MAAS MADRID: towards the multimodal user

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MAAS…towards the multimodal user

Digitalization and hyperconnection with citizens
MobilityLabsMadrid

DATA, TECHNOLOGY, AND OPEN RESOURCES FOR DEVELOPERS ...... #OPEN DATA 2.0

Play your experience
and share your own data with MobilityLabs
https://mobilitylabs.emtmadrid.es

http://mobilitylab.emtmadrid.es
http://rbmobility.emtmadrid.es:4444
Tools of the “Smart” era: ICT, ITS, Big Data...
MAAS is about…“sharing” mobility

New mobility services become a tool for transferring trips from private car to the sustainable transport system.
MAAS is about…improving information

Study on habits of non-users of public transport ATUC (2017)

**Tabla 32. Posibilidad de realizar el desplazamiento habitual en transporte público.**

<table>
<thead>
<tr>
<th></th>
<th>Grupo 1</th>
<th>Grupo 2</th>
<th>Grupo 3</th>
<th>Grupo 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sí podría hacerlo</td>
<td>24,3%</td>
<td>33,6%</td>
<td>29,6%</td>
<td>34,3%</td>
<td>30,4%</td>
</tr>
<tr>
<td>No sería posible</td>
<td>53,6%</td>
<td>58,6%</td>
<td>58,8%</td>
<td>61,3%</td>
<td>58,1%</td>
</tr>
<tr>
<td>No lo sé</td>
<td>22,1%</td>
<td>7,8%</td>
<td>11,6%</td>
<td>4,4%</td>
<td>11,5%</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>461</td>
<td>423</td>
<td>449</td>
<td>478</td>
<td>1.811</td>
</tr>
</tbody>
</table>

* Nota: n_ muestra por grupos y total. Personas que conocen el sistema de transporte público de su ciudad.

**Tabla 22. Conocimiento del sistema de transporte público urbano de su ciudad.**

<table>
<thead>
<tr>
<th></th>
<th>Grupo 1</th>
<th>Grupo 2</th>
<th>Grupo 3</th>
<th>Grupo 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sí, lo conozco muy bien</td>
<td>40,4%</td>
<td>13,2%</td>
<td>18,4%</td>
<td>30,0%</td>
<td>25,4%</td>
</tr>
<tr>
<td>Tengo alguna idea</td>
<td>51,6%</td>
<td>70,2%</td>
<td>62,4%</td>
<td>56,0%</td>
<td>60,0%</td>
</tr>
<tr>
<td>No lo conozco en absoluto</td>
<td>7,8%</td>
<td>14,8%</td>
<td>18,2%</td>
<td>13,1%</td>
<td>13,6%</td>
</tr>
<tr>
<td>Ns/Nc</td>
<td>0,2%</td>
<td>1,8%</td>
<td>1,1%</td>
<td>0,9%</td>
<td>1,0%</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>500</td>
<td>500</td>
<td>550</td>
<td>550</td>
<td>2.100</td>
</tr>
</tbody>
</table>

* Nota: n_ muestra por grupos y total.

Group 1: cities with >1 Million inhab.
Group 2: cities with 300 mil- 1 Mil
Group 3: cities with 200 mil- 300 mil
Group 4: cities with 100 mil- 200 mil
Radiography of the mobility habits in Spain Alphabet (2017)
Radiography of the mobility habits in Spain
Alphabet (2017)
MAAS is about...making it simpler
Previous experiences

Positive effects: with MAAS increases the use of public transport

**Trips made with Whim in Helsinki before and after Whim**

- **Before Whim:**
  - 9% PT
  - 41% Private Car
  - 3% Bike
  - 5% Other

- **After Whim:**
  - 20% PT
  - 48% Private Car
  - 5% Bike
  - 2% Other

*Walking & cycling excluded from the result data, data based on surveys done among Whim users*
Previous experiences

- 6 months pilot in 2014
- 83 households and 195 users
- 135 € monthly fee

"At the end of the trial, 97% of the participants wanted to continue as UbiGo customers"

Table 2. Reported changes in choice of transport mode, ex-post (n=160)

<table>
<thead>
<tr>
<th></th>
<th>More seldom</th>
<th>As before</th>
<th>More often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private car</td>
<td>48%</td>
<td>48%</td>
<td>4%</td>
</tr>
<tr>
<td>Bicycle sharing</td>
<td>16%</td>
<td>61%</td>
<td>23%</td>
</tr>
<tr>
<td>Bus/tram</td>
<td>4%</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>Local train</td>
<td>7%</td>
<td>75%</td>
<td>18%</td>
</tr>
<tr>
<td>Car sharing</td>
<td>6%</td>
<td>37%</td>
<td>57%</td>
</tr>
<tr>
<td>Taxi</td>
<td>12%</td>
<td>68%</td>
<td>20%</td>
</tr>
<tr>
<td>Walk</td>
<td>6%</td>
<td>73%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Positive effects: MAAS increases the use of multi-user transport
## Previous experiences

**Göteborg**

The use of MAAS in Göteborg has shown positive effects in improving the perception of public transport. The table below illustrates the reported changes in attitude towards different modes of transport, ex-post (n=160).

<table>
<thead>
<tr>
<th>Mode of Transport</th>
<th>More Negative</th>
<th>As Before</th>
<th>More Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private car</td>
<td>23%</td>
<td>74%</td>
<td>3%</td>
</tr>
<tr>
<td>Bicycle sharing</td>
<td>1%</td>
<td>57%</td>
<td>42%</td>
</tr>
<tr>
<td>Bus/tram</td>
<td>2%</td>
<td>46%</td>
<td>52%</td>
</tr>
<tr>
<td>Local train</td>
<td>3%</td>
<td>71%</td>
<td>26%</td>
</tr>
<tr>
<td>Car sharing</td>
<td>3%</td>
<td>36%</td>
<td>61%</td>
</tr>
<tr>
<td>Taxi</td>
<td>6%</td>
<td>76%</td>
<td>18%</td>
</tr>
<tr>
<td>Walking</td>
<td>2%</td>
<td>82%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Positive effects: MAAS improves the perception of public transport.
Positive effects: with MAAS, the use of public transport would increase

- 28% of respondents would use more public transport when using a MaaS platform, while 23% stated MaaS would have no effect on their public transport usage
- 22% would substitute public transport for taxi, while 14% would use bike share and 12% would use car sharing
Phase 1
- Spring 2018
- Geo-referenced information of:
  - Public transport
  - Other services
  - Additional Information

Phase 2
- January 2019
- Incorporating:
  - Multimodal planner
- And optional services:
  - Booking // Payment // Ticketing
Service API aggregator:
- Vehicle location / PT stop
- Vehicle data (availability-model-capacity-autonomy) / PT information (lines / next arrival / frequency)

Redirects to provider app

The information is configurable by the user according to:
- Providers
- Mean of transport
- Additional information options (air quality, traffic, charging points, POIs…)

The user decides to transfer travel data:
- Always anonymously
- If registered: recurrent data available
Adding **journey planner** with comparison options configurable by preferences

- Choosing origin and destination: route selection
- Vehicle availability
- Booking
- Vehicle access / ticket cancellation
- Payment: Direct / through provider

The information shown is configurable by the user according to:
- Comparison preferences: cheaper, faster, less polluting, healthier
- Providers
- Mean of transport
  - Save “My stops“ option in PT
- Additional information options

The user decides to transfer the travel data:
- Always anonymously
- If registered: recurrent data available
MAAS...with public transport as the backbone

Moving people, not vehicles