

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

**DESTINATIONS**



## Measure Evaluation Result

MAL 6.3 – Promoting sustainable mobility among tourists

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## Executive summary

The main action of this measure was the development of a **mobile application, MyMaltaPlan**, to provide useful and interesting information to encourage a change in the travel behavior amongst tourists towards more green mobility options. The University of Malta has developed the App, with assistance from Transport Malta (TM) and the Ministry of Tourism (MoT).

The app integrates different services (e.g. public transport information, location and information of Points of Interest, and other tourist information), including a newly developed scheduling technique for day planning, which combines information on transport routes and times with the time needed to explore touristic sites, to provide tourists with a full day plan based on the use of sustainable modes of transport.

The app was launched in October 2019 and a public launch event took place in early March 2020. Unfortunately, while the marketing campaign was developed in 2019 and had started being disseminated, the main marketing effort was planned for spring 2020, the beginning of the high season, which was thwarted by the COVID-19 pandemic and the resulting closure of the airport and complete halt of tourism until end of June 2020.

The measure was evaluated through two surveys with visiting tourists: a baseline survey in 2019 (wave 1) and an ex-post survey in 2020 (wave 2). Use of the app was evaluated through the number of downloads, with 125 downloads until November 2020. Ex-post data collection was delayed because of the COVID-19 pandemic and impacted by the much lower than usual number of visitors. The survey responses showed that the vast majority of visitors own a smartphone and use their smartphone on holiday to plan, access or book transport. Of the surveyed respondents in the second wave, 20% was aware of the newly introduced MyMaltaPlan app, and 7% of the respondents had used the app. The majority of surveyed tourists used the bus as their main mode of transport on the islands. Factors that encourage visitors to use public transport are better service provision, in terms of frequency and reliability, better coverage of the islands and increased operating hours. To encourage more active transport, respondents primarily highlight the need for increased road safety and improved infrastructure.

A Business Plan was developed for the MyMaltaPlan app, which contains several suggestions for further developing, marketing and sustaining the app, either by Transport Malta or another public or private entity.

The evaluation concluded that an increase in awareness about the App was recorded, even though the effects of COVID-19 had shifted much tourist travel to taxi rather than shared modes. In addition to this, participant fatigue was observed during the conduct of the surveys and face-to-face interviews were not possible due to the pandemic. It is envisaged that the App developed as part of DESTINATIONS be considered for the national tourist app developed by the relevant government entity (Malta Tourism Authority).

# A Description

This measure saw the development of a mobile application, MyMaltaPlan, to provide useful and interesting information to encourage a change in the travel behaviour amongst tourists towards more green mobility options.

Through stakeholder consultation, desktop research and on-the-spot data collection, baseline data was collected which helped with the design of the specifications for the system.

The University of Malta has developed the App, with assistance from Transport Malta (TM) and the Ministry of Tourism (MoT). The app was launched in October 2019 and a marketing campaign was devised and disseminated through an online video shared on social media, an advert in the AirMalta in-flight magazine, several brochures in hotels and at the airport, and in-person promotion of the app at the airport terminal. A public launch event took place in early March 2020. Data collection has been done before the introduction of the app to determine the baseline situation. The ex-post survey was planned for spring 2020, to monitor the use of the app and the modal shift achieved through the information and encouragement provided by the app. However, due to the COVID-19 pandemic, tourism came to a complete halt and the survey had to be postponed. The marketing campaign also could not be continued as planned and had to be postponed.

## A1 Objectives and outputs

### City policy level objectives

- Improve guest experiences and promote more sustainable travel behaviour.
- Safeguard the environmental assets which attract tourists to the Maltese Islands and the Valletta Region.
- Improve the quality of life of residents via the mitigation of the tourism carbon footprint.

### Measure specific objectives

- Encourage sustainable transport behaviour among tourists
- Collect data about tourist mobility through the app, in order to assist long term tourism transport infrastructure planning

### Outputs

- Development and deployment of Sustainable Mobility app, MyMaltaPlan;
- Hosting of a series of workshops with Tourist Operators;
- Marketing campaign to promote the app;
- Site and knowledge exchanges between UM and ARDITI (Funchal) (\*extra-output, funded through the CIVITAS DESTINATIONS project).

### Supporting activities

- Tourist mobility was addressed and discussed in the first stakeholder consultation meeting organised for the SUMP process under MAL2.1.
- Background research on mobile and internet use, and market research, including a survey with tourists at the airport, and a review of existing similar applications and their features, feeding into the development of a Business Plan for the Sustainable Travel app as part of Task 8.2 under WP8: Business Model and Training.

- Design and deployment of a survey to understand tourist mobility on the Maltese Islands, the most visited sites and modal split, their experience with different modes of transport, and their use of information and technology to plan their travels.
- Beta-testing of the app in a focus group in the autumn of 2019.
- Planned marketing campaign to promote the app in the holiday period of 2019.
- UoM participated in exchanges with ARDITI (Funchal).
- Workshop was held with tourism operators to explain the app and the portal for them to add information about their tourism activities operation.
- Book chapter ‘Sustainable tourism mobility in Malta: encouraging a shift in tourist travel behaviour through an innovative smartphone app for trip planning’ accepted for publication in book published by Emerald called ‘Sustainable Transport and Tourism Destinations’

## A2 Inter-relationship with other measures

The app, and the sustainable travel planning technology behind it, promoting modal shift for visitors, was included in the list of measures as part of the SUMP developed under MAL2.1 - Sustainable Urban Mobility Plan for the Valletta Region.

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

The target groups mostly affected were the tourists and included all of the Maltese Islands.

## A4 Stakeholders: CIVITAS project partners and other important actors

Stakeholder name	Activities description
Valletta 2018 Foundation	Stakeholder Forum, Stakeholder Consultation
Projects Malta Ltd	Stakeholder Forum, Stakeholder Consultation
Malta Hotels and Restaurants Association	Stakeholder Forum, Stakeholder Consultation
Malta Tourism Authority	Stakeholder Forum, Stakeholder Consultation
Minibuses Cooperative	Stakeholder Forum, Stakeholder Consultation
Unscheduled Bus Services	Stakeholder Forum, Stakeholder Consultation
Malta Public Transport	Stakeholder Forum, Stakeholder Consultation
Marsamxetto Ferry Service	Stakeholder Forum, Stakeholder Consultation
Hop-on Hop-off Bus Operators	Stakeholder Forum, Stakeholder Consultation
Taxi and City Cab Companies	Stakeholder Forum, Stakeholder Consultation
Ministry for Transport and Infrastructure	Stakeholder Forum, Stakeholder Consultation
Ministry for Finance and Investment	Stakeholder Forum, Stakeholder Consultation
Transport Malta Directorates: Integrated Transport Strategy Directorate; Traffic Management Unit; Public Transport Unit; Licensing and Testing Directorate	Development of App

**Table 1:** Stakeholders involvement

## B Measure implementation

### B1 Situation before CIVITAS

Two of the most popular tourist destinations in Malta are within the Valletta Region - Valletta and Cottonera, as well as two of the most popular tourist resorts and entertainment centres, Sliema and St Julian's. Scheduled bus services, Hop-on hop-off buses and a network of ferry services offer options which connect the tourist resorts to the most popular tourist attractions, and yet 22% of all tourists still opt to hire vehicles during their stay on the island, as found by the Malta Tourism Authority in a survey in 2013. The new mobile App goal was to make easier for tourists to find information about sustainable transport options and plan their trip to travel around the island using public transport, active modes and shared mobility services.

### B2 Innovative aspects

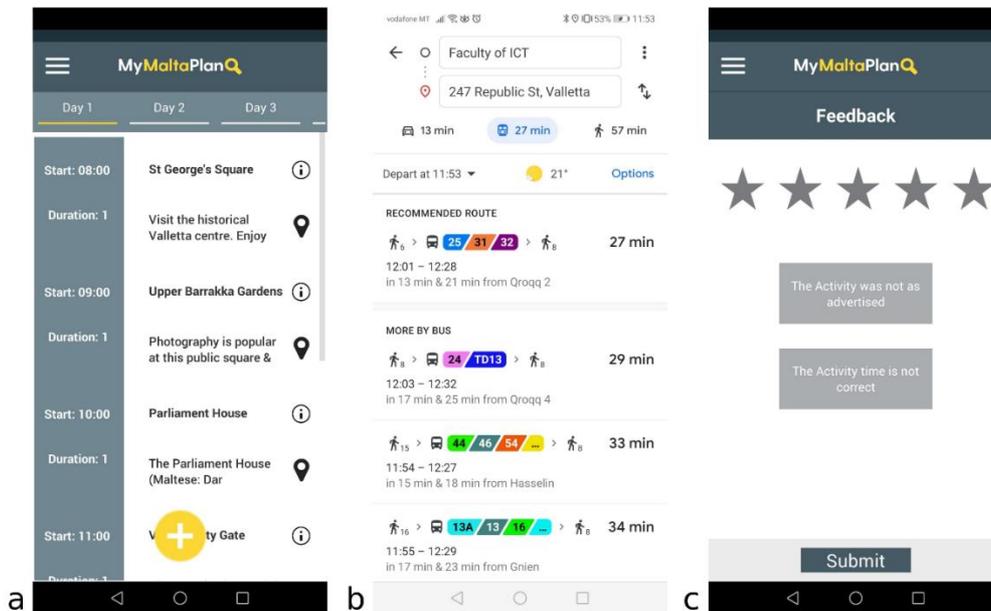
During the course of the DESTINATIONS project there was one App (tallinja app by Malta Public Transport) which provides travelers with information about scheduled bus services, routes and schedules. However, no App exists which integrates different transport information. The App created within the DESTINATIONS project, the MyMaltaPlan app, provides useful and interesting information to tourists, in order to encourage a change in travel behaviour towards more environmentally friendly mobility options. The app provides information about the main tourist attractions and how to get to these attractions using sustainable modes of transport, including the public bus, inner-harbour ferries, and car and (e-)bike sharing. The novel contribution of the MyMaltaPlan app lies in the creation of a random customized trip timetable, based on the user's preferences, dates of arrival and departure, and opening hours of activities.

### B3 Technology development

The app integrates different services (e.g. public transport information, location and information of Points of Interest, and other tourist information), including a newly developed scheduling technique for day planning, which combines information on transport routes and times with the time needed to explore touristic sites, to provide tourists with a full day plan based on the use of sustainable modes of transport.

### B4 Actual implementation of the measure

The design specifications for the app were determined through desktop research, workshops with project partners and stakeholder consultations. Further background and market research as part of the development of a Business Plan, has led to a final conceptualization of the app design. The app was developed by UoM. The **MyMaltaPlan app was developed** in order to enable tourists to plan trips and schedule itineraries visiting touristic sites, while being guided to use sustainable mobility options. A novel addition of this app is the automatic itinerary created based on users' preferences (filled in when registering), their arrival and departure dates and the opening hours of different touristic activities.



**Figure 1:** Screenshots of the MyMaltaPlan app with a) typical itinerary, b) travel information, c) feedback ability.

A **workshop for tourist operators**, for them to learn how to submit information about their attractions and services to the app, was organized in July 2019 (see Figure 2). The workshop included a practical component, where the tourist operators were asked to submit information on their tourist attraction or service to the Tourist Operator Tool in the back-end of the app. The Tourist Operator Tool provides the operators with a standard form that they have to fill to include their touristic activities in the database. The operator tool also provides information on the demographics of the tourists, the number of tourists that have added an activity to their timetable (through the automated process or manually added), and tourist feedback on the activities (star rating). This feedback is currently only visible to the tourist operators.



**Figure 2:** Workshop for tourist operators

The app was launched in October 2019. The **marketing campaign** was developed by the Ministry of Tourism (MoT) in summer 2019, and has been promoted at the Malta International Airport and other sites since November/December 2019. The marketing campaign included the preparation of an article in Air Malta's in-flight magazine, and artwork, gadgets and promotion stands for hotels.

A promotional video explaining the use of the app was developed in July 2019. Figure 3 shows an example of the promotional material developed (bookmark), alongside marketing on social media, the in-flight magazine and on tv-screens on Air Malta flights.

A **public launch** of the app took place on 11 March 2020, with presentations by the developer from the University of Malta about the app, and by the site manager from Transport Malta and an external consultant about the DESTINATIONS project and the results from the baseline survey on tourist mobility.

A **survey questionnaire to better understand tourist mobility on the Maltese Islands** was designed and the first round of the survey (survey wave 1) took place in April 2019, to collect the baseline information with tourists visiting the islands. The cross-sectional survey was held through face-to-face questionnaires with tourists at the departure lounge of the Malta International Airport, the Valletta Cruise Port terminal and the Virtu Ferries terminal (linking Malta to Sicily by fast ferry).

The ex-post survey (survey wave 2) was planned to follow on the launch of the app and the marketing campaign in early 2020, to understand the uptake and use of the app, and its impact on tourist transport mode choice and transport behaviour. However, due to the COVID-19 crisis all tourism was halted in early March and therefore it was not possible to conduct the ex-post survey in the planned time period. With the airport reopening in July 2020 and some tourist arrivals in the summer and autumn season, ex-post data was collected until November 2020.



**Figure 3:** Information stand and bookmark to promote app at a hotel

## C Impact evaluation

### C1 Evaluation approach

#### Expected impacts and indicators

Impact category	Impact indicator	Unit of measure
Economy	1-Investment Cost	€
Society	2-Number of users	N <sup>o</sup>
Transport System	3-Modal Split of users	%
Society	4-Awareness level about the MyMaltaPlan app	%
Society	5-Acceptance level about the MyMaltaPlan app	%

**Table 2:** Expected impact and indicators

## Method of measurement

Impact indicator	Method*	Frequency (Months)			Target Group	Domain (demonstration area or city)
		Bef.	Dur.	After		
1-Investment Cost	E	n.a.	n.a.	32	-	Maltese islands
2-Number of users	DC	n.a.	40	48	tourists	Maltese islands
3-Modal Split of users	S	32	n.a.	48	tourists	Maltese islands
4-Awareness level about the MyMaltaPlan app	S	32	n.a.	48	tourists	Maltese islands
5-Acceptance level about the MyMaltaPlan app	S	32	n.a.	48	tourists	Maltese islands

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

**Table 3:** Method of measurement

### Detailed description of the indicator methodologies:

- 1 - Investment cost** - Data collected by University of Malta from their Project Support Office for personnel costs associated with the development of the app.
- 2 - Number of users** - Data collected by University of Malta from the back-end of the app. This indicator considers the number of downloads of the mobile app.
- 3 - Modal split of users:** Data obtained from the baseline and ex-post surveys carried out as part of the DESTINATIONS project by Transport Malta sub-contracted market research institute with representative samples of visiting tourists. In total, 339 respondents participated in the baseline survey. The margin of error was 5.32% at a 95% level of confidence. Data collection was scheduled at different times and days in order to capture a wide variety of travelers, and inbound tourists from both EU and non-EU countries were included in the survey. Of the tourist arrivals, the vast majority (over 96%) arrive through the airport, whereas around 3% arrive using the ferry from Sicily, and 1% with a cruise liner. The responses were weighted to reflect the distribution of arrival/departures of tourists from the different ports. Since fieldwork to do face-to-face questionnaires at the airport and ferry terminal was not permitted due to the COVID-19 pandemic, the data collection strategy for the ex-post survey was adapted by directly contacting hotels across the Maltese Islands for them to disseminate the survey to their guests. In total, 119 respondents participated in the survey, with a margin of error of 8.89% at a 95% level of confidence. The number of respondents to the second wave of the survey is smaller than the first wave, as there were fewer visitors to the islands due to limited travel in 2020. Of the respondents, 97% arrived via the airport, with the remaining 3% arriving via the ferry from Sicily or with a private yacht, which is representative of the general tourist profile. From the first wave of the survey, only the responses of those tourists who arrived via the airport and ferry port were considered, as tourists who arrive by cruise liner generally only stay for one day and make use of

organised transport, or only walk around the capital city where the cruise liner terminal is located. In the second wave of the survey, respondents arriving by cruise liners were not included, as there were very few cruise liners in operation due to the COVID-19 pandemic.

**4 - Awareness level about the MyMaltaPlan app** - Data collected by Transport Malta sub-contracted market research institute through the ex-post survey with representative samples of visiting tourists. The awareness level was defined as being aware of the existence of the MyMaltaPlan app as an information source to plan travel on the Maltese Islands.

**5 - Acceptance level about the MyMaltaPlan app** - Data collected by Transport Malta sub-contracted market research institute through the ex-post survey with representative samples of visiting tourists. The acceptance level was defined as having used the MyMaltaPlan app to plan travel on the Maltese Islands. A follow-up question was included to determine if those who answered “yes” were satisfied with the information provided through the app.

### The Business-as-Usual scenario

Considering that this is a new measure and the information on the indicators sought to understand the use, awareness and acceptance of the new app, carrying out a BAU analysis was not possible for this measure. Without the DESTINATIONS project, this app would not have been developed and an integrated, targeted app for tourists to plan their travel on the Maltese Islands would not have been available.

## C2 Measure result

Impact category	Impact indicator	Unit of measure	Baseline	Ex-Ante	Ex-post
Economy	1-Investment Cost	€	0	47.400	47.400
Society	2-Number of users	Nº	0	1.000	125
Transport System	3-Modal Split of users	%	13% car (rental) 6% car (own or family/ friends) 54% public transportation	5% shift to PT	9% car (rental) 1% car (own or family/ friends) 57% public transportation
Society	4-Awareness level about the MyMaltaPlan app	%	0	10%	20%
Society	5-Acceptance level about the MyMaltaPlan app	%	0	10%	7%

**Table 4:** Measure results

## C2.1 Economy

### 1-Investment Cost

This indicator reflects the investment cost of developing the tourist mobility App. With the support of DESTINATIONS, it was possible to achieve the investment foreseen.

## C2.2 Transport system

### 3-Modal Split of users

In terms of the tourist use of transport on the islands, the majority of tourists (54%) used the public bus in wave 1, which increased to 57% of respondents in wave 2. Other respondents to survey wave 1 used a rental car (13%), taxis (11%), or moved mostly on foot (10%). The use of the private car (own car, or of friends/family) was the dominant transport mode for 6% of respondents. In wave 2 of the survey, there was a notable increase in the use of taxis (21%), while the share of use of rental cars declined to 9% and the use of private cars to 1% only. The remainder was made up by those who used the ferry as their mode of transport (5% in wave 1; 2% in wave 2 of the survey), and very few respondents who opted for the car-sharing service, bicycle rental or a rented motor/scooter (<1%). Valletta, Mdina and the sister island Gozo were the three most visited destinations by tourists, with 81%, 47% and 46% of respondents having visited these sites respectively (in wave 1; this question was omitted in wave 2 to reduce the length of the survey). Most of these trips were made by bus, and in the case of Gozo of course in combination with the inter-island ferry service (Gozo Ferry Services).

From the comparison of the first and second wave of the survey, a small increase in bus usage can be noted, from 54% to 57%. This increase is seen more strongly in the purchase of a weekly public transport smartcard: whereas in wave 1 24% of respondents purchased a week pass for the bus, in wave 2 that was 46%. There was also a notable increase in taxi use. The latter could be explained by a preference for more 'individual' transport use, because of fears around spending time in crowded places with many other people, due to the COVID-19 pandemic. Another explanation could be the difference in demographic profile of the visitors during wave 2 of the survey versus the first wave; in the second survey wave more respondents were traveling solo (38% in wave 2, versus 18% in wave 1), rather than as a couple (42% in wave 2; 47% in wave 1) or family (14% in wave 2; 24% in wave 1).

## C2.2 Society

### 2- Number of users

In late 2020, the app was downloaded 125 times. Unfortunately, the timing of the launch of the app and the planned promotion was disrupted due to the COVID-19 pandemic. The airport closed just after the launch of the app in March, and remained closed until June 2020, so tourism came to a complete halt in these months. The app was therefore not being downloaded or used by tourists. The number of downloads is not reflecting the normal situation and further uptake is expected once tourist numbers are up to the level of previous years.

In terms of smartphone ownership and use of the smartphone for trip planning purposes, 88% of the respondents own a smartphone, and 78% use their smartphone on holiday for transport purposes, e.g. to plan, access or book transport in the first wave of the survey. In the second

wave of the survey, these percentages were even higher: 91% of respondents own a smartphone, and 90% used their smartphone for holiday planning purposes. The vast majority of those who do not own and use a smartphone are over 50 years of age.

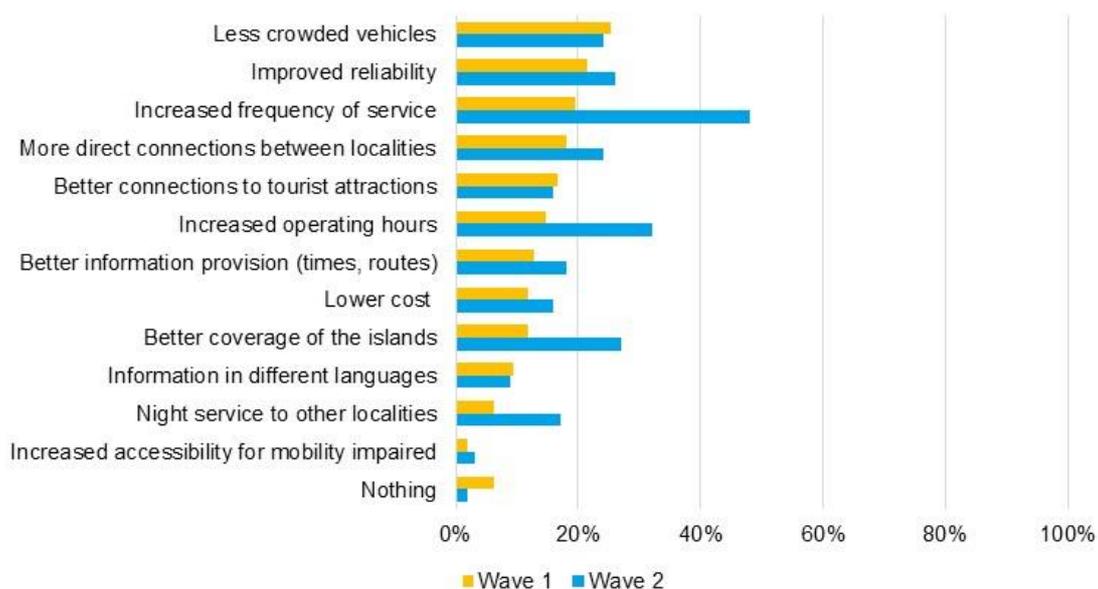
#### 4-Awareness level about the MyMaltaPlan app

Respondents were asked what applications or websites they used to plan their trip. The MyMaltaPlan app was added to this question after the launch in early 2020, and was therefore only included in wave 2, to be able to compare with the baseline figures obtained from survey wave 1. In terms of awareness of information sources for trip planning, the top three information sources were, in both survey waves: Google Maps, the Visit Malta website and the bus operator website. Of the respondents in the second wave of the survey, **20% indicated they were aware of the MyMaltaPlan app.**

#### 5-Acceptance level of the MyMaltaPlan app

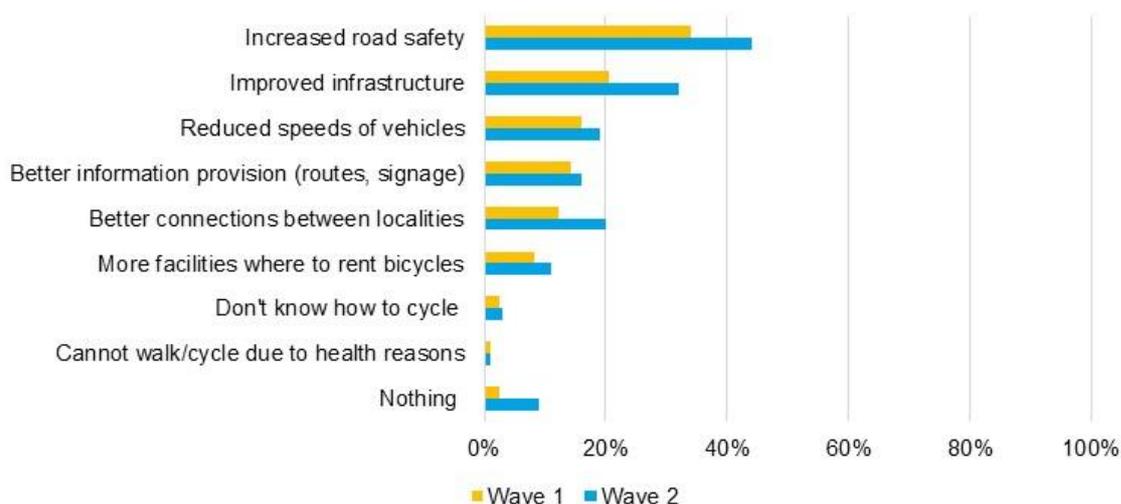
In terms of acceptance, the actual usage of the information services, Google Maps topped the list in both survey waves, with 66% of respondents using this service for trip planning. The bus operator website and app (Tallinja) was used more frequently by respondents in wave 1 than in wave 2. Websites and social media of private transport operators and taxi's increased in use in wave 2 when compared to wave 1, in line with more taxi use as discussed above. **Of the respondents in wave 2, 7% indicated to have used the MyMaltaPlan app.**

Respondents were asked what would encourage them to make more use of public transport. Figure 5 lists the responses from wave 1 and 2. The respondents in wave 1 highlight the importance of 'less crowded vehicles', 'improved reliability' and 'increased frequency of service'. In the second wave of the survey, there was less concern about crowding on vehicles and reliability of the service, potentially due to lower numbers of public transport users as tourist numbers were down. The top three responses in the second wave were 'increased frequency of service', 'increased operating hours' and 'better coverage of the islands'.



**Figure 5:** Encouraging factors for public transport use “What would make you consider using more public transport on the islands?”

Respondents were also asked what would encourage them to make more use of active transport modes, such as walking and cycling. Figure 6 list the responses from wave 1 and 2. For both survey waves, to encourage active transport modes, 'increased road safety' and 'improved infrastructure' topped the list. In the first wave, 'reduced speeds of motorized vehicles' came as a third factor, whereas in wave 2, 'better connections between localities' was mentioned. 'Better information provision (routes, signage)' also scored high in both waves of the survey.



**Figure 6:** Encouraging factors for active transport use “What would make you consider using more active transport on the islands?”

### C3 Quantifiable targets

No	Target	Rating
1	Less CO <sub>2</sub> emissions 1,776kg CO <sub>2</sub> e/a	NA
2	Modal shift: 600 tourists make use of sustainable transport instead of hire car/taxi	NA
3	*Investment cost within budget	**
4	*1,000 registered users using the app	O
5	*5% modal shift to public transport by tourists	*
6	*10% of tourists aware of the App (Awareness level)	***
7	*10% of tourists have used the App (Acceptance level)	*
<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 5:** Assessment of quantifiable targets

The targets from 1 to 2 were planned in the grant agreement. Targets from 3 to 7 were defined during the project implementation.

During the development of the App it became evident that the targets set for 1 and 2 would not be possible to evaluate, given also the start of the pandemic affecting the launch and release of the App on the market. Other targets were therefore defined to reflect better the context and timing of the launch of the measure.

Target 3 referred to the investment cost of the App which was achieved in full. The investment cost disbursed for the design and development of the App was within budget. Target 4 aimed for 1,000 registered users by the end of the project. The launch of the App however coincided with the COVID-19 pandemic which saw a dramatic decline in tourist arrivals. So much so that the target identified for this indicator was not achieved.

In Target 5 the objective was to achieve a modal shift to public transport among tourists. In the surveys we found that bus use among tourists increased from 54% to 57%, making this target substantially achieved. It is important also to remember that the surveys were carried out during the pandemic when tourist numbers had declined and public transport was seen as an “unsafe mode of transport” by many.

For Target 6 the achievement is exceeding the targets set. The number of tourists aware of the App was registered as higher than 10%. As for Target 7, this was substantially achieved with 7% having downloaded and used the App.

## C4 Up-scaling of results

The app is available for the entire country, so further up-scaling is not applicable.

# D Process Evaluation Findings

## D1 Drivers

At the **organizational** level, there has been good collaboration between UoM, TM and MoT, through regular meetings and emails, to follow-up on progress on the implementation of the measure, to test the functionalities of the app, to assist with organising the workshop with tourist operators, to develop the marketing campaign and to organise the public launch of the app.

At a **technological** level, the extensive research and development carried out by the developer at UoM, saw the inclusion of additional, novel functionalities in the app, most notably the trip scheduling feature, which creates a random customized trip timetable, based on the user’s preferences, dates of arrival and departure, and opening hours of activities.

## D2 Barriers

Deciding to use the Google Maps API to develop the app created a **technological** barrier. While the functionalities provided by Google Maps are among the best, compared to other travel planning and mapping tools and the Google Maps API is widely used in travel planning apps, this means the trip planning functionality of the app relies on the availability and accuracy of the information provided by public and private operators to Google. For example, while the Malta

Public Transport bus schedule is available through Google Maps, other transport providers, such as the inner harbour Valletta Ferry Services, have not made their information available, and could thus not be properly integrated in the trip planning functionality of the app.

An **organizational** issue was encountered as a result of apps similar to the MyMaltaPlan app being placed on the market at the same time. While the app was in development, a similar app was being developed by the Malta Tourism Authority, the Visit Malta app, which provides tourists with information about tourist attractions. Another app, by mobility-as-a-service company MEEP, provides trip information integrating the different public transport and shared mobility services available on the Maltese Islands. While neither of these apps provide the exact same functionalities as the MyMaltaPlan app, there is clear competition between them and their co-existence may lead to confusion or frustration for visiting tourists. While efforts were made to liaise and cooperate with MTA to seek the possibility of integrating functionalities into a single app, this was not achieved until the time of this review.

### D3 Lessons Learned

Smartphones and mobile apps have changed the way people travel and plan for their trips. The MyMaltaPlan app was developed in order to enable tourists to plan trips and schedule itineraries visiting touristic sites, while being guided to use sustainable mobility options. A novel addition of this app is the automatic itinerary created based on users' preferences.

The COVID-19 pandemic thwarted the plans to launch and promote the MyMaltaPlan app. However, there is some uptake of the app and from the surveyed respondents in wave 2 of the survey, it appeared that 20% of respondents were aware of the app. Once the tourism industry is up and running again, further promotion of the app would be needed to increase awareness and uptake of the app.

## E Evaluation conclusions

In order to understand current tourist travel behaviour, and tourists' use of smartphone or web applications in trip planning, a survey was conducted with tourists arriving at the airport, cruise- and ferry ports. From the survey responses it appears that the vast majority of visitors own a smartphone and use their smartphone on holiday to plan, access or book transport. Of the surveyed respondents in the second wave, 20% was aware of the newly introduced MyMaltaPlan app, and 7% of the respondents had used the app.

More than half of the surveyed tourists use the bus as their main mode of transport on the islands. Between the first and second wave of the survey there was a slight increase in bus use, and a notable increase in taxi use. The latter can be explained by a different demographic of visitors and a preference for travelling more individually, due to the COVID-19 pandemic.

Factors that encourage visitors to use public transport are better service provision, in terms of frequency and reliability, better coverage of the islands and increased operating hours. To encourage more active transport, respondents primarily highlight the need for increased road safety and improved infrastructure.

## **F Additional information**

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

During the baseline survey, it became evident that respondent fatigue was experienced. It occurred because survey participants became tired of the survey task and the quality of the data they provided began to deteriorate toward the later sections of the questionnaire. In order to address this in the ex-post survey, the questionnaire was shortened and made simpler to answer. However, respondent fatigue was still experienced during the second wave of the survey, with a number of questions in the survey left empty by respondents. The fact that the surveys were left at hotels for tourists to fill by themselves, rather than a face-to-face questionnaire at the airport or port did not aid this situation, but due to the COVID-19 pandemic, face-to-face interaction was not permitted.

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

To utilize the full potential of the app and its developed functionalities, actors in the tourism industry should work together to ensure that a wide variety of tourist activities is included and kept updated. A Business Plan was developed for the MyMaltaPlan app as part of Task 8.2 under WP8: Business Model and Training. The Business Plan contains several suggestions for further developing, marketing and sustaining the app, either by Transport Malta or another public or private entity. UoM and TM have initiated talks with MoT to integrate and transfer the app to a new app being developed for Malta.