Workshops for Municipalities #2

How to use transport and survey data to test active and sustainable mobility solutions?

Note

The second edition of the Workshops for Municipalities organized by the CoMobility team took place on 15 September 2022.

The workshop was organized in an online format via the ZOOM communication platform. There were 41 participants, mostly representing the municipalities sector. In addition, the workshop was also attended by people professionally involved in urban mobility.

The second edition of the workshop focused on topics related to the possibility of collecting data and then using it in the context of urban policy-making. As part of the workshop, the CoMobility team also presented ways in which machine learning methods could be used in the context of research into transport behavior and choices, drawing on their own experience of the project. New to this edition was an expert debate among representatives of municipalities focusing on opportunities and barriers to building modern sustainable mobility in the Polish reality.

Agenda:

1. 9:30-9:45 – Welcome.
2. 9:45-10:00 – About the project activities – Anna Nicińska PhD.
3. 10:05-10:35 – Workshop: Quantitative research in urban mobility policy making – Jakub Zawieska PhD, Katarzyna Archanowicz-Kudelska PhD.
4. 10:35-11:05 – Workshop: Machine learning in modelling transport choices – Maciej Grzenda, PhD.
5. 11:15-12:10 – Expert panel: "Opportunities and barriers to building sustainable mobility - the experience of Polish municipalities".
6. 12:15-13:00 – A Scandinavian perspective on sustainable mobility: lessons from Oslo – Tobias Wolf

The workshop started with a speech by Anna Nicińska PhD, project coordinator, who briefly introduced all event participants to the current status of activities and the degree of their implementation in the CoMobility project. This was extremely important, as the subject matter of each workshop is closely linked to the project, making it possible, on the one hand, to have an

evaluation by external parties and, on the other, to exchange knowledge between the consortium and participants based on experience.

The first part of the workshop opened with a lecture by Jakub Zawieska PhD and Katarzyna Archanowicz-Kudelska PhD entitled "Quantitative research in the creation of urban mobility policy". The presentation reviewed the essential methods of sociological research in both qualitative and quantitative terms. Jakub Zawieska PhD presented ways of measuring travel preferences among city residents on the basis of transport surveys carried out as part of the CoMobility project – so-called travel diaries. This method makes it possible to describe individual daily journeys from A to B in great detail, providing extremely valuable information for highlighting key factors influencing transport choices. This part of the workshop was complemented by a presentation by Katarzyna Archanowicz-Kudelska PhD, who addressed the topic of social research from a sociological and psychological perspective. Katarzyna Archanowicz-Kudelska PhD drew attention to the key aspects in constructing survey questionnaires so as to best explore the aspect of urban mobility and obtain unique and usable data.

The second part of the workshop concerned the use of machine learning techniques in building transport models. The talk was given by Maciej Grzenda PhD, from the Warsaw University of Technology, in which he introduced the participants to the issue of machine learning from both the theoretical and practical side. This presentation discussed in detail how transport models based on machine learning can be used and their degree of effectiveness. Based on the example of a travel preference model for Warsaw residents developed by a team from the Warsaw University of Technology, Maciej Grzenda PhD, presented the process of building such a model, starting from the basics in the form of selecting appropriate data sets, the appropriate development of the model's IT architecture and software, and finishing with the process of "training the algorithms" of the model itself. In his presentation, Maciej Grzenda PhD, pointed out that the use of machine learning tools makes it possible to carry out much deeper and more accurate analyses of urban mobility than the traditional method of relying solely on static data. In addition, he emphasized that the preference model developed as part of the CoMobility project can be successfully implemented in any other city due to the use of open source solutions.

A new element that emerged in the second edition of the Workshops for Municipalities was a panel in the form of a thematic debate among those representing the local government sector. The discussion entitled. "Opportunities and barriers to building sustainable mobility – the experience of Polish municipalities", the following experts were invited to the discussion:

- Ewa Macała – Wrocław City Office (Active Mobility Team).
- Tomasz Zwoliński – Cracow City Office (Department of Municipal Economy and Climate).
- Agnieszka Krzyżak-Pitura – "Parent in the City" Foundation.
- Dariusz Salwa – Public Transport Authority of Kielce.

The panel began by discussing the barriers Polish cities currently face in relation to building sustainable mobility. The most frequently mentioned answer by experts concerned issues related to insufficient financial resources for the implementation of investments. However, cities are increasingly aware of the problem related to the low level of knowledge among citizens about sustainable mobility or the poor level of incentives for changing transport attitudes towards active mobility. An important contribution to the discussion was made by Agnieszka Krzyżak-Pitura, who believes that a barrier to building sustainable transport systems is the lack of courageous and unpopular decisions on the part of cities, e.g. on restricting parking zones and increasing priority for public transport.

The next stage of the discussion concerned ways of building cooperation for sustainable mobility between local authorities – NGOs – commercial companies. Representatives from the local government sector unanimously agreed that such space exists through joint promotional and educational activities. The most important thing is to go beyond standard, somewhat outdated schemes and to look for innovative forms of cooperation, e.g. by making use of technological solutions or models developed in Western Europe. The experts also emphasized the importance and relevance of building cooperation in a non-exclusive and comprehensive manner.

Another question concerned the role that NGOs and local authorities see for themselves in the process of educating the public about sustainable mobility. In the course of the discussion, the representatives of local authorities stated that, in this respect, there is a need to intensify educational activities in schools, to develop cyclical rather than point-based information campaigns, workshops and related activities. The experts stated that education for sustainable mobility should be a process that takes place in cooperation with NGOs and business (although they stressed that cities are not always willing to do this). Agnieszka Krzyżak-Pitura said that activities aimed at educating children are not as important as those aimed at adults, because children's transport habits are shaped by their parents, who at the same time decide how their children get around.

The final element of the debate was for participants to present concrete measures implemented or being implemented to build a sustainable urban mobility system. For example, the City of Kielce

is working intensively on the implementation of intelligent transport systems (ITS) and urban cycling. Wrocław and Kraków, on the other hand, strongly develop educational activities, in particular related to the promotion of cycling transport through projects such as "W kółko kręcę" (Wrocław) or "Stars" (Kraków) projects. The "Parent in the City" Foundation is actively working on the preparation of a handbook connected with the "New School Street" project, which is to help local groups to implement such initiatives.

The final element of this edition of the Local Government Workshop was a presentation by Tobias Wolf, representing Oslo City Council, on air pollution monitoring and mitigation. Oslo is struggling with air pollution directly related to weather conditions and the energy system. As part of the presentation, Tobias Wolf presented the air quality monitoring system implemented by the Oslo authority, which allows for real-time measurements and a two-day prediction of air conditions. The presentation was complemented by a presentation of the Oslo authorities' climate mitigation measures, such as the introduction of car entry charges in the city centre, electrification of transport and designation of car-free zones.

We would like to express our sincere thanks to all those who took part in the second edition of the local government workshop and cordially invite you to the next installments of this initiative.

CoMobility Team

CoMobility benefits from a €2.05 million grant from Iceland, Liechtenstein and Norway under EEA Grants. The aim of the project is to provide a suite of tools and methods for co-creating sustainable mobility in urban spaces.