



Application in volunteers' smartphones to monitor trips to corroborate survey's results

2015

 **University**
Universitat Autònoma de Barcelona

Country
Spain

Location 
Peri-urban. 20 km from Barcelona

Size 
40,000-50,000

Mobility Organizational Structure 
Mobility team

Summary

In last edition of 2015, the traditional methodology of an online questionnaire was strengthened through a pilot-test based on the use of new technologies for mobility monitoring (known as Campus Mobility), which was linked to the questionnaire on a voluntary basis. The volunteers installed an application in their smartphones and their movements were monitored.

Aims

Complementing traditional surveys by obtaining information which traditional surveys alone were unable to offer. For example:

- The use of public space and resources during time periods different from those which were asked about.
- The relation of work/study mobility with respect to other kinds of mobility.
- The gap between answers (perception) and real use.
- Understanding mobility in relation to how people previously used other forms of transport to access to stations etc.

Stakeholders

Campus transport provider.

Background

From 2011, UAB carries out, every two years, the Survey of Mobility Habits (EHMUAB), it is a basic tool for mobility monitoring at UAB.

The survey is structured in several sections: features of the University community, mobility habits of this community (modal split and travelling time, type of public transport ticket, etc.).

The survey also delves into the users' evaluations about transport and into their opinions on several measures which could encourage improving sustainable access to the UAB Campus.



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Description

Survey results help to diagnose deficiencies and to design measures in UAB policy, in the field of mobility and accessibility. The survey offers the necessary information to update mobility observatory information associated with the Mobility Plan.

In relation to material resources it is important to highlight, since 2009, the change in methodology, from the in-person to on-line method. A change which has allowed savings in both time and resources, while simplifying the operation and improving the process.

In the edition of 2015, thanks to the application installed in volunteers' smartphones to monitor their movements, the results allowed comparisons between the perceived mobility habits, derived from survey responses, with the actual ones, derived from displacement tracks registered in the application; thus giving a greater accuracy in the study about mobility habits of the UAB Community.

The tasks developed were:

- Questionnaire design.
- Online survey tool programming.
- Data collection.
- Data treatment and data interpretation.
- Publication of results.



Indicators

- Participation data in each edition.
- Number of volunteers participating in the experience about new technologies for mobility monitoring in 2015.

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Results

The average of participation has been 5.000 people, which is enough to offer a representative view about mobility at the University.
240 volunteers participating in the experience about new technologies for mobility monitoring in 2015.

Cost

From 0 to 10.000 €.

Financing

UAB Budget and private Budget associated to a prize to promote participation.

Findings

- It is said that survey answers slightly deviate from real uses of several transport modes because these are conditioned by what is considered the most correct answer in some cases or by the influence of their own time cost perception.
- The introduction of tracking is an incipient issue and generates rejection related to privacy aspects. For this reason, it is necessary to clearly link the experiment with the regulations on personal data protection and specify clearly what will constitute the processing of personal data and of its exclusive use for this objective.
- Available technologies are in a process of continuous improvement to minimize negative impacts in terms of battery and data consumption.

Pictures



Fig.1. Tracking individual map obtained thanks to the App "Campus Mobility"

Links

<http://www.uab.cat/web/inicio-1273127135815.html>

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