

3.9

POLAND

GDATI FOR PLANNING IN KRAKOW

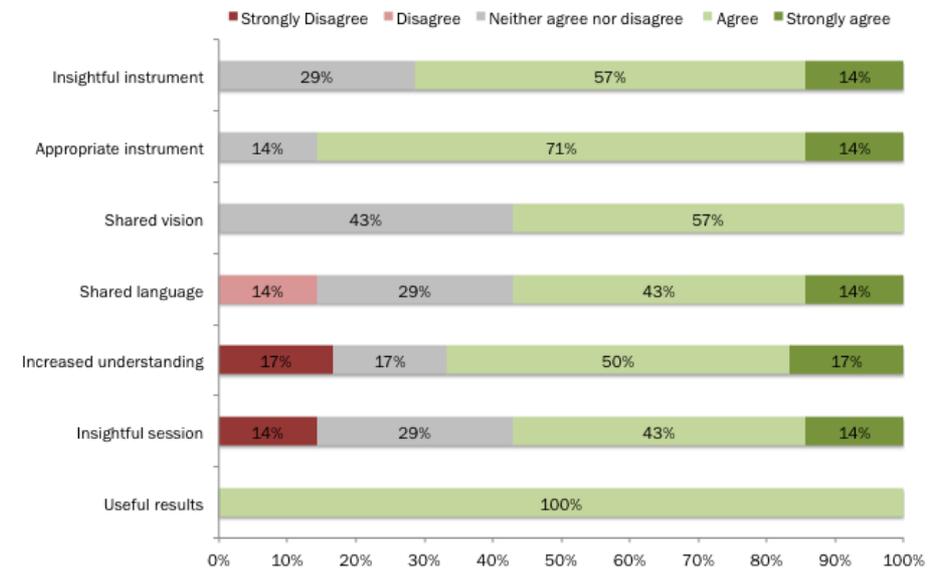
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Participants' profile	# Participants: 7
Male	7
31-45 >60	5 2
Transport planner Housing developer Manager	5 1 1
Public organisation Private organisation	4 3

Views about the session and the instrument



GDATI

The Geographic/Demographic Accessibility of Transport Infrastructure GDATI instrument assesses the public transport system in relation to its features (such as number of stops, length of routes), and to the area where it operates and the number of inhabitants that should be served by this system. The accessibility measure was assessed based on the previously recorded demographic and geographic indicators of settings and public transport operation factors. In this case the accessibility of public transport systems, it is defined as a density measure, and it relates the number of stops or length of public transport routes to the area or number of inhabitants. The division of urban areas of a town into smaller sub-areas that are gathered around the elements of public transport infrastructure allows it to provide a comparison of the levels of accessibility to public transport infrastructure for different locations. In this way the GDATI instrument can point out sub-areas of low accessibility and those that are attractive in terms of accessibility.

The utility of the accessibility measure (as a density measure) has been expanded by including data that describe the levels of public transport service, such as frequency, number of bus or tram lines, etc.

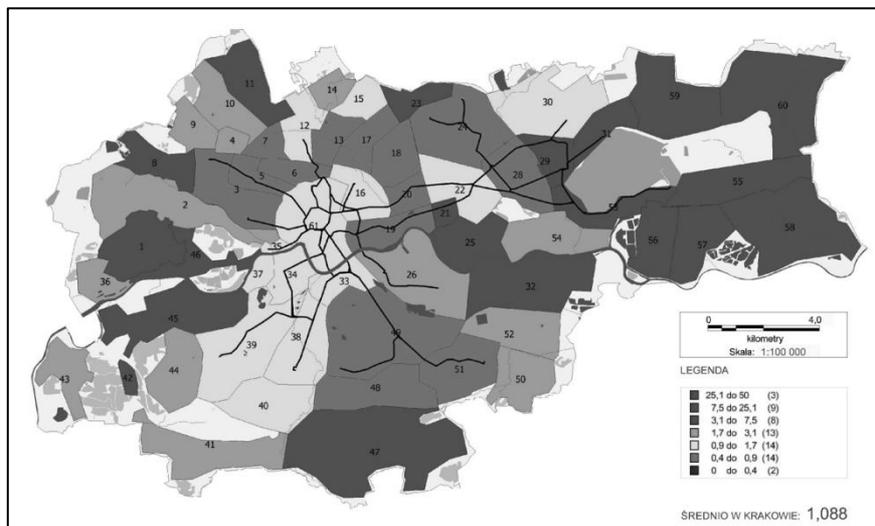


Figure 3.22: GDATI density of PT stops

The evaluation of existing public transport systems in urban areas and sub-areas provides the assessment of conditions and level of service at the given moment. In relation to planning practice, this includes not only the foreseeable investment in public transport infrastructure or current offer but also the

developments in land uses. In the areas where weak geographical and demographical accessibility is detected, policy measures should be enhanced in order to increase the level of accessibility (more PT routes, more PT stops, better PT service offer). In the areas where good accessibility is identified, the planned investments and land development may be introduced, without fearing a decrease in overall accessibility to public transport.

The GDATI instrument is based on data that describe, on the one hand, settings such as area and population, and, on the other hand, public transport infrastructure and operation details. The planned investments in land use, population changes or public transport development can be inputted in the model, thus arriving at the new level of PT accessibility.

Setting the scene

Seven practitioners were invited to the workshop. Three were representatives of the different departments of the Municipality of Krakow responsible for public transport affairs. Two were managers of housing developers companies. There was also one representative from the municipal transport operator and the manager of a private company that cooperates with the Municipality on various projects connected with the planning and designing of transport systems. The following transport and planning professionals took part in the workshop:

- Stanislaw Albricht (Laboratory for Planning and Designing of Transport Systems – ALTRANS) from a private company that cooperates with the Municipality in various projects connected with the planning and designing of transport systems and their elements;
- Kazimierz Goras (Biuro Planowania Przestrzennego, the Planning Office of the City of Krakow) from the body responsible for land use planning, strategic planning of roads and public transport;
- Adrian Obuchowicz (MPK S.A. w Krakowie) from the local public transport operator;
- Lukasz Szewczyk (Biuro Infrastruktury, the Office for Infrastructure of the City of Krakow) from the body responsible for the strategic planning of roads, public transport, infrastructure and non-motorised transport;
- Grzegorz Sapon (ZIKIT, Management of Infrastructure and Transport in Krakow) from the body responsible for the planning of transport services, organising public transport system and traffic management;
- Mariusz Bryksy (Bryksy Group) manager of the private housing developer;
- Marcin Zemanek (Convector Development) manager of the private housing developer.

Only the representatives from the housing developer companies use measures related to accessibility in their daily work. They commission analyses of pedestrian travel time to the nearest PT stop from the location of a planned housing estate. The other workshop participants do not use any accessibility measures. Their daily routines is concentrated primarily on mobility measures as well as the level of PT service and such quality features like punctuality, frequency and comfort.



Figure 3.23: Setting of Krakow workshop

Describing the workshop

Step 1

Approximately five weeks before the start of the workshop the first telephone contacts were made. Each end user was introduced to the main goals of the workshop and was asked for final confirmation of their attendance. Also they were asked for the preferred time and place of the first face-to-face meeting, when the planning questions they are interested in would be selected. Before the first face-to-face meeting the pre-workshop survey questionnaire was sent by email. Three weeks before the date of the local workshop the first physical meetings were carried out. The end users were informed about the workshop, its aims and tasks, and they had the opportunity to describe the daily/usual problems they face in their work and would like to address. All end users agreed that an accessibility instrument would be useful in their work but, up to now, they have not used any instruments to support their professional activities and their knowledge of accessibility. Also, the pre-workshop surveys were collected from all end users.

Step 2

The local workshop was held on 14 May 2013 in the City Council Hall of Krakow. The moderator of the local workshop, Prof. Wieslaw Starowicz (a MC member), greeted all participants and introduced the WU team, giving a short presentation on the COST Action and in particular on COST TU1002. He explained the idea of accessibility and emphasised the concept of the GDATI instrument, focusing on how this instrument can be used to assess PT accessibility. For the purpose of the local workshop, the area of the city of Krakow within its administrative borders was divided into 60 regions. Then, the geographical and demographical measures used in the GDATI instrument were evaluated for each of regions and visualised on GIS maps. The sets of maps and tables containing the GDATI measures were distributed among all participants. They took some time to familiarise themselves with the maps and tables, and to evaluate whether these maps and tables were understandable and provided new insight on accessibility and the sensitivity of the instrument.

Step 3

Taking into account the possibilities of the GDATI instrument, the participants were asked to formulate interventions that it could assist. Their proposals were written down on small yellow sticky notes. All sticky notes were collected, stuck on the board and divided into themes. Based on these thematic groups, two interventions were selected. The first intervention proposal was to connect the new tram route to the region of low accessibility (upgrading life quality through better accessibility to public transport). The second one was to support the decision on the new location of a housing estate (activation of new areas).

Step 4

The evaluation of the proposed interventions and strategies developed was processed right after step 3. The assisting materials (maps and data) were prepared before, as a result of the first face-to-face meetings. The participants pointed out the possible locations where additional accessibility knowledge could be useful. The proposed interventions in public transport development were placed in the area where the housing estate could be erected.

Conclusions

The participants were satisfied with the performance of the GDATI instrument and with the workshops. The GDATI instrument outputs were seen as relevant for the interventions and helpful in the development of strategies. The researchers were satisfied with the process of workshop and with the discussion and knowledge exchange among the participants. The end user

remarks provided added value for the further development of the GDATI instrument. A final observation is the unequal level of activity among participants during the discussion. It is important to engage the participants and facilitate a dynamic discussion and exchange of opinions.



Figure 3.24: Krakow participants with maps

Lessons on usability

The researchers have collected some ideas on which other data and factors should be used to strengthen the possibility of describing and assessing the public transport service level in terms of GDATI measures.

Because the GDATI instrument is interactive, it allowed for responsive adjustments according to changes proposed by the end users. However, there are many additional operational details that should be explored and integrated in the model, in order to improve the way it responds to changes.

The most important lesson to improving usability of our GDATI instrument is to include not only the number of services on each public transport line but also the capacity of vehicles carrying transport passengers on each line.

The final lesson refers to the need to connect accessibility to employees or work places in each region (not only to number of inhabitants). In the end, the workshop participants felt that it is necessary to work out one complex accessibility measure that would allow defining and assessing accessibility in every region in one common value.