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CIVITAS
Cleaner and better transport in cities

DESTINATIONS



Measure Evaluation Results

LPA 7.4 - Integrated payment solutions for mobility and tourism

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Executive Summary

The objective of this measure was twofold: to increase the number of tourists travelling on public transport (PT) and to update the ticketing system of the public transport system.

Before DESTINATIONS, the sales network of the Guaguas Municipales public bus operator was limited. Passengers had the possibility to pay for urban PT trips by cash (directly to the bus driver) or they could acquire an urban PT smart card in advance and validate it once on the bus. The PT operator had interest in expanding the sales network, by installing ticket machines at bus stops so that all customers could pay in advance (not only those customers with a smart card, but also those who pay by cash). This could make the bus operation faster, and more efficient, punctual, and attractive for citizens and visitors.

On the other hand, Las Palmas de Gran Canarias aimed to position itself as a high quality touristic urban destination that attracts tourists, especially national tourists. In that context, the PT operator of the city, following the example of other Spanish cities, wanted to launch new tickets for tourists at a competitive price, to promote and encourage the use of PT during their stay.

To achieve this, the local partners created tourist-oriented fares (Live 1-day and Live 3-day fares) and developed efforts to test up-to-date ticketing machines. The tourist-oriented fares were the key feature of this measure in order to increase tourists' ridership of the PT system. The Live 1-day and Live 3-day fares focused on tourists who visit the city for a short period of time – the average stay in the city is three days but many visitors stay for just for one day, particularly cruise passengers or visitors whose accommodation is in the tourist hotspots in the south of the island. The new tourist-oriented fares were put into operation in October 2018 and were sold together with an urban PT map at tourist information offices, Guaguas Municipales commercial offices, as well as at some hotels and apartments.

The update of the ticketing system was planned to occur by testing up-to-date ticketing machines. Guaguas Municipales' launched the tender and acquired the 2 vending machines in March 2018. However, it was not possible to carry out the pilot test, as these vending machines were planned to be installed at 2 stops of the new BRT system, and as of December 2020 the bus stops were not finished due to delays in the construction works of the BRT, due to COVID-19. Nonetheless, thanks to the lessons learnt in this measure, Guaguas Municipales has improved the tender documentation for the renewal of 57 buses and the technical specifications for the on-board ticketing machines of the new BRT buses.

Concerning the evaluation framework of the measure, as the new ticketing equipment has not been implemented yet, the evaluation was focused on the new tourist tickets for public transportation. The level of awareness among tourists about these tickets was measured as the percentage of those who knew about it, when asked during on-street surveys. Results showed that 11.1% of tourists were aware of the tickets, which was only half of what was estimated before the measure implementation. The evolution of the number of public bus users and number of tourist tickets sold over the years was also assessed, thanks to data provided by the public bus operator. Both indicators showed a growing trend during the CIVITAS DESTINATIONS project lifetime.

A Description

This measure aims at improving the public bus system for tourists and citizens. One of the actions was the development of new pricing strategies for tourists, which did not exist prior to the CIVITAS DESTINATIONS project. The other action consisted of installing new payment equipment on the bus network.

For the first action, the public bus operator, Guaguas Municipales, developed a pricing strategy with a Smart Card system that combines two public transport trips with the entry to specific tourist attractions, leisure activities, or events. The initial idea was to offer combined bus tickets with entry passes to tourist attractions. However, the tickets launched to date do not include the passes to tourist attractions yet.

Two tickets for tourists were developed: The Live 1-day and Live 3-day tickets. These are intended for tourists that visit the city for a short period of time. These 1- and 3-day periods were selected as the average duration of stay in the city is three days, but with many visitors staying just for one day (for example cruise passengers or visitors whose accommodation is in the tourist hotspots in the south of the island).

These tourist-oriented fares were put into operation in October 2018 and were sold together with an urban public transport map at tourist information offices, Guaguas Municipales commercial offices, as well as at some hotels and apartments.

Concerning the new payment equipment, the aim was to purchase 2 external ticketing vending machines. The tender for this equipment was launched and awarded during the CIVITAS DESTINATIONS project. Local partners proceeded with the needed adjustments and configuration of the equipment, but the full operation within the network had to be postponed as COVID-19 delayed the construction works of the BRT system. Consequently, this delayed the construction of the 2 bus stops where the pilot test was supposed to occur with the new vending machines.

A1 Objectives and outputs

City policy level objectives

- Efficient and coordinated use of the different transport modes (urban public transport, pedestrian and bike mobility)

Measure specific objectives

- Increase of the number of tourists that use sustainable modes of transport by facilitating the way of payment
- Introduction of new ways of payment solutions better adapted to users' needs, whether tourists or locals

Outputs

- 1-day (24-hour) and 3-day tourist and mobility ticket that provides access to urban buses

- Business case integrating pricing strategies that combine leisure and touristic trips, for example, the inclusion of the public bike sharing system as part of the 24-hour ticket
- Meetings with tourist partners and stakeholders
- Definition of the technical requirements, launching and awarding of the tender for the acquisition of new ticketing equipment for the bus stops

A2 Inter-relationship with other measures

This measure is directly linked to the implementation of the Bus Rapid Transit system of Las Palmas de Gran Canaria (Metroguagua), as the new ticketing machines will be installed in 2 new BRT stops. The Metroguagua is expected to be put into service in 2022 and is a BRT system that will connect the northern and southern neighbourhoods of the city with a high-quality bus-based transit system. It is one of the current biggest mobility projects within the city, not linked to the CIVITAS DESTINATIONS project.

Moreover, this measure is also related to measure LPA 6.1 (green credits scheme, a loyalty system for public transport customers).

In addition, one of the tasks foreseen in the CIVITAS DESTINATIONS project (WP8) consisted of defining the business model of one of the measures, which has been performed for LPA 7.4.

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

The new touristic tickets developed in this measure are intended for tourists in Las Palmas de Gran Canaria, and the ticketing machines will be used by both tourists and citizens

A4 Stakeholders: CIVITAS project partners and other important actors

Stakeholder name	Activities description
Persons in charge of the Tourist attractions	Collaborate to develop a new ticket that combines two public transport trips with the entry to specific tourist attractions, leisure activities, or sport events.

Table 1: Stakeholder involvement

B Measure implementation

B1 Situation before CIVITAS

Prior to CIVITAS DESTINATIONS, there were no special tickets for tourists. The city of Las Palmas de Gran Canarias wants to be a high quality touristic urban destination and attract more tourists, especially national tourists. With this in mind, Guaguas Municipales wanted to launch new tickets, specific for tourists, with a competitive price, following the example of other Spanish cities. The aim was to attract more tourists to the city and to the public bus network in order to promote more sustainable mobility.

Regarding the payment equipment on-board buses, the current contactless ticketing system was outdated and had to be substituted.

B2 Innovative aspects

This measure aims at integrating pricing strategies that combine leisure and touristic trips into the current pricing strategies of Las Palmas de Gran Canaria's urban public transport. During the CIVITAS DESTINATIONS project, a business case for integrating pricing strategies that combine leisure and touristic trips was developed, with the objective of designing the tickets and launching them.

As for the ticketing machines, these are innovative in Las Palmas as until now, it was not possible to buy tickets at the bus stops.

B3 Research and technology development

Technology and market research was carried out by Guaguas Municipales during the definition of the technical specifications of the tender for the ticketing equipment.

B4 Actual implementation of the measure

Concerning the new bus tickets for tourists, Guaguas Municipales, with the collaboration of stakeholders from the touristic attractions of the city, developed a business case integrating pricing strategies that combined leisure and touristic trips. However, the touristic tickets that were launched did not integrate entry passes to tourist attractions or events during DESTINATIONS.

There were two kinds of touristic tickets launched in October 2018 (<https://www.guaguas.com/empresa/noticias/Guaguas-Municipales-pone-en-marcha-%E2%80%9CLive%E2%80%9D.-la-nueva-tarjeta-de-transporte-de-uno-y-tres-d%C3%ADas-para-los-turistas-de-la-ciudad-1750>): Live 1 (unlimited trips in 24h for 5€) and Live 3 (unlimited trips for 72h for 12€). The tickets are sold together with an urban public transport map at tourist information offices, Guaguas Municipales commercial offices, as well as at some hotels and apartments. In addition, since December 2020, travel cards can be recharged online on the Guaguas Municipales website.

Initially, the business case foresaw the option of including access to the public bike sharing system within the 24-hour ticket, however this approach was not possible to implement during DESTINATIONS, due to some unforeseen technicalities.

Concerning the acquisition of the 2 new ticketing machines for the bus stops, Guaguas Municipales was in close contact with several providers of this technology and launched a tender in March 2018, which was later awarded. Local partners performed configuration and adjustments to the new vending machines. However, due to multiple delays in the construction of the new



Figure 1: Live 1-day and Live 3-day tickets.

BRT system, the full operation of the new machines was postponed and awaits the conclusion of the construction works of the BRT system. The inauguration of the BRT line was expected in 2021 but due to the delays caused by the pandemic, it will not be in operation until 2022.

C Impact evaluation

C1 Evaluation approach

Expected impacts and indicators

Impact category	Impact indicator	Unit of measure
Society	1 - Awareness about the “Live” touristic ticket	%
Transport	2 – Number of bus users	Nº
Transport	3 – Number of Live 1 / Live 3 tickets sold	Nº

Table 2: Expected impacts and indicators

Method of measurement

Impact indicator	Method *	Frequency			Target Group	Domain (demonstration area or city)
		Bef.	Dur.	After		
1 - Awareness about the “Live” touristic ticket	S	n.a.	n.a.	39	tourists	city
2 - Number of bus users	DC	4	16/28	40	bus users	city
3 – Number of Live 1 / Live 3 tickets sold	DC	1	28/40	52	tourists	city

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

Table 3: Method of measurement

Detailed description of the indicator methodologies:

1 - Awareness about the “Live” touristic ticket – This indicator evaluated the percentage of tourists that knew about the “Live” touristic ticket for public transport. This was obtained through a survey in which 244 tourists were asked if they knew about this ticket. There is no baseline for this measure as the touristic tickets Live 1-day and Live 3-day didn’t exist before. The Ex-Ante figure was decided during the business model definition within WP8.

2 - Number of bus users – This indicator addresses the number of bus users per year (before and after the outset of the CIVITAS DESTINATIONS project). This data was provided by the bus operator, who obtained it from the ticket validations.

3 - Number of Live 1 / Live 3 tickets sold – This indicator shows the cumulative total of Live 1 and Live 3 tickets sold (separated by a “/”) in Las Palmas de Gran Canaria. The cumulative total is the sum of 3 years: 2018 (since its launch in October), 2019, and 2020. This information was provided by the public transport operator of the city (Guaguas Municipales).

The Business-as-Usual scenario

If DESTINATIONS was not implemented in Las Palmas de Gran Canaria, tourists would still have limited ticket options that are not optimised for them. Therefore, they would not be as attracted to using public transportation during their visit.

C2 Measure results

Impact category	Impact indicator	Unit of measure	Baseline	Ex-Ante	Ex-Post
Society	1 - Awareness about the “Live” touristic ticket	%	-	20%	11.1%
Transport	2 - Number of bus users	Nº (millions)	33.4	37	38.5
Transport	3 - Number of Live 1 / Live 3 tickets sold	Nº	0 / 0	1,200 / 3,000	999 / 2,266

Table 4: Measure results

C2.1 Society

1 - Awareness about the “Live” touristic ticket

According to the on-street surveys carried out, 11.1% of tourists knew about the existence of the specific bus tickets for tourists. At the beginning of the implementation of this measure, it was expected that 20% of tourists would know about these tickets when visiting the city. However, this percentage is still not met so more promotion will be necessary.

C2.2 Transport

2 - Number of bus users

Over the last years, the number of annual urban bus users in Las Palmas de Gran Canaria has had a year-on-year increase of 2-5%. This is why the expected value for 2019 was set at 37 million users (in 2016 there were 33.5 million users and an average year-on-year rate of +3.5% was assumed). However, the final value exceeded expectations as there was an important increase of bus users between 2018 and 2019 (+8.8%).

Year	2013	2014	2015	2016	2017	2018	2019
Urban bus users (millions)	29.7	30.6	31.8	33.4	34.7	35.4	38.5

Table 5: Urban bus users over the years

3 - Number of Live 1 / Live 3 tickets sold

The total number of Live 1 and Live 3 tickets sold was slightly under the estimations made. This was due to the effect of the COVID-19 pandemic, which caused a decrease in the number of tourists that visited the city and therefore, a decrease in the number of touristic tickets sold. However, before the pandemic started, the number of Live 1 and Live 3 tickets sold was above expectations.

Year	2018*	2019	2020	Total
Live 1 (tickets sold)	186	575	238	999
Live 3 (tickets sold)	361	1,583	322	2,266
Total	547	2,158	560	3,265

*(October 2018 – December 2018)

Table 6: Number of touristic bus tickets sold

C3 Quantifiable targets

No	Target	Rating
1	Increased number of public transport trips among tourists	**
2	Increased number of public bike users (through 24-hour tickets)	NA
3	Increased satisfaction among tourists about the quality of mobility services at the tourist destination	**
<p>NA = Not Assessed O = Not Achieved * = Substantially achieved (at least 50%) ** = Achieved in full *** = Exceeded</p>		

Table 7: Assessment of quantifiable targets

Target 1 was Achieved in full. It can be assumed that there has been an increase of the number of public transport trips among tourists as there has been an increase in overall public transport trips within the city. The overall number of urban bus trips has increased by 15% between 2016 and 2019, as was mentioned in Section C2. Concerning the modal split of Las Palmas de Gran Canaria, the public transport share has significantly increased (from 13% in 2016 to 21% in 2019).¹

Target 2 was Not Assessed because the 24-hour tourist ticket (Live 1) developed in this measure did not include the option to use the public bike sharing system. However, the number of users of the public bike sharing system has increased during the lifetime of the CIVITAS DESTINATIONS project, thanks to the success of the brand-new system created in LPA 4.1, but with its own tickets.

Target 3 was Achieved in full. This indicator was evaluated in measure LPA 2.1 and reflects the result of implementations of several actions and measures. The level of satisfaction among tourists about the quality of the mobility services was evaluated through surveys in 2019, and was given a rating of 7.8/10. This value is not comparable with a baseline value as it has never been evaluated before, but 7.8/10 exceeds the forecast, which was 7/10 for this concept.

C4 Up-scaling of results

Not applicable.

D Process Evaluation Findings

D1 Drivers/enablers

The support and willingness to collaborate by the Tourism Board of Las Palmas de Gran Canaria has been crucial for the success of the new tourist-oriented tickets. The knowledge about the needs and requirements of different tourist groups helped to design and fine-tune the new fares.

D2 Barriers

Finding the right selling channel was the most difficult issue for the success of the new tourist-oriented tickets. In order for the tourists to buy the new tickets, they have to be aware of their existence in the first place. This is why they have to be sold in places that tourists frequent.

D3 Main Lessons Learned

It is necessary to define a comprehensive strategy in order to attract more tourists to public transport (and other sustainable mobility services). The positive impact of these new tourist-

¹ For more details regarding the cumulative effects under the modal split indicator, see the “MER Introduction: Global Executive Summary and Common Indicators” document

oriented tickets would quickly decrease if no further actions would be implemented to promote sustainable mobility amongst tourists.

The aim of Guaguas Municipales is to offer a high-quality public transport system that connects the different hotspots of the city quickly and effectively. Some of the measures they have adopted to be able to offer this high-quality and innovative service to visitors and tourists include the incorporation of new technological projects. Some examples are the GuaguasLPA App, that allows users to see the real-time of arrival of buses and the option to re-load bus tickets online.

E Evaluation conclusions

Only one of the objectives of this measure has been met (to attract more tourist towards public transport), while the other objective (to update the on-board ticketing system in order to be prepared for the upcoming BRT system) could not be reached.

F Additional information

F1 Appraisal of evaluation approach

Initially, there were two indicators foreseen for the evaluation of this measure. One was related to the increase in the level of satisfaction for the new BRT system due to the introduction of new ticketing equipment. However, as this equipment has not yet been implemented and the BRT system is not yet operational either, this indicator had to be deleted. The other indicator concerns the action LPA 7.4, which consisted of developing a new tourist ticket for public transportation, and the indicator measures tourists' level of awareness of the ticket. This was evaluated thanks to the touristic surveys carried out in LPA 2.2.

F2 Future activities relating to the measure

In order to complete this measure, after the CIVITAS DESTINATIONS project, Guaguas Municipales will purchase and install new ticketing equipment. Up to now, 2 new ticketing machines have been purchased within the framework of this measure, but they still need to be installed.