

2020  
**CiViTAS**  
Cleaner and better transport in cities

**DESTINATIONS**



## Measure Evaluation Result

### MAD 2.1 - Sustainable Regional Mobility Plan (SRMP) in touristic regions

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Responsible Author(s):	Andreia Quintal, Joana Gaudêncio (HF)
Responsible Co-Author(s):	
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## Executive summary

Before DESTINATIONS, in the Madeira Region there was neither a regulation framework nor a global mobility strategy, municipalities could rely on to outline their local strategies, based on a regional strategy. Hence, the main goal of this measure was to develop and implement a Sustainable Mobility Plan for the Autonomous Region of Madeira (SUMP ARM), to define a regional mobility framework taking in account the needs local administration, residents and tourists.

The SUMP ARM defined a common strategy for mobility, tourism and other related macro policy topics at a regional level. The elaboration process of the SUMP ARM, contemplated a participatory methodology involving the stakeholders, players and public entities play direct and indirect role in the mobility system of the ARM.

Grounded on the outcomes of the plan, followed the elaboration of Tourist Traffic Plans for 3 annual events, which provided mobility entities a set of guidelines on how to operate on such tourist events. In addition, other activities, part of the SUMP ARM, were implemented. CMF developed a new info mobility app (Município do Funchal); HF started to developed specific initiatives for big events, providing tourists and residents with an affordable and more sustainable alternative to go to such events, reducing traffic and congestion. Complementarily to the data collected during the SUMP ARM preparation, it was also performed surveys at the main gateways of the Region (airport and the port of Funchal), during 2017, 2018 and 2019, which allowed to characterize tourists' profiles and better understand their mobility patterns. The outcomes of the surveys were very relevant as they supported mobility strategy definition and decision-making process. To provide better information to the users and keeping up with innovative approaches, the Municipality of Funchal implemented a new mobility and touristic mobile app.

This measure did not have a standard evaluation process for all initiatives implemented, as the SUMP ARM output was evaluated through a self-assessment approach, considering the situation before the project and after the SUMP ARM. Nevertheless, it was possible to perform an impact evaluation for some of the initiatives implemented. As a result of the actions, the monthly pass reduction initiative was perceived as very important measure for the society attracting 8% of new passengers to the PT in 2019. Also, the PT promotional activities during big events attracted more 32,4% passengers in 2019, compared to the events in 2017.

The main driver to boost this measure was the stakeholders meeting that occurred during the participatory process. It was an important opportunity to demonstrate to the politicians the necessary actions to establish a strategy towards sustainable mobility. The meetings were the starting point to include the topic on the political agenda as it was recognized its importance to the Region, being extended to the entities involved. With this plan, all the stakeholders involved had the opportunity to see their proposals embed in a concrete action plan, contributing to for more commitment with the Plan. The municipalities of Madeira Region have now a plan to proceed with the implementation and ask for the necessary funding, using the ERDF for example.

SUMP ARM interactive and dynamic development process made clear to all stakeholders that a SUMP is not just a policy document, but can be the beginning of real actions to change the mobility future for the cities, their citizens and for visitors.

## A Description

The main objective of this measure was the development of a Sustainable Mobility Plan for the Autonomous Region of Madeira (SUMP ARM), taking in account the needs of residents and tourists. It defines a common strategic plan for mobility, tourism and other related macro policy topics at a regional level. The preparation of the SUMP ARM, contemplated a participatory methodology involving the stakeholders, players and public entities with direct and indirect actions in the system of mobility and transport of the ARM. This methodology allowed to better understand the mobility solutions, as it was also a great opportunity to strengthen the commitment from the regional bodies with the project and, more importantly, to reinforce the political commitment with a long-term sustainable strategy.



Figure 1: Public presentation of SUMP

The SUMP ARM was officially adopted by the Regional Government on June 2019. Based on the outcomes of the plan, followed the elaboration of the Tourist Traffic Plans for at least 2 touristic events. The plans allow all mobility entities related (public transport, tourism/mobility operators) to have at their disposal a set of guidelines on how to operate on such tourist events.

The local partners proceeded with the implementation of other activities identified during the SUMP ARM development. HF developed a specific initiative for big events, providing tourists and residents with an affordable and more sustainable alternative to go to such events, reducing traffic and congestion. The measure contributed positively to shift tourists and residents to more sustainable transport modes.

Complementarily to the information collected during the SUMP ARM preparation phase, it was also collected questionnaires at the airport and the port of Funchal, during 2017, 2018 and 2019. The surveys allowed to characterize tourists' profiles and better understand their mobility patterns. The conclusions of the surveys are very important as it supports strategy definition and decision-making process, giving better response to the tourism sector.

Another important goal of the measure was to improve mobility and tourism information and resource sharing between all mobility stakeholders. It focusses on mobility and tourism information collection and sharing resources and data between different regional actors. This was achieved through the integrated Regional mobility platform (website and mobile app) and through the info touristic/mobility point. Both tools are relevant instruments as they allow to provide better information about tourism and mobility solutions for the people.

This measure had the cooperation of the local partners:

- ARDITI - Agência Regional para o Desenvolvimento da Investigação, Tecnologia e Inovação and AREAM - Agência Regional da Energia e Ambiente da Região Autónoma da Madeira, participating in the meetings to define the idea concept of the SUMP ARM.
- CMF- Câmara Municipal do Funchal, participating in the meetings to define the idea concept of the SUMP ARM and definition of the info mobility point measure.

- HF – Horários do Funchal, participating in the meetings to define the idea concept of the SUMP ARM, definition of the integrated mobility and tourism solution, implementation of the monthly pass reduction and promotional campaigns during big events.

## A1 Objectives and outputs

### City policy level objectives

- Improve the accessibility of the entire territory of the Autonomous Region of Madeira (ARM)
- Provide sustainable and high-quality mobility and transport
- Improved urban accessibility
- Improve satisfaction of the user
- Less emissions / increased air quality
- Less energy consumption
- More attractive tourist destination

### Measure specific objectives

- Prepare a smart, participative and sustainable regional mobility plan with a long-term vision
- Better usage of transport infrastructures according the mobility demand
- Promotion of an attractive and high-quality public transport service
- Promotion of behaviour change among tourists and residents to more sustainable transport modes
- Tourist satisfaction increase due to better mobility solution.

### Outputs<sup>1</sup>

- 1 Strategic transport network design study
- 1 SUMP ARM Plan
- Traffic plans for annual events
- 1 Web-based platform and mobile app to a better involvement of citizen and tourist
- 1 Info tourist/mobility info point in Funchal
- \* Public Transport promotional campaigns in big events
- \*Public transport promotional campaign
- \*\* Reduction of the price of the urban and interurban monthly passes.

### Supporting activities

- Awareness plan for a sustainable mobility.
- Regional program to encourage electric mobility.
- Event promotion activities to boost Public Transport use.

## A2 Inter-relationship with other measures

This measure has a relation with several DESTINATIONS measures, as follows:

- **MAD 2.2** - Smart metering / sensing and user generated content to improve urban mobility planning and services - The data collected from the smart sensors can support decision process along with the SUMP ARM Plan;

<sup>1</sup> \*Extra-output with DESTINATIONS budget; \*\*Extra-output during DESTINATIONS with other funds

- **MAD 3.1** - Innovative solutions to improve safety and security public spaces – Through the info mobility point which is geared towards a more safe and secure public places.
- **MAD 6.1** - Gamification as a way to induce behavioural change in Mobility - To maximize the achievements of expected goals of the mobility/tourism info point, it was also assessed the possibility to bridge the MARge app (MAD 6.1) with the APP.
- **MAD 6.3** - Mobility planning for tourism related companies – The promotional campaigns regarding the promotion of PT during big events, counted with the support of the hotels that placed flyers and posters at their premises. Also, during the preparatory phase of the SUMP ARAM, occurred Focus Group activities that involved the tourism sector.
- **MAD 7.2** – Attractive public transport – Through the monthly pass reduction initiative and corresponding PT promotional campaigns, that contributed to a more attractive PT.
- **MAD 7.3** - Smart PT traveller information service and **MAD 7.4** - Public Transport open and smart ticketing system – Due to the synergies between the HF's new website, mobile app and the Regional integrated mobility platform, all solution were gathered on the same award and developed in simultaneous.

### A3 Target groups and/or affected part of the city or region

Several mobility actors affected by the measure (Region and municipalities). All residents, tourists and other related policy groups at regional level are affected by this measure. The measure will contribute to change people behaviour improving data and resource sharing between all mobility stakeholders.

The measure will require the involvement of different regional actors and markets, considering that the objective is to focus on mobility and tourism information collection and to share resources and data between them.

### A4 Stakeholders involvement

Stakeholder name	Activities description
Interurban Public Transport Companies	Participation in the public transport network restructuring to better serve residents and tourists, by providing information about the public transport service. Contributions and participation in the mobility management for big events.
Institute of Mobility and Transport (IMT)	IMT is the national control and regulation authority. IMT system integrates with the mobility platform to send/receive information.
Other municipalities	Participation in the public transport network restructuring to better serve residents and tourists. Provide contributions and participation in the mobility management for big events.

**Table 1:** Stakeholder's involvement

## B Measure implementation

### B1 Situation before CIVITAS

In the Madeira Region, there are several mobility actors (Region and Municipalities) that act in their territories, with specific objectives, limited space and with different audiences. In the Region, there was neither a regulation nor a global mobility strategy in which municipalities could rely on to outline their local strategies, based on a regional strategy.

A regional transport plan (PIETRAM) to improve and optimize the whole transport network in the region was running, however, it was necessary to collect information about mobility patterns of sites and tourists in order to carry out a planning of assertive mobility measures. So, there was a need for an improved SUMP, and to achieve a broader goal, DESTINATIONS proposed an extended SUMP model, taking into account the tourist component.

Considering that the received tourists in the Region were raising over the years, attracted in most cases by the touristic festivals hosted by Region (flower festival, Atlantic festival, New Year's Eve, etc.), and given that most of the events also attract considerable numbers of residents. With such premises, a mobility management plan for such events became critical, considered the high levels of traffic and congestion, and the to inclination of most of the residents to use private car. A wide and well articulated solution to manage traffic in such events was required.

Previously to DESTINATIONS, the Region had no website nor mobile app that provided the users (residents and tourists), with an integrated information platform, that provided in just one channel all information about mobility and tourism. By then, users had to check the needed mobility information through several mobility operators' websites, with frequent information discrepancies of final users. During the surveys to tourists applied at the airport in 2018, raised that 15% of the mobility improvement proposals were about the need to "Improve information made available to tourists (integrated platform with all information and clearer)". Complementarily, tourists also shared comments about the public transport, mostly (46,2%) focusing the lack of information: 28,8% mentioned the "Lack of information on online and stops about schedules, routes and careers", 9,6% "Difficulty in interpreting / clarifying TP information", 7,8% "Lack of information about pre-purchased tickets, discounts and validity" and 1,9% need for "Integrated TP system, offering integrated products". Considering such scenario, a comprehensive solution to integrate all mobility and tourism information was required.

### B2 Innovative aspects

The measure includes the following innovative actions in Madeira:

- **New conceptual approach**– The new integrated Regional mobility solution provides a new solution/method for mobility users (tourists and residents) to access all mobility related information though only one platform. The solution sets the definition of a central framework and implementation of an innovative integrated system to collect mobility data and to support transport planning of all regional transport actors, modes and transport infrastructure;
- **New organisational arrangements** – New and more effective institutional arrangements as new agreements between stakeholders were defined following the SUMP ARM adoption. A sustainable regional tourism mobility plan in articulation with existing regional

strategic framework for transport, tourism and land use. Also, mobility management for big events, including traffic plans, promotion of the use of sustainable modes of transports, evaluation of how tourists and residents travel to the events, once it established areas of activity per mobility stakeholder.

- **Targeting specific user groups** – The SUMP ARM considered an extended SUMP model, taking into account the tourist segment, which using such type of data/information was new to SUMPs.
- **Use of new technology/ITS** – The mobility InfoPoint and the new Regional mobility and tourism integrated platform (website and mobile app) provide new and innovation software solution to provide clearer and better information.

### B3 Technology development

Due to the complex technical solution regarding the integrated Regional mobility platform, HF and SRETC performed an exhaustive benchmarking analysis of the possible solutions, to compile the technical requirement description.

As the Tourism Mobility information collected in the SUMP ARM isn't enough detailed to perform a thorough analyses, Horários do Funchal organized several surveys campaigns, that were applied in the main entry/exist points of the island (airport and port), in the scope of the evaluation process of the project. Complementarily, passengers counting process (tourists and residents) in the bus lines and tourists counting in the main touristic points were also carried out. This measurement procedures allowed to determine, roughly, the average tourist demand in PT. Such survey campaigns were implemented since 2017, applied again on 2018 and 2019. With this evaluation approach it was possible to characterize tourist's mobility patterns, together with their profile.

### B4 Actual implementation of the measure

#### Strategic transport network design study

The first Regional Strategic Integrated Transport Plan was presented to public in May 2016 (Plano Integrado e Estratégico dos Transportes da Região - PIETRAM), and based on the PIETRAM. The Directorate of Economy and Transport subcontracted a Strategic transport network design study, to carry out the appraisal of the public transport service network of the Autonomous Region. The study entailed a detailed analyses of public transport supply and demand and it presented a list of measures to increase the efficiency of public transport service.

The strategic transport network study was later used as the backbone of the international inter-urban tender process, to be award late 2021/beginning 2022.

#### SUMP ARM Plan

The first step to elaborate the Action Plan for Sustainable Mobility in the Autonomous Region of Madeira (SUMP ARM), was to perform the characterization and diagnosis of the mobility and transport system. It was released a report including the transport service definition, evaluation of scenarios, definition of objectives and targets. The subcontract to develop the plan was financed by the European Regional Development Fund (ERDF).

The preparation of the SUMP ARM, involved a participatory methodology involving the stakeholders, players and public entities with direct and indirect actions in the system of mobility and transport of the ARM. It also involved entities/ enterprises that are responsible for the generation / attraction of trips, like public transport operators, taxis, tourist animation companies, travel agencies and transfers, rent-a-cars and representative entities of users of the system, like citizens with reduced mobility, students etc. It was also set a Focus Group with the tourism companies, this activity occurred during the SUMP ARM participation events and in cooperation with DESTI-SMART project (Interreg Europe project), related to measure MAD 6.3. The results of the participatory methodology allowed to better understand the mobility solutions available for both, residents and tourists.

The SUMP ARM Plan was approved on 21<sup>st</sup> of June 2019 and the Plan provides the regional government with an instrument that links the short, medium and long-term action strategy for infrastructure and transport development within the ARM, improving accessibility throughout its territory and providing more sustainable mobility options and transport alternatives to residents and visitors. The SUMP ARM includes Tourism mobility dimension and such topic is linked to a wider existing medium and long-term strategy for the future development of existing transport and mobility infrastructure and services in the Madeira island and Porto Santo (Strategic and Integrated Regional Transport Plan of Madeira).

As the Tourism Mobility component in the SUMP ARM wasn't comprehensive enough to perform a thorough analyses and to support decision making process in what regards tourism sector, HF developed several surveys processes. One at the main entry/exist points of the island (airport and port), that occurred since 2017, applied again on 2018 and 2019. Complementarily, passengers counting process (tourists and residents) in the bus lines and tourists counting in the main touristic points were also carried out, which allowed to determine, roughly, the average tourist demand in PT. With such measurement approach it was possible to characterize tourist's mobility patterns, understand their profile and to adapt public transport service to their needs.

The involvement of the stakeholders continued with regional activities, and with the meetings of the Interreg Europe project DESTI-SMART. During the meeting in January 2020, it was discussed the situation of the SUMP ARM implementation. The plan is well accepted by the municipalities and they are devoted to its implementation, considering their current situation. On the other hand, some municipalities are not fully aware about the application process to apply for the financial programs to implement the mobility plans, as it is a complex administrative and technical procedure.

### **Reduction of the price of the urban and interurban monthly passes.**

During the development of the SUMP ARM Plan, the Regional Government studied population needs and the public transport network layout, and concluded that the transport prices are an obstacle to the public transport use.

As an outcome of such analyses, the Regional government decided to reduce the price of the monthly passes in order to increase affordability and the initiative came to effect in April 2019. A monthly urban pass started to costs €30 instead of €45.80, whilst an interurban pass costs 40€ as opposed to between €57 and €130. With the cost of a monthly urban pass representing 7.5% of the minimum monthly wage, the pricing's impact on families' budgets is clear.





Figure 2: Tariff reduction promotional campaigns

### Traffic plans for annual events

After the conclusion of the SUMP ARM, followed the elaboration of the Traffic Plans (PURMET - Regional Urban Plan for Mobility Management in Tourist Events and Other Special Events in the Autonomous Region of Madeira).

The plans define an integrated strategy for the management of mobility with primary objectives of improving accessibility for the 2 tourist events. During such events, the Plans allow all mobility entities related (public transport, tourism/mobility operators) to have at their disposal a set of guidelines/orientation on how to operate on such tourist events, considering the mobility needs of residents and tourists. The work related with the Traffic Plans will continue beyond the project.

In parallel, Horários do Funchal started to implement a commercial strategy focused on promoting public transport during big events, whilst some municipalities in the region started to consider traffic issues when planning their events. Potential mitigation measures were studied, including the road closure during such events and restricting access to public transport.

### Public Transport promotional campaigns during big events

Horários do Funchal implemented several specific promotional campaigns during the Regional big touristic events, in order to promote the use of public transport, reduce the use of private modes and reduce the congestion situations during big events that attract, not only tourists, but also many residents who travel with their own vehicles.



Figure 3: Promotional campaigns on big events (marketing material)

Before DESTINATIONS, HF was developing promotional activities dedicated to specific events, only for few events with a weak promotional campaign. Since February 2018 (Carnival festival), HF have been adopting a stronger strategy, focusing on the promotion of PT use during big events, dedicated to both, residents and tourists. The new strategy defined a robust and comprehensive communication resources for the main events that occurred annually in the city of Funchal. The campaigns were improved and adapted event by event according to the results of the campaigns.

The promotional campaigns were composed by targeted promotional material, tickets with special prices and a reinforce of the service. According to the specify (some are more tourist focused, others are more Regionals) and duration of the events, HF promoted also the tourist kit (multi-day tickets), with the support of the hotels, and also the special ticket for the event. The campaigns have a strong communication and marketing content: promotional posters disseminated on HF webpage, social media (Facebook and Instagram), at HF selling points and, when applicable, displayed inside the buses, on automatic selling machines, PT information televisions, newspapers and at hotel receptions. These activities occurred during the Carnival, Flower Festival, Atlantic Festival, Chestnut Festival, Market Night, New Year's Eve, etc, since February 2018. Given the results achieved with this initiative it is an activity to continue on the future events.

### “Município do Funchal” mobile App - Info tourist/mobility info point

The Municipality of Funchal (CMF) had a tourist mobility point at one of the busiest streets in Funchal city. However, to provide better information to the users and keeping up with innovative approaches, the Municipality decided to develop a mobile app (Município do Funchal app), which was launched during the mobility week 2019 (September 2019).

The mobile app encompasses several online services as well as information related to road alerts, touristic information, public transport and other important touristic information, such as information about accommodation and main point of interest to visit. the app is aimed at tourist audience and residents too and it is constantly updated. In addition, it was produced several information materials to present and promote touristic points of attractiveness in Funchal.

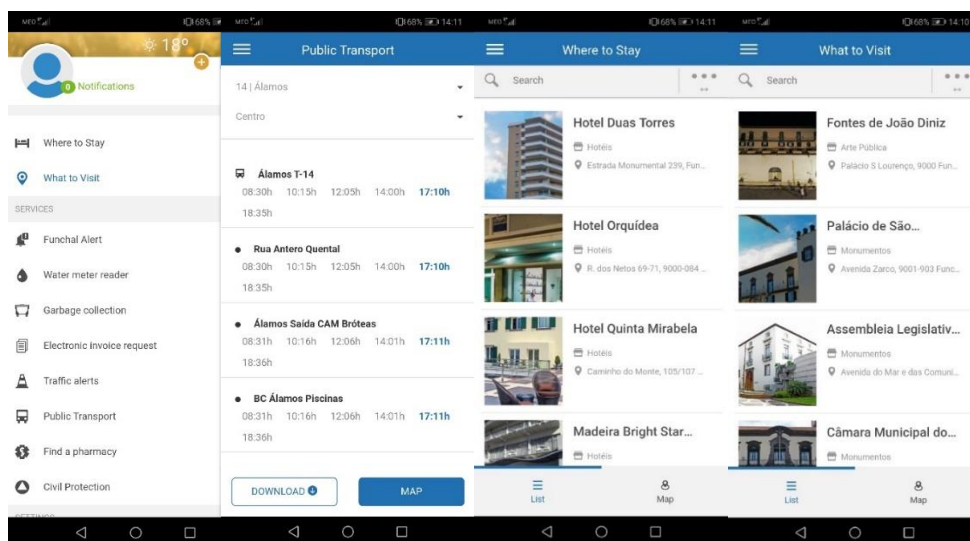


Figure 4: Município do Funchal app main menus

The long-term development of the APP beyond DESTINATIONS include additional contents, such as information regarding the rechargeable stations for electric vehicles that will be activated very soon by the Municipality (also with European funding), integration of dynamic maps tailored for tourists (geodiversity, geological and museology routes throughout the city.) and other useful information. In order to maximize the achievement of expected goals, it was also assessed the possibility to bridge the MARge app (MAD 6.1) with this APP.

During the European Mobility Week 2020, the Municipality incorporated a set of pedestrian routes in the APP. It comprised of 6 routes combining walkability and historical information regarding Funchal. In October 2020, 992 people submitted their registration. In addition, an informative layer includes the spatial location of the recharge stations implemented by the Municipality of Funchal is available in the APP. These recharge stations for electric vehicles were launched during the European Mobility Week 2020.

### Public Transport promotional campaign

The Directorate of Economy and Transport in partnership with the Regional Public Transport operators (Horários do Funchal, EACL, Rodoeste and SAM) launched a comprehensive promotional campaign in May 2021, involving all the stakeholders.

The PT promotional campaign was disseminated through social networks, media, television, mupis, tourist offices and screens on board PT vehicles. Dedicated PT promotional vinyl was placed on the buses back and bus doors.

A Youtube video was also prepared and disseminated: [https://www.youtube.com/watch?v=N3PB\\_5tR-Z0](https://www.youtube.com/watch?v=N3PB_5tR-Z0)



**Figure 5:** Public presentation of the campaign, hosted by Madeira politician



**Figure 5:** Launch of the campaign and promotional material

## Regional mobility and tourism integrated platform

The Directorate of Economy and Transport and Horários do Funchal worked closely at the preparation of the tender process for the integrated mobility platform, as well as on the development of the technological solution.

The objective is to have a single platform that includes all mobility and tourism related information for tourists and residents. The solution provides better information about PT and other sustainable modes, such as the Madeira Tourism portal and other mobility and tourism stakeholders, including improved description of how to access points of interest or events. The platform includes the PT service of all Regional other PT companies.

However, the launch of the tender suffered several delays on the requirements definition process due to the complexity of the solution, that integrates in one platform all the mobility stakeholder's data, including integration with other platforms. Also, the tender process took longer than expected due to the need of contributions of the several mobility stakeholders involved.

In 2020, HF and the Directorate of Economy and Transport closed the requirements of the system and decided to proceed with the development, together with the development of HF's new website and mobile app (MAD7.3 and MAD7.4). In February 2021, the local partners started working together with the supplier to develop the technical solutions. The development of the 3 solutions progressed well during the last months of DESTINATIONS (until May 2021), and will continue beyond the project, with the official launch of the solutions foreseen for September 2021.

# C Impact evaluation

## C1 Evaluation approach

### Expected impacts and indicators

Impact category	Impact indicator	Unit of Measure
Transport System	1 - Perceived importance for the society of the monthly pass reduction initiative	Nº
Transport System	2 – Number of new clients after the tariff reduction	%
Transport System	3 - Number of passengers that joined the PT campaigns/events	Nº
Society	4 - Satisfaction rate with transport system/options	%
Society	5 - Number of registered users	Nº
Society	6 - Number of sections related to traffic and mobility	Nº

**Table 2:** Expected impact and indicators

### SUMP ARM

The impact evaluation of the SUMP was performed using a different methodology. It was assessed through two qualitative questionnaires using an online tool European Platform on

Sustainable Urban Mobility Plans. The first questionnaire was answered in 2017, the Baseline Evaluation Questionnaire which was used to evaluate the previous transport plan, and the second to evaluate the SUMP implementation, the Ex-post Evaluation Questionnaire that occurred in 2020. The results of the two questionnaires allowed to assess the impact of the new SUMP on the planning processes and tourism management.

The survey evaluated several SUMP dimensions: the SUMP Cycle Steps, the SUMP Characteristics, the potential for a successful SUMP, the mobility situation and develop scenarios; a common vision and citizens' engagement; the priorities and measurable targets; the effective packages of measures I and II; a clear responsibilities' allocation and funding awarding; the monitoring and assessment and final adoption of Sustainable Urban Mobility Plan.

### Method of measurement

Impact indicator	Method*	Frequency			Target Group	Domain (demonstration area/city)
		Bef.	Dur.	Aft.		
1 - Perceived importance for the society of the monthly pass reduction initiative	S	n.a.	n.a.	M40	Public Transport users	Funchal
2 – Number of new clients after the tariff reduction	S	n.a.	n.a.	M40	Public Transport users	Funchal
3 - Number of passengers that joined the PT campaigns/ events	DC	2016	2017,2018	2019	Public Transport users	Funchal
4 - Satisfaction rate with transport system/options	S	M9	M28	M40	Tourists	Funchal
5 - Number of registered users	DC	n.a.	n.a.	M54	Residents and tourists	Funchal
6 - Number of sections related to traffic and mobility	DC	n.a.	n.a.	M54	Residents and tourists	Funchal

\*(Data collection (DC), Estimation (E), Survey (S))

**Table 3:** Method of measurement

#### Detailed description of the indicator methodologies:

**1 - Perceived importance for the society of the monthly pass reduction initiative** – HF was responsible for collecting this indicator. The data was collected through a survey applied by HF at one of the main selling kiosks to 102 residents. In the survey, residents were questioned “How do you rate the importance of the monthly pass reduction for the society?”, by classifying in a scale 1 to 5 (1- Nothing important; Very important).

**2 – Number of new clients after the tariff reduction** – HF was responsible for collecting this indicator. The data was collected through a survey applied by HF at one of the main selling

kiosks to 102 residents. To the respondents that the title more used in PT was the monthly pass, it was asked which title they used, whether tickets or monthly pass or didn't use PT.

**3 - Number of passengers that joined the PT campaigns/events** - HF was responsible for collecting this indicator, through the extraction of the tickets validations from the PCGB system for each event and also through the consultation of the ticket sales reports from the finance department. The data was collected considering the tickets that were sold during these events (special ticket for the event, multi days tickets (1,3, 5 and 7 days) and onboard tickets).

**4 - Satisfaction rate with transport system/options** - HF was responsible for collecting data for this indicator by deploying a questionnaire targeting airport tourists. Concrete questions posed to tourists are the following: "have you seen information about where you could buy a ticket? And Have you seen information about what you could do using PT?"

**5 - Number of registered users** – CMF was responsible for gather this indicator. The data was collected based on the user's registration on the new mobile app, considering the improvements development.

**6 - Number of sections related to traffic and mobility** - CMF was responsible for gather this indicator. The data was collected based on the user's registration on the new mobile app, considering the improvements development.

### The Business-as-Usual scenario

Indicator 1 – Perceived importance for the society of the monthly pass reduction initiative and Indicator 2 – Number of new clients after the tariff reduction it was not possible to establish a BAU scenario because this was a new activity. However, if the action would have not been carried out, the PT would continue witnessing a continuous PT passengers' loss, as projected under MAD7.2.

It was not possible to establish a BAU scenario for the indicator 3 - Number of passengers that joined the PT campaigns/events given that the actions that allowed to sell those tickets were mostly carried out during the project. However, if these initiatives would have not been implemented, from one side, traffic and congestion would worst with consequent increase of pollution levels and tourists and residents would not have a sustainable mobility solution for such occasions.

For indicator 4 - Satisfaction rate with transport system/options it was not possible to perform a BAU analyses, considering that the indicator evaluated the actions carried out under the project.

A BAU scenario does not apply to the indicators 5 - Number of registered users and 6 - Number of sections related to traffic and mobility as it is an innovation, a new mobile app, so the BAU does not apply.

## C2 Measure results

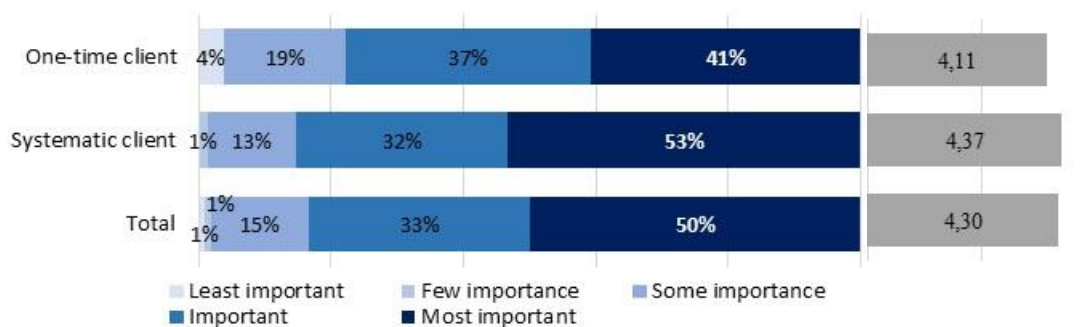
Impact category	Impact indicator	Unit of Measure	Baseline	Ex-Ante	EX-Post
Transport System	1 – Perceived importance for the society of the monthly pass reduction initiative	Nº	n.a.	4,0	4,3
Transport System	2 – Number of new clients after the tariff reduction	%	n.a.	5%	8%
Transport System	3 - Number of passengers that joined the PT campaigns/events	Nº	84.987	93.443	112.565
Transport System	4 - Satisfaction rate with transport system/options	%	3.85	4.62	3.60
Society	5 - Number of registered users	Nº	n.a.	n.a.	1.245
Society	6 - Number of sections related to traffic and mobility	Nº	n.a.	n.a.	4

**Table 4:** Measure results

### C2.1 Transport System

#### 1 – Perceived importance for the society of the monthly pass price reduction initiative

It is possible to conclude that the monthly pass price reduction was a very important initiative for the Madeira population. The surveyed residents attributed an average importance of 4,30 (in a scale 1- Least important; 5 – Most important). The perceived importance is even superior among systematic clients (monthly pass users), who evaluate the initiative with 4,37.



**Figure 6:** Importance attributed to the tariff reduction by customer type

#### 2 – Number of new clients after the tariff reduction

The tariff reduction, in force since April 2019, had a very positive effect attracting new customers to the PT to shift one-time users to systematic users of PT. In 2019, 25% of the current systematic customers (using monthly pass) used tickets before the tariff reduction and 8% did not use PT at all. In addition, 13% of the surveyed were HF Group customers for about 1 year (since 2019), a higher number among systematic customers (13%) compared to one-time customers (11%).

These achievements result from synergies with measure MAD 7.2, which focused on the public transport improvements and evaluated the number of validations on the PT system.

### 3 - Number of passengers that joined the PT campaigns/events

The promotional campaigns launched during the several Regional tourist big events, to promote the use of PT instead of individual transport options, achieved very good results. In the overall, it was accomplished an increase of 32,4% more passengers in 2019, compared to 2017.

	2017	2018	2019	Var 17/19
Onboard	68.746	102.239	92.364	34,4%
Multi-day	13.012	15.536	16.425	26,2%
Special tickets	3.229	2.102	3.76	16,9%
<b>Total</b>	<b>84.987</b>	<b>119.877</b>	<b>112.565</b>	<b>32,4%</b>

**Table 5:** Total validations of public transport tickets over the last years

The values of 2018 and 2019 were strongly affected due to disaster that occurred during the Monte night event of 2018, where a big tree fell down and killed 13 people. Since then, the event is attracting less and less locals and tourists.

	2017			2018			2019		
	Onboard ticket	Multi-day	Special tickets	Onboard ticket	Multi-day	Special tickets	Onboard ticket	Multi-day	Special tickets
Carnival	1.294	896	0	4.780	1.030	0	5.372	1.023	129
Flower festival	44.028	9.004	0	75.245	11.874	0	68.949	11.552	38
Atlantic festival	14.481	1.646	0	13.446	1.340	0	14.402	2.268	97
Market night	3.027	574	0	2.894	482	718	3.641	558	1.208
Monte night	n.a.	n.a.	2.733	n.a.	n.a.	927	n.a.	n.a.	1.405
New Year's Eve	5.916	892	0	5.874	810	0		1.024	0
Compadres festival	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	36
Curral das freiras festival	n.a.	n.a.	496	n.a.	n.a.	457	n.a.	n.a.	426
Chestnut festival	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	437
<b>Total</b>	<b>68.746</b>	<b>13.012</b>	<b>3.229</b>	<b>102.239</b>	<b>15.536</b>	<b>2.102</b>	<b>92.364</b>	<b>16.425</b>	<b>3.776</b>

**Table 6:** Total sales of PT tickets over the last years, per event

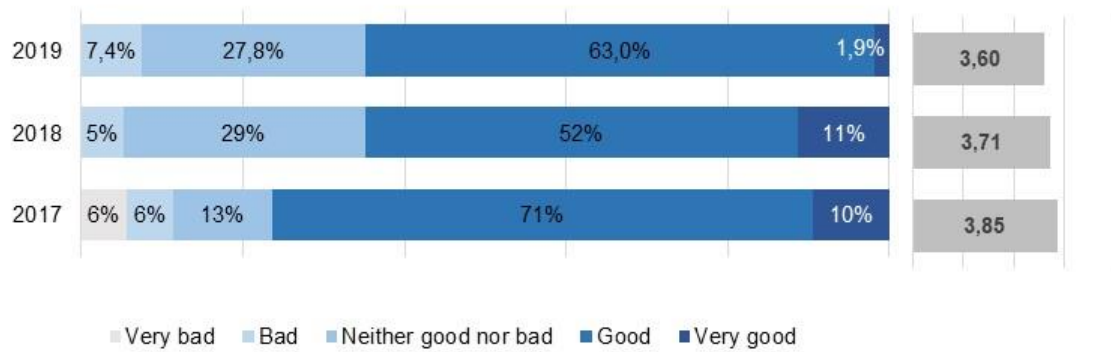
### 4 - Satisfaction rate with transport system/options

This indicator did not achieve an improvement between 2017 and 2019. It has in fact registered a decrease as shown on Figure 5. On 2017, 50% of the surveyed tourist saw information about transports instead of rented car, as they classified such information with an average of 3,85 (scale 1- Very bad; 5- very good). Although, during the 2019 surveys, only 29% of the tourists answered in an affirmative way, classifying the information seen with 3,60.

	2017	2018	2019
Yes	50%	52%	29%
No	50%	48%	71%

**Table 7:** Tourists that have seen/received information other than rented car



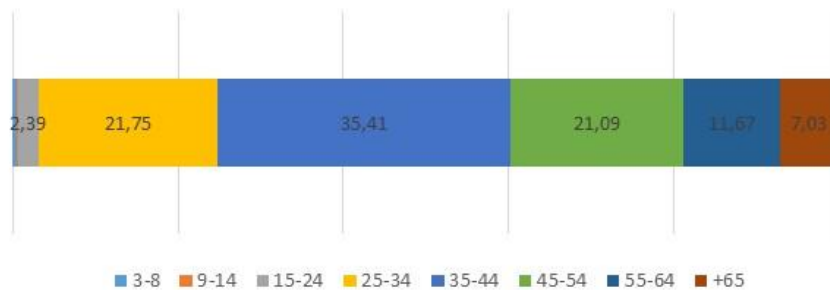


**Figure 7:** Satisfaction rate with the transport options

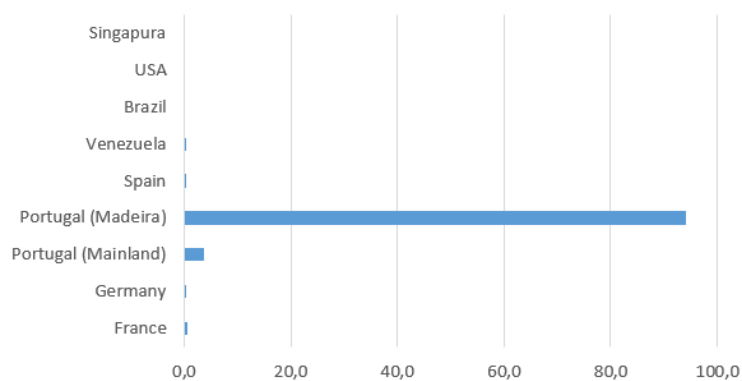
## C2.5 Society

### 5 - Number of registered users

Following the launch of the mobile APP (EMW 2019), so far, 1.245 users have registered. Aiming to assess its scope and range, two charts were produced accordingly to age and nationality. According to the graph below, most users are within the 35-44 age level, followed by 25-34. As expected, these figures reflect that young adults are more receptive to new technologies, although it should be stressed that some users beyond 55 years are also using the APP. As for nationality, although the majority of users are locals, the APP have managed to reach several other countries that showcases the Portuguese migration trends with an active emigration to central Europe. Citizens from Venezuela in which the Autonomous Region of Madeira is the main hub for Venezuelans have also embraced the APP.



**Figure 8:** Distribution of APP users by age category



**Figure 9:** Users by nationality

## 6 - Number of sections related to traffic and mobility

In order to ease the traffic congestion and to promote the use of active modes among tourists and residents, the APP encompasses several contents related to traffic and mobility. These includes the following:

- Public transport, including the location of bus shelters, bus routes and other information;
- Road alert system, in which road constraints due to civil works are georeferenced and shared to users, made available with the APP launch. So far, 163 alerts were generated;
- Pedestrian routes containing 6 routes that combines pedestrian mobility with historical heritage in Funchal, made available during the EWM 2020;
- Geolocation of 22 recharge points for EV in Funchal, launched during the EWM 2020.

### SUMP ARM

Through the self-assessment it was possible to achieve a score from 67 to 99 (in a scale 1 to 100), meaning that Madeira have integrated the different sustainable mobility planning aspects in a good manner into the Regional mobility system. Madeira score the highest points on almost all criteria (Long-term vision and clear implementation plan; Monitoring, plan revision and reporting; Assessment of current and future performance & cost-benefit analysis; Sectoral vertical and spatial integration; Balanced consideration of all transport modes and Participatory approach. The biggest gains are on the Participatory approach and on the cost-benefit analysis.

## C3 Quantifiable targets

No	Target	Rating
1	Less emissions 2%;	**
2	Less energy consumption 2%	**
3	More attractive tourist destinations 5%	NA
4	Better cost-effectiveness of transport services 2%	NA
5	At least 100 residents and 50 tourists making suggestions in the web platform for city living	NA
6	Satisfaction increase with transport system/options 20%	O
7	Better balance between yearly total operational cost and revenues among all the PT operators (100.000 €)	NA
8	Increase the number of tourists and residents travelling to events by PT of at least 10%	***
9	* At least 5% of new clients after the tariff reduction	***
10	* Average perceived importance for the society of the monthly pass reduction initiative of at least (in a scale 1 to 5).	***
<b>NA = Not Assessed O = Not Achieved * = Substantially achieved (at least 50%)</b> <b>** = Achieved in full *** = Exceeded</b>		

\*New target, not in GA

**Table 8:** Assessment of quantifiable targets

The target 1 and 8 were planned in the grant agreement. Targets 9 and 10 were defined during the measure development.

Targets 1 and 2 were not assessed specifically on this measure as the implementations did not have a direct contribution to these targets, but were evaluated under measures MAD 4.1 and MAD 7.1.

Target 3 was not possible to assess due to the COVID-19 outbreak, given that it was not possible to carry out surveys. However, despite not being possible to quantify/measure the improvement achieved, the local partners consider that the set of actions implemented contributed to a more attractive touristic destination.

Target 4 was not assessed specifically under MAD2.1 as the implementations did not have a direct contribution to this target. Nonetheless, the carried out under measures MAD7.1, MAD 7.3 and MAD 7.4 contributed for a better cost-effectiveness of transport services, with more efficient buses and operation, and improved PT service.

Target 5 was not possible to assess due to the late implementation of the web platform, which is planned to occur by September 2021.

The Target 6 was not achieved as the that tourists have seen/received information about travel options in Madeira, other than by car, have rated this aspect worst. Between 2017 and 2018 there was an increase of tourists that have seen information about travel options from 50% to 52%, result of the promotional campaigns (MAD2.1, MAD6.3 and MAD7.2). Although, the low value of 2019 (29%), suggest that the fact of having a different team performing the survey process had influence. Regarding the experience from previous inquiry processes, in the specific case of this question, some tourists had difficulty to understand the question, and the Interviewers had to reformulate having a positive answer in most cases. In the inquiry of 2019, if the interviewers did not guide the tourist in such question, not good results might be achieved.

Target 7 was not assessed. It was not possible to measure the efficiency of the public transport service because the offer management was not implemented until the end of the project, it will occur with the new concession of the interurban network (late 2021/beginning 2022).

Target 8 was Exceeded in full, achieving an increase of 32.4% of tourists and locals using PT as transport mode to big events. This means that people are prioritizing PT over private modes, contributing for sustainable mobility and reducing congestion problems in such events.

Target 9 Exceeded in full the target defined, as it was defined to improve number of new PT transport users by 5% and it was possible to achieve an increase of 8%. Target 10 was also Exceeded in full as the perceived importance for the society of the monthly pass reduction initiative achieved a value of 4,30 instead of 4,00, as defined.

## C4 Up-scaling of results

Not applicable.

## D Process Evaluation Findings

### D1 Drivers

At a **political/strategic** level, the PIETRAM plan in itself a great chance to underpin the project measures. Politicians and decision-makers proved they are very keen on improving the local mobility system to drive the mobility behaviour change in the right direction. At a **positional** level, the negotiations with the regional bodies to use the EU funds to support the sustainable mobility measure proved to be a great opportunity to achieve win win solutions. In this sense relevant synergies were raised during the measure implementation.

### D2 Barriers

At a **political/strategic** level were encountered several constraints, regarding the introduction of a new legal framework that requires a public tender for interurban public transport provision which led to several delays. **Organizational** barriers related to the lack of manpower in SRETC led to delays in the development of the mobility integrated platform, also **technical** difficulties regarding the requirements for the info mobility point have experienced during the project lifespan.

**Planning** barriers related to sorting out a digital platform raised during the measure implementation. It proved to be a complex solution to develop due to the staggering amount of data that is expected to encompass.

### D3 Main Lessons learned

The stakeholders meeting that occurred during the participatory methodology to develop the SUMP ARM, was the main driver to proof to the politicians the actions needed to establish a clear strategy towards sustainable mobility goals. The meetings were the starting point to include the topic in the political agenda as it was recognized its importance to the Regional strategy. With this plan, all the stakeholders involved had the chance to see their proposals considered and included in a concrete action plan, contributing to an increased commitment with the Plan. The municipalities of Madeira Region have now a plan to proceed with the implementation and ask for the needed funding, accessing to the ERDF resources as an example.

SUMP ARM interactive and dynamic development process made clear to all stakeholders that a SUMP is not just a policy document, but it can be the beginning of real iteration process to change the mobility future for the cities, their citizens and for visitors.

## E Evaluation conclusions

This measure did not have a standard evaluation process for all initiatives implemented, as the SUMP ARM output was evaluated through a self-assessment approach. Based on such implementation it was possible to collect an insight into how the Madeira site improved due to the improved quality of the sustainable mobility plans. The SUMP self-assessment evolved from a score of 67 in 2017 to 99 in 2020 (in a scale 1 to 100), meaning that Madeira site have integrated the different aspects of sustainable mobility planning process in a good manner into

the Regional overall mobility strategy. The biggest advantage verified by the most of the involved stakeholders was the Participatory approach.

Public transport customers revealed that the monthly pass reduction initiative was a very important measure for the society, classifying as 4,3 (increasing scale from 1 to 5). 21% of the customers started using the pass in the last 2 years and 8% were new passengers, that did not use public transport previously.

## **F Additional information**

### **F1 Appraisal of evaluation approach**

The tourist mobility surveys applied during 2017, 2018 and 2019, at the port and airport of Funchal had different approaches, fact that was considered to have hampered some results of the surveys.

Firstly, the surveys occurred during different months. In 2017 occurred during May and June, but the 2018 and 2019 occurred during December month, which can result in comparative differences between years, even more in the mobility patterns as May/June are summer months and December winter. It was not possible to perform the surveys during the same month, given that the chosen months were when the local team had more time available, considering the work developed under the DESTINATIONS project

Another important aspect was the project team that performed the inquiry. On 2017 and 2018 the surveys were applied by the HF team, totally aware of the thematic. But in 2019, HF had the need to subcontract an inquiry service (4 elements for 400 questionnaires) due to the lack of manpower for such purpose. It was required a 2 days training, firstly to evaluate their capacity to inquiry in English and then to make them comfortable with the long surveys process, but also, and more importantly, about the topics to be surveyed. The interviewers have to completely understand the HF operation and understand the DESTINATIONS initiatives. On the first days the HF team accompanied the interviewers to the places and performed the first surveys, to show what was expected to achieve and to provide them some confidence. The inquiry proceeded very well, nevertheless, it was noticed during the data analysis that some of the data collected was not as expected, and could have been result of some kind of misunderstanding, poorly formulated questions or wrong interpretation. Also, the fact of having 4 different interviewers might also contributed for the results. It is such recommended to keep the same team during the inquiry processes.

### **F2 Future activities relating to the measure**

The actions included in the SUMP ARM are part of the political agenda of the municipalities and they will be applied by them via the support of ERDF funds during the coming years, according to the time plan.

Considering the importance and acceptance of public transport service provided by HF during big events, HF will continue to provide residents and tourists with such essential service.

In the future, the APP launched by the Municipality, can also provide other contents to users such as parking information per category (residents, taxis, parking meter) among other. Within MAD 5.1, the APP is also expected to provide information in real time based on sensors

deployed in load and unload parking spots. Moreover, the Municipality is also currently developing several dashboards in GIS environment, targeted at creating automatic charts based on the collected relevant data. These are additional activities that although are not required within DESTINATIONS framework, they are expected to enhance the outputs and will be pursued beyond the project lifespan.