

## Walking in Mobility as a Service (MaaS): Exploring the Appraisal of Walking in MaaS in the Paris Region

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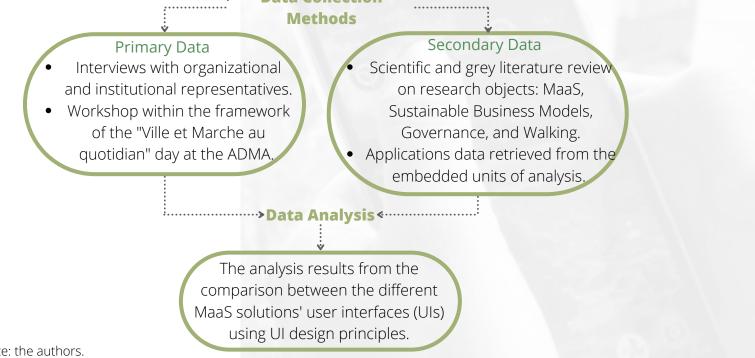
# Walking in Mobility as a Service (MaaS): Exploring the Appraisal of Walking in MaaS in the Paris Region

### Laura Mariana Reyes Madrigal, Ph.D. Candidate Chaire Anthropolis, IRT SystemX - Projet Human Centered Mobility (HCM); Laboratoire de Génie Industriel, CentraleSupélec-Université Paris-Saclay Isabelle Nicolaï Virginie Boutueil LGI, CentraleSupélec - Université Paris - Saclay LVMT, ENPC-Université Gustave Eiffel C. RESEARCH METHODOLOGY **Case Study-based Empirical-Inductive Qualitative Research** The Role of Active Modes in Sustainable Mobility **Objective: Transitions Comparative Case study** Comparative of the integration status of walking into MaaS available in Île de France. • Active modes require human energy like "walking, cycling, skating, skiing, and Data Collection • Potential to connect the last mile of journeys and help reach public health Selection of: Primary Data • Case Focus: Status of information provided for Interviews with organizational • Potential of bringing economic, environmental, and health benefits to the walking itineraries and institutional representatives Case Study Design •·· mobility ecosystem by enabling access to more city features and services (Fig.2). • Study Terrain: Paris Capital Region Workshop within the framework • Embedded units of analysis: MaaS solutions (Fig. X) of the "Ville et Marche au quotidian" day at the ADMA. Choices for the Test-Case Itinerary search (Point A-B) in the core city of Paris. Searched itineraries on the same hours (scheduled Future urban Last mile issues for itineraries at 18h) for comparison purposes. mobility all types of users Screenshots of the proposed itineraries. challenges • Identification of the trip's features per MaaS application. Figure 6. Research design. Source: the authors. **13** CLIMATE ACTION **17** PARTNERSHIPS FOR THE GOALS **D. CASE STUDY General functionalities** $\mathfrak{B}$ Basic functionalities Bonjour Navigation map Citymapp 43, Rue <u>Beaubourg</u>, 75003, Par Google Maps ltinerary search field A 39, Rue Saint-Fargeau, 75020, Par Figure 2. Relevance of the topic and expected SDGs to be improved through the improvement of walking in Maas Leave earlier Leave Source: UN, 2015. Saved trips Go to main screen Account parameters Specific functionalities Special alerts Search by mode Nearby commerce Constanting Tax Static PT data Itineraries Trip options Dynamic PT data Departure Gambetta - Paris 20e Arrondis uv PT tickets Arrival 39 Rue Saint-Fargeau - Paris (750 **IDFM App** Google Maps **Bonjour RATP** VTC, taxis, free-floating and school transport Citymappe Released in October 2020 $\Xi \phi$ • Released in June 2021 Released in 2005 • Released in 2011 in London, 2015 Departure Now ecurity contac + 10 000 M downloads (Google + 5 M downloads (Google play + 1 M downloads (Google play in Paris Walk speed play store, consulted 01/2022) store, consulted 01/2022) store, consulted 01/2022) + 10 M downloads (Google play **B** Advertisement ) Good walke Size 90,9 Mo (AS) Size 157,1 (AS) Size 209,8 Mo (AS) store, consulted 01/2022) recommendations • Developed by RATP Smart Developed by Instant Systems Developed by Google • Size 169, 6 Mo (AS) M 31 04 min Developed by Citymappe Systems 齐 2 min 40% 18h02 → 18h06 Figure 7. Main features across the UI of MaaS solutions analyzed. Source: Screenshots from the app by the authors, 2022 Walking BUS 64 06 min Walking itinerary requests Type of information Where to go? How to go? When? ⊕ ऺ ⊕ ♥ ▶ @ ♥ ¥ ⊖ ♥ № ∎ 17:52 Walking on<sup>1</sup> Walking on M1 ⊗1.90 € intermoda 22 min trips 18:01 - 18:24 Active modes (cycling and walking) ्री<sub>1 20</sub> छ1.90 € | ऊं M 🚺 24 min 齐 14 min 36 min 18 million trips 18:00 - 18:36 18h01 → 18h2 BUS 38 • BUS 96 43 min <u>24 mir</u> 23 min (4.4 km) 🕕 🕑 1.90€ 18:01 - 18:44 INCENTIVES 🚍 🖨 🛪 😣 Morphology Mixed Landscape Urban of the space services and 1 hr 1 min (4.5 k 51 min (4.1 k and urban confort and its form facilities 0 0 0 $\bigtriangledown$ 0 🗆 ambience Figure 8. Walking itineraries on the second screen after the itinerary search. Source: Screenshots from the app by the authors, 2022 Figure 11. Google Maps (left). Citymapper (right). Source: Screenshots from the app by the authors, 2022 **E. CONCLUSION AND RESEARCH PERSPECTIVES**

- Walking is integrated at a basic level in studied MaaS solutions in the French capital region, and there is a gap when considering different types of users and travel reasons.
- Room for improving user experience (UX) quality by providing users with more and better (higher level of customization) information on the type and quality of their journeys and the infrastructure (higher level of detail) in publicly led MaaS.
- Crowdsourcing tools could help to collect and co-construct a more detailed database of the characteristics of chosen itineraries.

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1) Identify the current situation regarding the integration of walking in the MaaS solutions analyzed and the actors' perspectives concerning this integration.



Walking itinerary features by app

