

Measure title: Car-pooling service for students in Debrecen

City: **Debrecen**

Project: **MOBILIS**

Measure number: 9.3.D

A Introduction

Alternative mobility modes are not very widespread in Hungary because this kind of model has no roots in the history of Hungarian society.

Debrecen University currently has 24,000 students living in the city and regularly returning home for the weekend. Most of them are public transport users. As students travel with a 67.5% discount, public transport use is encouraged and is much cheaper than a private vehicle. However, due to a reduction in governmental subsidies for local transport systems, the transport companies will need to raise their fees for students significantly.

More and more students get cars from their parents as the standard of living slowly rises.



Debrecen seemed like a good location for developing carpooling and students a very good target group, besides the citizens of the city itself.

A1 Objectives

The main objective of the measure was to increase seat-occupancy rate of private cars by implementing a car-pooling system.

A2 Description

The measure was implemented in one go: in April 2008, when the city administration opened a website on the official page of the City, see www.utitars.debrecen.hu.

Before its implementation, the website had to be developed – the software took one month to develop, March 2008.

B Measure implementation

B1 Innovative aspects

New mode of transport exploited

In the mid 1980s, private car ownership became a status symbol, which meant that citizens were not open to sharing their car with others. This society trend has strengthened in the last couple of years, when car-leasing has become popular in Hungary. This phenomenon also has a downside though: a lot of the citizens leasing a car cannot pay the costs, thus they must return the vehicle and lose a considerable amount of money. Taking this situation into account, this measure is a real innovation in the country. It is a new way of gathering people together for a shared journey and helps to share the resources efficiently, thus helping to prevent pollution. Sharing a car is also an opportunity to build friendships and social networks, and the measure therefore has society impacts as well.

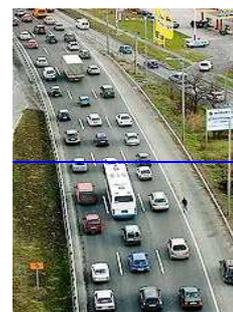
Targeting specific user groups

The target group of the measure are the students of Debrecen, because the younger generation is the most open to new means of urban mobility (see cycling),

B2 Situation before CIVITAS

Before CIVITAS-MOBILIS, students were mainly public transport users, but more and more of them have been getting cars from their parents as the standard of living has gradually risen. No precise data on public transport and car use are available to define the situation in 2005.

No official system existed to organise carpooling at city level.



B3 Actual implementation of the measure

The measure was implemented in the following stages:

- 1. Development of the concept and associated promotion study** (November, 2007 to March 2008). According to plan, the city services drew up a consistent concept and associated promotion study, since this was the first step for the software development and promoting activities.

2. Software development (March, 2008). A webpage was created, according to the design of the official webpage of the city, to serve as a forum for car-pooling needs.

3. Implementation of the system (April, 2008). The city authorities implemented the online car-pooling system, based on the concept and promotion study. The system provides a web space where everyone can find out about the possible journeys and post their own adverts. The system fulfils student needs, since the Students' government leaders were also involved in the implementation process.

B4 Deviations from the original plan

The measure has been carried out according to plan, no deviations occurred.

B5 Inter-relationships with other measures

The measure is related to other measures as follows:

No.	Measure title	Relation
11.5.D	Sustainable city-traffic development plan	alternative mobility modes
9.1.T	Promotion of car-pooling and integration with PT services in Toulouse	carpooling

C Evaluation – methodology and results

C1 Measurement methodology

C1.1 Impacts and Indicators

Table of Indicators

No.	Impact	Indicator	Used	Etc.
1	Transport system	<ul style="list-style-type: none"> • Average number of adverts posted • Average number of answers to adverts • Number of matches • Number of trips resulting from matches 	X	Indicator for future development
2	Quality of service	Last period of time use		
3	Acceptance <ul style="list-style-type: none"> ▪ Awareness 	<ul style="list-style-type: none"> • Time to find out about the website • Source of information • Number of website address transfers 	X	
4	<ul style="list-style-type: none"> ▪ Acceptance 	<ul style="list-style-type: none"> • Satisfaction level 		

Indicators 1 and 2: Statistics of site attendance. The system has a monitoring system, thus the number of daily users can be checked. The statistics are able to show the level of use. The number of matches and the number of trips resulting from matches can only be an indicator of future evaluation, since the relatively low use of the site and the time passed between the implementation of the webpage and the research (including summer period) do not provide reliable data about the success of the measure.

Indicators 3 and 4 – Interviews with users. The users' opinions were asked in August 2008. Among 68 registered users, we have the name of the first 50, 35 of whom provided their phone number on the registration form. During the three days of research, 17 users were interviewed (the rest did not answer or had changed mobile number). The interviews aimed to discover the strengths and weaknesses of the software, providing recommendations of its further improvement, as well as outlining its popularity thus far. In-depth interviews can help to determine further improvements since the users' feedback about carpooling has not yet been presented.

C1.2 Establishing a baseline

The baseline is the situation before CIVITAS with no existing car-pooling system.

C1.3 Building the business-as-usual scenario

The business-as-usual scenario is no financed development of a car-pooling system, although citizens' initiatives may also lead to a spontaneous appearance of a web-forum serving the same purpose.

Without the implementation of the measure, no State and/or EU-funded initiative would take place to promote carpooling or any other kind of alternative mode of private mobility.

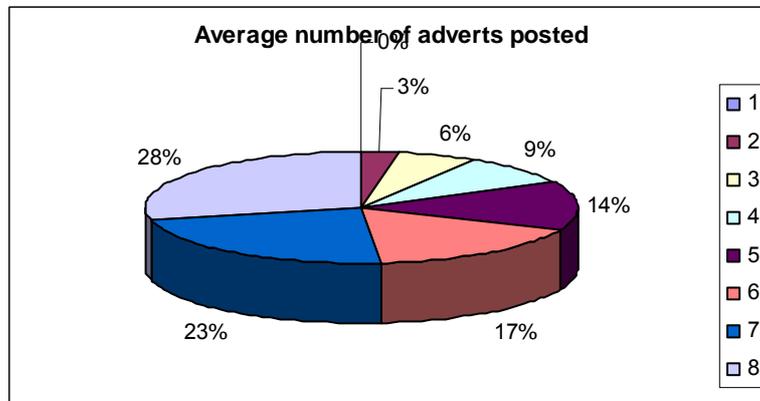
C2 Measure results

C2.4 Transport

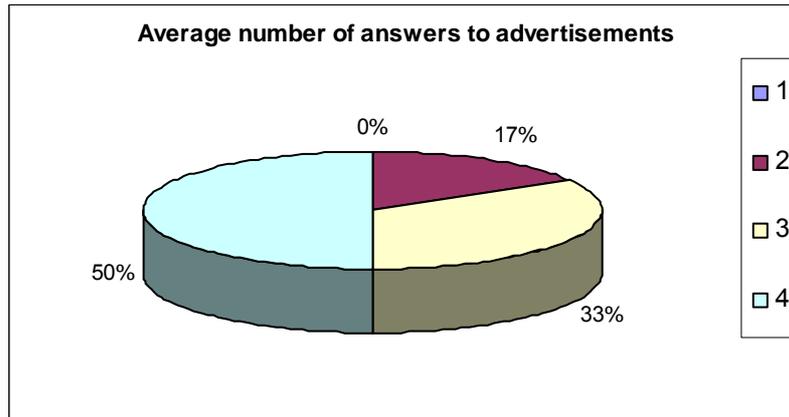
The results of the web-site analysis were the following.

Advertisers are partly car-owners who are looking for a passenger for a trip and partly non-car owners who are looking for a car for the same purpose. The page makes the advertisements of car-owners searchable for the actual day or for a given period of future trips. The page can only be used by registered users.

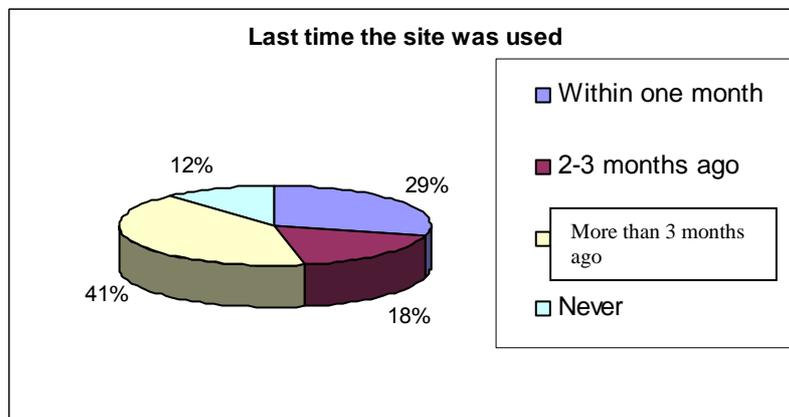
More than half of the respondents (54%) had put more than 5 ads on the site, but the proportion of those who published only one is also high, 28%. This is an early disappointment for the opportunity, and can also be attributed to the small number of users (68 registered people).



By analysing the number of answered ads, the above statement can be proved: 40% answered only 2 or 3 ads, 50% answered 4 of them. This reflects a very important characteristic of users: according to the society trend of preferring car-ownership, users tend to publish their own ads and try to find partners more than to search for opportunities to join someone. If the number of registered users increases, this situation would probably alter, though we cannot expect an attitude at odds with the surrounding society from the users.



The aforementioned disappointment is further proved if we consider the last time the page was visited: only 30% of the users have checked in within a month, the rest have not visited the car-pooling site since June (do not forget that the site operates until April and the interviews were carried out in August, which could partly interpret the low level of usage). The decreasing number of visitors shows the need for further promotion of the site, preferably in a short period, before the existence of the possibility is forgotten about. Since the respondents are the “oldest” users of the site, if they had stopped advertising through the page and gone on organising their trips via other media, the answers would have shown this tendency. In only one occasion did it turn out that a meeting organised through the page led to a long-term match of owner and passenger.



C2.5 Society

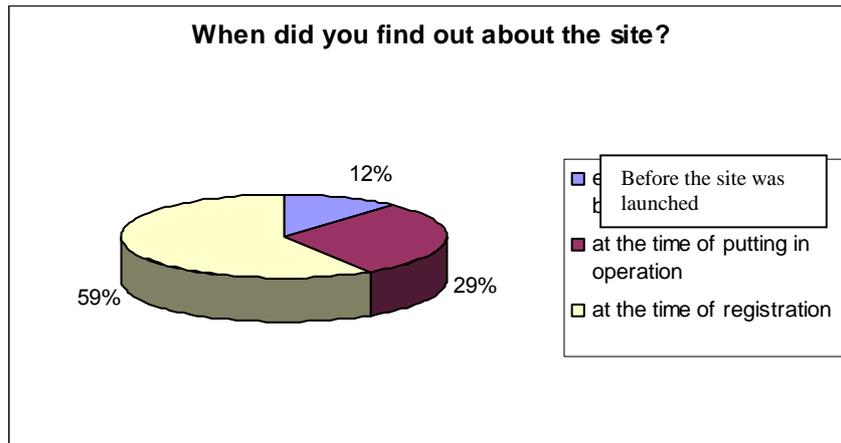
Awareness

It is interesting to know when and how users received information about the web page, thus the interviewers asked questions about this issue.

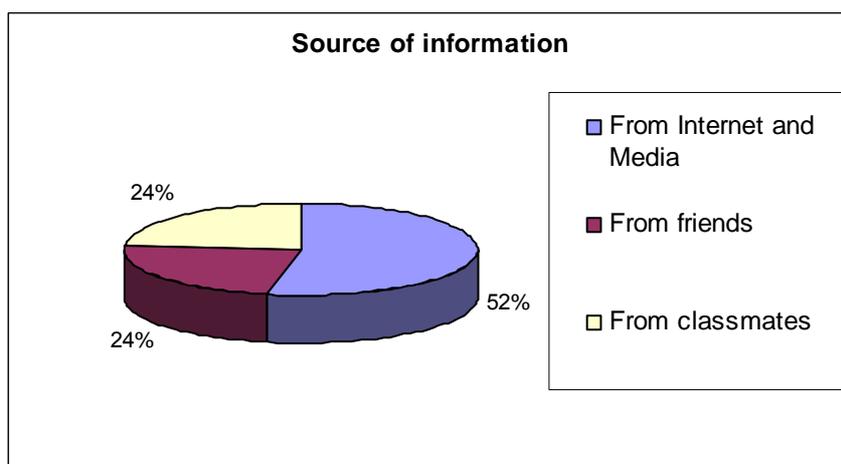
The average age of the users is 23.13, which shows that students are not the only users of the site. The youngest user is 18 years old and the oldest is 35.

Men are slightly overrepresented: out of the first 50 users, who provided their name in the registration form, 20 are women and 30 are men. Although, in view of the relatively few registered users, we cannot say this is a trend.

The majority of users found out about the site when registering, i.e. they “stumbled across it” accidentally. A little more than 10% had already heard about the development long before the site itself had become operational and almost 30% found out through the promotion campaign – the latter can be assessed as an efficient tool to promote web site use.

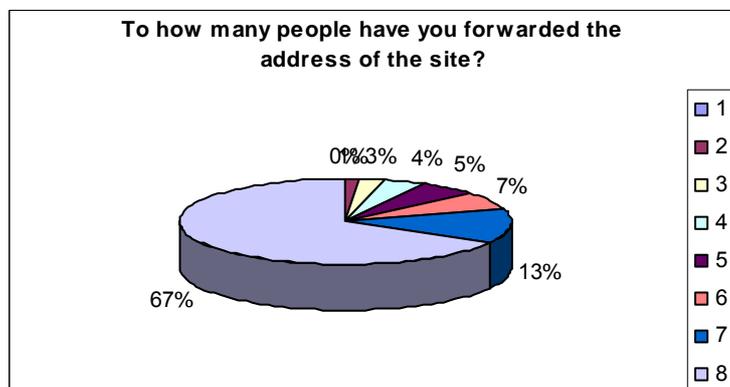
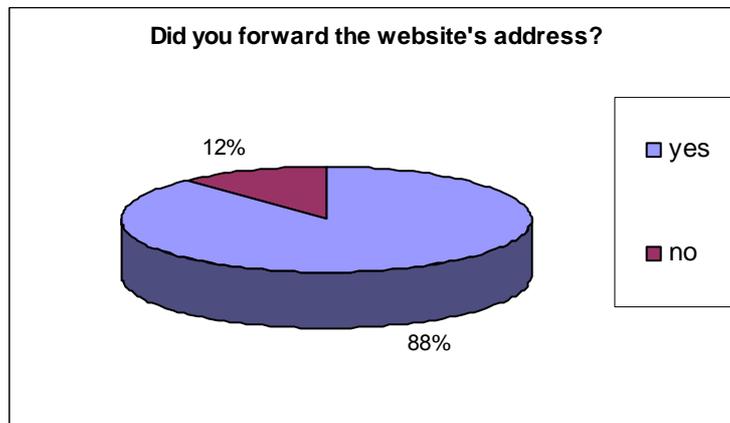


The media and Internet had informed more than half of the users about the site. The proportion of those who heard about it from friends and classmates is the same, 24-24%. This result shows that promotion through electronic media is as efficient as the direct forwarding of information and this should be taken into account in a further advertising campaign, also because registering users may forward the site address to others, therefore the direct information chain cannot be the most effective promotion method anymore.

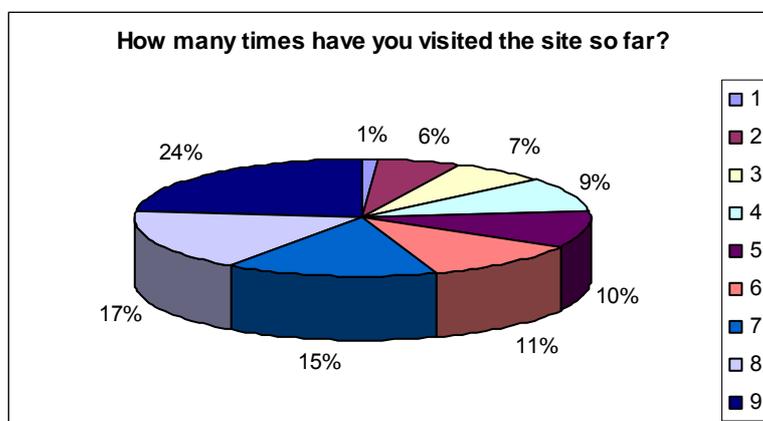


Users of the site may also act as advertisers and partners as well. So, it is necessary to know to what extent users have informed others about the opportunity of car-pooling. The results show that the large majority (88%) of questioned users have forwarded the address of the site. Interestingly, 80% of them have forwarded this

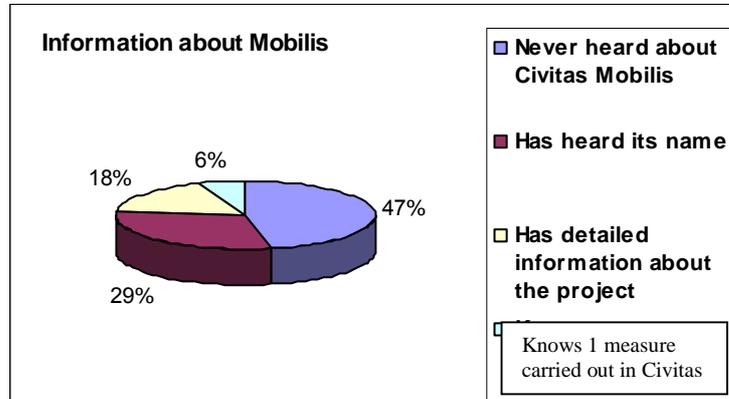
information to 7 or 8 people, so we can conclude that the best ad for the measure is the growing number of users – it is obvious that this factor has a multiplication impact on the number of registrations.



As for site attendance, 77% of the users have visited the page at least 5 times, the rest have visited it 1 to 4 times. Given that five months had passed since the website was launched, this cannot be assessed as a good result. It later turned out that this was partly due to the low number of registered users and how often other users consult the site: if people don't receive answers to their ads, they stop posting them on the site because they feel there is no point.

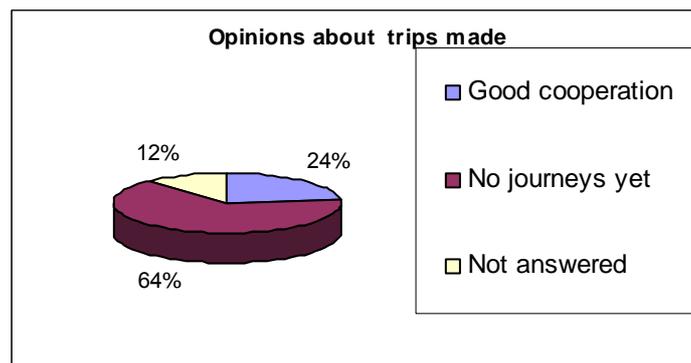


For dissemination purposes we asked the users what they know about Civitas Mobilis – unfortunately almost half of them had never heard of the project. 29% had at least heard the name, and a small number knew at least one measure carried out within the framework of the project. 18% though have detailed information about the goals of Mobilis, but as a summary, we can unfortunately conclude that the awareness level of the project in the case of car-pooling users is still very low.



Satisfaction

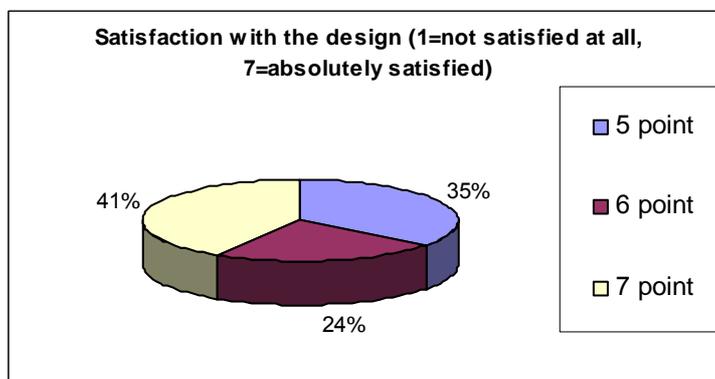
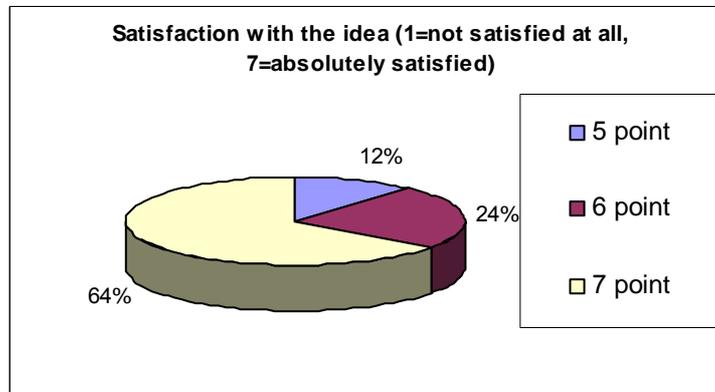
There is absolute satisfaction over the trips made in any case: all of the respondents, who ever made a shared trip, reported maximum satisfaction. This means that once a trip is organised, people find it a very good opportunity to make friends and widen their social network. The site has a sort of “success-story” as well: a respondent reported that she lives in a smaller town close to Debrecen, and found a car-mate with help of the site: since then they go to work together every day and became friends as well.



The evaluation also consisted of questions referring to what extent respondents are satisfied with specific characteristics of the site, and the answers generally show a high level a satisfaction. These results also strengthen our hypothesis that the existence of the site itself is welcome, only attendance needs to increase for it to present a real, up-to-day opportunity for trips.

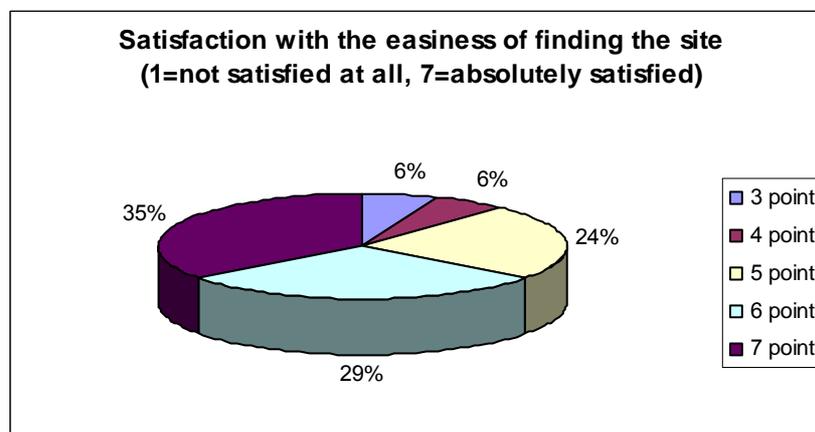
All questions on the level of satisfaction consisted of a scale, where respondents answered 1 if they are not satisfied at all and 7 if they are absolutely satisfied with the given characteristic.

The idea of establishing the site received only high scores: no scores below 5 were chosen. This means the users like the idea very much and support the existence of such an opportunity.

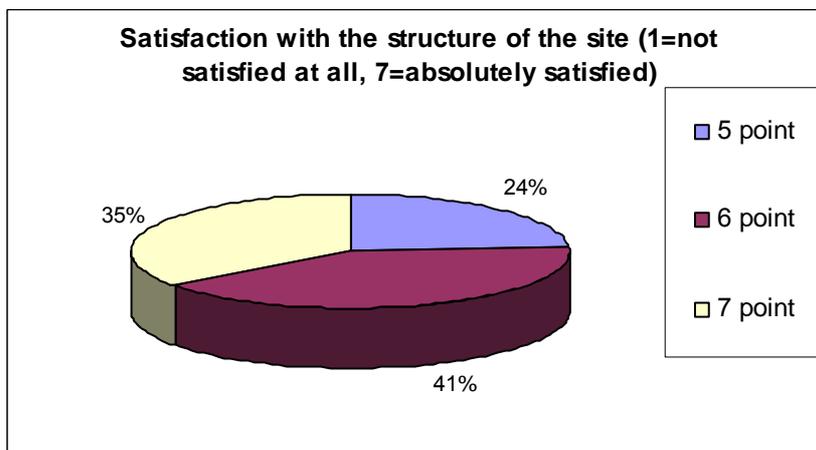


The same can be concluded about the design of the site: 65% of the respondents gave scores 6 and 7. The design is harmonised with the design of the City's homepage, therefore the high level of satisfaction also affects the official site as well.

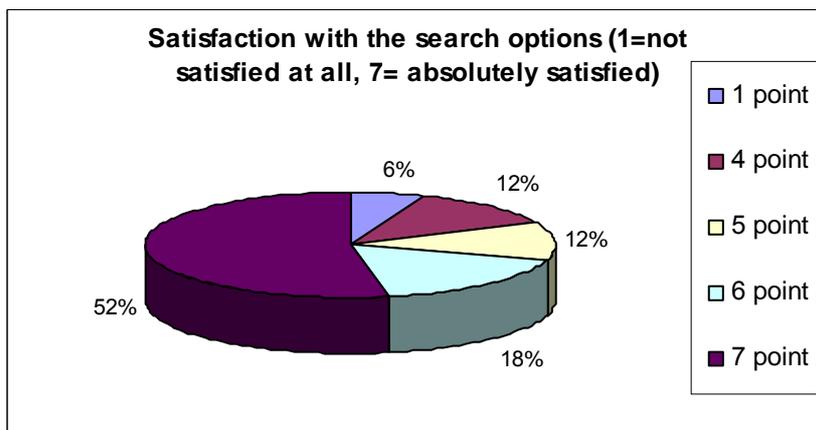
Regarding the low level of attendance, the respondents attribute this phenomenon to the fact that the site cannot be found easily: this characteristic received lower points, 36% of respondents gave 3-5 points.



As for the structure of the site, user satisfaction is also very high, which means no fundamental changes are needed.



Views on the search options were more varied, since a 1 score appears as well, but more than half of the users are completely satisfied with them. Those who did not like the present optional structure did not give any concrete recommendation for its improvement.



The users put great emphasis on the need to promote the site, because they all like its opportunity and are unhappy about not being able to use it more regularly. Their comments and proposals to improve website advertising meet the opinion of the evaluators: the advertisement options are the following:

- **The real target group (students) shall be contacted so that they learn of this opportunity.** They mentioned:
 - putting up posters on the display boards of the University of Debrecen
 - putting up posters in cafés and bars where students go.
- **The students have to be informed of the popularity of such systems in Western countries.**
- **The site should not focus solely on Hajdú-Bihar County,** it should be advertised in other universities across the country as well.

C3 Achievement of quantifiable targets

No.	Target	Rating
1	Setting up the website for carpooling	**
2	Growing number of users of the site	*
0= Not achieved * = Partly achieved **= Achieved in full ***= Exceeded		

C4 Upscaling of results

Through effective advertising, within a relatively short space of time (by the end of 2009) the popularity and attendance of the site can be increased and the site can become a real opportunity for students and citizens to share cars, thus decreasing air pollution and travel costs.

C5 Appraisal of evaluation approach

The measure has been implemented quite recently and carpooling has not yet become a habit, so it has been difficult to evaluate the impact of car-pooling development in energy and environmental terms.

The evaluation has been carried out with soft measures and has tried to collect the key information by interviewing the users. Unfortunately the number of respondents remains low, although there was no way of contacting more users. No change in the social evaluation approach is needed.

C6 Summary of evaluation results

- **Key result 1** – The majority of users heard about the site right at the time of registration, i.e. they “stumbled across it” accidentally when looking for travel opportunities.
- **Key result 2** - Promotion through electronic media seems to be a bit more effective than the direct forwarding of information.
- **Key result 3** - The results show that the majority (88%) of the questioned users have forwarded the address of the site, thus the best advertising is the growing number of users.
- **Key result 4** - As for site attendance, 77% of the users have visited the page at least 5 times, the rest have visited it only 1 to 4 times.
- **Key result 5** – More users tend to post their own ads and try to find partners than search for opportunities to join someone.
- **Key result 6** - The decreasing number of visitors shows the need for further promotion of the site.
- **Key result 7** - There is absolute satisfaction over the trips made in any case: all of the respondents, who ever made a shared trip, reported maximum satisfaction. This means that once a trip is organised, people find it a very good opportunity to make friends and widen their social network.

D Lessons learned

D1 Barriers and positive features

D1.1 Barriers

Barrier 1 – The lack of suitable and effective advertising of the measure may result in a disappointment for users.

D1.2 Positive features

- **Postive feature 1** – The cooperation with students' representatives and use of all their available resources can have a considerable impact on the success of the measure.

D2 Participation of stakeholders

- **Stakeholder 1** – students' representatives took part in designing the initial concept.
- **Stakeholder 2** – The City took part in the coordination of software development and the promotion campaign.

D3 Recommendations

Recommendation 1 – the awareness and information campaigns should use all available resources for advertising, such as:

- Students' official administration system, www.neptun.hu
- Other popular community webpages, like www.iwiw.hu
- Other universities' official portals
- Regional sites of towns and villages
- Direct links from other city-coordinated sites to www.uitars.debrecen.hu

D4 Future activities relating to the measure

As presented before, users appreciate this development and like the idea very much. There is a need for such new ways of thinking regarding mobility, but since such initiatives have no history in Hungary, it would probably be a long time before citizens themselves provide such an opportunity.

New promotion campaigns need to be developed to increase site attendance.