

2020
CiViTAS
Cleaner and better transport in cities

DESTINATIONS



Measure Evaluation Result

LIM 3.1 - Increase cycling and walking in combination with special interest tourist activities as an integrated product

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Executive Summary

Prior to the DESTINATIONS project, Limassol city already had several cycling and walking paths by the seaside, which were very popular and aroused the interest of tourists and locals towards cycling and walking. However, there was a need for more routes and lanes to be designed, so that more areas would be connected to the coastline. Hiking routes exist in the countryside of the Limassol region, but they need to be improved as they lack facilities such as signage, map panels, and bike parking points. Promotional material and information provision have supported this effort and encourage visitors and locals to add cycling, walking, and hiking to their leisure trip itinerary. Videos for this promotion of cycling can be found at: <https://www.youtube.com/watch?v=p3M-HsSaVEk> / <https://www.youtube.com/watch?v=bnBpR7D3Pxx>.

The upgrading of cycling, walking, and hiking as a tourist product increases the interest of the public. Under this measure, tourists and residents were encouraged to use cycling, walking, and hiking to explore the region according to their special interests. The cycling and walking networks have been expanded, bicycle parking facilities have been added, routes have been created or adapted, map panels and signage have been installed, and promotional material has been produced and disseminated. The measure includes business activity for tour guides who escort cycling, walking, and hiking groups and enhances the business of bike rental companies.

The collaboration with Local Authorities regarding the approval of the construction of bike lanes and installation of bike stands and maps was successful. Additionally, Local Authorities have agreed in introducing a new law regarding cycling, cycling lanes, cycling paths, and cyclists' responsibilities and rights for ensuring the safety of cyclists, therefore allowing evaluation data to be gathered and analysed.

The use of cycling increased with the extension and addition of sidewalks and bike lanes in the Limassol region, reaching 256.1 Km. There was a considerable decrease in air pollution (250 tCO₂) and noise pollution (47 dB) in comparison to levels at the beginning of the project. This was because more tourists and residents were preferring to use sustainable modes of transportation, including cycling, over other modes of less environmentally friendly transportation, as well as walking in the newly developed lanes. In addition, the fuel cost savings (fuel cost saving: 69,700 €) and the fuel savings (fuel consumption saving: 55,500 L) increased. The awareness level of the surveyed population who downloaded/received/saw the new materials regarding the touristic maps and guides reached 97% in 2018 and 93% in 2019. The survey results revealed that 33% of people had accepted cycling by 2018 and by 41% in 2019, while hiking/walking had been accepted by 19% in 2018 and by 24% in 2019.

All outputs have been completed on time, allowing the evaluation for this measure to be successfully undertaken. In the future, meetings with Local Authorities will take place to ensure the measure continues to run smoothly.

A Description

The measure intends to improve public health and safety as well as to change habits of both locals and tourists. To support this measure, new cycling lanes and walking routes have been created, as well as the installation of 5 bicycle parking facilities in the region. Moreover, 7 map panels have been placed for cycling lanes/routes/paths, walking paths, and hiking routes, as well as signage. Maps and guides, both in electronic and printed format, and positive cycling images have been created, as well as a substantial presence in the local press to promote the increase of cycling, walking, and hiking. Hotels, travel agencies, CTO tourist information offices, the port of Limassol, Limassol Chamber, and Local Authorities' offices are some of the places where the dissemination is taking place. In addition to the promotional tools, an application has been created to support the increase of cycling, walking, and hiking (LIM 7.4). To enhance this measure, the expansion of public bike sharing stations including e-bikes have been installed in the region to serve the new cycling paths and increase the number of available bikes.



Figure 1: New cycling lane in Ypsonas Municipality & promotion of new walking route in Limassol Region

For the first time, efforts have been made to introduce a law regarding cycling, cycling lanes, cycling paths, and cyclists' responsibilities and rights, to ensure the safety of the increased number of cyclists. This has been formed in cooperation with the Cyprus Cycling Association, the Limassol Cycling Club, and Limassol Members of the Parliament.

A1 Objectives and outputs

City policy level objectives

The measure is in line with Limassol's Municipality Strategy and of Local Authorities, aiming to increase cycling and walking in combination with special interest tourist activities as an integrated product in the Region of Limassol, contributing to the below objectives:

- Fewer CO₂ emissions, cleaner more attractive public spaces

- Less traffic noise in the city centre and increased tourist attractiveness
- Less energy consumption
- Public health and safety and improved quality of life
- Change habits of local people and tourists towards more sustainable mobility modes
- More attractive tourist destination
- Increase the total share of citizens that use smarter and more fuel-efficient mobility modes

Measure Specific objectives

- Increase interest towards cycling, walking, and hiking
- Increase in guided tours by bike or on foot and enriching the tourist experience
- Creation of cycling, walking, and hiking routes that will enhance special interest tourism (wine, gastronomy, bird watching, history)
- Promotion of cycling, walking, and hiking in relation to special interests
- Encouraging tourists and locals to combine sustainable mobility modes to leisure trips and special interest tourism

Outputs¹

- 5 bike parking facilities
- 8 routes (cycling and walking) in Limassol region were designed and mapped
- 2 new bike lanes/routes have been created in Ypsonas Municipality in the Limassol region
- Signage for cycling lanes, paths, and routes, and walking paths and routes
- 7 map panels for cycling, walking, and hiking paths and routes
- 34,000 maps have been created and printed
- Tourist guides have been developed in electronic and printed form (5,000 guides printed and distributed)
- Photographic material useful in promotion (photoshooting to promote cycling and walking)
- Promotional video for cycling (creation of 3 video spots to promote the new law for cycling)
- *Broadcasted at the National TV show of Cyprus for a period of 3 months
- *Organisation of a National Seminar to promote the new law of cycling

Supporting activities

Supplementary activities have been carried out to enhance the impacts of the measure:

- Local cooperation dimension associated with measure implementation (local authorities, cycling clubs and associations, and points of interest such as theme parks and museums)
- Cooperation with hotels, travel agencies, tour guides, and tourist information offices to support the measure success

A2 Interrelationship with other measures

The measure shares some synergies and has a strong interaction with the following CIVITAS DESTINATIONS measures:

- **LIM 4.2:** *Expansion of public bike sharing system, including e-bikes*, as this measure enhances the implementation of the examined measure which aims, among other things, to upgrade cycling within leisure trips.
- **LIM 6.1:** *Awareness of the use of sustainable mobility modes for leisure trips*, as this measure aims to upgrade and expand the cycling and walking paths, to increase the interest of locals

¹ *Extra-output with DESTINATIONS budget

and tourists, and encourage them to cycle, walk, and hike to explore the region. Complementary to LIM 3.1, LIM 6.1 aims to increase the awareness about how to travel around for leisure trips using bikes and walking, among other modes. To attract people and increase awareness, campaigns and competitions have been designed.

- **LIM 7.1:** *Improvement of PT routes, timetables, ticket procedure and bike transportation on buses to make the service more attractive*, as the installation of bike racks on buses worked towards increasing the use of combination of cycling with PT, so tourists and residents have the chance to explore more cycling paths.
- **LIM 7.4:** *Mobility application and travel planner*, as the bicycle parking facilities, the new cycling lanes, walking, and hiking routes developed under this measure are included in the Mobility application.

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

The group of people on which the measure will have an influence are the tourists and residents of the Limassol region.

A4 Stakeholders involvement

Stakeholder name	Activities description
Local authorities	To identify locations for new bike lanes and routes and ensure their long-term maintenance and cleaning
Cyprus Tourism Organisation	To promote the new lanes and routes in combination with special interest tourism through their media
Members of the Parliament	To support the new legislation for cyclists' safety and rights
Ministry of Communications and Works	To support the new legislation for cyclists
Bike rental companies	To encourage their customers to use the bike, walking and hiking routes in combination with special interests
Bike sharing company	To encourage their customers to use the bike, walking and hiking routes in combination with special interests
Cyprus Cycling Association	To support the new legislation for cyclists
Limassol Cycling Club	To support the new legislation for cyclists
Hotels, travel agencies, tourist information offices	To disseminate the promotional material and encourage their customers to use the bike, walking and hiking routes in combination with special interests

Table 1: Stakeholder involvement

B Measure implementation

B1 Situation before CIVITAS

Limassol area used to have a cycling road and a walking route running along the coastline to the city centre. In some areas, both the cycling road and the walking route have been discontinued, forcing users to alter their path, and use the main road until they reach where the cycling road or walking route continues. Due to this issue, both tourists and residents were avoiding cycling or walking along the coastline, as they were putting their safety at a high risk. This lack of infrastructure reduced the use of walking and cycling, affecting human health and quality of life.

B2 Innovative aspects

The most innovative aspect of this measure is related to the **new conceptual approach**. The measure has provided better accessibility and mobility conditions to residents and visitors due to the development of bike and walking lanes/routes, to support the concept of a smart city. Therefore, this measure upgrades cycling, walking, and hiking options as a tourist product, by creating 5 new bike parking facilities, designing 8 cycling and walking routes, creating 2 new bike lanes, and installing 7 map panels to inform tourists and citizens about landmarks, as well as the installation of signage for cycling and walking lanes/routes and the printed maps and guides.

B3 Technology development

The in-depth research resulted in the final technology development which comprises the installation of 5 bike parking stations with terminals. The terminals include:

- the Nextbike smart box FVZ2 which serves as the central processing unit for all stations' electronic components. It fits into the Nextbike terminal and can be integrated into individually designed kiosk structures. The smart box FVZ2 is a mandatory component for all stations with display and payment modules, and
- a touch display which serves as the central interface for dynamic information and customer interaction. With its encapsulated build, it is optimised for outdoor environments. The electricity for the touch screen display, the RFID card reader, and the smart box is supplied by a solar panel.

B4 Actual implementation of the measure

Within this measure, the cycling and walking networks have been expanded, bicycle parking facilities were added, walking/cycling routes were mapped and signed in the Limassol region, map panels and signage were installed, and promotional material (printed and electronic) was produced and disseminated.

In total, 5 bike parking facilities have been installed during December 2017 in collaboration with NextBike CY. LTC installed 3 bike sharing stations which include the terminals with solar panels to provide electricity to the touch screen display. The terminals include: i) the Nextbike smart box FVZ2 which serves as the central processing unit for all stations' electronic components. It fits into the Nextbike terminal and can be integrated into individually designed kiosk structures. The smart box FVZ2 is a mandatory component for all stations with display and payment modules, and ii) a touch display that serves as the central interface for dynamic information and customer interaction. With its encapsulated build, it is optimised for outdoor environments. LTC also installed 2 other free bike parking facilities in the Limassol region. Additionally, 7 map panels have been installed during November 2017, in order to inform tourists and citizens about the landmarks, cycling lanes, and routes around specific areas. Furthermore, 8 routes (cycling and walking routes in the Limassol Region which were mapped and designed in 2018) and 2 bike lanes have been created at Ypsonas Municipality during March 2020, which promote and offer more opportunities for cycling.



Figure 2: Creation of promotional maps

In cooperation with the Cyprus Cycling Federation, the Limassol Cycling Club, and Limassol Members of Parliament, efforts have been made to introduce, for the first time, a law regulating cycling, to ensure the safety for the increased number of cyclists. The law was accepted by Parliament in April 2018 and was applied in October 2018 (Police Announcement on the new law under the title 'The movement of cyclists' regulating law of 2018). The law offers a detailed description about the rights and responsibilities of cyclists, as well as those of drivers. A National Seminar has been implemented during November 2018 with the aim to promote and inform people about the new law for cycling, cyclists' responsibilities, and their rights.

Moreover, during September 2018, 3 video spots were created in order to promote cycling in Cyprus and increase awareness about the new law for cyclists. Furthermore, to promote the increase of cycling, walking, hiking, and special interest tourist products in combination,



Figure 3: Installation of Five Bike Parking Facilities in Collaboration with Nextbike CY Ltd

34,000 maps were created and 5,000 guides both in electronic and printed format have been distributed.

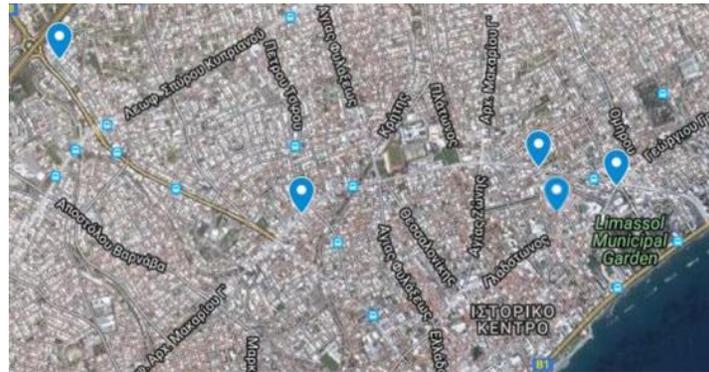


Figure 4: Installation of Bike Sharing Stations in Limassol (5 Bike Parking Facilities)

C Impact evaluation

C1 Evaluation approach

Expected impacts and indicators

Impact category	Impact indicator	Unit of measure
Environment	1- CO ₂ emission	Ton
Environment	2- Traffic noise	dB
Economy	3- Fuel costs	€
Energy	4- Fuel Consumption	L
Transport system	5- Extent of on-street cycle network	Km
Society	6- Opportunity for active mobility	Km
Society	7- Awareness level about the touristic maps and guides	%
Society	8- Acceptance level of cycling, walking and hiking	%

Table 2: Expected impact and indicators

Method of measurement

Impact indicator	Method *	Frequency			Target Group	Domain (demonstration area/city)
		Bef.	Dur.	Aft.		
1- CO ₂ emissions	DC/E	10	26	45	Vehicles in demonstration area	Demonstration area

2- Traffic noise	DC/E	10	26	45	Inhabitants and visitors	Demonstration area
3- Fuel costs savings	E	10	26	45	Transport service providers	Demonstration area
4- Fuel consumption savings	E	10	26	45	Vehicles in the area	Demonstration area
5- Extent of on-street cycle network	E	9	24	34	Residents and tourists	City
6- Opportunity for active mobility	E	9	24	34	Residents and tourists	City
7- Awareness level about the touristic maps and guides	S	n.a.	M21 -	M34 -	General public	City
8- Acceptance level of cycling, walking and hiking	S	n.a.	M21 -	M34 -	General public	City

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

Table 3: Method of measurement

Detailed description of the indicator methodologies

- **1 CO₂ emissions** – This indicator was estimated using data collected from the environmental sensors (CO₂ pollutants) installed in the main areas of the city. This is where the local partners carried out the interventions to improve cycling/walking conditions, and the construction of the bike lanes and sidewalks, according to the works that were assessed under indicators 6 and 7.
- **2 Traffic noise** – This indicator was estimated using data collected from the environmental sensors (noise pollutants, dB) installed in the main areas of the city. This is where the interventions were carried out to improve cycling/walking conditions, and the construction of the bike lanes and sidewalks, according to the works that were assessed under indicators 6 and 7.
- **3 Fuel costs and 4 Fuel consumption savings** – To calculate these indicators, the local partners made assumptions based on the experience of the Next Bike sharing company who unfortunately does not keep track of statistical data. Therefore, it was estimated that with the development of cycling, walking, and hiking routes, the increase in the number of people that turned to walking and cycling was around 40 persons per year, covering a distance of 30 km per day. An average of 60 days per year was considered for people to cycle and walk. The saved fuel costs and consumption due to the measure implementation was estimated based on the approximate consumption of an average car (8 L/100 Km) and the average fuel price in Cyprus for the period of the implementation of the measure (1.24 €/L).
- **5 Extent of on-street cycle network and 6 Opportunity for active mobility network** – These indicators were obtained based on the actual cycle network in the city (length of urban roads with segregated cycle facilities) and the actual number of road and streets with sidewalks and bike lanes.

- **7 Awareness level about the touristic maps and guides** – This indicator was collected through 350 surveys applied to 347 tourists and 3 residents. The indicator aimed to assess if the 350 surveyed people were aware of the existence of touristic maps and guides (either in printed or electronic format), and how the number of people aware changed between 2018 and 2019.
- **8 Acceptance level of cycling, walking and hiking** – This indicator was collected through 350 surveys applied to 347 tourists and 3 residents. The 350 people surveyed contribute to understanding if cycling, walking, and hiking are practises which have been adopted by tourists and residents between 2018 and 2019.

The Business-as-Usual scenario

Considering the type of indicators used, which mostly comprised of surveys, and indicators whose information was gathered for the first time, carrying out a BAU analysis was not possible. However, if this measure was not implemented, the tourists and residents of Limassol would lack the upgrade to cycling, walking, and hiking. More specifically, Limassol city and would lack the expansion of cycling and walking networks, the addition of bicycle parking facilities, the creation/adaptation of new routes, installation of map panels and signage, as well as production and dissemination of promotional material about these elements.

C2 Measure results

Impact category	Impact indicator	Unit of measure	Baseline	Ex-Ante	Ex-Post
Environment	1- CO ₂ emission	Ton	791.26	233	541.26
Environment	2- Traffic noise	dB	96	82	49
Economy	3- Fuel costs saving	€	0	63,860	7,142.4
Energy	4- Fuel consumption saving	L	0	51,500	5,760
Transport system	5- Extent of on-street cycle network	Km	0	0.2	0.4
Society	6- Opportunity for active mobility	Km	205.9	263.9	462
Society	7- Awareness level about the touristic maps and guides	%	0	40	93
Society	8- Acceptance level of cycling, walking and hiking	%	0	20	Cycling: 41 Walking/ hiking:24

Table 4: Measure results

C 2.1 Environment

1- CO₂ emissions

The actions carried out under this measure contributed to the reduction in the use of conventional modes of transport, as well as decreasing unnecessary driving for leisure, which resulted in a decrease of 250 tCO₂ compared to the baseline scenario (791.26 tCO₂). The decrease of CO₂ emissions reveals that tourists and residents have adopted cycling and walking as a way to spend their leisure time.

2- Traffic noise.

The improvement of cycling and walking conditions is considered to have a positive impact on noise in the urban centre of Limassol. With residents and locals using more cycling and walking as a mode of transport, Limassol region achieved a considerable decrease in traffic noise in comparison with the beginning of the project – a decrease of 47 dB was achieved, to 49 dB, compared to the baseline scenario (96 dB).

C 2.2 Energy

4- Fuel consumption savings

As it has already been stated, the local partners, in cooperation with Next Bike, made assumptions in order to estimate indicator 4. Therefore, for estimating the fuel consumption savings, it was assumed that 40 people per year turned to walking, cycling, hiking, which was multiplied by the 30 km that each will cover per day, then multiplied by the 60 days of the year that they will walk/cycle/hike. The final result is the total km of all the people who covered the distance in 1 year. This number is multiplied by the approximate consumption of a car which is 0.8lt/km, resulting in an assumption that the implementation of this measure resulted in 5,760 L of fuel being saved since the upgrading of cycling and walking.

C 2.3 Economy

3- Fuel costs savings

Based on the average fuel price in Cyprus for the period of the implementation of the measure (1.24 €/L), and based on the fuel consumption savings (L of fuel savings x average fuel price in Cyprus), the measure was calculated to bring 7,142.4 € (5,760 L x 1.24 €/L) of fuel savings under the studied conditions.

C 2.4 Transport system

5- Extent of on-street cycle network

The expansion of the cycling network resulted in a significant increase in the length of urban roads with segregated cycle facilities. The actual length of the cycle network in the city reached 0.4 km, accounting for 0.2 km more than was expected.

C 2.5 Society

6- Opportunity for active mobility

The expansion of the bike and walking networks significantly increased the length and number of roads and streets with sidewalks and bike lanes in the Limassol region. The result was an increase of 256.1 km, to a total of 462 km, compared to the baseline (205.9 Km).

7- Awareness level about the touristic maps and guides

The results of the 350 surveys applied to tourists and residents revealed that, in 2019, a significant number (93%) of the surveyed population had received/seen/downloaded the touristic maps and guides. In 2018, the percentage was slightly bigger, reaching 97%. It was a great achievement that in both years the dissemination of the materials was successful.



Figure 5: Places where surveyed people found touristic information

Following the survey results, the local partners understood that people are, understandably, using the internet more often to find the information they want. People are getting more and more used to searching on the web instead of searching for printed materials. In 2018, 30% of the population received the materials from hotels and information offices in printed form, but in 2019, only 10% received the material in printed form. This technology development (the increase in using the internet) will contribute to the minimisation of paper waste which is already a European goal.

8- Acceptance level of cycling, walking and hiking

The survey results of 2018 revealed that 33% of the surveyed population had made a bike trip recently, while this percentage increased in 2019, reaching 41%. In 2018, 70.6% of the surveyed population answered that they intend to use the bike more often, while in 2019 all people answered that they would like to use their bikes more often. Another important outcome from the survey was that in 2018, 62% of the surveyed population knew that they could rent a bike from hotels, and 7% actually rented one from hotels. However, in 2019, 64% knew about the possibility to rent a bike at hotels and 40% went on to rent one from hotels.

Additionally, in 2018, 19% of people answered that they had made a walking/hiking trip, while in 2019, the number increased to 24%. In 2018, 52% of people expressed that they would like to walk/hike on their holiday and 26% that would like to walk/hike in future holidays. In 2019, 11% of people answered that they would like to hike/walk on this holiday and 72% would like to walk/hike on future holidays.

C3 Quantifiable targets

No.	Target	Rating
1	Less CO ₂ emissions: 558.26 t CO ₂	0
2	Less traffic noise in the city centre: 30 dB	***
3	Less energy consumption: 463.5 MWh	*
4	Less fuel costs: Overestimated 63,860 €, new ex-ante value: 5,000 €	**
5	Less fuel consumption: Overestimated 51,500 L, new ex-ante value: 4,000L	**
6	*Extent of on-street cycle network	***
7	*Extent of sidewalks and bike lanes: 263.9 Km	***
8	*Increase the awareness and acceptance level of people	***
9	Increase public health and safety	*
10	Change habits of local people and tourists	*
N/A = Not Assessed 0 = Not Achieved * = Substantially achieved (at least 50%) ** = Achieved in full *** = Exceeded		

*New target, not in GA

Table 5: Assessment of quantifiable targets

Most of the targets have been achieved compared to those initially stated in the Grant Agreement, either fully or substantially, allowing data to be collected and analysed on time.

Only Target 1 was not achieved. After the expansion of the cycling and walking networks, the evaluation results revealed that the CO₂ savings reached 250 t, just less than half of the expected 558.26 t. One reason for this is the possibility of an acceptance period that must be considered in order for tourists and residents to be informed and adopt cycling and walking into their daily routine. Another explanation is that the target considers activities which are interrelated with the activities of measures referred to in section A2.

Target 2 was exceeded, achieving a reduction of 47 dB noise pollution compared to the baseline (96 dB). The creation of additional cycle and walking lanes improved the cycling and walking conditions. Following the result from the surveys, tourists and residents showed an increased interest in cycling (33% in 2018 and 41% in 2019), and walking/hiking (19% in 2018 and 24% in 2019). The intervention areas assisted an increase of people walking and cycling, resulting in a noise reduction which is caused mainly from the traffic created by cars.

Target 3 was not possible to be assessed due to the lack of collected data regarding the avoided energy consumption from cars due to the expansion of cycling, hiking, and walking lanes. However, it is expected that the target is substantially achieved as targets 2, and 5 were achieved. Additionally, this target was achieved through the implementation of the other interrelated measures referred to in section A2.

Targets 4 and 5 were overestimated during the proposal writing. The new ex-ante values have been set to reflect the assumptions made, and considering that the fuel savings and costs are arising from the total distance covered from people by walking/cycling/hiking instead of driving their car. Therefore, the reduction of unnecessary driving for leisure trips allowed Targets 4 and 5 to be achieved in full. The development of cycling, walking, and hiking routes allowed savings of 5,760 L, and consequently, savings in fuel costs of 7,142,4 €. The result of the surveys revealed that more people are turning to cycling and walking each year. Although there was a lack of statistical data on the number of people who cycle and walk, as well as the distance they cover per day, the survey results revealed that the savings in fuel and cost are likely to increase each year.

Targets 6 and 7 were exceeded as it was possible to achieve the length of the on-street cycle network by 200 m more than was expected, and the length of sidewalks and bike lanes by 256.1 Km compared to the expected 263.9 Km. This target is interrelated with LIM 4.2.

Target 8 was exceeded. For the successful implementation of this target, the dissemination of the measure through the printed and electronic guides was very important, which included a presence in the local press and the promotion from hotels, travel agencies, CTO tourist information offices, the port of Limassol, Limassol Chamber, and Local Authorities' offices. During the surveys, it was possible to understand that 93% of residents and tourists surveyed (in 2019) were aware and had already download the touristic maps and guides. Additionally, the acceptance level of cycling, walking, and hiking was understood through the surveys. In 2019, the surveys showed that 41% of the surveyed population had cycled recently, while 24% had walked/hiked recently. From the answers to the surveys, it was understood that all people had the intention to cycle more, with fewer people having the intention to walk/hike more.

Initially, it was planned to estimate the increase in public health and safety (Target 9) and the change in habits of local people and tourists (Target 10), but such quantifications were not possible to perform during DESTINATIONS. However, all the studied indicators which have been examined in this measure from indicator 1 to 8, led to the conclusion that there is a positive behavioural change among people. Specifically, a decrease in fuel consumption and CO₂ emissions as well as the levels of acceptance reveals that people have already adopted cycling and walking in their lives more often, either for leisure, exercise, or for going to work. Another way to understand the positive behavioural change is the results from the indicators studied in the other interrelated measures detailed in section A2. Regarding Target 9, it is expected from the above and Target 8 that public health has been improved, as people seem to cycle and walk more than before (compared to 2018). The promotion of the measure through the developed materials in both printed and electronic forms as well as promotion through tourist interest points has informed people about the new installations which are safe for use. These conclusions are supported from almost all the activities within the DESTINATIONS project in Limassol city. Considering the above, it is expected that both indicators have been at least substantially achieved.

C4 Up-scaling of results

Not applicable

D Process Evaluation Findings

D1 Drivers

There was a very good collaboration with Local Authorities regarding the approval of the construction of bike lanes and installation of bike stands and maps. Local Authorities have also agreed in introducing the new law regarding cycling, cycling lanes, cycling paths, and cyclists' responsibilities and rights for ensuring the safety of cyclists, allowing the evaluation data to be gathered and analysed.

D2 Barriers

There were no significant barriers for this measure, and it has been implemented and evaluated on time. The only barrier was the difficulties that LTC faced to gain the appropriate permissions for the construction of the 2 bike lanes. The close cooperation with Ypsonas Municipality and other involved authorities determined the completion of the activity.

D3 Main Lessons Learned

There is a need for an increase in the awareness of the sustainable ways of travelling, especially among younger people. With the implementation of the measure, tourists and residents have been encouraged to use cycling, walking, and hiking more often to explore the region according to their special interests.

E Evaluation conclusions

The measure upgraded the cycling, walking, and hiking routes in the Limassol region, and tourists and residents can enjoy a walking, cycling, and hiking trip during their visit. The expansion of the public bike sharing stations served the new cycling paths and increased the available bikes. Map panels and signage have been placed for cycling lanes/routes/paths, walking paths, and hiking routes to help travellers move around. Materials have been disseminated through printed and electronic format. The measure was successfully implemented, and its evaluation was undertaken on time.

F Additional information

F1 Appraisal of evaluation approach

All outputs have been completed on time, allowing the evaluation for this measure to be successfully undertaken. During the proposal, evaluation into the increase of public health and safety as well as the behavioural change among local people and tourists (Targets 9 and 10) was also planned, but such estimations were not possible considering that these are not quantifiable targets. However, the local partners consider that through the successful implementation of the other targets and the successful evaluation of the interrelated measures detailed in section A2, both targets have been achieved. Furthermore, Limassol, combining measures related to the increase in interest for walking and cycling (LIM 3.1), extension of bike sharing services, installation of new infrastructure to combine cycling and PT (LIM 7.1), as well as actions to increase awareness on the use of sustainable modes of transport for leisure trips (LIM 6.1), affected the modal shift of transportation in the Limassol Region by increasing the interest of residents and tourists to use walking and cycling in combination with PT services.

Additionally, energy consumption (Target 3) was not assessed due to the impossibility of collecting data for the energy consumption avoided due to the expansion of cycling, hiking, and walking lanes. However, it is expected that the target is substantially achieved through the targets 1, 2, and 5 of the studied measure as well as the interrelated measures in section A2.

A third survey was initially planned to occur between M44 and M47 to observe the impact of the measure in 2020 and how it evolved from 2018 and 2019. Unfortunately, due to COVID-19 pandemic the country was continuously under (semi and fully) lockdowns. The arrivals of tourists in Limassol decreased dramatically and even the residents moves in the region decreased. Therefore, the data resulting from surveys in 2020 would have not been representative and it was decided to consider the results from the survey applied in 2019 for impact evaluation approach.

F2 Future activities relating to the measure

Future activities related for this measure include meetings with Local Authorities in order to ensure that the measure continues to run smoothly.