UMAM Course of Project 2020

EIT Urban Mobility - Mobility for more liveable urban spaces

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1. Executive Summary

UMAM, the Urban Mobility Assessment Model, was envisioned by EIT Urban Mobility for the yearly assessment of its City Club cities and has been jointly developed by University College London, BABLE, CTAG, CARNET and EIT Urban Mobility Factory within the KAVA 20008 "Analyse City Club cities with UMAM". It is a tool which can be used to analyse the mobility performance of cities and to subsequently develop a framework to scale up solutions and blueprints. It is an easy-to-use indicator system which can help to steer urban mobility activities as a complement to SUMI, SUMPs and SULPs. UMAM further investigates the potential for development of new mobility services within the city and what the most appropriate actions to improve sustainable mobility may be. The project started with the development and refinement of UMAM and the UMAM tool which is used to collect data, before proceeding to conduct the analysis in order to test the tool and provide valuable insights and recommendations to the cities.

UMAM was developed on the basis of two indicator tools developed by the partners within the project, namely the MMI (UCL) and Morgenstadt Index (BABLE/Fraunhofer). These two tools were first dissected to determine the most important characteristics and the methodology behind the analysis of cities' mobility performance. Next, city officials were consulted in a series of workshops to determine whether the indicators were those that cities found the most important and additional priorities were found. Through this collaborative and iterative process between literature review, expert analysis and stakeholder workshops, a thorough index was developed which can effectively assess a city's mobility system. This process resulted in a tool which can be split into six dimensions: 1) policy & innovation, 2) transport supply, 3) transport demand, 4) data governance, 5) environmental aspects, and 6) social aspects. Across these six dimensions, 33 individual indicators are used to provide a complete score for each category and consequently the city's mobility system as a whole. For each indicator, a benchmark scoring system was developed on the basis of best practices and expected performance. Combined with an expert-led weighting system identifying which indices may be more important to cities, this resulted in the provision of a final score for each city on a scale of 1-5. Following an initial trial of the tool and scoring system with the City of Amsterdam, as well as quality feedback from EIT Urban Mobility Factory consultants, minor revisions were made to improve and clarify elements within UMAM.

The EIT Urban Mobility City Club invited representatives of the City Club to a webinar, organised by the EIT Urban Mobility Factory, to launch the process of the Baseline

Assessment 2020, introducing UMAM and the data collection procedure supported by the Partners and the Factory.

Once the full scores for each indicator were calculated an overall score for the city was determined, to show the overall performance of the cities' urban mobility systems. Detailed analysis of the data and scores calculated by UMAM was then combined with further reading and investigation of the city by the project partners (UCL, BABLE, CARNET, CTAG) to produce detailed roadmaps for the cities. These roadmaps included an analysis of the strengths and weaknesses that arose within the UMAM assessment and provided concrete actions to overcome them. Using the Avoid-Shift-Improve[1] methodology, these actions were classified according to their complexity, time requirement and which indicators in particular they address. UMAM thus enables a regular assessment and feedback loop for cities with the potential to identify and understand the key improvements within a city's mobility system.

Moreover, a session introducing the UMAM to a wider audience was jointly organised and held by the Factory and its Partners at the EIT Urban Mobility Summit in December 2020 (>500 attendees).

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[1]https://www.transformative-mobility.org/assets/publications/ASI_TUMI_SUTP_iNUA_No-9_April-2019.pdf

2. City Baseline reports

Within the project in BP2020, UMAM conducted the analysis of 14 cities, for which there are full datasets, scoring reports and roadmaps. The cities that were analysed input their data using the online tool (https://www.bable-smartcities.eu/bable/my-bable/app/umam.html). This data was then analysed using UMAM and then roadmap reports were written on the basis of these. The individual roadmap reports are attached as separate documents which were then distributed to all of the cities. The list of cities which were analysed is included below:

1. Barcelona
2. Barcelona Metropolitan Area
3. Amsterdam
4. Eindhoven
5. Hamburg
6. Helmond
7. Helsinki
8. Milan
9. Stockholm
10. Warsaw
11. Istanbul
12. Stuttgart
13. San Cugat
14. Rubi