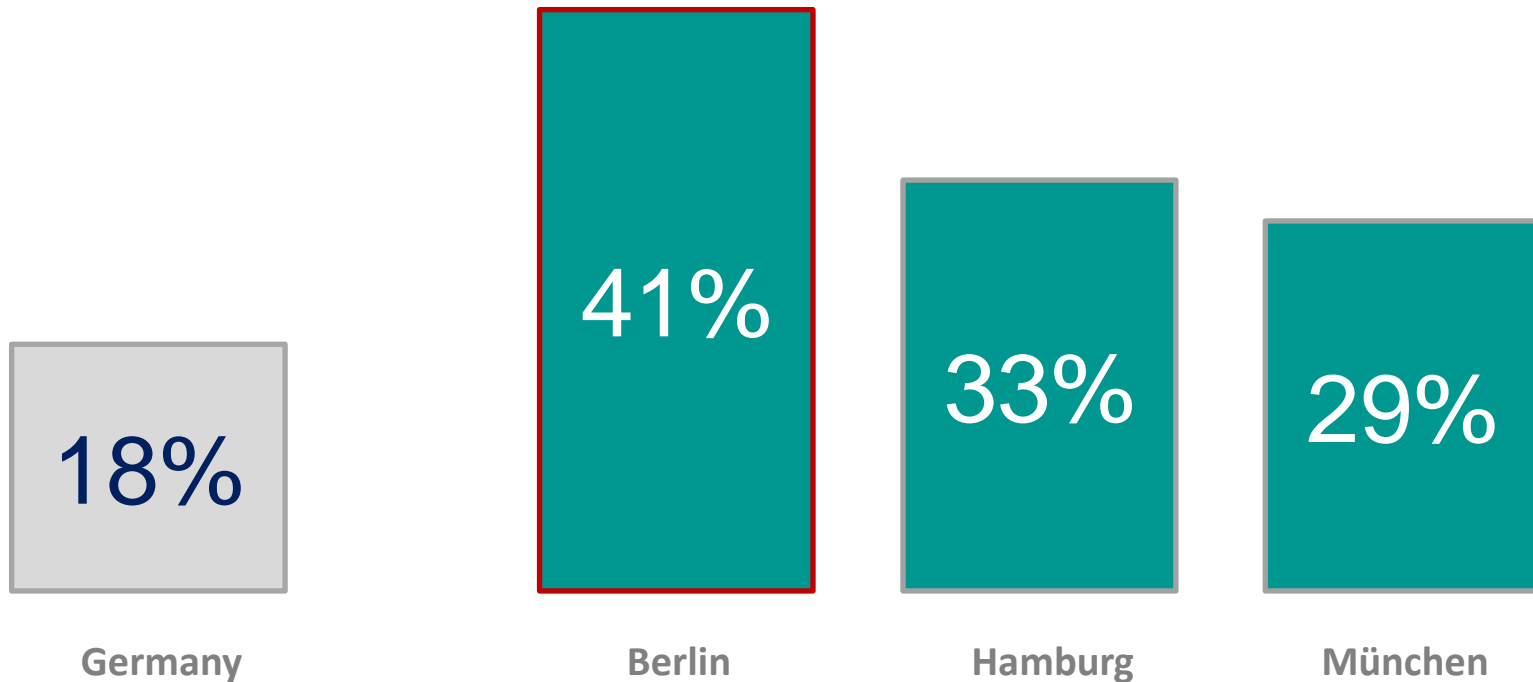


Modal Split MIT (trips)



Multimodal Patterns in Big Cities

Car-free households:



Source: InnoZ/infas 2012

Comodal journey planning – example Stockholm

Journey Planner Stockholm County- Trafiken.nu - Mozilla Firefox

http://reseplanerare.trafiken.nu/bin/query.exe/en?

TRAFIKEN.NU Stockholm

Startsida Reseplanerare Smart resande Om Trafiken.nu

Byt region

From (Address, station or location)
Herdevägen (Stockholm)

To (Address, station or location)
Älvsjö (Stockholm)

Plan commute Friday 11:00 - 12:00

Options Search

sooner

Possible connections Friday 03.06.11 11:00 - 12:00

Public transport

Duration	Cost	CO ₂
every 30 min.	0:32	690 kr/month 0 kg/month
11:26 - 11:29	Bus 112 at Herdevägen. Get off in Spånga station.	
11:35 - 11:58	commuter train 35 at Spånga towards Västerhaninge. Get off in Älvsjö.	

Bicycle and public transport

Duration	Cost	CO ₂
every 15 min.	0:30	690 kr/month 0 kg/month
6 min	Cycle from Herdevägen (Stockholm) to Spånga.	
11:20 - 11:43	commuter train 35 at Spånga towards Västerhaninge. Get off in Älvsjö.	

Car and public transport

Duration	Cost	CO ₂
every 20 - 40 min.	0:35	2795 kr/month 143 kg/month
11:05 - 11:25	Drive from Herdevägen (Stockholm) to Telefonplan infarts P. Allow about 20 min. to get there.	
3 min	Walk from Telefonplan infarts P to Telefonplan.	
11:29 - 11:40	Bus 142 at Telefonplan. Get off in Älvsjö station.	

Car

Duration	Cost	CO ₂
11:00 - 11:28	0:28	2679 kr/month 172 kg/month

1 11:00 0 km Herdevägen (Stockholm) (1 min.) (1,0 km)

2 11:01 1,0 km turn right onto Ulvsundavägen/ 279 (7 min.) (5,7 km)

3 11:03 6,7 km take second exit on Drottningholmsvägen/ 275 (2 min.) (2,3 km)

4 11:12 9,0 km right turn to Essingeledden/ E20/ E4 (3 min.) (3,7 km)

5 11:15 12 km at the end of motorway Essingeledden/ Södertäljevägen/ Nybodavägen/ Västberga Allé/ Årstabergetsvägen (155) keep right on Södertäljevägen/ E20/ E4 (2 min.) (2,8 km)

6 11:17 15 km turn right from Södertäljevägen/ E20/ E4, continue ahead onto

Visible on map

- Stations
- Bus stops
- Park + Ride
- Stockholm City Bikes
- Bike roads
- Ferry Stops
- Sport Center

Bevaka | About Trafiken.nu | Hjälp | Kontakta oss |

Et samarbete mellan: TRAFIKVERKET

Comodal journey planning – example Stockholm

plan trip for a specific time

From (Address, station or location)
Herdevägen (Stockholm)

To (Address, station or location) [Add via](#)
Älvsjö (Stockholm)

Leave at earliest

[Options](#)

Hint: Drag and drop the icons on the map

From **Via** **To**

sooner	Possible connections Monday 06.06.11 08:00			later
Public transport	Duration	Cost	CO₂	
+ 08:26 - 08:58	0:32	23 kr	0 kg	
Bicycle and public transport	Duration	Cost	CO₂	
+ 08:28 - 08:58	0:30	23 kr	0 kg	
Car and public transport	Duration	Cost	CO₂	
+ 08:11 - 08:43	0:32	70 kr	3,4 kg	
+ 08:32 - 09:05	0:33	70 kr	3,4 kg	
+ 08:41 - 09:14	0:33	70 kr	3,4 kg	
Car	Duration	Cost	CO₂	
+ 08:00 - 08:37	0:37	64 kr	4,1 kg	
Bicycle	Duration	Cost	CO₂	
+ 08:00 - 09:00	1:00	0 kr	0 kg	
Walk	No connection found.			

- Comparison by different transport modes
- Comparison by mixture of transport modes
- Evaluate and compare
 - Frequency
 - Duration
 - Cost
 - CO₂

Comodal journey planning – example Stockholm

plan trip for a specific time

From (Address, station or location)

To (Address, station or location) [Add via](#)

Leave at earliest

[Options](#)

Hint: Drag and drop the icons on the map

From Via To

<u>sooner</u>				<u>later</u>
Possible connections Monday 06.06.11 08:00				
	Public transport	Duration	Cost	CO ₂
+	08:26 - 08:58	0:32	23 kr	0 kg
	Bicycle and public transport	Duration	Cost	CO ₂
+	08:28 - 08:58	0:30	23 kr	0 kg
	Car and public transport	Duration	Cost	CO ₂
+	08:11 - 08:43	0:32	70 kr	3,4 kg
+	08:32 - 09:05	0:33	70 kr	3,4 kg
+	08:41 - 09:14	0:33	70 kr	3,4 kg
	Car	Duration	Cost	CO ₂
+	08:00 - 08:37	0:37	64 kr	4,1 kg
	Bicycle	Duration	Cost	CO ₂
+	08:00 - 09:00	1:00	0 kr	0 kg
	Walk	No connection found.		

plan trip for a commuter

From (Address, station or location)

To (Address, station or location) [Add via](#)

Plan commute

[Options](#)

Hint: Drag and drop the icons on the map

From Via To

<u>sooner</u>				<u>later</u>
Possible connections Monday 06.06.11 08:00 - 09:00				
	Public transport	Duration	Cost	CO ₂
+	every 30 min.	0:32	690 kr/month	0 kg/month
	Bicycle and public transport	Duration	Cost	CO ₂
+	every 30 min.	0:30	690 kr/month	0 kg/month
	Car and public transport	Duration	Cost	CO ₂
+	every 30 min.	0:32	2705 kr/month	143 kg/month
+	every 30 min.	0:33	2705 kr/month	143 kg/month
	Car	Duration	Cost	CO ₂
+	08:00 - 08:37	0:37	2679 kr/month	172 kg/month
	Bicycle	Duration	Cost	CO ₂
+	08:00 - 09:00	1:00	0 kr/month	0 kg/month
	Walk	No connection found.		

Comodal journey planning – example Stockholm

plan trip for a specific time

From (Address, station or location)

To (Address, station or location) [Add via](#)

Leave at earliest

[Options](#)

Hint: Drag and drop the icons on the map

From Via To

sooner				later
Possible connections Monday 06.06.11 08:00				
	Public transport	Duration	Cost	CO ₂
+	08:26 - 08:58	0:32	23 kr	0 kg
	Bicycle and public transport	Duration	Cost	CO ₂
+	08:28 - 08:58	0:30	23 kr	0 kg
	Car and public transport	Duration	Cost	CO ₂
+	08:11 - 08:43	0:32	70 kr	3,4 kg
+	08:32 - 09:05	0:33	70 kr	3,4 kg
+	08:41 - 09:14	0:33	70 kr	3,4 kg
	Car	Duration	Cost	CO ₂
+	08:00 - 08:37	0:37	64 kr	4,1 kg
	Bicycle	Duration	Cost	CO ₂
+	08:00 - 09:00	1:00	0 kr	0 kg
	Walk No connection found.			

plan trip for a commuter

From (Address, station or location)

To (Address, station or location) [Add via](#)

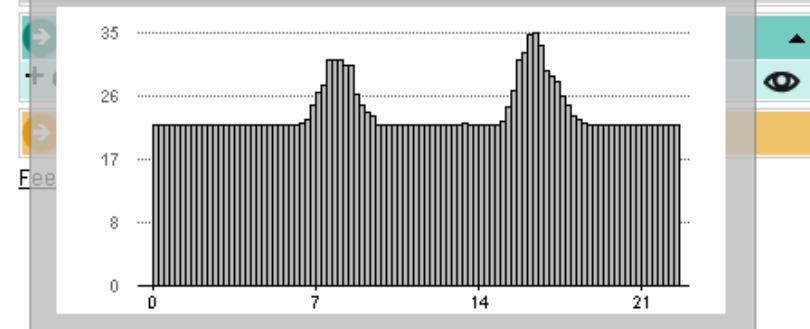
Plan commute

[Options](#)

Hint: Drag and drop the icons on the map

From Via To

sooner				later
Possible connections Monday 06.06.11 08:00 - 09:00				
	Public transport	Duration	Cost	CO ₂
+	every 30 min.	0:32	690 kr/month	0 kg/month
	Bicycle and public transport	Duration	Cost	CO ₂
+	every 30 min.	0:30	690 kr/month	0 kg/month
	Car and public transport	Duration	Cost	CO ₂
+	every 30 min.	0:32	2705 kr/month	143 kg/month
+	every 30 min.	0:33	2705 kr/month	143 kg/month
	Car	Duration	Cost	CO ₂
+	Car Travel Times	0:37	2679 kr/month	172 kg/month



Comparison public transport, flight, car (bahn.de)



Clever ans Ziel!

Vergleichen Sie Bahn, Flug und PKW.

[-> Jetzt vergleichen!](#)



DB BAHN - DB Verkehrsträger-Vergleich - Mozilla Firefox

http://labs.bahn.de/bin/vtv/query.exe/dn?application=VTV

DB BAHN Kontakt | Hilfe | Sitemap a a+ a++ Frage oder Suchbegriff eingeben ... Suchen

Startseite | Angebotsberatung | **Fahrplan & Buchung** | Services | BahnCard | Urlaub **Meine Bahn**

Vergleich Bahn-Flug-PKW [-> Wie vergleichen wir?](#)

Hinfahrt Hannover - List, Lister Straße 15 Fr, 13.05.11 Abfahrt ab 15:02 Beste Verbindung bevorzugen
München, Hofbräuhaus München (Gastronomie)
Rückfahrt München, Hofbräuhaus München (Gastronomie) Do, 19.05.11 Abfahrt ab 12:00
Hannover - List, Lister Straße 15 [-> neue Suche](#) [-> Suche ändern](#)

Vergleich [-> Voreinstellungen für Bahn, Flug, PKW ändern](#) [Beste Option](#)

	Gesamtpreis	Reisezeit	Nutzbare Zeit	Umweltbelastung (CO ₂)	
Bahn	208,00 EUR	Hin: 4:52 h Rück: 4:50 h	Hin: 83 % Rück: 83 %	46,4 kg	Verbindung & Buchung
Flug	375,56 EUR	Hin: 4:43 h Rück: 4:43 h	Hin: 31 % Rück: 28 %	163,8 kg	Verbindung & Buchung
PKW	581,15 EUR	Hin: 5:51 h Rück: 5:48 h	Hin: 0 % Rück: 0 %	207,5 kg	Routenplan

Alle Angaben ohne Gewähr. [Ihr Feedback](#) [f](#) [t](#) Weiterempfehlen

[Seite drucken](#) [Zum Seitenanfang](#)

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Comodal door to door planning



Beta

Start Auswahl Hinfahrt Details & Buchung

Folge Qixxit auf:

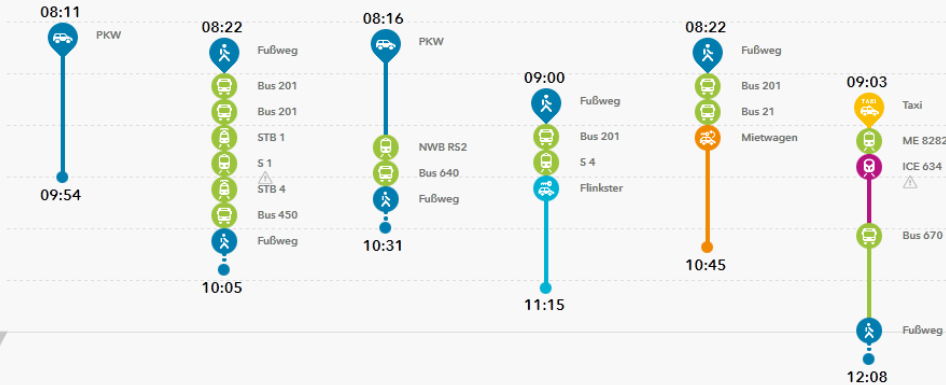


« Zurück

Empfehlung ?

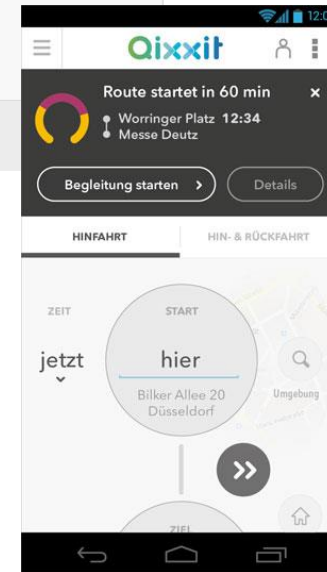
Schnell Günstig Mein Qixxit

Abfahrt: Jetzt
Sarstedt, Bettina-von-Arnim-Straße 24
Worpswede



ca. 54,21 € 1h 43	k.A. 1h 43	46,32 €+ 2h 15	29,81 €+ 2h 15	126,85 €+ 2h 23	44,30 €+ 3h 05
----------------------	---------------	-------------------	-------------------	--------------------	-------------------

Verbindungen werden gesucht



Comparison at SNCF: Mytripset

The screenshot shows the Mytripset website interface for a search from Hanover (Germany) to Paris (France) on 14/11/2012. The page displays various filters and search results.

Page Header: Mytripset - Itinéraire de Hanovre (Allemagne) à Paris (75, France) le 14/11/2012 - Mozilla Firefox

Search Bar: Mytripset - Itinéraire de Hanovre (Allem... | mytripset.voyages-sncf.com/?t=1352143882506#/result/outward/all/2910831/V/2988507/V/14-11-2012/o/AM/AM1/o/C/o/2/o/o/E/F/5

Filters:

- AFFINER VOS CRITÈRES**
- Filtrer par modes de transport:** Airplane, Train, Car icons. **Filtres avancés** button.
- Durée totale de l'aller:** Slider from min 05h24 to max 13h01.
- Prix aller (à partir de):** Slider from min 107€ to max 1088€.
- Nombre de changements:** - 2 +

Results Section:

- Trier par:** Prix (dropdown)
- SÉLECTIONNER UN ITINÉRAIRE ALLER**
- ALLER - le 14/11/2012** (Timeline: 0h to 22h)

TRAJET EN VOITURE

- Allez à partir de: **107€** TTC (81 (2))
- Durée estimée: **06h50**
- Changer cet aller
- Changeement(s) : 0 | CO₂ : 161 kg
- Timeline: 09h00 Hanovre to 15h50 Paris (75)
- Voir détails

DEPUIS HANNOVER HBF

- Allez à partir de: **130€** TTC (00 (1))
- Durée estimée: **07h16**
- Changer cet aller
- Changeement(s) : 1 | CO₂ : 9 kg | Voir conditions
- Timeline: 09h06 Hanovre to 16h22 Paris (75)
- Voir détails

DEPUIS HANNOVER HBF

- Allez à partir de: **140€** TTC (00 (1))
- Durée estimée: **08h43**
- Changer cet aller
- Changeement(s) : 1 | CO₂ : 11 kg | Voir conditions
- Timeline: 10h15 Hanovre to 18h58 Paris (75)
- Voir détails

DEPUIS HAMBURG

- Allez à partir de: **153€** TTC (50 (1))
- Durée estimée: **09h21**
- Changer cet aller
- Changeement(s) : 1 | CO₂ : 257 kg | Voir conditions
- Timeline: 03h26 Hanovre to 12h47 Paris (75)
- Voir détails

DEPUIS HANNOVER HBF

- Allez à partir de: [Price obscured]
- Durée estimée: [Duration obscured]
- Changer cet aller
- Changeement(s) : [Changes obscured] | CO₂ : [CO2 obscured]
- Timeline: [Timeline obscured]
- Voir détails

Footer: VOTRE AVIS AIDE

Comodal journey planning – example Austria

The screenshot displays the VA O website interface for route planning. The browser window shows the URL `demo.hafas.de/bin/pub/kgoevv/query.exe/en?ld=std&`. The page title is "Route - Verkehrsauskunft Österreich".

ROUTE RESULTS

FROM Bahnhof, Untertullnerbach
TO Donaumarina, Wien
DEPARTURE Mo, 05.11.2012, 20:50

Public transport

Time	Mode	Duration
20:56	Public transport	1h 0min
22:00	Public transport	1h 3min
22:31	Public transport	0h 55min
23:17	Public transport	1h 21min

Car [Calculate route](#)

Bike [Calculate route](#)

Foot [Calculate route](#)

Bike & Ride [Calculate route](#)

Bike Carriage [Calculate route](#)

Park & Ride [Calculate route](#)

Kiss & Ride [Calculate route](#)

Public transport details:

05.11.2012 22:00

R 2045 Regionalzug
Westbahnhof
dep 22:00 Untertullnerbach
arr 22:30 Westbahnhof

Transfer | 5min

U-Bahn U3
Simmering
dep 22:41 Westbahnhof
arr 22:45 Volkstheater

Transfer | 2min

U-Bahn U2
Aspernstraße
dep 22:49 Volkstheater
arr 23:03 Donaumarina

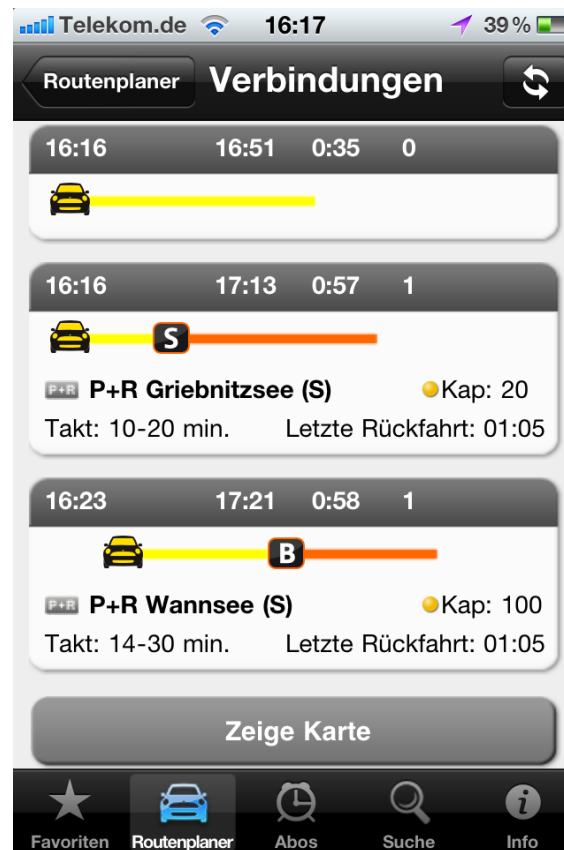
Donaumarina
arr 23:03

The map on the right shows the route in Vienna, starting from the Westbahnhof area and ending at Donaumarina. It highlights the R 2045 Regionalzug, U-Bahn U3, and U-Bahn U2 segments. A small inset map shows the location of Vienna within Austria.

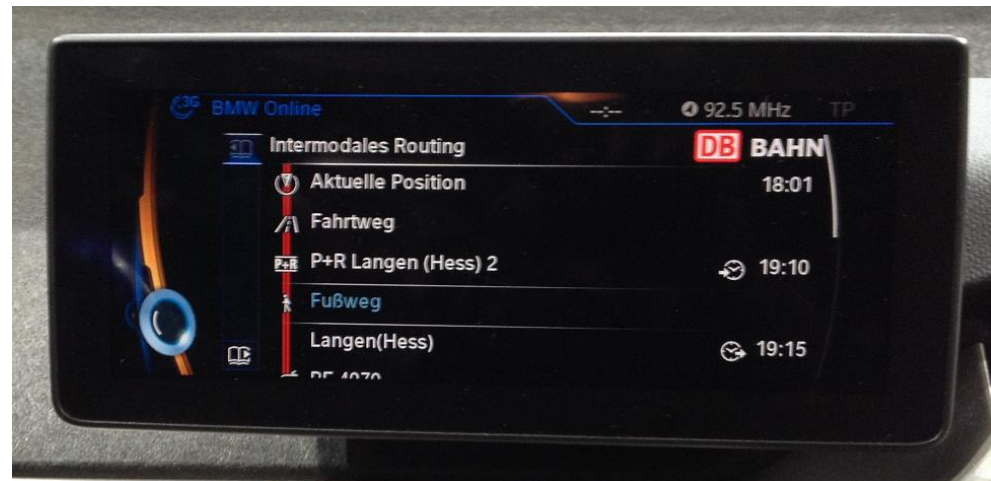
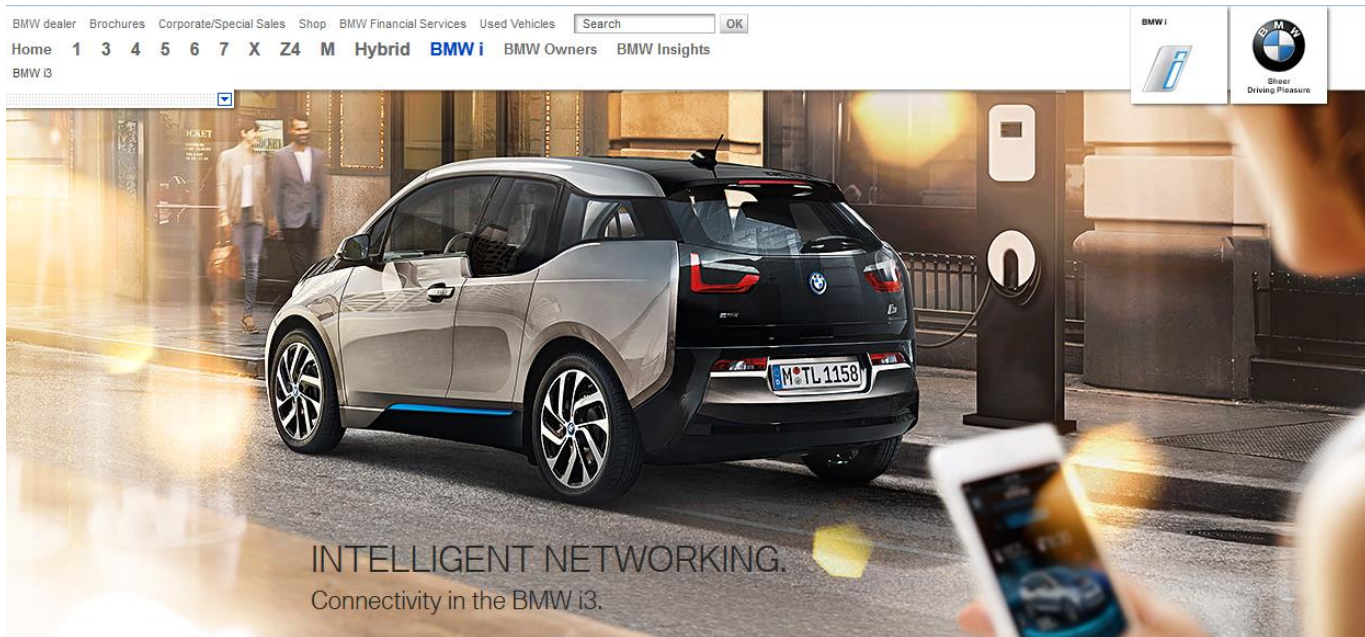
Version: HAFAS 5.32 STANDARD 4.7 | GUI: 4.0.19

Integrated mobility: Park & Ride

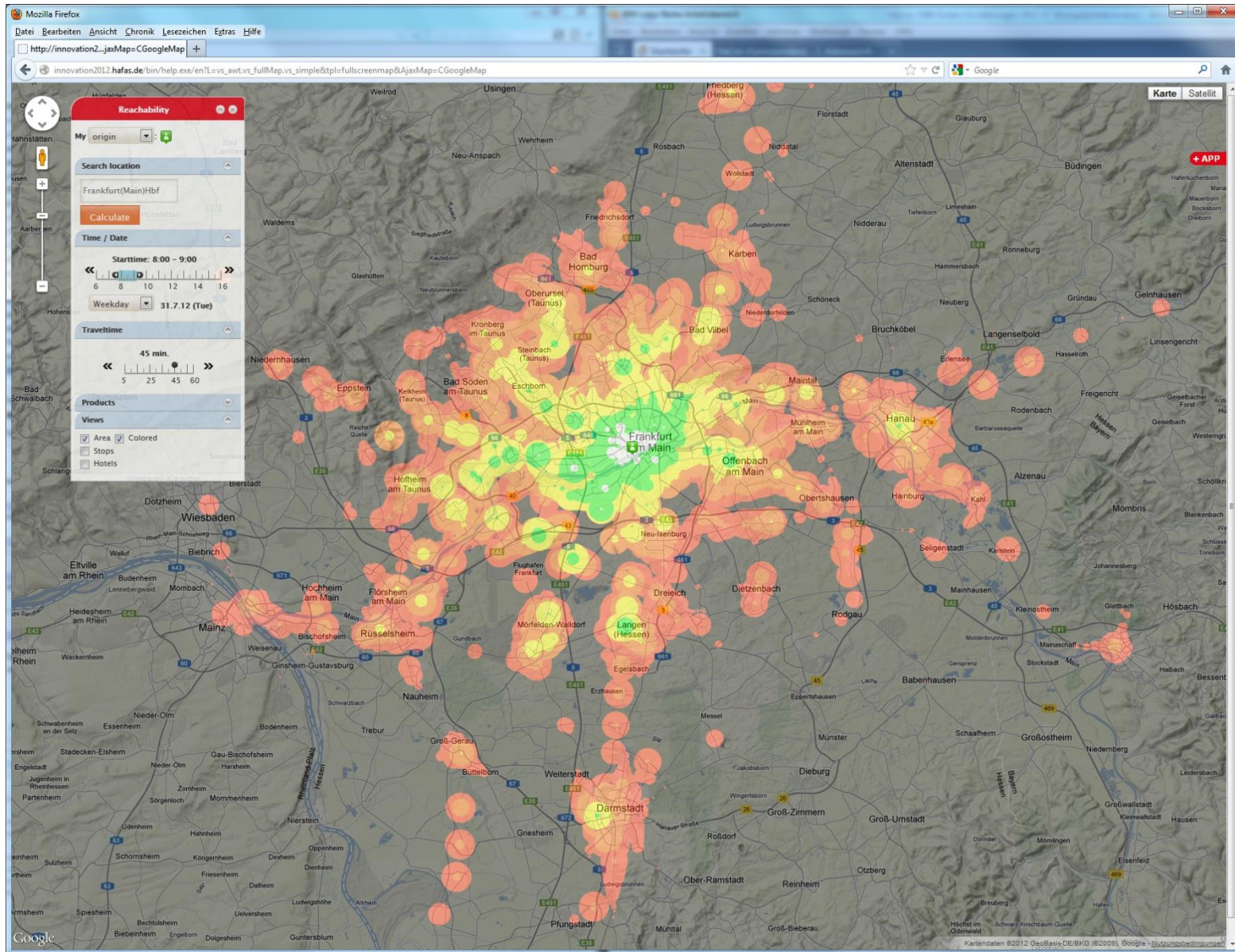
- Comparison of different modes
- Mixture of different modes
- Connection to car



Example BMW i3



Heat Map Frankfurt Hbf, 45 minutes



Hotel search and public transport proximity

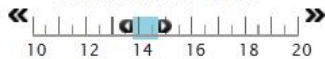
Hotelfinder

Search location

Hannover Congress Centrum

Time / Date

Starttime: 14:00 - 14:30

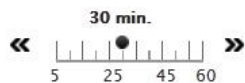


Weekday

16.4.13 (Tue) 15 4 2013

Traveltime

Choose the maximum duration:

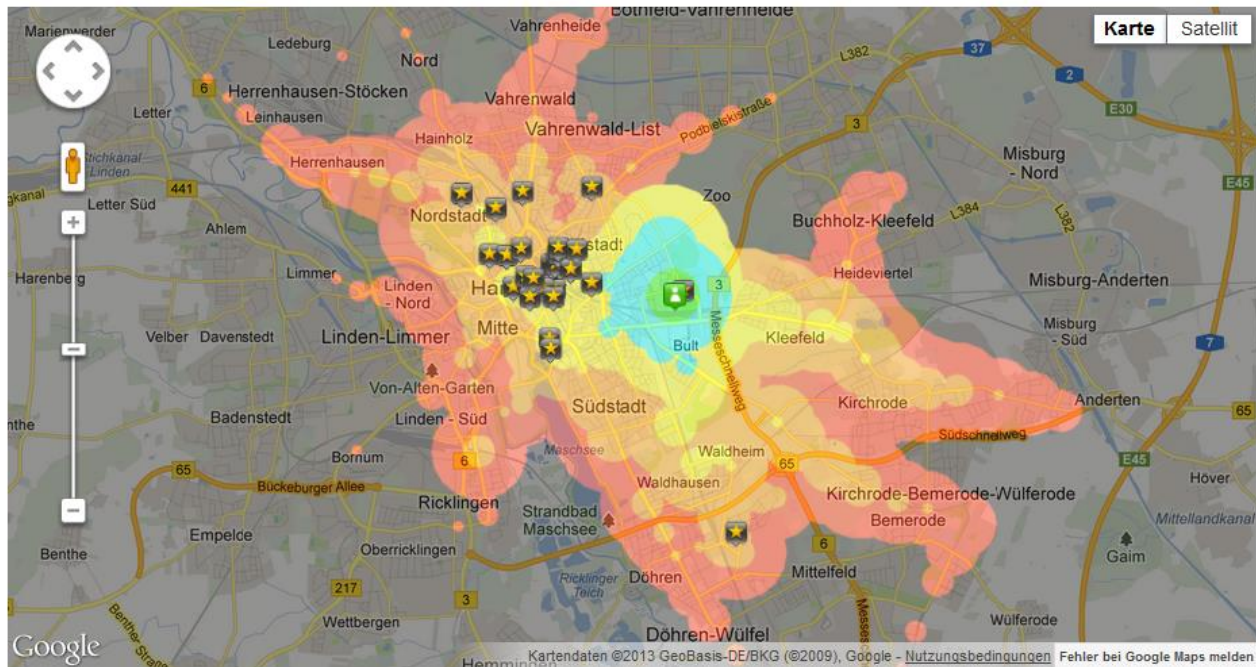


Products



maximum changes: 2

Calculate



Toggle map

Sort

...more than 5 minutes



Congress Hotel am Stadtpark, Hannover
Details

★★★★★
7.8 / 10

in 7 min. 60.0 EUR

Hannover
Clausewitzstr. 6

...more than 10 minutes



City Panorama, Hannover
Details

★★★★★
8.3 / 10

in 15 min. 45.0 EUR

Hannover
Münzstr. 5



Central-Hotel Kaiserhof, Hannover
Details

★★★★★
7.5 / 10

in 16 min. 79.0 EUR

Hannover
Ernst-August-Platz 4

Comodal journey planning today

- New complex travel chains
- What are feasible connections?

- More and more people don't own a car anymore
- Car sharing and flexible rental car systems solve the last mile problem of public transport

- Even more advanced support during the journey needed
- Additional data is required
- Journeys using different transportation systems rely even more on good realtime data

Thank you for your
kind attention!



Stephan Sünderkamp

Head of Development

HaCon Ingenieurgesellschaft mbH
Lister Str. 15
30163 Hannover
Germany

Phone: +49 511 3 36 99-0
Fax: +49 511 3 36 99-99
info@hacon.de
www.hacon.de