

**CiViTAS**  
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## Measure Evaluation Results Template

### FUN 4.1 – Awareness Raising Campaign for Sustainable Mobility

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*Measure title:* **Awareness Raising Campaign for Sustainable Mobility**

*City:* **Funchal**

*Project:* **MIMOSA**

*Measure number:* **4.1**

## **Executive Summary**

The Mobility Study carried out in the city of Funchal in 2007 revealed that the private car was the main mode of transport used by citizens, followed by public transport and walking. The measure 'Awareness Raising Campaign for Sustainable Mobility' aimed at encouraging citizens to adopt a daily cleaner mode of transport by disseminating clear information on mobility alternatives addressed to specific target groups. Moreover, according to surveys conducted throughout MIMOSA activities, 68,6% (2010) and 50,9% (2011) of the respondents were not aware of sustainable mobility which also highlighted the relevance of organizing information campaigns in order to foster urban sustainable mobility among citizens.

The measure was implemented in the four following activities fields, which allowed hundreds of citizens of all generations to be reached:

**Field 1: School Mobility Manager Campaign** (2010 – 2012) The school mobility addressed mainly students, since they were a target group that is more likely to change their habits. Within this component, the Municipality developed a large range of activities such as thematic conferences, playful activities, distribution of t-shirts and video competition. In total, over 1000 students from seven schools took part in these activities.

**Field 2: Pedestrian Circulation Campaigns** (2009 – 2012) The pedestrian mobility campaigns consisted of a "City Treasure Hunt" in which the participants were invited to (re)discover their city by walking in a playful way. In total eight events were conducted (2 per year) and over 1500 citizens have participated.

**Field 3: Public Transport Campaigns** (2010 - 2011) The public transport campaigns sought to promote among the population the environmental and economic advantages of using bus on a regular basis. For that purpose, conferences were organised and three editions of the "Get Around in Funchal by Bus" activities were carried out. 400 people participated in this activity.

**Field 4: Eco Driving Campaigns** (2010 - 2012) Besides the training campaigns for both Municipality fleet drivers and bus drivers (an activity described in detail in FUN 6.1) , workshops which addressed citizens were carried out, aiming to familiarize them with the advantages of eco-driving as a driving practice that aims at reducing fuel consumption and pollutants emissions.

During each of those several campaigns, handouts, leaflets, posters and several merchandising items such as pens, pendrives and t-shirts were distributed. During the diverse campaigns, the yearly European Mobility Week was promoted as well.

Due to the fact that the awareness campaigns mainly worked as a social driver, those actions should be carried out regularly, even beyond MIMOSA life span and its impacts should be measured continuously.

The evaluation was mostly focused on surveys to assess the various components of this measure. The impact evaluation was based on indicators related with eco-driving, modal split, pedestrian campaigns and mobility habits of students.

**The key-results** of the evaluation showed that the measure was successful since its main goals were achieved. For instance, 1500 people participated in the eight events organized in the frame of the pedestrian campaign. The eco-driving habits were improved, since according to the surveys carried out during 2010 and 2011, the participants stated that they would be familiar with eco-driving, perceiving eco-driving as a way of saving fuel (31,4% in 2010 and 31% in 2011) and saving CO<sub>2</sub>-emissions (46,8% in 2010 and 43,1% in 2011).

While all the components of the measure were innovative on the Island of Madeira, it was not always easy to reach citizens, since **one of the main barriers** encountered was the lack of tradition and some resistance of the residents to change their transport mode. Nevertheless, as **a main driver**, most activities were innovative and attracted interest, through which various target groups ranging from elderly people to youngsters/students could be reached.

One of the most significant successes of the measure was the campaign focused on public transport acceptance "Get Around in Funchal by Bus". This campaign **can be easily replicated in other cities** since it is simple to organize, it is innovative and affordable and it creates a synergy among schools and environmental associations enabling a large audience to be reached. In the frame of MIMOSA project, the campaign was already successfully replicated in the city of Tallinn (see TAL 4.1 – 'Mobility Management and Marketing Activities Directed at Popularising Usage of Active Transport Modes'). This showed the importance of sharing and exchanging ideas and experiences on methods to involve citizens and raise awareness towards behaviour change.

Overall, most activities carried out revealed a high degree of satisfaction from participants and showcased the importance of developing similar actions in the future. The school mobility campaign, for instance, contributed largely to communicate sustainable mobility issues to students. Both the pedestrian campaign and the public transport campaign played a significant role in raising citizens' awareness of sustainable mobility due to the innovative and attractive approach applied. The high rate of participation highlighted the success of the measure and convinced the Municipality to continue its efforts to encourage public participation for a better urban mobility in Funchal.

## **A Introduction**

### **A1 Objectives**

The measure objectives are:

(A) High level / longer term:

- Increase the modal split towards more sustainable modes;
- Improvement of quality of life.

(B) Strategic level:

- The purpose of this measure is to disseminate among the population the concept of sustainable mobility as a new perspective, and raise awareness of the individual's role in contributing to a better environment.

(C) Measure level:

- To develop eco-driving skills among the general population;
- To advertise and promote the city areas dedicated and reserved for pedestrians, i.e, the roads closed to car traffic and parks, through the organisation of orienteering competitions, for all ages and physical conditions, in the city centre;
- To promote sustainable mobility habits among students.
- Promote the advantages of using public transports.

### **A2 Description**

The improvement of family income and the infrastructural development that occurred in the last decade in Madeira's Autonomous Region sharply changed mobility patterns, creating new and complex mobility needs and putting strong pressure on the territory due to urban expansion. Due to this fact, there was an increase in the number of cars and a rise in pollutant emissions. Public transport has been suffering continuous losses of passengers over the last few years, so in order to counter this trend, awareness campaigns were developed among younger people.

In order to prevent a further increase of pollutant emissions and other environmental consequences, the Municipality established this measure to reduce individual transport use. It aims at raising awareness of the citizens of the importance of sustainable mobility through various activities that include eco-driving campaigns, public transport campaigns, pedestrian circulation campaigns and a mobility management project aimed at schools.

According to the Mobility Study for Funchal, 49.000 vehicles enter the city every day. Due to this fact, it's essential that the population is aware of the importance of adopting an ecological driving style, in order to reduce emissions, improving, therefore the quality of life in the city.

## **B Measure implementation**

### **B1 Innovative aspects**

While the measure does not feature any type of technological achievement, it was indeed innovative in the definition of the campaigns. Prior to MIMOSA, specific campaigns on sustainable mobility were nonexistent. One approach specifically targeted awareness of the problems arising from the intensive use of the automobile. Additionally, the campaigns carried out in schools were also innovative for Madeira.

- **New conceptual approach (Regional and city level)** – Development of awareness campaigns that promote new perspectives to address mobility issues with a focus on benefits for users to adopt more environmental and cheaper modes of transport
- **Targeting specific user groups (Regional and city level)** – Development of awareness campaigns among young people, appealing to their inherent desire for environmental protection.
- **New organisational arrangements or relationships (city level)** – Establishment of new relationships between organizations creating mechanisms aiming at the same common goal.

### **B2 Research and Technology Development**

The Mobility Study (2007) revealed that individualised transport is the most popular type of transport among citizens, which outlines the necessity to develop campaigns in order to raise awareness for public transport, walking and bicycle.

For this measure, the study indicated above served as a basis for the following studies to outline all goals in a more specific way. Since youngsters were one of the main target group, the first study that was carried out focused on the modal choices of students in the schools in which the campaigns were developed. The Mobility Study revealed that home-school-home travel appears as a second priority in daily commuting (11%), being one of the main traffic generators. In particular, the first study to analyze the modal split conducted in schools, revealed that 51% of students uses individual transport as opposed to 32.6% of students who reported using public transportat.

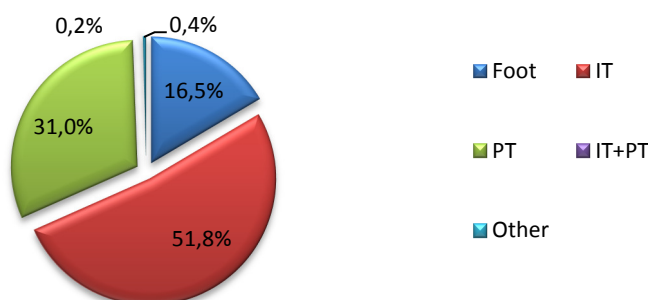
The studies conducted also revealed that there are very deeply held beliefs in terms of transport choices, such as owning a car provides the driver with a higher social status, while using public transport is associated with much less favored social classes. For these reasons, it is very common among young people to desire to own a car. In order to change the negative perception of the bus by young people and adults a new concept of awareness campaign was developed, namely the “Get Around in Funchal” activity. This campaign combined both walking and bus.

In terms of individual transport, awareness campaigns to promote eco-driving were developed, geared primarily for driving schools, Municipality drivers, public transport operators, taxi drivers and trainers in driving schools. In order to further surpass the objectives outlined, MIMOSA played an important role in the organization of the European Mobility Week in Funchal, marking, in 2009, the first participation of the City in this event. This important awareness campaign for sustainable mobility contributed for the development of various activities that were important to promote these issues among the population.

### B3 Situation before CIVITAS

According to the mobility study in Funchal, in 2007 only 16,5% of the trips made were done by foot, while the trips made using Individual motorized Transport corresponds to 51,8%.

The following graph indicates the types of transports that are mostly used, according to the mobility study. As for the Public Transport, 31% uses the Public Transport, while a small percentage uses individual transport combined with public transport and other types of transport.



Graph 1 –Modal split, according to the Mobility Study for Funchal (2007)

Due to this fact, traffic congestion is very prevalent in several parts of the City, namely in the City Centre at several times of the day. In the morning, the main access roads exceed, sometimes, their capacity, causing severe congestion that also affects PT efficiency. In the whole city, there are more immobilized vehicles in the streets than authorized places for vehicles. This situation leads to illegal parking both day and night. The dependence on the automobile is well noticed especially if we look at graph 1. This fact shows a tendency that continues to expand, in which the motorization rate increased until 2010. Due to the traffic increase, it is important that habits and behaviour be changed, especially the importance of increasing pedestrian circulation.

The Municipality of Funchal has developed a strategy of closing core streets to vehicle circulation (see measure 3.1) and constructing and creating more leisure areas in the city, which will support the promotion of pedestrian activity to be developed under this measure. Orienteering was selected as it is considered a sport that is perfectly accessible to all, independent of the age group or fitness level and can be practiced individually or in groups, encouraging, therefore, both the exploration of the city and the promotion of pedestrian circulation. As for mobility campaigns in schools, it will be the first time that a mobility management project will be implemented in Funchal schools.

### B4 Actual implementation of the measure

There are several different activities within this measure. Besides promoting pedestrian mobility, this measure also highlights the benefits of public transportation use, eco-driving, pedestrian circulation campaigns and mobility in schools. The Municipality of Funchal has developed the following events:

- 1. School mobility manager campaign:** Various activities were carried out throughout 2010-2011 and 2011-2012 school year;
- 2. Pedestrian circulation campaigns:** 8 orienteering campaigns were carried out;
- 3. Public Transport Campaign:** The Municipality carried out 3 events dealing with public transport: "Get around in Funchal by bus";
- 4. Eco Driving campaigns:** Many activities were completed, such as an eco driving

training and awareness campaign, 7 eco-driving workshops and an eco driving race;

- 5. Other activities:** oriented towards sustainable mobility, the activities include important regional events, such as the participation in two expo-madeira exhibitions, II, III and IV expo-energy, and Mobility Week 2009, 2010, 2011 e 2012.

## 1. School mobility manager campaign

**Stage 1: Campaign conceptual approach** (October 2009 to March 2010) - The aim of this campaign was to integrate the sustainable mobility concept in some schools, in order to make the youngsters aware of possibilities of changing their mobility habits and how to acquire mobility skills. With this activity we expected to provide the students with all the information and adequate plans regarding their daily travel needs (home-school-home), in order to improve their mobility and road safety.

**Stage 2: Preparation of the study of the campaigns to be carried out in schools** (September 2009 to January 2010, September 2011 to October 2012) - During this stage, several data was collected in the city of Funchal, in which schools were selected for the campaigns. The choice of the schools for the implementation of the project ranged from basic school to highschool, including 5 public schools and 2 private schools strategically located in the traffic area. Overall, 1.100 students participated in the project. To evaluate the students' mobility patterns, a survey was conducted in these schools in order to further collect data, regarding the student's transport choices (home-school and school-home). The definition of the school campaigns were in agreement with the Municipality's policy of improving not only the knowledge level regarding sustainable mobility, but also promoting sustainable mobility habits among youngsters so that they can play a more active role in the community. Thus, the project implementation includes various activities, such as the development of travel plans, analysis of travel diaries and awareness activities. With these activities, it was expected to reduce pollutant emissions and traffic circulation in the area and encourage modal shift, multi-modal urban trips and the use of public transport among students. During this stage, a survey was designed to gauge the modal split among students. The results can be seen at below in Table C1.1: Indicators.

**Stage 3: Development of materials to support school campaigns:** (From September 2009 to March 2012): During this period, several items were produced such as pamphlets and posters to spread information about the benefits of public transport among students. Additionally, various merchandising items were produced such as keyrings, t-shirts and pens. All the materials were handed out to students and teachers during the activities.



Figure 1: Some promotional materials for the school campaigns

**Stage 4: Establishment of partnerships with schools** (October 2009 to January 2010): Meetings were established with schools to disseminate the project, which were supported by

the government department that is responsible for school management in the Region. These meetings allowed both the school and the Municipality to agree the activities and actions to be carried out in the schools. The function of the mobility manager is to promote sustainable mobility, such as the use of public transport as well as meet with the heads of each school to devise measures to improve school mobility. The role of the mobility manager is to promote sustainable mobility, namely the use of public transport, and meet, on a regular basis, with all schools in order to draw strategies to improve mobility in schools.

**Stage 3: Effective implementation at schools** (*November 2010 to July 2012*): The first step in the project implementation consisted of a survey that was oriented towards all the students that participated in the mobility project. The activities and awareness campaigns were proposed to the seven schools included in the project through the teacher appointed as mobility manager, where a set of activities and actions were presented, allowing them to choose the ones that best suited their interests and student age ranges, all within an adequate pedagogical slope.

Numerous activities were held in schools, namely lectures on the subject of sustainable mobility, orienteering paper and contests for developing and creating a poster and a t-shirt for sustainable mobility, among other activities. The lectures on sustainable mobility were held in the schools, oriented towards students between the ages of 10 to 18, covering about 630 youngsters.

The presentation was followed by an interesting debate between the speakers and the young audience, in the course of which numerous questions were raised on PT service and urban spaces managed by Funchal's Municipality, where students were made aware of the logistics and dynamic of the entities involved. The close contact between the younger population and the entities responsible for mobility in the city, allowed a greater awareness and a better understanding of the more complex measures that require a acceptance by the public.

Another activity carried out was a lecture on the subject: "I use Public Transport, I am Independent" given by Psychologists from the Youth Support Office of the Funchal Health Center. It covered about 100 students between 10 and 16 years old. The aim of this activity was to convey to the young audience and consequently to their parents, the idea that the use of PT grants them a certain degree of independence, thus constituting a source of accomplishment and pride.

Among the reasons pointed out by students for not using PT is the fact that parents do not perceive PT as safe or do not trust children to travel independently. Youth autonomy must be worked out between parents and children. Responsible behaviours and mature attitudes will make parents more confident about granting their children more autonomy, while simultaneously fostering a balanced growth. Around 150 students between the ages of 11 and 15 participated in the orienteering Paper, answering questions related to the subject of Sustainable Mobility, thus acquiring knowledge while pedestrian movement and physical exercise were stimulated.

In five schools competitions were promoted between students and/or classes, to create a poster, a T-shirt and a video raising awareness towards Sustainable Mobility, in which a total of 200 students participated. The best works were awarded with prizes and distinguished. The aim of this activity is to raise student awareness of the issue of Sustainable Mobility through creativity. Not only do young people get the message easily, but they also constitute efficient message disseminators, which in the future may prove vital towards effective sustainable mobility.



## 2. Pedestrian circulation campaigns

**Stage 1: Development of the campaigns** (January 2009) – In this stage, we defined the main goals to be achieved with the implementation of the pedestrian campaigns and the preferred target groups.

Since pedestrian mobility has the potential to reduce the use of individual transport, and especially given that the centre of Funchal is easily traversed in 15 min by foot, the City has been adopting a policy of encouraging walking, through the closure of streets since the 90's and creating sidewalks.

For this purpose, the development of these campaigns focused more on the orienteering campaigns to achieve the proposed goals. The main objective of these campaigns is to show the participants that it's fun, quick and easy to walk in the city, while (re)discovering some of the city's heritage and natural landmarks. With these campaigns it was expected to show that it is possible to raise pedestrian mobility, and reduce individual transport use.

In order to support the achievement of these events, the Municipality hired a team specialized in organizing orienteering campaigns, that, along with the Municipality team, developed the most suitable strategy. One of these strategies was, for example, the conduction of a CO2 emissions test that was carried out among the participants of one of the orienteering events. This test was based on the participant's travel diary routines (house-work/school-house), and the type of vehicle used.

**Stage 2: Elaboration, design and production of the supportive materials that were handed out to participants** (throughout MIMOSA lifespan) – For each of the orienteering event, various materials were developed to raise awareness, including flyers, billboards, postcards, and others.

**Stage 3: Preparation of an evaluation survey campaign** (June 2009) – a survey was conducted to collect all the data necessary for evaluation of the measure, namely to assess awareness of CIVITAS MIMOSA, sustainable mobility, pedestrian habits, modal split and participant's mobility.

**Stage 4: Promotion of the orienteering campaigns** (July 2009, December 2009, July 2010, September 2010, July 2011, September 2011, June 2012 and September 2012) – The campaigns were promoted through various ways, such as the Municipality's website, local press, posters, facebook and through e-mail.



Image 2 – Some promotional materials of the orienteering campaigns

**Stage 5: Orienteering campaign** (July 2009, December 2009, July 2010, September 2010, July 2011, September 2011, June 2012 and September 2012) – Two orienteering

competitions were organised each year, giving a total of 8. The orienteering competitions are activities in which the participants have to explore in the city, using maps to establish a quick route. This type of event gathered people from all ages, mainly composed by families or large groups of friends. The test to measure the CO2 levels proved to be an important awareness tool for the participants, especially for the participants that use the car regularly. Furthermore, they could find out how much CO2 emissions they would reduce if they use the bus more often or shared their vehicles. Some of the events were supported by public exhibitions, whose focus was to promote advantages of pedestrian mobility, bike use, public transport, eco-driving. Furthermore, the MIMOSA Project was also a focus of these exhibitions, as well as less pollutant vehicles that were publically displayed.

Apart from the above, leaflets and other merchandising items were given out among those who participated in the events. In the eight events, 1500 people from all ages participated in the orienteering campaigns, which showcase the success of these events. Also, at the end, the best participants were awarded with trophies (according to their age and participation level), and raffles were usually conducted among all participants, in which bikes, book collections and other prizes were raffled.



Image 3 – Picture of one of the orienteering campaigns

**Stage 6: Survey conduction** (*July 2009, December 2009, July 2010, September 2010, July 2011, September 2011, June 2012 and September 2012*) - To gather a better insight of the public attitude towards the transport system and sustainable mobility issues, a survey was conducted among all participants in the first event and the seventh event, aiming to obtain several indicators such as:

- level of knowledge about CIVITAS MIMOSA
- Sustainable Mobility knowledge
- Pedestrian circulation habits
- Types of transport most often used
- Participant's mobility and its habits

### **3. Public Transport Campaign**

**Stage 1: Conception approach** (*January 2010 to June 2010*): The main goal of this campaign is to promote public transport use and raise awareness of its environmental, social and economic advantages. For that, an innovative concept was created, entitled “Get Around in Funchal by bus”, where the challenge was to complete, in the shortest possible time, a previously defined route using only public transport and walking. This event is a way to demonstrate citizens ability in using the public transport system and to showcase public transport as a friendly and convenient mode of transport.

**Stage 2: Design of materials to support the campaign of public transport** (April 2010 to August 2010): Several materials were designed to support the public transport campaign, such as posters, flyers. Besides the communication materials, the participants themselves were given a map containing the location of the control points, a t-shirt, the bus timetables, and a quiz focusing on sustainable mobility and MIMOSA in general.



Image 4 – Promotional material for the “Get Around in Funchal” event

**Stage 3: Public transport promotion campaigns** (September 2010, September 2011 and September 2012) – The campaigns were promoted through various tools, such as media and posters.

**Stage 4: Implementation of “Get Around in Funchal by bus”** (September 2010, September 2011 and September 2012) – This initiative took place in Funchal, during European mobility week (2010, 2011 and 2012) aiming to promote a more regular use of public transport and to inform the participants of its environmental, social and economic importance. The “Around in Funchal by bus” activity consisted in completing, in the shortest time possible, a path, using as a mode of transport the bus or walking.

More than 500 citizens, especially youngsters, took to the streets of Funchal using public transport. Citizens who use public transport often tend to stick to the same route or use it on an infrequent basis. Participants were tested on new routes, giving them an insight into how quick and useful public transport can be to travel to other parts of the city. Those who don't use public transport service, on the other hand, were challenged to just give public transport a go. There were plenty of smiles on faces when the best navigators won a vast array of prizes: free six month public transport passes, bicycles, local mobility books, DVD's, and other prizes. A pattern analysis was made, regarding the participants' choice of routes. The majority of people opted to choose the most central areas, such as the main Hospital, and the shopping centre located in the western side of the Municipality, which is also served by the new bus lane “Green Line”, a CIVITAS MIMOSA measure demonstrating the high degree of knowledge that people have regarding this bus lane.



Image 5 – Some pictures from left to right (analyzing maps, team photo, prizes)

#### 4. Eco Driving campaigns

The development of eco-driving campaigns focused on 3 stages. In the first stage, the best approach was studied to outline the objectives of the measure. After this stage we designed all necessary materials to support the campaigns. The last stage consisted of the effective implementation during the mobility weeks (2010 and 2011). The European Mobility Week was used as the background to implement these campaigns, since it could reach a wider audience.

**Stage 1: Design of eco-driving campaigns** (*October 2009 to November 2009*) – With these campaigns, the main target group was to reach students of driving schools and ordinary citizens. Thus, the strategy that was chosen to publicize the benefits of eco-driving consisted of workshops during Mobility Week (2010 and 2011).

**Stage 2: Design, production and printing of materials to support campaigns** (*January 2010 to August 2010*) – At this stage, a graphic layout was made for these marketing campaigns, namely leaflets, posters, webpages and facebook page.

**Stage 3: Implementation of eco-driving campaigns** (*September 2010 and September 2011*) – 8 workshops were promoted about eco-driving, aiming to make citizens aware, that it is important to adopt a more ecologic driving behaviour. While assisting these workshops, the participants found out the level of their pollutant emissions, by filling a small survey. The participants could also test their eco-driving knowledge in a simulator and obtain a score. This event contributed to the diffusion among the population of a method of driving in a more sustainable way. A survey was used to evaluate the eco-driving knowledge.

Besides the workshops and the exhibition of awareness videos, a race was organized. The drivers that participated in the race were well known persons from our city. The participants had to drive through several roads in Funchal in pairs. The main goal of this activity was to promote eco-driving, using the media to disseminate its benefits among the population. Aiming to understand the benefits of more ecological driving, the participants had to overcome several obstacles, putting in practice the eco-driving rules, in order to reduce CO2 emissions and fuel consumption. Besides participating in the race, all participants had to answer an eco-driving quiz and perform an alcohol test.

## **5. Other campaigns**

### **5.1 – European Mobility Week (September, 2009, 2010, 2011, 2012)**

Since 2009, Funchal's municipality organized Mobility Weeks which were the most important events to promote Sustainable Mobility, through several activities that were developed. Several activities were launched such as less pollutant vehicles exhibition (hybrid and electric), conferences, street awareness campaigns, launch of the first bicycle track, among other events, that caused a positive and important impact, regarding the sustainable mobility issues.

### **5.2 – Expo-Energy Funchal (June of 2010, 2011 and 2012)**

The expo-energy was yet another initiative organised by Funchal's Municipality, that aimed at promoting the latest technological innovations in terms of renewable energies (such as solar powered ovens and other type of equipment). Also, several vehicles were displayed, such as electric and hybrid automobiles, segways and electric scooters. The event also included several environmental awareness activities, such as seminars, films and conferences. MIMOSA was also a focus of these event, through conferences and exhibitions.

### **5.3 – Expomadeira Edition (July of 2010, 2011)**

Expo Madeira, the main Economic Activities Exhibition of Madeira, takes place at Madeira Tecnopolo in Funchal annually, from 9-18 July. With access to large numbers of the business community and public all in one place, CIVITAS Mimosa Funchal took the opportunity to promote itself with a stand in 2010 and 2011. The presence at the trade exhibition turned out to be an important way to disseminate the project, since this event is the biggest regional dissemination platform of products and services. According to the company that organized this activity, more than 80.000 people/per year attend the event, from all over the island. The overall aim was to make citizens and businesses aware of just how much atmospheric pollution and overcrowding, caused by heavy traffic volumes in the city, can be easily prevented with the help of the people, business and new measures being introduced in Funchal. Visitors were able to see and hear for themselves about the negative effects on their health and local environment along with the urgent need to put into practice more sustainable mobility behaviour, thanks to the role played by the members of the CIVITAS Mimosa Funchal Team who demonstrated how easy it is to create a better environment and increase one's quality of life, simply by using less pollutant transport.

Several merchandising items were given away such as pens, key chains, bike reflectors and sunflower seeds. Also pamphlets were distributed to passers by about Eco Driving, Green Tariffs and CIVITAS Mimosa. Participation in the Expo also proved to be a good way to evaluate peoples' knowledge about the CIVITAS MIMOSA project in Funchal. A survey was used to check their perception of the overall project and the importance given to the projects' measures. In order to draw people's attention, several prizes were raffled, including conventional bicycles and electric bicycles, in which surveys were also conducted among attendants. Expo Madeira served as a great way to collect surveys, since it is one of the most important events in Madeira, regarding the divulgation of new products and companies. The questions used in the survey referred mainly to the respondent's mobility patterns.

#### **5.4 – Other campaigns carried on by local partner – transport operator Horários do Funchal (September of 2010 and August of 2012)**

In September of 2010, "Horários do Funchal" purchased professional photographs to enhance specific campaigns so as to give a boost to public transport. In addition to this, the PT Operator announced during Mobility Week a new fare menu, including an annual pass. This campaign already included one of the new photographs. Also, during this month, "Horários do Funchal" subcontracted an upgrade of the ticketing system to introduce a new ticket, the annual pass. This activity intended to promote customer loyalty. In August of 2012, Horários do Funchal launched a communication campaign dedicated to students, to promote the purchase of the monthly pass during holiday time.

#### **B5 – Inter-relationships with other measures**

The measure is related to other measures as follows:

**Measure 1.2 – Electric and hybrid vehicles:** One main goal of this measure is to raise public awareness regarding the benefits of electric vehicles. The awareness campaigns conducted in this measure also aimed at promoting the benefits of less pollutant vehicles.

**Measure 2.1 – FUN Green PT Line:** The Green Line is a public transport service of high frequency that covers the western part of the city. One of the goals of FUN 4.1 is to increase the use of public transport including the Green Line.

**Measure 6.1 – Eco-Drive in large fleet:** The Municipality and Horários do Funchal (local partner) have been developing awareness campaigns on eco-driving, oriented towards drivers, bus drivers, and citizens in general. Measure 6.1 is related to one of this measure component's (eco-driving). Nevertheless, the target groups are different.

**Covenant of Mayors:** The inclusion of Funchal in the Covenant of Mayors<sup>1</sup> and its subsequent SEAP (Sustainable Energy Action Plan) were an important step towards sustainability. This action plan has the goal to reduce CO2 emissions by 20%, by 2020, , integrating measures that promote eco-driving, increase the use of public transport and pedestrian mobility, among other measures in the sustainable mobility field.

**Road prevention Project:** Not directly related with CIVITAS, the Municipality of Funchal is also promoting other activities, such as road accident prevention and environmental campaigns that are developed by the Educational Department. Local authorities are also responsible for the development of several actions, such as "safe-school" project which is aimed towards all students.

**European Project "Eco-Schools":** This project has also been successfully implemented in several regional schools. This project, aimed towards environmental education, has proved to be very efficient, since 21 regional schools have been awarded for their good practices. Promoting public transport is also a goal.

## **C Impact Evaluation Findings**

### **C1 Measurement methodology**

#### **C1.1 Impacts and Indicators**

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<sup>1</sup> The 'Covenant of Mayors' is a European Commission (DG ENER) initiative to go beyond the EU 2020 energy targets. By signing the 'Covenant', mayors of cities and local authorities commit themselves to developing a sustainable energy action plan which will set out the way to achieve their goals. These goals are to decrease the CO<sub>2</sub> emissions by more than 20%, and to increase the use of renewable energy and energy efficiency, compared to a baseline emission inventory scheme. In order to carry out the sustainable energy action plan the city can apply for funding and technical assistance.

**Table C1.1: Indicators**

No.	Impact	Indicator	Data used	Baseline data
1	<b>Awareness level</b>	Sustainable mobility awareness level (POINTER core indicator – no. 13)	PT Operator and the Municipality have collected this data through a survey carried out at Expo-Madeira event.	No data collected before the implementation
2		Awareness of dissemination tools (city specific indicator)	Information collected by the Municipality This indicator refers to the number of articles produced by local media, facebook statistics and website articles	No data collected before the implementation
3	<b>Modal split</b>	Percentage of travellers using a particular type of transportation ( POINTER core indicator – no. 26))	Data provided by the Municipality	The baseline data available is from 2007, “mobility study”.
4	<b>Acceptance</b>	Willingness of citizens to use sustainable modes of transport in future) POINTER core indicator – no. 14)	Data collected through a survey carried out during the Expo-Madeira event	No baseline data
5	<b>Transport modes used by students</b>	Transport modes used by students in school-home trips (city specific indicator POINTER core indicator – no. 28)	Information collected by the Municipality through a survey carried on schools	Collected during the beginning of 2010-2011 school year (sample size of 1182 students).
6	<b>Acceptance of eco-driving skills</b>	Eco-driving usefulness level (pointer no. 13)	Information collected by the Municipality through a survey carried out at expo-madeira event	Collected in July, 2010 with a sample size of 610. The surveys were carried out using a random process and mostly face-to-face.
7		Eco-driving golden rules application		
8	<b>Acceptance</b>	Usefulness of pedestrian campaigns (POINTER core indicator – no. 14)	Information collected by the Municipality through a survey carried out at expo-madeira event and during the 2012 European Mobility Week	Collected in July, 2010 with a sample size of 610. The surveys were carried on using a random process and mostly face-to-face.

Given the fact that this measure focuses on four major campaigns (Pedestrian, public transport, eco-driving and school mobility management), it is necessary to describe in detail each of the indicators and methodology for its collection. Between the two measurement periods for each one of the indicators several campaigns to promote sustainable awareness were developed.

- **Indicator 1** - (Measure acceptance level) – Results were obtained through the Expo-Madeira survey. The target groups were the visitors of the Expo-Madeira. The question used to assess this is “are you aware of the term Sustainable Mobility? If yes, what does the term mean to you”. Collected in July, 2010 and in July of 2011. In 2010 the sample size was 679 people while in 2011, the sample size was 763. The surveys were carried on using a random process and mostly face-to-face. The target group covered a wide range of people, ranging from students to elderly people and company representatives.
- **Indicator 2** - (Awareness of dissemination tools) – This indicator was assessed by counting the number of news items in regional press and number of hits in the mobility and transports website.
- **Indicator 3** - (Modal Split) - Percentage of citizens that uses the modes of transport (private car, bus, bicycle, walk and motorcycle) – This data was also collected at Expo-Madeira. The methodology is based on specific surveys carried out by the municipality (in 2010 and in 2011) during Expo Madeira, a regional exhibition fair. Collected in July, 2010 and in July of 2011. In 2010 the sample size was 679 while in 2011, it was 763. The surveys were carried out using a random process and mostly face-to-face. The target group covered a wide range of people, ranging from students to elderly people and company representatives (indicator is bundled with FUN 6.2, but was handled in a different way, only referring to citizens that live and work in Funchal).
- **Indicator 4** - (willingness to use the modes) – Percentage of citizens that are likely to change their mobility habits in the future. This data was collected in Expo-Madeira in 2010 (July) and 2011 (July).
- **Indicator 5** - (Transport modes used by students) – This indicator refers to the transport modes used by students in school-home trips. It was collected in schools, in two different school years (2010-2011 and 2011-2012).
- **Indicator 6** - (eco-driving usefulness level) – This data was collected in Expo-Madeira in two periods. The question used to assess this indicator was “how useful are eco-driving campaigns for you?”.
- **Indicator 7** - (eco-driving golden rules application) - This data was collected in Expo-Madeira in two periods (2010 and 2011). The question used to assess this indicator was “what does eco-driving mean to you?”.
- **Indicator 8** (Pedestrian campaigns usefulness) – This data was collected in Expo-Madeira in 2010 and during the European Mobility Week (2012). This indicator was used to assess the level of usefulness perceived by the population regarding the pedestrian campaigns that the Municipality carried on during MIMOSA.



What follows is a more detailed sample characterization of the survey conducted in Expo-Madeira:

Sample details		2010		2011	
<b>Male</b>	<b>Ages</b>	<b>Abs</b>	<b>%</b>	<b>Abs</b>	<b>%</b>
	-18	26	6,9	48	12,9
	18-30	164	43,3	109	29,4
	30-55	177	46,7	196	52,8
	55	12	3,2	18	4,9
<b>Total</b>		<b>379</b>	<b>100,0</b>	<b>371</b>	<b>100</b>
<b>Female</b>	<b>Ages</b>	<b>Abs</b>	<b>%</b>	<b>Abs</b>	<b>%</b>
	-18	36	8,5	62	14,2
	18-30	201	47,6	146	33,5
	30-55	179	42,4	207	47,5
	55	6	1,4	21	4,8
<b>Total</b>		<b>422</b>	<b>100</b>	<b>436</b>	<b>100</b>
	<b>2010</b>	<b>2011</b>			
Percentage of males	47	45			
Percentage of females	53	54			

	<b>%</b>	<b>%</b>
Resident and work in Funchal	64,7	58,8
Resident but not working in Funchal	9,5	4,8
nonresident but work in Funchal	17,3	19,6
Nonresident and not working in Funchal	8,5	16,8
<b>Total</b>	<b>100</b>	<b>100</b>

Table 1 – Sample size characterization (Expo-Madeira survey 2010-2011)

**Table C1.2: List of potential effects that were not assessed**

<b>No</b>	<b>Indicator</b>	<b>How does it impact</b>	<b>Why it was not accessed</b>
<b>1</b>	<b>Quality service</b>	Client's level of satisfaction	Due to an unexpected financial situation, to an uncertain legal framework about concession of the this public space, , and also due to a lack of time to develop this activity before the end of the CIVITAS project, the public transport operator has not implemented the info point.

<b>2</b>	<b>School Mobilization</b>	No. of students and schools involved in school mobility manager campaign	This indicator was not the best way to measure the campaign's effectiveness. Therefore, it was removed and replaced by a different indicator related to the student's modal split.
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### C1.3 Establishing a Baseline

No.	Impact	Indicator	Baseline data
<b>1</b>	<b>Awareness level</b>	Sustainable mobility awareness level	No baseline data for this indicator
<b>2</b>		Awareness of dissemination tools	No baseline data for this indicator
<b>3</b>	<b>Modal split</b>	Percentage of travellers using a particular type of transport	According to the Mobility Study in 2007, the modal split for Funchal's citizens are: Foot = 16,5% PT = 31% IT = 51,8% IT+PT = 0,2% Other = 0,4%
<b>4</b>	<b>Willingness to use the modes</b>	Willingness of citizens to use sustainable modes of transport in future	No baseline for this indicator  The survey carried out during the beginning of the school year 2010-2011 revealed that of all 7 schools, only the students of two schools uses public transport more. The students of other schools uses mainly individual transport.
<b>5</b>	<b>Transport modes used by students</b>	Transport modes used by students in school-home trips	
<b>6</b>	<b>Acceptance of Eco-driving skills</b>	Eco-Driving usefulness level	No baseline for this indicator
<b>7</b>		Eco-driving golden rules application	No baseline for this indicator
<b>8</b>	<b>Acceptance of Pedestrian campaigns</b>	Pedestrian campaigns acceptance	No baseline for this indicator

### C1.4 Building the Business-as-Usual scenario

Since the measure is innovative in every aspect, and works mainly on a social level, a BAU analysis is not applicable for all indicators.

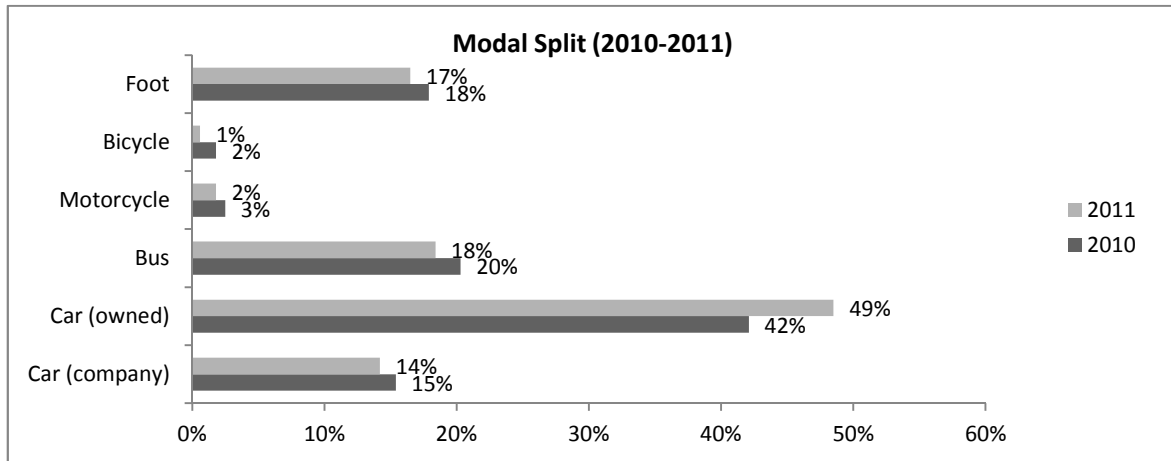
Indicator	BAU assumptions
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Indicator	BAU assumptions
<b>Sustainable mobility awareness level</b>	No baseline data prior to the implementation
<b>Awareness of dissemination tools</b>	No baseline data prior to the implementation
<b>Percentage of travellers using a particular type of transport</b>	Although it was collected in 2007, the information gathered is not sufficient to perform a BAU analysis . Our perception is that despite fact that the campaigns have contributed to increasing the use of more sustainable modes of transport, there are other factors that have contributed to a reduction in individual transport (decrease of occupancy of public car parks, reduction in the number of vehicles and reduction in fuel sales).
<b>Willingness of citizens to use sustainable modes of transport in the future</b>	No baseline data prior to the implementation
<b>Transport modes used by students in school-home trips</b>	No baseline data prior to the implementation
<b>Eco-Driving knowledge level</b>	No baseline data prior to the implementation
<b>Eco-driving golden rules application</b>	No baseline data prior to the implementation
<b>Pedestrian campaigns acceptance</b>	No baseline data prior to the implementation

## C2 Measure results

### Indicator 3 – Modal Split

The data for this indicator was collected during the Expo-Madeira event on two occasions: July of 2010 and July of 2011. According to the graph below, despite the fact that the modal share remained the same, there was a decrease in the percentage of people using their own car (-6,4 p.p), and an increase in PT use (from 18,4% to 20,3%). Also, both walking (16,5% to 17,9%) and cycling (0,6% to 1,8%) have gained a slight increase, which prove that respondents, despite keeping the individual transport as their main type of transport, are gradually changing their mobility habits. This change is also in agreement with the willingness level that is assessed in detail below. There is a change in behaviour between 2010 and 2011. This shift indicates a reduced use of the car itself, a greater use of bus and foot. In parallel, there is also an increase in motorcycle and bicycle.

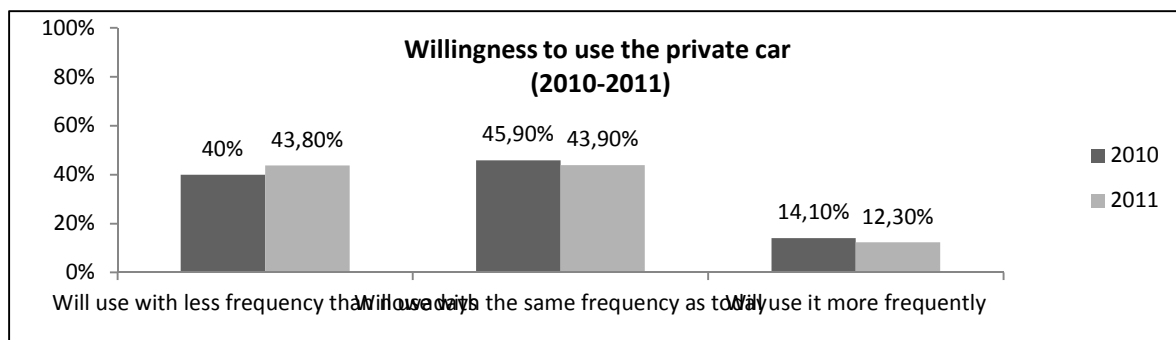


Graph 2 – Modal split of participants that answered the survey in Expo-Madeira (2010 and 2011)

We have 6 categories, so the number of degrees of freedom is 5. For the table, for a significance level of 0.05, the critical value is: 11.1. Since  $31.91 > 11.1$ , then we can reject the hypothesis. Therefore, there is no change in the modal split between 2010 and 2011.

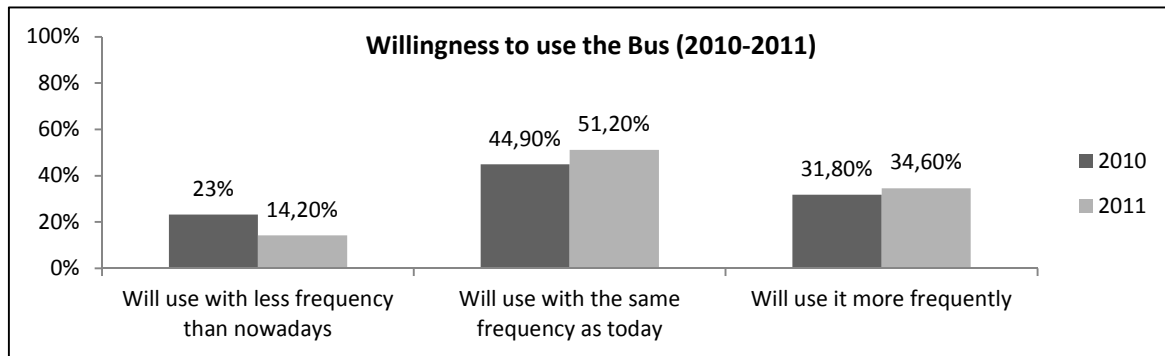
#### Indicator 4 – Willingness to change the modes

The surveys conducted in Expo-Madeira also assessed the willingness of the participants to change their type of transport. As for the car use in the future, there was some noticeable changes in both years results. Despite the fact that most respondents stated that they will use the car with the same frequency as today, in both years, in 2011, there was an increase of 3,8 p.p in the percentage of people that will use the car less. Also, there was a decrease in the percentage of people who say they will use it more frequently (14,2% to 12,3%). We have 3 categories, then the number of degrees of freedom is 2. For the table, for a significance level of 0.05, the critical value is: 5.99. Because  $6.39 > 5.99$ , therefore, there is no difference in intention to change car use between 2010 and 2011.



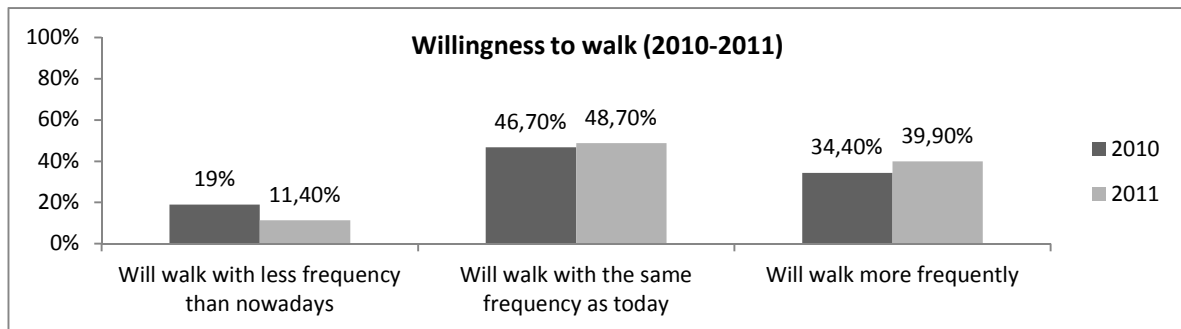
Graph 3 – Willingness to use the private car (Expo-Madeira survey - 2010 and 2011)

As for the bus use in the future, the surveys also revealed a positive improvement between the two periods. There was an increase of 2,8 p.p in the percentage of people that will use the bus more often. Moreover, the survey also revealed that fewer people will use the bus less (14,2% answered, in 2011 that they will use the bus less, which is an improvement over the results obtained in 2010). We have 3 categories, then the number of degrees of freedom is 2. For the table, for a significance level of 0.05, the critical value is: 5.99. Since  $26.97 > 5.99$ , then the hypothesis shows there is no difference in intention to change bus use between 2010 and 2011.



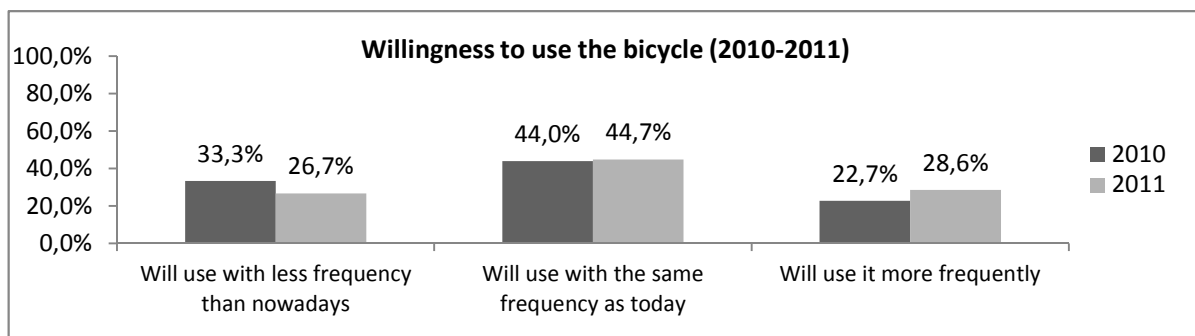
Graph 4 – Willingness to use the bus (Expo-Madeira survey - 2010 and 2011)

As for walking, the surveys revealed that people intend to walk more. Comparing both results reveals an increase of 5,5 p.p in the percentage of people that will walk more often. We have 3 categories, then the number of degrees of freedom is 2. For the table, for a significance level of 0.05, the critical value is: 5.99. Since  $21.0 > 5.99$ , then we can reject the hypothesis that there is no difference in intention to change frequency of walking between 2010 and 2011.



Graph 5 – Willingness to walk (Expo-Madeira survey - 2010 and 2011)

As for the bike use, the surveys revealed that participants are more willing to use the bicycle in the future (an increase of 5.9 p.p). We have 3 categories, then the number of degrees of freedom are 2. For the table, for a significance level of 0.05, the critical value is: 5.99. As  $21.0 > 5.99$ . Therefore, we can reject the hypothesis that there is no change of intention on the use of bicycle between 2010 and 2011.



Graph 6 – Willingness to use the bike (Expo-Madeira survey - 2010 and 2011)

The above indicators shows that there is a slight behavioral change to more sustainable modes of transport. Although it is difficult to distinguish the factors that lead to this change in behavior, surely the campaigns conducted within MIMOSA have played an important role. Unfortunately, no data has been collected before the implementation of the campaigns.

While we know that behavior changes are not attributed to a single factor, we find that campaigns for citizens play a role in changing behavior, though of course it is not the only one. Another key factor is certainly the economic crisis and the increase of fuel prices. Although no information has been collected, the perception that we have, is that in recent months there has been a decrease in the use of individual transport. This trend is backed up by a decrease in the number of vehicles circulating in the city, reduction in the fuel sales and decrease in the occupation of parking lots.

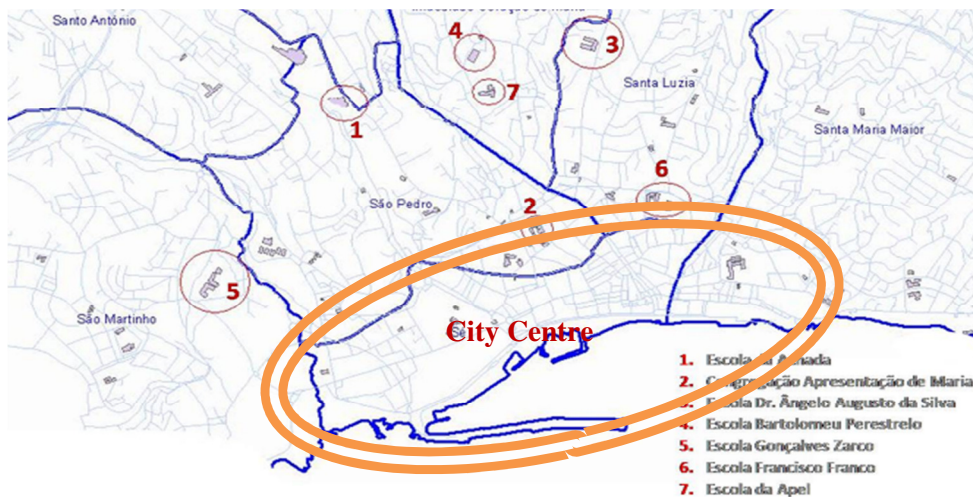
### Indicator 5 – Transport modes used by students

The survey consisted of only one question, specifically the type of transport used by students to the following destinations: Home-School, and School-Home. The choices included individual transport, bus, foot, motorcycle, bicycle, hitchhiking, or other.

The results are strongly influenced by many factors, such as the school's geographic localization, the public transport regularity/offer, proximity to habitation areas, student's age, and others. The location of the school near a good public transport service are the most important factors. Furthermore, the students that answered the survey were mostly teenagers (16 years of age) being perfectly capable of using the BUS on their own. As mentioned previously, the school campaigns were conducted in two school years. The results are described for each year.

### School year 2010 – 2011 analysis

In general, the survey results revealed that most students predominantly use individual transport (IT). Only in two schools, the bus constitutes the most used type of transport by the respondents.



Map 1 – Location of schools that participated in the campaigns

Most students use the same type of transport for both journeys (home-school and school-home), which shows the necessity of fostering among students, other sustainable means of transport. A second survey was conducted at the end of the school year. The following table shows the global results.

		Car	Bus	Foot	Motorcycle	Bike	Hitchhinking
<b>School 1</b>	1st survey	53,3%	38,3%	5,0%	-	-	3,3%
	2nd survey	45,6%	32,4%	19,1%	-	-	2,9%

<b>School 2</b>	1st survey	74,5%	12,7%	9,9%	-	-	2,4%
	2nd survey	76,4%	13,0%	9,6%	-	-	1,0%
<b>School 3</b>	1st survey	48,8%	16,7%	29,8%	-	-	4,8%
	2nd survey	44,7%	18,4%	34,2%	-	-	2,6%
<b>School 4</b>	1st survey	64,3%	17,6%	16,2%	1,0%	-	0,5%
	2nd survey	62,7%	20,3%	17,1%	-	-	-
<b>School 5</b>	1st survey	29,3%	53,3%	17,4%	-	-	-
	2nd survey	26,0%	43,3%	28,0%	2,7%	-	-
<b>School 6</b>	1st survey	27,5%	65,7%	6,4%	-	-	0,5%
	2nd survey	29,3%	66,3%	3,3%	-	-	1,1%
<b>School 7</b>	1st survey	60,5%	24,1%	8,8%	2,2%	0,9%	3,5%
	2nd survey	67,8%	19,7%	6,7%	3,8%	-	1,0%

Table 2 – School results (school year 2010-2011)

We have 6 categories, so the number of degrees of freedom is 5. For the table, for a significance level of 0.05, the critical value is: 11.1. Since  $14.8 > 11.1$ , then the hypothesis is rejected since there are no changes in mobility behaviour between 2010 and 2011 (beginning and end of the school year).

The application of surveys to students in the end of the school year allowed a comparison of results from the same survey conducted at the beginning of the school year.

In all schools the most widely used type of transport is IT, except for two schools (5 and 6) in which the majority of the respondents uses public transport.

A comparison of the two years reveals that the results remained more or less the same. Nevertheless, there was some increase in pedestrian circulation, namely in school 1, school 3 and school 5. There was also a slight increase in the percentage of students that started to use the bus more often after the campaigns (schools 2, 3, 4 and 6).

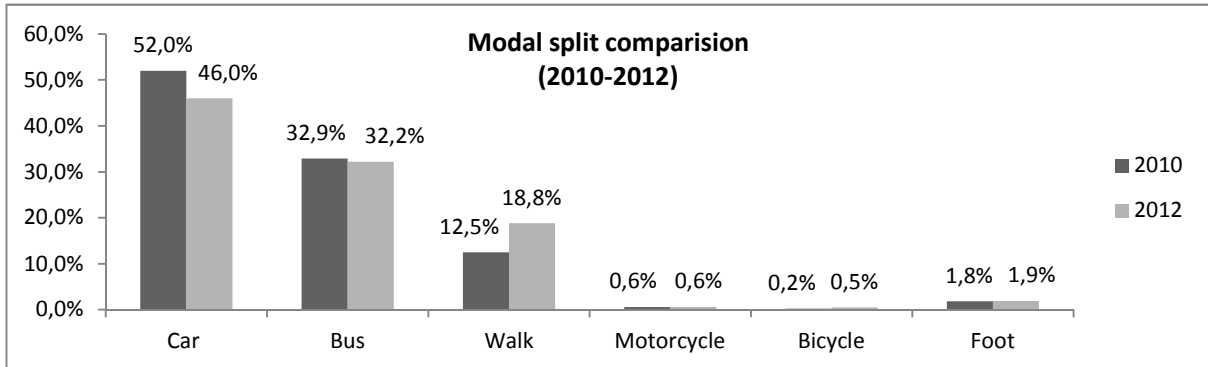
### **School year 2011 – 2012 analysis**

Due to the lack of human resources, the campaigns started in the middle of the school year. Nevertheless 4 schools participated in the campaigns (schools 3, 4, 5, 6 and 7, according to map 1). The surveys were conducted in the middle of the year and at the end.

The surveys were not conducted properly in 3 schools, due to the lack of availability from the teacher and the lack of human resources that contributed to a late implementation of the campaigns. The campaigns were also influenced by additional mobility activities implemented as part of the overall project. This increased the difficulty of making comparisons. Nevertheless, in 3 schools where the survey was conducted twice, there was a positive improvement: in school 4 (decrease of car travel and increase in walking), school 6 (increase in walking) and school 7 in which most sustainable modes of transport increased (+ 6.2 p.p in the use of bus and +12.6 p.p in walking). We have 6 categories, so the number of degrees of freedom is 5. For the table, for a significance level of 0.05, the critical value is: 11.1. Since  $31.2 > 11.1$ , the change in mobility behavior of the students at the beginning and end of the 2011-2012 school year is not significant.

## 2010-2011 | 2011-2012 Comparison

The following graph presents a comparison between both school year results. Despite the fact that the private car remains the most used type of transport, there was a slight decrease in 6 p.p. As for the bus use, it remained more or less the same. As for walking, it suffered a slight increase of 6 p.p. The bike use also increased by 0.3 p.p.



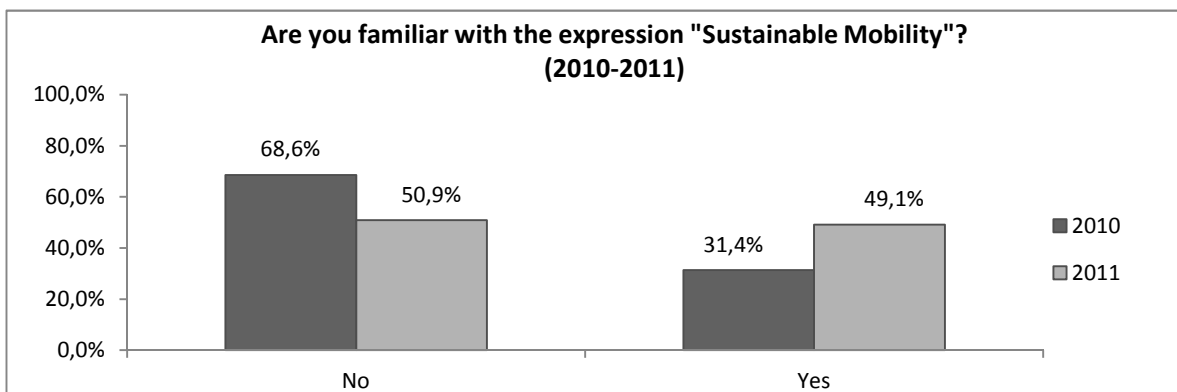
Graph 7 – Students modal split (2010-2012)

We have 6 categories, so the number of degrees of freedom is 5. For the table, for a significance level of 0.05, the critical value is: 11.1. Since  $27.3 > 11.1$ , there is not a significant change in mobility behaviour between 2010 and 2011.

## C2.5 Society

### Indicator 1 – Measure acceptance level

The acceptance was assessed through surveys that were carried out in two years during the expo-madeira event (in 2010 and 2011). In 2010, the majority of the participants were unfamiliar with sustainable mobility (68,4%). The surveys conducted in 2011 revealed that 49,2% of the population were familiar with sustainable mobility, a significant increase on 2010 results (+ 17.8 p.p). Between the two periods in which the surveys were conducted, several activities were developed, so its possible that these campaigns have played an important role in promoting sustainable mobility. We have 2 categories, so the number of degrees of freedom is 1, for a significance level of 0.05, the critical value is 3,84. Since  $11,1 > 3,1$ , then we can reject the hypothesis that there is no change in the level of familiarity regarding the concept of Sustainable Mobility between both measurement periods.

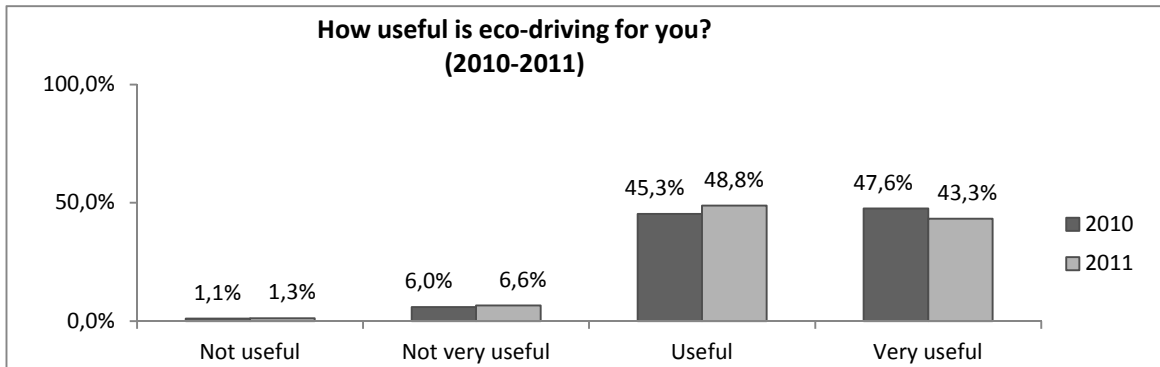


Graph 8 – Are you familiar with the expression "Sustainable Mobility" (2010-2011)



### Indicator 6 – Eco-driving acceptance level

When asked about the level of usefulness, the majority of participants considered these types of campaigns useful. While the changes are minor, there was a slight decrease in the percentage of people that considered these campaigns useful (a decrease of 4.3 p.p). On the other hand, there was a small increase in the percentage of people who perceived these activities as useful.

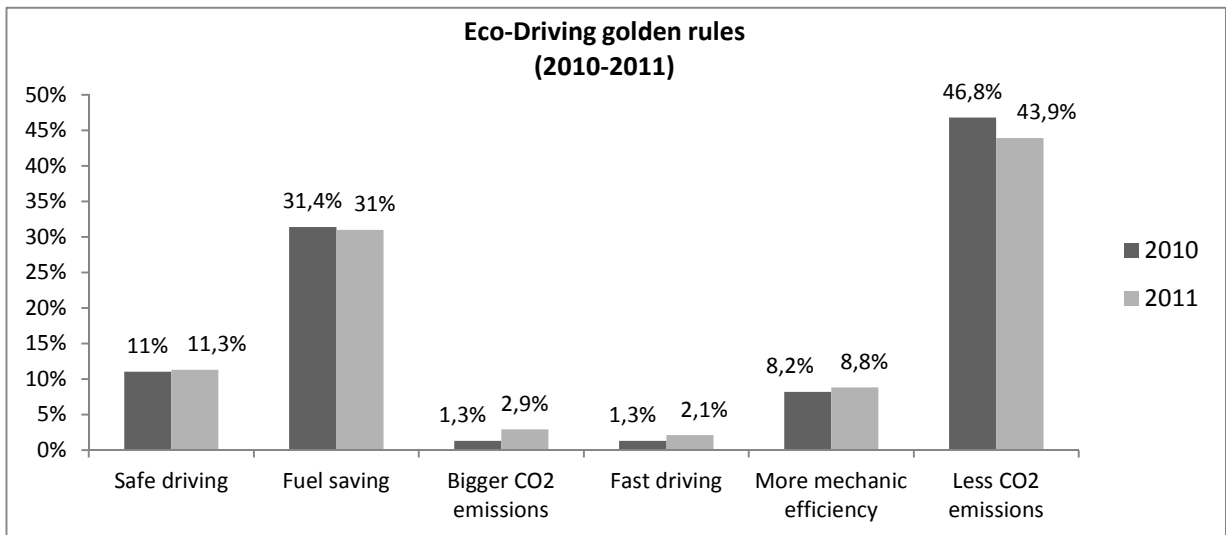


Graph 9 – Eco-Driving usefulness (Expo-Madeira – 2010-2011)

We have 4 categories, so the number of degrees of freedom is 3. For the table, for a significance level of 0.05, the critical value is: 7.81. Since  $4.45 < 11.1$ , then we can not reject the hypothesis that there is no change of opinion between 2010 and 2011.

### Indicator 7 – Eco driving golden rules application

The following graph shows the level of knowledge that people have about eco-driving. As we can see in the following graph, most people associates eco-driving with the reduction of CO2 emissions and fuel saving. The results show, ultimately, that the participants have a very good knowledge of eco-driving.



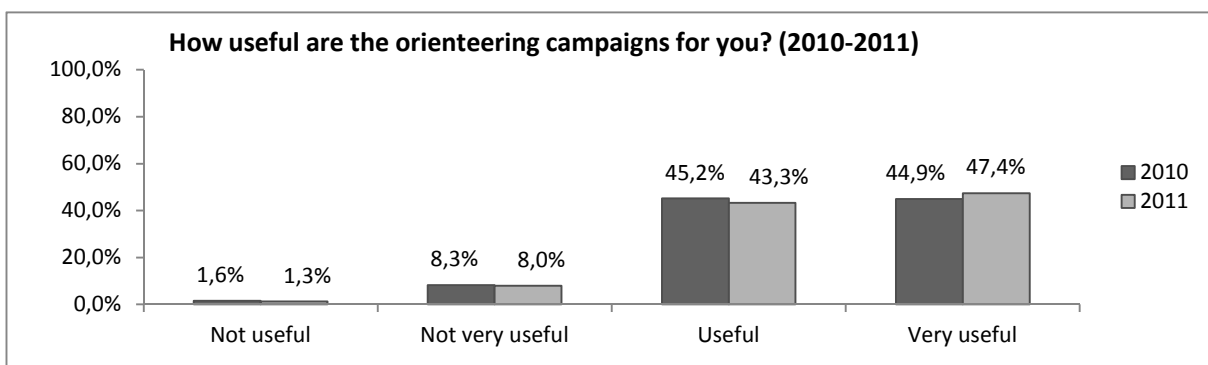
Graph 10 – Eco-Driving application of golden rules (Expo-Madeira – 2010-2011)

We have 6 categories, so the number of degrees of freedom are 5. For the table, for a significance level of 0.05, the critical value is: 11.1. As  $48.1 > 11.1$ , then one can reject the hypothesis that there is no change in mobility behavior between 2010 and 2011.

### Indicator 8 – Acceptance of pedestrian campaigns

One of the campaigns that were carried on during MIMOSA were the orienteering events. Over the MIMOSA lifespan, the Municipality conducted 8 orienteering events, in which more than 1500 people participated, With the exception of the third edition that was aimed towards senior citizens, all of the campaigns had at least 150 participants which reflects their success. By 2010, for example, 62% of the participants were already aware of the pedestrian campaigns that were happening in the city (a question that was asked during the fourth Orienteering event to assess knowledge of the campaign's ). As for the surveys carried out to assess the degree of usefulness perceived by citizens, the majority of people that answered the survey considered the campaigns useful(45,1%) and very useful (44,9%).

In the second year, the trend remained the same, although, in this case, the majority of people considered the orienteering campaigns very useful (increase of 3.9 p.p). We have 4 categories, so the number of degrees of freedom is 3. For the table, for a significance level of 0.05, the critical value is: 7.81. As  $2.54 < 11.1$ , then we can not reject the hypothesis that there is no change of opinion between 2010 and 2011.



Graph 11 – Orienteering campaign usefulness (Expo-Madeira – 2010-2011)

## Indicator 2 – Awareness of dissemination tools

In total, so far, the actions that were developed in this measure have managed to gather hundreds of people. The events that gathered the most participants were the orienteering competitions. As for the news that have been spread in the media, we were able to gather more than 240 articles that were published. This includes not only TV broadcast, but also newspapers, radio broadcasts, institutional website (both the Municipality's website dedicated to mobility and transports, and also Facebook page). As for the items that were produced, so far we have produced more than 15.000 leaflets/pamphlets (including CIVITAS pamphlets, sustainable mobility awareness leaflets, eco-driving pamphlets, and others) and more than 200 posters. While it's difficult to assess the impact that the produced material had upon citizens, it definitely contributed to disseminate the MIMOSA project and sustainable mobility theme.

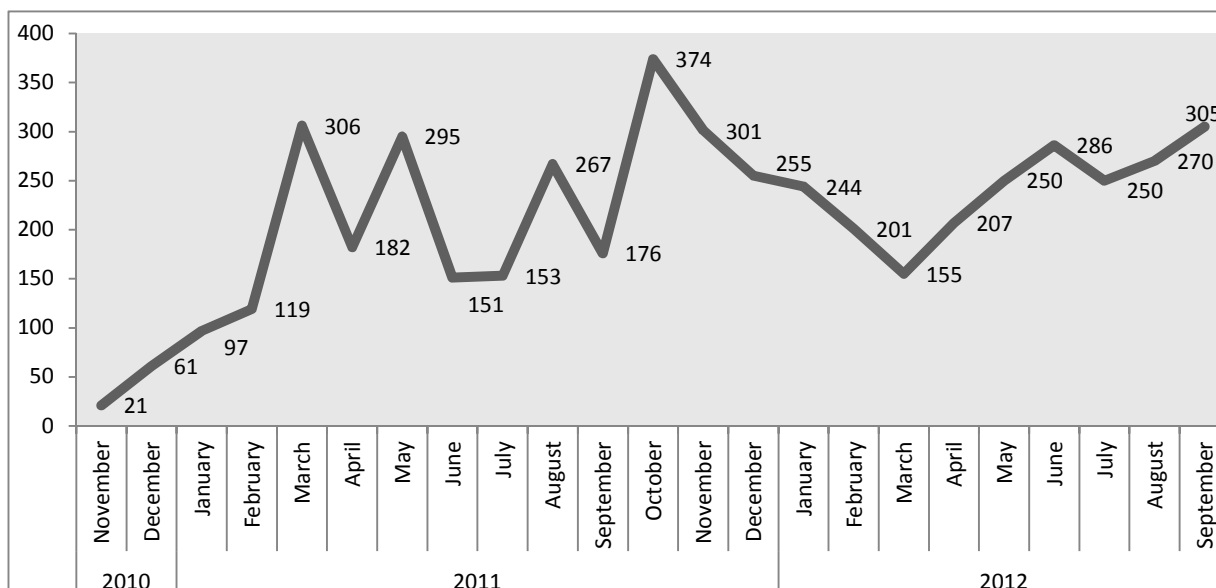
As for merchandising items we have produced and given out more than 5000 items, of which at least half are t-shirts focusing on the different events that we had (orienteering campaigns, public transport, school campaigns, mobility week t-shirts).

To further promote sustainable mobility among citizens, the Municipality launched, on November of 2010, a specific website dedicated to mobility and transports. This website includes several information not only related to CIVITAS measures, but also other relevant data, such as the Mobility Study documents (2007) and GIS data (geographic distribution of taxis, parking lots, bicycle track, etc). So far, the website has

reached almost 5000 hits. The monthly average of hits in the website is 214. Looking at the graph below, the months that had more hits were September of 2011 (and also the following months) and September of 2012, due to the mobility week activities that were reported on the website.

Events	Communication/dissemination			
	News in the media	Leaflets	Posters	Merchandising
Orienteering competitions	31	3200	150	1200
Eco-Driving	13	1100	30	-
Public transport campaign	12	900	120	550
School mobility manager	15	-	-	1700
Other activities (i.e: EMW 09,10, 11, 12, Expo-Madeira 10, 11 )	170	15000	-	3800
<b>Total</b>	<b>241</b>	<b>20.200</b>	<b>300</b>	<b>7250</b>

Table 3 – Materials produced throughout MIMOSA lifespan



Graph 12 – Hits on the Municipality's micro site dedicated to mobility

Most events that were carried on within this event had a strong communication campaign, in which several merchandising items were handed out to participants. According to the table above that resumes some of the materials that were produced, a total of 20.200 leaflets were produced and given out to the citizens during several occasions. The merchandising items that were produced includes t-shirts, keyrings, pens, hats. Overall, 7250 items were given to participants. The use of internet features, such as Facebook is crucial to expand CIVITAS knowledge among the population. Aiming to further awareness of CIVITAS, the MIMOSA team created a facebook page dedicated to CIVITAS MIMOSA activities in Funchal. Since the page creation in 27th May 2010, we have managed to gather more than 700 members. While the majority are from Portugal, there are also members from other countries such as Brazil, Estonia, Venezuela, Belgium, Netherlands, Germany, Indonesia, Spain, Italy and others. Most members (40%) are young (25-34 years old). which shows that young adults are more aware of, or at least, more concerned about sustainability issues.

### C3 Achievement of quantifiable targets and objectives

No.	Target	Rating
1	Goal: Increase knowledge on eco-driving habits among the population Result: During the surveys carried on during 2010 and 2011, the participants showed that they are familiar with eco-driving, perceiving it as fuel savings (31,4% in 2010 and 31% in 2011) and less CO2 emissions (46,8% in 2010 and 43,1% in 2011)	**
2	Goal: Improvement of the use of public transport, especially by students Result: According to the surveys, in 2010-2011 4 schools have improved their use of public transport. In 2011-2012, the surveys showed an increase in walking (12.6 p.p in one school)	**
3	Goal: To have an increasing number of people participating in orienteering activities Result: In the 8 events that were conducted, approximately 1500 people participated in them	**
4	Sustainable mobility manager concept implemented in local schools	O
NA = Not Assessed    O = Not Achieved    * = Substantially achieved (at least 50%) ** = Achieved in full    *** = Exceeded		

In addition to the expected outputs, the results obtained revealed that the activities were successful. The main components of this measure were the activities (eco-driving, pedestrian campaigns, public transport and school campaigns). The surveys carried out during the eco-driving showed that the participants were already familiar with this type of driving. As for the public transport, of all 7 schools that participated in the project, according to surveys, 4 schools showed an increase in bus use (partly at the cost of walking). Despite the fact that the sustainable mobility manager concept has not been implemented, the activities that were developed, contributed to an increased use of public transport to a certain extent. As for the pedestrian mobility campaigns, there was a total of 8 events (250 people per event), which means that the awareness for walking as a sustainable transport option has increased in the city of Funchal.

Due to the fact that changing habits needs time, the activities can be seen as an important step towards a more sustainable transport in Funchal.

#### **C4 Up-scaling of results**

The positive influence of most activities that were carried on within this measure showed the importance of developing more of these actions in future. The school mobility campaign proved to be a success in disseminating the sustainable mobility themes among the students. The Municipality is considering the possibility of further developing these strategies in schools in future because those activities may influence the students future use of transport modes and can support their awareness and acceptance for sustainable options. The orienteering contests will be also replicated in future by the association that supports the Municipality in organizing these types of events. Additionally, the Municipality will continue to join the European Mobility Week and organize local events, such as the Expo-Energies and other mobility-related events.

## C5 Appraisal of evaluation approach

Promoting sustainable mobility is, more than ever, a challenge for cities. In cities like Funchal, in which there is still a lack of tradition in using more sustainable vehicles, the challenge to show significant changes is even bigger. The results of the evaluation must be considered with care since we are dealing with behavioral changes. During the evaluation process it became evident that it would be difficult to identify effective results, given the nature of the measure, and the high cost of data collection.

Measuring eco-driving effectively would be very difficult, given the cost of collecting information (namely citizen resistance due to the necessity of installing the consumption meters in cars). As for the modal split, a proper evaluation would imply a survey campaign with very high costs. Due to this, the evaluation of the measure was more focused on awareness than assessing behaviour changes since significant changes will become visible only in the long run (beyond MIMOSA's lifetime).

For the schools activities that were carried on, it would have been more successful to have other schools as a control site to compare the data and identify a clear impact of the measure, but this was not possible because the activities were delayed and so there was not enough time left to do further surveys.

Additionally - despite the interest showed by the Regional Government (who manages the schools) during the school campaigns - this interest was not shared by many schools, since they are more focused on teaching the students the curricular subjects, than non curricular subjects. The interest decreased even more by the 2011-2012 school year, due do the financial constraints that led to a reduction of teaching personnel. Therefore, the extracurricular subjects lost relevance and it was also not possible to convince them to take part in a survey as a control site.

Nevertheless the events external to the measure (such as Mobility Week and/or Expo-Energy) proved to be important in promoting both MIMOSA, its measures, and sustainable mobility. Due to its innovative features, the activities carried on reached a lot of citizens. The surveys revealed that the participants are willing to change their mobility habits. Therefore the campaigns can be seen as a step towards a more sustainable transport behavior.

## C6 Summary of evaluation results

The key results are as follows:

- **Increase knowledge and awareness on eco-driving habits among the population** – According to the Expo-Madeira surveys, the participants have already showed that are they are acquainted with some eco-driving skills. The workshops that were carried on during Mobility Week 2010 and 2011 have been contributing to increase the eco-driving knowledge level. In addition, a significant percentage of the participants that answered the surveys in Expo-Madeira perceived these actions as very useful (47,6% 2010 and 43,3% in 2011).
- **Increase the public transport rate among students** – According to the surveys conducted in schools, of the schools that participated in the mobility campaign, 4 schools have shown an increase in the use of public transport (partly to the detriment of walking however). The campaign “Get Around in Funchal by Bus” has also contributed to foster the use of collective transport. **To have an**

**increasing number of people participating in orienteering activities** – In total we have managed to gather at least 1500 participants. If we include the public transport campaigns (Get Around in Funchal by Bus), the number of total participants will reach 2000, which means more awareness of sustainable modes of transport.

- **Increase number of hits in key actor's websites** – The internet was used to spread sustainable mobility. The strategy relied on creating a CIVITAS webpage on a social network (facebook), and launching a webpage dedicated to mobility in Funchal. Almost 5000 people has visited the Mobility Municipality website (since its launch on September, 2010). Furthermore, the CIVITAS facebook page has gathered at least 700 friends.

## **C7 Future activities relating to the measure**

Throughout the new school year, the school mobility campaign will be carried on. It is also expected that, after MIMOSA, the Municipality will continue to participate in the European Mobility Week and organize other local events, such as Expo-Energies and similar ones. Additionally, more orienteering events will be organized in which we expect to reach an even larger number of participants and target groups.

## **D Process Evaluation Findings**

### **D.1 Deviations from the original plan**

The deviations from the original plan comprised:

- **Subcontracting** – Task 4.1.2 (in the DoW document) presupposes the subcontracting of an external team regarding the conception of the awareness campaigns. However, all the activities considered in this measure were developed by the Municipality CIVITAS Team. Due to this fact, we have stated in the second amendment that a great deal of work will be carried out by the Municipality itself. Therefore, we have included in the second amendment a corrective action, regarding the subcontracting, in which we stated that the activities developed will be carried out by the municipality. Nevertheless, external teams were hired to support the execution of activities.
- **Infopoint** – In the second amendment Horários do Funchal (the local public transport operator and MIMOSA partner), planned to subcontract a new activity and new equipment: Horários do Funchal added €156.000 (€78.000 of EC co-funding) in the implementation in order to build a mobility info point, and €5.940 (€2.376,00 of EC co-funding) dedicated to purchase equipment for the mobility info point. Due to an unexpected financial situation, an uncertain legal framework about concession of this public space to HF and also due to a lack of time to develop this activity before the end of the CIVITAS project, the InfoPoint was not implemented.

## D.2 Barriers and drivers

### D.2.1 Barriers

#### Overall barriers

- **3 – Cultural Barrier**

**Social resistance** – Since this measure deals with changing habits among citizens, the main barrier detected was at a social level. Despite the numerous awareness raising campaigns, the results showed, that despite the participants likelihood to change their transport habits, there is still a strong resistance in acquiring clean vehicles, and adopting sustainable mobility habits, because the impact of such activities can be only shown in the long run.

#### Preparation phase

- **9 – Organizational Barrier**

**-Lack of human resources** – Concerning the actions that were carried on in schools, we came across some limitations, namely the lack of human resources, which made it difficult to implement the actions.

#### *Operation phase*

- **9 – Organizational Barrier**

**Lack of data** - The lack of data on mobility hampered the evaluation process, and made it difficult to compare data. The implementation of the mobility observatory (FUN 8.3) was crucial since it will enable the collection of data related to mobility.

- **4 – Problem related Barrier**

**Subcontractor** - The work undertaken by the subcontractor to carry out the evaluation study on the environmental impacts arising from the implementation of the Project CIVITAS MIMOSA in Funchal, did not correspond to the expectations, given that this type of work is not common and there is no experience in this field.

### D.2.2 Drivers

#### Overall Drivers

- **1 – Political Driver**

**Political commitment** – The political involvement proved to be instrumental in promoting the events in this measure. The commitment shown meant that the message reached a greater number of people, and contributed to increased public discussion about the need to change our mobility habits.

#### *Preparation phase*

- **7 – Planning** – The involvement of the regional secretary of education was crucial in the implementation of the actions

- **7 – Planning**

**Innovation** – Since most activities are innovative and attract interest, we were able to reach various target groups ranging from elderly people to youngsters/students.

### D.2.3 Activities

#### Preparation phase

- **7 – Planning**

**Selection of target groups** – Selection of target groups and places in which the activities will be carried out.

**Definition of approach** – Definition of methodology to conduct the activities.

### D.3 Participation

#### D.3.1. Measure Partners

- **Municipality of Funchal** – Leader in the development of the measure and primarily responsible for all activities of the measure.
- **Horários do Funchal** - The CIVITAS partner supported the Municipality in some activities, namely the “Get Around in Funchal by Bus”, and in the school mobility project.
- **Madeira Tecnopolo** – The CIVITAS partner supported the Municipality at the Expo-Madeira exhibition.

#### D.3.2 Stakeholders

- **Schools** - The schools that welcomed the school mobility project supported the Municipality in developing some of the activities.

### D.4 Recommendations

#### D.4.1 Recommendations: measure replication

The issues related to sustainable mobility plays an important role in cities. Taking in account that in the City of Funchal, public transport has been losing users over the years, and that citizens does not have sustainable mobility behavior, it is important to counter this behavior and its adverse effects on the quality of life in the city.

In the city of Funchal, there is a lack of knowledge regarding sustainable mobility. Indeed, given the cultural issues it is necessary to conduct several actions related to mobility.

To implement measures similar to those described in this document its important to engage and inform citizens. The communication process is critical in campaigns that attempt to change behavior, and should involve specific messages about what is desired, but to be effective they need to demonstrate that opting for less polluting



modes of transport is not only because of the need to do more for the city but essentially demonstrate that these options assume important gains, since they are cheaper, faster and healthier.

Given the various components of this measure, and taking in account that these work mainly on a behaviour level, these are easily transferable to any city, since no technological conditions are required.

#### **D.4.2 Recommendations: process**

The technical requirements consist of multidisciplinary technical teams involving people with a background in land planning, psychology, marketing and design, committed in raising awareness for behavior change. This is a difficult and time consuming process, since developing strategies that lead to behavior change requires a lot of persistence on the part of the teams involved.

To engage citizens in these different actions, its necessary to take in consideration the specificities of each activity.

The eco-driving, for instance, although is not listed in the curriculum, is an important theme to be taught to trainees. Only then, the driving schools will participate. In schools, the creation of contests and definition of prizes about sustainable mobility was important to involve the school boards and students.

As for the pedestrian campaigns, it is crucial to involve sports associations, and enjoy events such as the European Mobility Week, and other local events such as the expo-energy as a way to promote pedestrian mobility.

Involving media is an important part not only for the dissemination of these campaigns, but mainly to use this tool as a mean of public awareness of the social responsibility that we all have in order to have a better quality life.

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