# 3.8

**NETHERLANDS** 

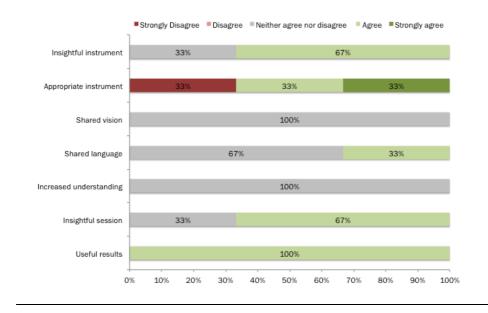
# JOINT ACCESSIBILITY DESIGN FOR STRATEGIC URBAN DEVELOPMENT PLAN 'BREDA 2030'

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Participants' profile	# Participants: 3
Male	3
46-60	3
Transport planner   Urban planner	1   2
Public organisation	3
-	
Views about the session and the instrument	



#### Joint Accessibility Design

The Joint Accessibility Design framework consists of a methodology that uses accessibility mapping to enhance coherent decision-making between urban and mobility planning. Accessibility maps depict the accessibility of specific locations within a city or region, considering one or more specific modes of transportation, time of day and target group. In order to create the right maps, the framework uses four steps to guide planners in the process:

#### 1. Translating social goals into accessibility criteria

First, the social issues to be addressed by policymakers are translated into accessibility criteria, by asking stakeholders to give a clear view on what kind of accessibility measure is important for their discipline. These include mode of transport, travel times, type of services or target groups which should be reached and times of day.

#### 2. Assessing current quality of accessibility

The second step is the analysis of the maps of the current situation. We ask the participants what insights the maps show them. Also, we ask the participants whether the current situations or future likely situations (based on trend projections) fit with their specific policy goals.

#### 3. Designing strategies and identifying strategic choices

The next step is to develop strategies to improve the situation in order to meet the policymakers' goals. The strategies include both spatial and infrastructural interventions, which are translated into accessibility maps, producing outputs along the same criteria as the maps from step 2.

## 4. Evaluate interventions on predefined goals

In a last step we evaluate the effects and further improve the strategies.

Some interesting benefits of using accessibility maps as a concept to design integrated transport and land use strategies are

- Accessibility strengthens the knowledge about the geographical distribution
  of opportunities and how these are influenced by interventions in the
  transport and land use system. It increases awareness about the
  development potential of locations and how well different activity patterns
  can be served in a particular location.
- Accessibility can lead to different transport and land use strategies, as opposed to planning processes which only do mobility impact analyses.
- Accessibility makes it easier to relate transport policies to wider societal goals. It is important to have a multidimensional perspective since

accessibility can differ quite a lot depending of the mode of transport or type of opportunities considered.

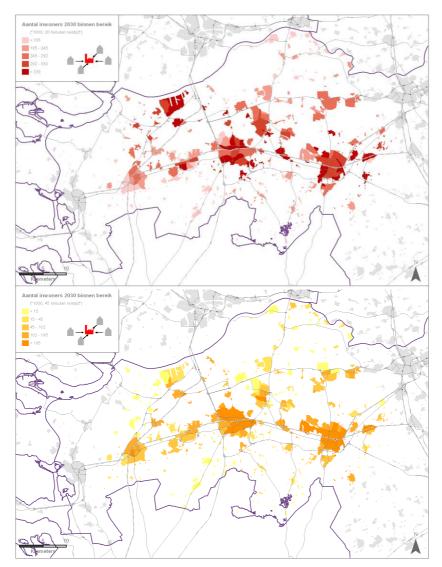


Figure 3.19: Accessibility maps used for the Strategic Urban Development Plan 'Breda 2030'

The upper map shows the number of inhabitants within 30 minutes travel time by car in peak hours towards a specific zone. The darker colours indicate that more inhabitants can reach that place within 30 minutes. Areas near highways are generally more accessible, rural areas less. Within cities, the centres are generally less accessible due to car regulations and low speed limits. The outer areas near highways have a better accessibility. The map shows both the effect

of urban density and policy regulations that discourage inner city car accessibility. The lower map shows the public transport accessibility within 45 minutes of travel time. Urban areas have better PT accessibility as can be seen. Here the 'borrowed size' effect is clearly seen: dense areas profit from each other's density through better train infrastructure.

# Setting the scene

We had two workshops in the Municipality of Breda, one pilot workshop (July 2012) and a second workshop (April 2013). The participants of both workshops included policymakers from the Municipality of Breda from several backgrounds, such as urban planning, transportation planning, economic development, architecture and public transport. These participants had been informed about accessibility planning in the pilot workshop. The participants were selected not only according to their background but also based on their eagerness to learn from new insights, the so-called early adopters.

The pilot workshop coincided with the start of the Strategic Urban Development Plan 'Breda 2030'. The information deriving from the pilot workshop, therefore, could be used—and indeed was used—in making decisions on urban redevelopment. For example, Breda chose to develop the northern part of the train station area, consisting of a multimodal corridor. The maps showed this part was the most accessible (in terms of spatial accessibility).

The timing of the second workshop was not as good as the participants were busy with final preparations of the spatial plan. Also, many spatial decisions had already been made, thus usability was lower, even though the participants stated that the workshop was useful in subsequent policymaking.

# Describing the workshop

# Step 1

As we did not receive all pre-workshop surveys for the second workshop (due to the lack of time), we started the workshop with a quick round on defining the planning issues (*step 0*). We used the 'Why-How-What' model by Simon Sinek; in order to guide the participants in this phase, three questions were asked:

- Why is accessibility important for your work?
- How does this need follow the priorities of the City of Breda, specifically in your field of expertise?
- What question would you like to have answered in this workshop? In order to guide the participants, we asked them to choose one of the following viewpoints (provided by the Municipality as relevant policy issues in the new spatial plan) on the city for policy development:

- Breda-city for living;
- Breda-city for working;
- Breda-city for education;
- Breda-city for recreation.

After choosing a point of view, we asked the participants to further elaborate and explain their planning questions:

- Type of destinations (offices, inner city, educational areas, housing, etc.);
- Target groups (business, logistics, students, elderly, tourists, etc.);
- Travel time (20, 30, 45 minutes);
- Means of transport (car, cycling, public transport, walking, train, etc.).

We collected the individual answers and clustered these according to the corresponding themes: (1) urban diversification, which included differentiation in accessibility environments (multimodal/high access vs. slow mobility/low access); and (2) regional economic accessibility, which serves the economic sectors of Breda that are operating on a interregional geographical level.

A third planning question was defined before the workshop and focused on the regional accessibility of Breda by public transport after completing the (not yet planned) railway line between Breda and Utrecht. We pre-calculated the accessibility effects of this railway on regional accessibility (45 minutes travel time) for both the total population and the working population (aged 20–65).

# Step 2

We continued the workshop by collectively explaining the concept of accessibility mapping and showing a few pre-fixed maps on a screen. This 'collective learning' gave all participants an equal level of knowledge on both the concept ('What do I see on the screen?') and the content ('What does it mean for my city?'). Also, it gives the workshop moderator the opportunity to question intermediate conclusions made by participants.

#### Step 3

Regarding the planning question of the new interregional railway, we were able to prepare accessibility maps by pre-calculating the effects with transport models and GIS analysis. Therefore, we could show the participants the effects collectively and discuss the implications for their specific field of expertise. Then, we divided the group into two sub-groups (3 to 4 participants), each focusing on one of the two other planning question ('urban diversification' and 'regional economic accessibility'). We selected some pre-fixed maps (we had over 20 different maps made in advance), handed these out and asked the participants to share with us their conclusions (i.e. 'What do you see?') and policy recommendations for infrastructure, the economy or spatial planning

(i.e. 'What would you do?'). In order to guide the participants, we asked them again to choose one point of view from the four different views on the city (living, working, education and recreation). After 30 minutes we asked each group to shortly present their findings on the lessons learned.

#### Step 4

As we were not able to calculate any interventions between step 3 and 4, we were not able to evaluate these. Instead, we asked the participants which lessons they had learned, both in this workshop and the preceding pilot workshop, specifically focusing on content ('Does the planning instrument correspond to your planning information needs?') and process ('What should be improved regarding the workshop?').



Figure 3.20: Pilot workshop Breda (July 2012)



Figure 3.21: 2nd Workshop Breda (April 2013)

# Lessons on usability

Because we were able to hold two workshops, it is valuable to see if there were any differences between the two workshops. The following are the key lessons learned from both workshops:

### The timing within the 'policymaking phase' is important.

The maps shown during the pilot workshop were actually used in order to make choices for the new spatial policy in Breda. The information provided during the second workshop (April 2013) was less valuable as the spatial decisions already had been made.

# The planning question(s) should be carefully defined.

Having a clear goal on the planning questions and information needs of the participants improves the usability of the instrument. This might include specific accessibility criteria, focused on a specific group of users (economic, educational, etc.). But it should be kept simple. Each participant should be asked a basic (real-life) planning question that can be translated into criteria that the model can handle. In case of the logistical planning issue from the second workshop, it was hard to translate it into criteria useful for accessibility mapping.

#### Limit the number of steps within one workshop.

The development of intervention strategies consists of a creative thinking phase—which requires sufficient time. If there is not enough time for two workshops or a full-day workshop, choose between

- · Working out a planning question and criteria; or
- Analysis of maps and strategy-making.

## The timing of workshop is important.

The second workshop was planned on the same day when the participants were finalising the main urban policy document. This meant that they had very little time to prepare for the workshop (and fill in the surveys). It is essential to check the participants' schedules to avoid potential commitment conflicts.

#### Collectively analysing one or two maps enhances the process.

Before starting the strategy-making exercise, we looked at the maps as a group. This sped up the process of reaching collective understanding, both on the concept and the content of the accessibility maps. Participants tend to 'see what they want to see', which carries the risk of misinterpretation (or misuse) of the maps according to their own agendas.