# 3.4 GERMANY

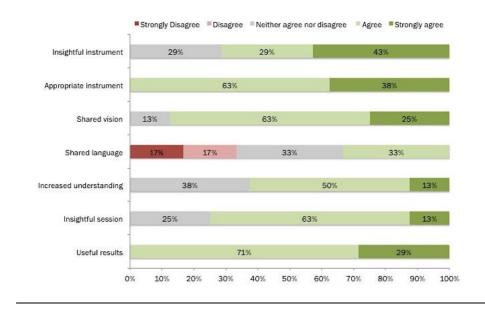
# EMM ACCESSIBILITY ATLAS FOR INCREASING HOUSING DEMAND

Benjamin Büttner, Chenyi JI and Gebhard Wulfhorst

Technische Universität München, Fachgebiet für Siedlungsstruktur und Verkehrsplanung. Arcisstraße 21, 80333 München, GERMANY

email: benjamin.buettner@tum.de

Participants' profile	# Participants: 8
Male   Female <30   31–45   46–60 Transport planner   Urban planner   Urban & Transport planner   Regional planner   Geographer Public organisation	6   2 2   1   5 3   1   1   2   1 8
Views about the session and the instrument	



#### **EMM Accessibility Atlas**

This multimodal GIS instrument offers a wide range of thematic analyses on different scales within the Munich Metropolitan Region. Hence, the EMM Accessibility Atlas is capable of analysing the accessibility to public transportation stops by network-based isochrones of non-motorised modes of transport on a district level as well as calculating gravity-based accessibility indicators, e.g. number of potential customers (inhabitants) within private car range of a regional shopping centre.

New structural and network data can easily be included and modified; thus, multiple planning issues of varying spatial dimensions can be tackled with the help of this instrument.

Good and transparent visualisation provides a proper platform for interdisciplinary discussion. The maps produced by the EMM Accessibility Atlas are included in regional policy and strategy papers as well as in reports about mobility costs, climate protection and spatial development. An online web tool contains the basic functions and data, which is publicly accessible and free of charge. Individual calculations regarding public transportation and car accessibility can be performed within the Munich Metropolitan Region.

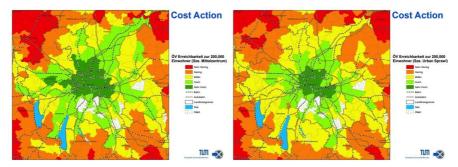


Figure 3.8: Typical EMM maps

## Setting the scene

The Munich Metropolitan Region is known for its active and open exchange of ideas concerning transport and land use planning within different initiatives and forums. Correspondingly, an interdisciplinary group has been chosen to participate in the workshop. Eight practitioners working in the fields of transport planning, land use planning, regional planning, public transportation as well as governance gathered to talk about the increasing housing demand and its consequences within the Munich Metropolitan Region.

They had varied knowledge and experience with using accessibility indicators. Most of them were already familiar with the EMM Accessibility Atlas, and some were even in charge of the Munich transport model. On the other hand, others did not have any experience with accessibility indicators. Hence, it was important to explain the accessibility indicators and the analysis used, so that everyone could to participate in the discussion.

# Describing the workshop

#### Step 1

The planning problem was discussed and defined in a meeting in October, three months before the second workshop. The practitioners were asked to name regional planning issues that could be analysed by the EMM Accessibility Atlas. A wide range of different problems and topics on different scales were debated. However, after a fruitful discussion, the growing housing demand turned out to be the most significant issue in the Munich Metropolitan Region. Through a brief presentation of the previous work done with the accessibility instrument, the practitioners got familiarised with the accessibility indicators used and which ones would be needed for their specific planning problem.

#### Step 2

Due to the split of step 1 and steps 2 & 3 into two meetings, the maps concerning the planning problem could be produced beforehand. In the course of the second meeting the maps of the current accessibility situation regarding housing were briefly presented to the practitioners. Through a discussion the attendees developed a collective understanding of the instrument as well as of the data and accessibility indicators.



Figure 3.9: Participants at the Munich workshop

#### Step 3

With the aid of the maps of the current status that were distributed, the practitioners discussed several options for allocating the needed housing supply among municipalities and locations within the region. The impacts of the suggested allocations were also examined during the exchange of ideas.



Figure 3.10: Participant using EMM map to clarify a point

# Step 4

The prepared maps that contained three different scenarios in line with the suggested interventions were presented to the experts in the room. A lively discussion on the consequences took place. By taking into account the impacts on accessibility shown in the intervention maps, strategies concerning proper allocation were debated and written down on a flipchart.

## Lessons on usability

The needs of the stakeholders in the room need to be carefully considered. The progress and speed of the workshop also depends on the profession and the land use and transport knowledge of each attendee. For the success of the workshop, it is crucial to explain the instrument or map in detail, so every stakeholder is fully aware of the data used and type of analyses. The objective is to give everyone the same level of information, so that the stakeholders will feel comfortable sharing their viewpoints. If the discussion gets stuck, strong moderation skills are needed to facilitate an exchange of opinions.

During the workshop it became clear that the EMM Accessibility Atlas is a very good instrument to visualise transport and land use development as well as

highlight the impact of structural changes and policies. Furthermore, the instrument turned out to be a suitable basis for facilitating discussions between experts and decision-makers from different disciplines. It was observed that the accessibility maps inspired planners to develop strategies for the future of land use and transport. However, the selected accessibility tool should be easily understandable for all participants, so that not too much time is spent on explaining the examples. It became clear that the number of maps and examples prepared in advance for the workshop was too high. Once the tool is being used, the complexity has to be reduced. One interactive map on public transport accessibility to jobs would have been enough.

It turned out that a dynamic accessibility instrument would be very helpful and handy to scan and evaluate the intervention strategies and policies that have been developed during the workshop. Preparing analysis and maps for the suggested intervention strategies takes some time and needs to be based on assumptions, because unforeseen suggestions cannot be modelled during the workshop itself.