

An Integrated Action Plan

for **Senglea, Malta**

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Glossary of Terms Used

Various terms, phrases and acronyms have been used throughout this document. These may not always necessarily be understood within the context of this study, particularly by non-technical persons; therefore, the following Glossary is provided to aid the reader. Generally, in the text, the full term is used in the first instance and the acronym thereafter:

BMI:	Body Mass index
CCTV:	Closed-Circuit Television
EC:	European Commission
ERDF:	European Regional Development Fund
EU:	European Union
FAQ:	Frequently Asked Questions
HCG:	Healthy Cities Generator
HIA:	Health Impact Assessment
IAP:	Integrated Action Plan
ICT:	Information and Communication Technology, the Planning Authority's IT department
LC:	Local Council, usually in reference to Senglea Local Council
NSO:	National Statistics Office, Malta
PA:	Planning Authority
pa:	physical activity
SSA:	Small-Scale Action
u/k:	Unknown; usually used when a data source or entry is unknown
ULG:	URBACT Local Group
UN:	United Nations
UoM:	University of Malta
WHO:	World Health Organization

Background to URBACT:

The URBACT network is a European exchange and learning programme financed by the Commission under its territorial cooperation goal as part of its programmes on interregional cooperation. The aim of the network is to stimulate innovation in urban regeneration by encouraging towns and cities to identify, transfer and disseminate good practice.

In the 2014-20 programming period, the initiative continues as URBACT III. The programme covers all Member States, Norway and Switzerland. It is jointly financed by the EU and the Member States, with the European Regional Development Fund (ERDF) contributing EUR 74.3 million to the budget, which has seen a significant increase compared to the previous programming period.

Projects financed under URBACT III will address four main objectives:

- Improving the capacity of cities to deliver sustainable urban policies;
- Improving the design of urban policies;
- Improving policy implementation in cities;
- Building and sharing knowledge.

Background to Malta's involvement in URBACT:

Malta was involved in the URBACT Programme through the Planning Authority, thanks to active networking with the local National URBACT Point over the years. The Planning Authority had participated in past URBACT Information Days, including providing support to Local Councils to participate in URBACT projects and had also followed up Open Calls throughout the years with keen interest and with an intention to participate in URBACT projects.

Malta forms part of the Healthy Cities network: this Action Planning network aims to deepen the relationship between health and the urban environment, planning actions that focus on improving the population's health, while developing a rigorous health impact assessment around it. Urban planning can become a health generator on many grounds. This partnership reflects the multiplicity of possible approaches to tackle the issue: green areas, mobility, social cohesion or promotion of sports are some examples.

Malta's URBACT project:

As a non-city partner, the Planning Authority is representing the Republic of Malta and participating as a Member State of the EU, rather than a city. Malta has a population of 494,000, which is on a sharp upward trend, whilst also fluctuating significantly due to its strong tourism sector. When coupled with the small size of the country, covering a land area of 316km², this results in the highest population density in Europe.

Malta also has an issue with obesity, particularly in the younger age groups. Therefore, the theme of 'healthy cities' is very relevant to the local scenario and this project is being used to look at how the planning system can address obesogenic environments and encourage healthier, more active lifestyles.

The learning opportunities and contributions related to the Maltese partner focused on the themes of Connectivity and Mobility, with the main challenge being identified to be obesity amongst the Maltese population in general. Since the idea was to use waterfronts to connect places and communities to address this issue, a culturally rich, maritime location which had clear and definite boundaries had to be chosen. The coastal environment of Senglea fit all these criteria. In addition to this, the Senglea Local Council already had past experience in the implementation of EU-funded projects and hence was already aware of the importance of thorough implementation of such projects. The coastal city of Senglea was therefore deemed to be the best choice for such a test base.

Purpose of the Integrated Action Plan:

One of Malta's greatest challenges is obesity, a fact that is prevalent amongst the population and that has been calculated to have a significant economic impact. A combination of poor diet and a sedentary lifestyle that depends mainly on private car use has resulted in a relatively high obesity rate amongst all ages. Recent initiatives have attempted to reverse these trends but more is needed to make a nationwide impact. Within Healthy Cities, the study will focus on the city of Senglea, as a test case/pilot project. The Integrated Action Plan (IAP) will focus on identifying factors that can play a role in reducing obesity and encouraging people to walk in urban areas, such as historic towns and villages, thus promoting healthier lifestyles and potentially prompting the upgrading of such environments in the longer term. In line with national policy, the promotion of healthy lifestyles is one of the topmost priorities. By being part of the Connectivity & Mobility group, Malta has worked on understanding how to create better environments that encourage people to exercise and increase their active mobility.

IAP Process:

An Integrated Action Plan is a succinct document defining actions to be implemented, covering the planned timings, implementation responsibilities, costings, funding sources, monitoring indicators and risk assessment of the actions.



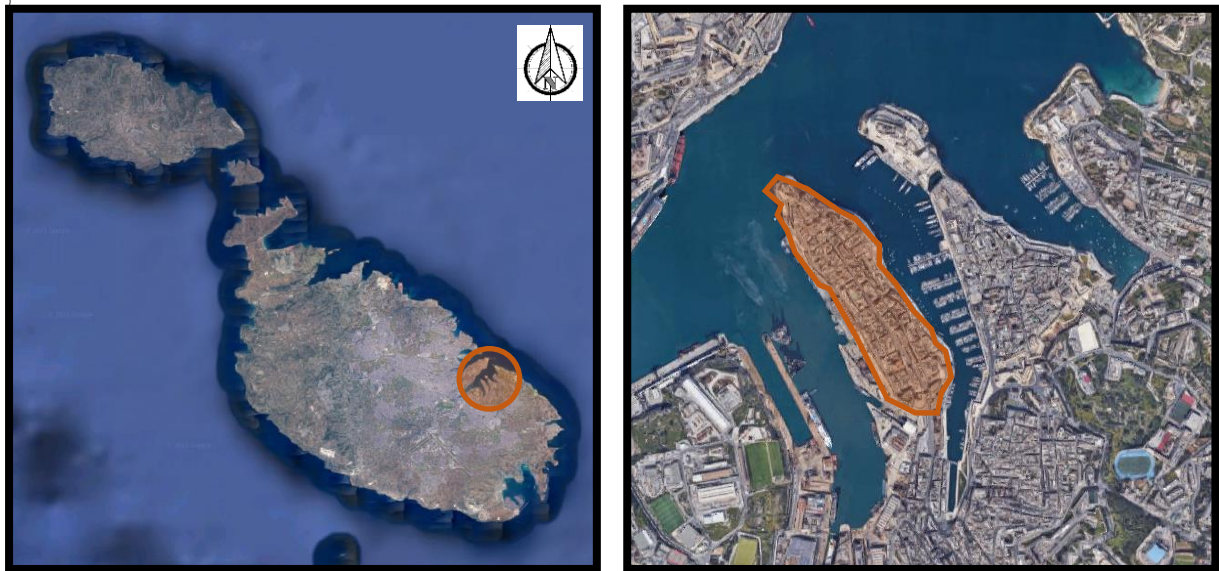
Figure 01: the action planning cycle

Part 1:

Presentation of Context and Process

a) City Context and Definition of the Initial Problem / Policy Challenge

■ General Context



Maps 01a and 01b: location of Senglea and city limits

Location and Environmental Conditions

Senglea (also known as Isla) is located on a peninsula, jutting out into the Grand Harbour from its southern shoreline. It forms part of the so-called 'Three Cities' in this area, the other two being Birgu (Vittoriosa) and Bormla (Cospicua). Prior to the arrival of the Knights of St. John in 1530, the area was known as the '*Isola di San Giuliano*' and was used as a hunting ground (the name Isla is the local vernacular for the Italian '*isola*', meaning island). Given its strategic harbour location, the Knights soon fortified the area, commencing with the construction of Fort St. Michael in 1552. Following this, a town developed within the fortifications circuiting the peninsula and was named after the reigning grandmaster, Claude De La Sengle (1494 - 1557, reigned 1553 - 1557).



Image 01: Senglea during the Great Siege of 1565

Senglea was very badly bombed during World War Two, given its proximity to the naval dockyards. Most of its historic centre was destroyed and re-constructed following WWII. It however maintained its topographical layout, that of having a ridge along its spine, with the land sloping down to the shoreline; this layout necessitated the use of stepped streets in various locations within the city to connect the different levels.

The city is very much an urbanised space, with the formal, grid-iron layout of a planned city. Given the nature and type of construction, there are no natural nor urban open/green spaces of significance, although there are some underutilised urban spaces within the built-up areas. The main open space is the waterfront on the eastern shoreline of the city, facing Dockyard Creek. This consists of a formal promenade, with trees in some locations and various types of street furniture along its entire length. However, there is competition for the limited available space: apart from the walking aspect of the promenade, it is also used for tables & chairs relating to nearby restaurants and for boat storage/maintenance and the launching of small craft.



Economic Development

Given that Senglea itself is a relatively small city, there is very little in the way of local economy and the potential for local economic development. In view of the generally small-scale of Malta's towns and villages, there is little scope for significant localised facilities; due to the small size of the island, it is usual to travel to larger commercial areas for shopping activities. In recent years, several out-of-town shopping centres have been developed that serve regional needs, such as supermarkets and large-scale shopping. These provide choice and value to users and generally serve specific geographical areas. On the other hand, such facilities generate the need to travel, which usually means the use of the private car; thus adding further car trips to an already congested road network.

Having said that, there are several local shops and facilities within the city limits of Senglea. These generally provide for local daily needs, such as grocers, newsagents, ironmongers etc. So, for basic daily needs, there are facilities within the city.

In the past, Senglea was very much dependent on the dockyards and their related activities for its economic well-being. This was due to the importance of the naval base and its proximity to the city. In fact, it was very common for residents of Senglea to work in nearby dockyards. Following the departure of

the Royal Navy in 1979, the dockyards have experienced fluctuating situations. In recent years, the dockyards have been privatised and works focus on specific areas of ship repair e.g. dedicated facilities for the servicing of luxury yachts and vessels. It is unclear how much of the present dock workforce actually originates from Senglea.

Cultural Scenario

Given Senglea's recent history, it has a fairly active cultural agenda. The most active is probably the regatta club, when oarsmen are trained for the annual regatta boat races in the Grand Harbour, where the different harbour towns compete against each other. These regattas are normally held on the 8th September (Victory Day) and 31st March (so-called Freedom Day). Other sports activities include football, bocci (a local variance of boules) and a gym, believed to be one of the first private gyms on the island. The cultural scene also includes amateur dramatic societies as well as religious organisations. The parish also holds its annual religious feast and the Local Council organises various activities throughout the year. Therefore, the cultural scenario is fairly active although very localised.

Current Challenges

The challenges currently being faced by Senglea are as follows and will be dealt with in greater detail in the relevant sections of this IAP; these challenges are in no particular order:

- obesogenic environments;
- high level of obesity in the population;
- lack of significant public open spaces;
- lack of localised facilities.

Population

In 2019, the population of Senglea stood at 2,720; this also implies a population density of 14,000 per square kilometre. This population is split 1,409 males and 1,360 females. These population figures may be further divided by age groups:

Age Group	Total	Percentage
0 – 9	217	7.9%
10 – 19	302	11.0%
20 – 29	353	12.9%
30 – 39	302	11.0%
40 – 49	311	11.4%
50 – 59	455	16.6%
60 – 69	416	15.2%
70 – 79	248	9.1%
80 – 89	120	4.4%
90 – 99	16	0.6%
Total	2,740	100%

Table 01: Senglea population by Age Group (2019)

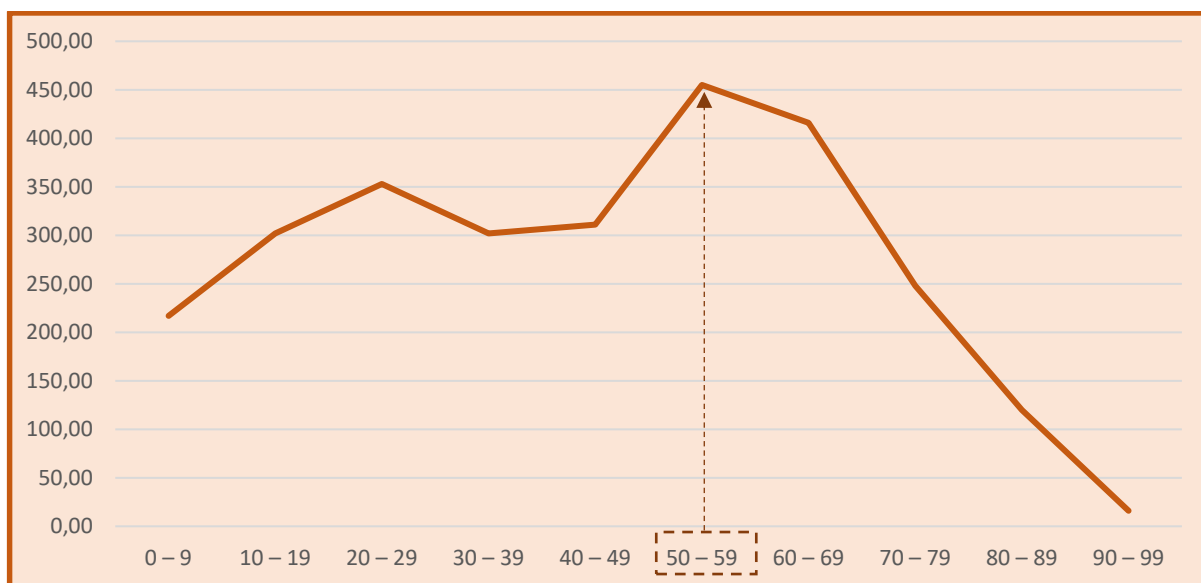


Chart 01: Senglea population by Age Group (2019)

The population is relatively evenly spread across the age groups, with the largest age group being the 50 - 59 category; the figures begin to come down for the older age groups (70 - 100).

Urban Landscape

The urban areas of Malta are generally very dense and Senglea is no exception. Given the limited land space available, developable plots are usually maximised to their full potential, with the largest number possible of residential units being provided on such sites. Whilst providing much needed accommodation, the standard of accommodation tends to suffer e.g. the properties provide the minimum standards of accommodation as permitted by law. This is not always the best option, particularly in the case of larger families. Given the lack of space on the islands, the other casualty is that of public open space; this is rarely provided and when it is, it usually irregular areas that come about as unusable (developable) space.

The above may also be applied to Senglea. However, Senglea's case is somewhat different: Senglea is a historic city (developed from 1552 onwards) developed during different times when priorities were different. Furthermore, as a consequence of the severe bombing during World War II, the post-war priority was to reconstruct and provide housing for the displaced households. Such 'luxuries' as public open spaces were down the list of priorities.

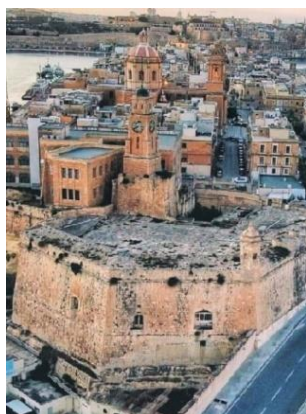
The overall area of Senglea is 160,000sq.m; of this, the current built-up area of Senglea is 80,000sq.m and open spaces account for 10,000sq.km; occupied dwellings stand at 1,177 (Electoral Register, April 2018). This works out at approximately 6sq.m of open space per inhabitant.

Senglea Primary School is located within the city and this is the main education facility for primary school age children. When it comes to secondary education, pupils would have to travel outside the city to one of the larger

educational facilities dotted around the islands (these may be categorised as state schools, church schools and private schools).

Given this intense development and lack of open space, the result is that of obesogenic environments. There are insufficient outdoors spaces where people can recreate and practice sport within a reasonable distance of their homes. Furthermore, the car culture means the high use of private transport, even for short or non-essential journeys.

This results in lack of exercise for people and contributes to the high obesity rate on the islands, together with other health issues.



Summary

One of Malta's greatest challenges is obesity, a fact that is prevalent amongst the population and which has been calculated to have a significant economic impact. The Integrated Action Plan will focus on identifying factors that can play a role in reducing obesity, encouraging people to walk in urban areas such as historic towns and villages, thus promoting healthy lifestyles and potentially prompting the upgrading of such environments in the long term. By being part of the Connectivity & Mobility group, Malta will work on understanding how to create better environments that encourage people to exercise and increase their active mobility.

SWOT Analysis:

Strengths	Weaknesses
<ul style="list-style-type: none"> Climate generally conducive to being able to lead an active lifestyle; Small distances encourage walking to run daily errands. 	<ul style="list-style-type: none"> Prevalence of unhealthy dietary habits; Heavy reliance on private car use; Ageing population.
Opportunities	Threats
<ul style="list-style-type: none"> Public open spaces which are walkable and have adequate cycle paths, in attractive rural, waterfront and historic environments; Underutilized open spaces may be used for specific activities. 	<ul style="list-style-type: none"> Lack of policy integration between urban regeneration and health promotion; Highly competitive environment for funding.

Table 02: SWOT analysis

Learning needs and contribution to the network:

Needs and Contributions	
Connectivity & Mobility	Contribution: Use of waterfronts to connect places and communities Need: Integration of walkable routes
Lifestyle	Contribution: Community life in external coastal environments and the related health benefits, both physical and psychological Need: Better integration of a healthy diet, such as the traditional Mediterranean diet in community-centric lifestyles

Table 03: needs and contributions

Health and Obesity

Obesity is a critical public health issue in Malta, which leads the overweight and obesity rankings in Europe. A recent study that measured the body mass index (BMI) of almost all school-aged children up to 16 years of age concluded that approximately 41% are overweight or obese according to WHO criteria, with a greater proportion being obese (26%) than overweight (15%). Maltese adults are also among the most overweight within the EU and the WHO European region: according to a recent nationally representative study, 36% are overweight and 34% are obese. The same authors reported a type II diabetes mellitus prevalence of 10.4% among the Maltese adult population.

Studies have also shown low levels of physical activity (PA) among Maltese adults and children, although levels of self-reported physical activity among adults have increased in recent years. A nationally representative study on Maltese boys and girls aged 10-11 years which objectively assessed PA levels showed that only 39% of boys and 10% of girls met the recommendation of one hour of daily moderate-to-vigorous PA; most children spent large proportions of their time engaged in screen time. Malta's participation in all rounds of the Childhood Obesity Surveillance Initiative (COSI) suggests that children as young as six to seven years of age are also physically inactive.

There is increasing evidence that obesity results from an individual's exposure to the 'obesogenic environment' - which has been described as "*the sum of influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations*". Numerous social and environmental determinants of health at multiple levels influence adversely healthy dietary and physical activity behaviour among the Maltese population. Almost all of these elements lie outside of the health sector's direct control. For example, Malta's rapid urbanization, lack of public open spaces and transport infrastructure deficiencies has led to decreasing opportunities for individuals to engage in active travel, free play (in the case of children) and unstructured physical activity. Maltese children exhibit alarming levels of physical inactivity and sedentary behaviour; these are key contributors to

energy imbalance and excess weight gain. In addition, Malta is characterized by a food environment with easy access to, and heavy promotion of, energy-dense foods and beverages that are high in fat, sugar and salt (HFSS). A 2013 study of local TV channels identified heavy promotion of HFSS foods during prime-time programs and a study in grocery stores demonstrated the existence of a price premium for certain healthy food options. These findings were supported by qualitative research that revealed numerous barriers to healthy behaviours for Maltese children, including parental concerns about traffic hazard leading to restricted physical activity and a reluctance to engage in active transport, as well as familial dietary patterns which encourage over-consumption of food. It is clear that an obesogenic environment underlies the problem of childhood obesity in Malta.

There is no one public health initiative that will address overweight and obesity on its own. If the broader environment remains obesogenic, then population overweight and obesity levels may be expected to increase and interventions aimed at influencing individual behaviour are unlikely to be effective. For example, education around physical activity in the absence of a supportive physical environment has been shown not to lead to significant behaviour change. Therefore, looking at the public health experience of tobacco control, it is suggested that a mix of interventional, educational, economic and regulatory approaches that simultaneously address multiple facets of the environment (which were demonstrably successful in the area of tobacco control) can also be applied to obesity. Sustained behaviour change due to changes at various levels will benefit all those exposed to the altered environment and not just those who are overweight or obese.

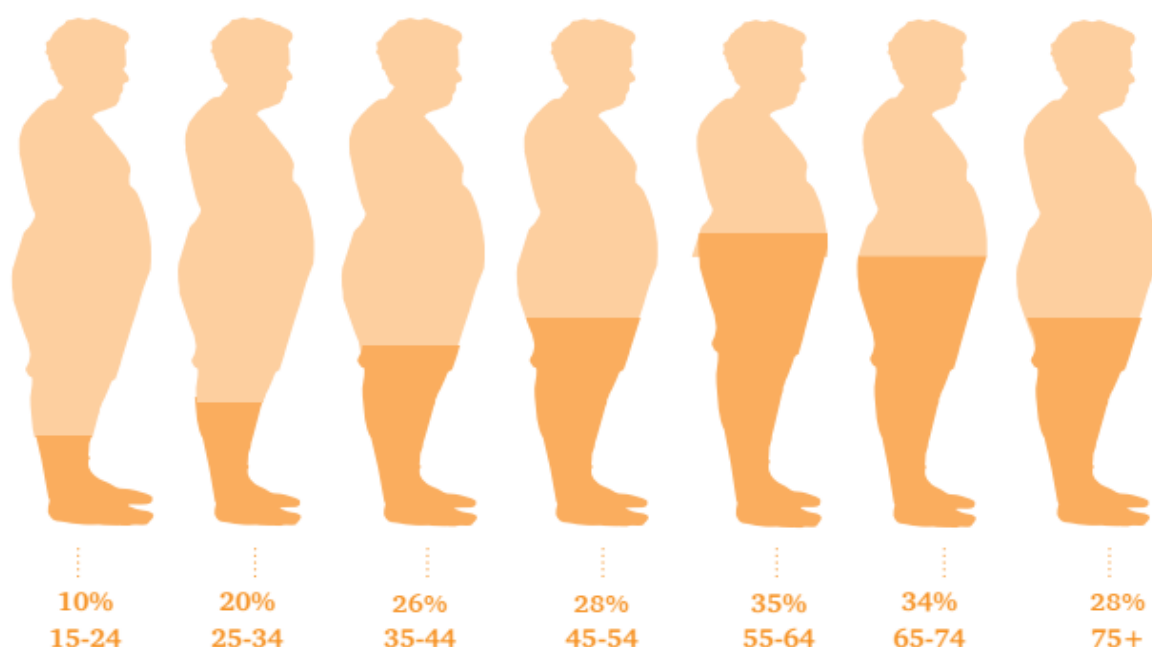


Figure 02: Percentage of Obese Population by Age (2015)
Source: Weighing the Costs of Obesity in Malta, PwC, March 2017

b) Focus

Focus of Integrated Action Plan

The main focus of this project, which is supported by this IAP, is to encourage healthier and more active lifestyles through interventions within the obesogenic environments frequently found around the Maltese islands. The case study focuses on the historical city of Senglea and looks at how planning policy can address these environments. A number of Actions are also being recommended for Senglea, with one Action being implemented as part of this project.

The term 'obesogenic environment' refers to "*an environment that promotes gaining weight and one that is not conducive to weight loss*" within the home or workplace (Swinburn, et al., 1999). In other words, the obesogenic environment refers to an environment that helps, or contributes to, obesity. Focusing on modifying the obesogenic environment at the community and policy level can impact the community residents at large.

Key Priority

As indicated in the 'Health and Obesity' section above, obesity is a major health issue in the Maltese islands. The key priority is to reduce obesity generally and more specifically, in the younger generation. The main focus will be two-fold: through localised initiatives (reference the Small-Scale Action: mobile app) and through more national instruments such as health policy and planning policy.

To this end, the URBACT Local Group (ULG) is made up of representatives from all three areas i.e. the Senglea Local Council (localised issues), the Health Department (health issues) and the Planning Authority (land-use and planning issues). Further details on the ULG are provide in Section C below.

Main Aspirations

There are a number of aspirations that are expected to be gained through this project and its associated components. These are listed below, in no particular order:

- to create awareness of the national obesity issue;
- to understand how the urban landscape contributes to obesogenic environments;
- to identify such obesogenic environments and make recommendations for their upgrading to more user-friendly environments;
- to actively encourage healthier lifestyles;
- to create opportunities for citizens to lead healthier lifestyles;
- to test a Small-Scale Action (SSA) that will encourage healthier lifestyles;
- to introduce a greener element into the city;
- to encourage a shift in emphasis in health and planning policies, to focus more on lifestyle issues;
- to upgrade the general environment with consideration for the above.

Link to URBACT Network

The Healthy Cities Action Planning network aims to deepen the relationship between health and the urban environment, planning actions that focus on improving the population's health, while developing a rigorous health impact assessment around it. Urban planning can become a health generator on many grounds. This partnership reflects the multiplicity of possible approaches to tackle the issue: green areas, mobility, social cohesion or promotion of sports are some examples.

This falls under URBACT's Physical and Urban Development Topic, which puts at the fore an integrated approach to urban development, which encourages growth and jobs throughout Europe and at the same time promotes a more cohesive society and better environment for an improved quality of life.

The Malta partnership was lucky to have Loulé (Portugal) and Bradford (United Kingdom) in its Healthy Cities network. Although Loulé is a small town within Portugal, it has very similar characteristics to Malta, such as its climate and dependence on tourism; Loulé as a town also has considerable experience in URBACT and other EU-funded projects. Therefore, it was a great opportunity to collaborate and share experiences with Loulé; in fact, Loulé and Malta (together with Falerna, Italy) form one of the City-2-City groupings in the Healthy City network.

Similarly, the city of Bradford is known for its experience and competence in Health Impact Assessments (HIAs). This was an important connection for the Malta partner, as practical knowledge of HIAs locally is limited. In fact, it is possible that the HIA carried out for this project is the first HIA carried out in Malta. For the project team, this was a new experience; so much so that during the Malta Deep-Dive in November 2020, the Bradford partner was invited to give a presentation and share experiences specifically with regard to HIAs. To this effect, there was a sharing of knowledge and experience from Bradford on the HIA, particularly processes and HIA development.



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Learning from External Sources

Apart from understanding the local environment and local conditions, desktop research was carried out to see how similar scenarios were treated in different countries and regions. Various online resources were referred to, especially during the process of identifying possible Actions for Senglea. As these Actions were identified and developed, research was carried out to find any similar solutions and how these were drawn up and implemented. This was especially useful in the case of similar proposals that were actually in place and operational; as it was thus possible to see the results and also learn from the processes. Of particular importance were any negative aspects, such as public

opposition or unforeseen circumstances. This enabled the design and development of the SSAs in such a way as to mitigate against any possible negative eventualities.

On a more localised level, a number of individuals, mainly hailing from Senglea, were also involved in the project. These included, for example, local historians, representatives from local interest groups and religious organisations. This was important to understand those issues pertinent to Senglea, in order for the project to be more location focused. These sources were consulted on an ad-hoc basis and on very specific issues. For example, the local historians provided all the historical data that was used in the app; local groups were also recruited for app testing on site.

Strategic Goal or Vision

The strategic goal of this project is to explore synergies between health and urban planning for the benefit of the community.

c) Description of the process

URBACT Local Group (ULG)

Composition of the ULG:

The ULG is composed of representatives from the following government entities:

- Planning Authority
- Local Government Division
- Ministry for Health
- Senglea Local Council

As project coordinators, the team from the Planning Authority also coordinated the ULG. Representatives from the local government division formed part of the team in order to ensure that the project remains relevant to communities and that the process is simultaneously top-down and bottom-up. Specialised doctors from the Health Promotion and Disease Prevention Directorate (from the Ministry of Health) were also involved, since the focus of the project is on health-related issues and they could therefore ensure technical correctness of any recommendations made through the project. The ULG met regularly throughout the project's lifespan, on average once every month (or every six weeks).

Full details of the ULG composition are as follows:

Planning Authority:

- Robert Galea, Project Leader
- Patrick Mifsud, Shadow Project Leader
- Fleur Marie Ebejer, Project Administrator

Local Government Division:

- Fabian Galea, National URBACT Point; subsequently replaced by Amanda Abela
- Robert Tabone, EU and International Affairs

Ministry for Health:

- Mariella Borg Buontempo, consultant in Public Health Medicine
- Karen Maria Borg, Health Information and Research

Senglea Local Council:

- Clive Pulis, Mayor
- Graziella Gellel, Executive Secretary

Ad Hoc members (as required for specific issues):

- Wendy-Jo Mifsud, Department of Spatial Planning and Infrastructure, University of Malta
- Roberta Zarb Adami, Allied Health Professional (nutritionist)
- Carlos Cañas, Institute for Climate Change and Sustainable Development, University of Malta

Goals of the ULG:

The main goal of the URBACT ULG was to use the URBACT framework and methods to design the IAP at a local level for sustainable urban development and to strengthen the capacity of local stakeholders to develop efficient policies. This was done by establishing a durable cooperation of stakeholders, using the URBACT method. The URBACT method is based on a holistic approach that takes into consideration the physical, economic and social dimensions of urban development from a sustainable perspective. The participative approach - the development of strong partnerships between public bodies, the private sector and civil society (including citizens and inhabitants) - is recognized as a cornerstone of efficient urban development policies. The ULG therefore translates these principles into concrete local dynamics that aim to foster shared ownership of the urban planning process. A key element of the process is to nurture the talent of city stakeholders and build their capacities, so they can actively get involved in delivering participative policy making and co-creation of the IAP at a local level.

Roles of the ULG:

The ULG ensures the viability and the feasibility of the IAP at local level and the IAP will be the token of sustainability of results in the long term, after the end of the project. The responsibility of the group is to ensure that the impact of the transnational exchange of practical experience between the cities is spread to the largest possible extent. The main task of the ULG is to gather all stakeholders who can actively contribute to the elaboration of the IAP and involve them in the activities of the network. URBACT Local Group activities include:

- analysing local challenges, seeking solutions and ultimately developing the IAP to address these challenges;
- embedding the learning from transnational exchange (practical knowledge, good practices, peer review etc. from other cities in the network and beyond) into the local policy-making process;
- contributing to the transnational exchange and learning process taking place at transnational level;

- communicating results at local level and disseminating lessons learnt to the wider community;
- taking part in the URBACT training schemes organised at national and European levels by the URBACT Programme, thereby developing the capacities of local stakeholders.

Transnational Exchange and Learning

The main aim of the transnational exchange and learning is to enable cities to work together and develop integrated solutions to common urban challenges, by networking, learning from one another's experiences, drawing lessons and identifying good practices to improve urban policies. To date, Malta has attended and participated in all scheduled transnational meetings. These meetings are a very useful exercise, in that there is scope to share knowledge with other partners whilst also learning from their experiences. These transnational exchanges also included further requirements of the project, such as the peer review of the various submissions.

As the project developed, we got to know the areas of expertise of the various partners and a number of more personal connections were established. For example, Malta has established a good relationship with the Loulé (Portugal) partner. Loulé and Malta have very similar characteristics (e.g. Mediterranean climate, tourism-dependent etc.) and as partners, naturally gravitated towards each other. In fact, Loulé and Malta are in the same City-2-City group, which also includes Falerna (Italy) and we are working closer together as the project enters its final stages. The first City-2-City, hosted by Malta, took place between 26th and 28th April 2022. Malta used this opportunity to fine-tune the proposed Actions, following their presentation to participants, discussions and feedback with the City-2-City partners. There was also an opportunity for all present to go out on site and experience the city and its issues first-hand. This was deemed to be a very useful exercise, as one only really understands a place when visiting in person and experiencing the urban environment on a personal level. The added bonus to this City-2-City event was that the city and the proposals were seen by "new eyes" and various proposals and alternative suggestions were made - these are included in Appendix II.

Similarly, Malta has direct lines of communication with Bradford City Council, another partner in this URBACT Healthy Cities project. Bradford is known for its experiences in Health Impact Assessments (HIAs), which is a totally new discipline for the Malta project team. This way, Bradford may share its knowledge and experiences with Malta, which is especially helpful due to local lack of experience in this area. In fact, during Malta's Deep-Dive (November 2020), Bradford was invited to present and share its experiences specifically on HIAs.

Part 2

Action Plan

a) Objectives, actions and schedule

▪ Actions, Schedules and Deliverables

As outlined in the 'Main Aspirations' section above, there are a number of objectives identified, with an aim to achieve them through this project. These Objectives are again presented below, with a focus on SMART (**S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**imebound):

Objective	
<i>To create awareness of the national obesity issue</i>	
S pecific	Obesity is a specific issue locally, with information provided by the Health Department showing the current situation
M easurable	Various statistics are available, at a national level, showing the level of obesity in the Maltese islands
A chievable	Awareness is created through dissemination and exposure; there are diverse options for this; this particular project is emphasizing the obesity issues in this IAP
R ealistic	Awareness is created through media outlets, which has a wide reach locally; of course, it would be nigh on impossible to reach every single person
T imebound	Timeframes are dependent on the entities concerned; this IAP is timebound by the overall project timeframes

Table 04a: SMART objectives

Objective	
<i>To understand how the urban landscape contributes to obesogenic environments</i>	
S pecific	This project has specifically looked at the urban landscape of Senglea, to understand what leads to obesogenic environments; this process may be applied to other locations
M easurable	Features that contribute towards obesogenic environments are all catalogued and mapped, such as differences in level, stepped streets, inadequate pedestrian facilities etc.
A chievable	A thorough understanding of what leads to the creation of obesogenic environments has been achieved by the project team; such information is disseminated e.g. through the IAP
R ealistic	Obesogenic environments are very real and understanding them is realistically achievable, as has been demonstrated
T imebound	This understanding has been achieved within the project timescales

Table 04b: SMART objectives

Objective	
<i>To identify such obesogenic environments and make recommendations for their upgrading to more user-friendly environments</i>	
Specific	This project has the specific objective of making recommending the upgrading of existing obesogenic environments to more user-friendly environments
Measurable	Further to the previous Objective, obesogenic environments are identified; thus the 'before & after' scenarios may be compared
Achievable	The measures proposed are achievable and have been worked out in accordance with the project parameters
Realistic	When identifying measures, it was important to keep in mind their achievability; any suggestions that were too fanciful were discarded early in the process
Timebound	Given the achievable-ness and realistic-ness of the measures, these may be implemented within a reasonable timeframe

Table 04c: SMART objectives

Objective	
<i>To actively encourage healthier lifestyles</i>	
Specific	Healthier lifestyles may be encouraged by using specific tools; in this case, the development of a mobile app (SSA)
Measurable	Since there is currently no dedicated app, the measure will be the number of downloads once the app is launched and anonymous usage data may also be extracted
Achievable	This is achievable through active encouragement & promotion
Realistic	This is realistic in that the app has been developed and launched during the lifespan of this project
Timebound	The app is being developed within the project timeframes and will be officially launched well within the project lifespan

Table 04d: SMART objectives

Objective	
<i>To create opportunities for citizens to lead healthier lifestyles</i>	
Specific	The recommended Actions form part of an overall 'package' that will create better environments for healthier lifestyles
Measurable	The use of Actions and visual reporting will show the level of usage (e.g. if people use a newly upgraded area) and its measurability
Achievable	The measures proposed are achievable and have been worked out in accordance with the project parameters

Realistic	When identifying measures, it was important to keep in mind their achievability; any suggestions that were too fanciful were discarded early in the process
Timebound	Given the achievable-ness and realistic-ness of the identified measures, these may be implemented within a reasonable timeframe

Table 04e: SMART objectives

Objective	
<i>To test an SSA that will encourage healthier lifestyles</i>	
Specific	This is a very specific objective
Measurable	Considering there is currently no dedicated app, the measure will be the number of downloads once the app is launched and anonymous usage data may also be extracted
Achievable	This is achievable through active encouragement & promotion
Realistic	This is realistic in that the app has been developed and launched during the lifespan of this project
Timebound	The app is being developed within the project timeframes and will be officially launched well within the project lifespan

Table 04f: SMART objectives

Objective	
<i>To introduce a greener element into the city</i>	
Specific	Most Actions proposed include a green element, whether specifically themselves (e.g. vertical gardens) or as part of a wider app (e.g. upgrading of urban spaces)
Measurable	The amount of 'green' introduced will be visually measurable
Achievable	The recommended Actions are not large-scale afforestation proposals but include green elements as part of the package
Realistic	It is realistic to include greening when implementing proposals
Timebound	The greening element will be part of the Action and thus fall within the same timescales

Table 04g: SMART objectives

Objective	
<i>To encourage a shift in emphasis in health and planning policies, to focus more on lifestyle issues</i>	
Specific	This is a specific element that needs to be introduced into planning policies, particularly when developing new or updating existing policies

Measurable	The measure will be the references to healthier lifestyles in new and updated planning policies
Achievable	This is achievable, dependent on the nature of the policies being drafted and/or updated
Realistic	This is realistic, as there is a general shift in focus towards encouraging healthier lifestyles
Timebound	Timescales would be very much dependent on the timescales for policy development; note that policy timing is bound by relevant legislation

Table 04h: SMART objectives

	Objective
	<i>To upgrade the general environment with consideration for the above</i>
Specific	All Actions include an element of general upgrading
Measurable	The use of Actions and visual reporting will show the level of usage (e.g. if people use a newly upgraded area) and its measurability
Achievable	The measures proposed are achievable and have been worked out in accordance with the project parameters
Realistic	When identifying measures, it was important to keep in mind their achievability; any suggestions that were too fanciful were discarded early in the process
Timebound	Given the achievable-ness and realistic-ness of the identified measures, these may be implemented within a reasonable timeframe

Table 04i: SMART objectives

In order to achieve these Objectives, there are a number of supporting activities that are required that form part of the overall process. Many of these activities have already been carried out as part of the development of the IAP and the process of identifying recommendations. The supporting Activities are present in the Tables below.

	Objective
	<i>To create awareness of the national obesity issue</i>
Activities	The Health Department has highlighted the national obesity issue and its tasks include information campaigns; through the promotion of the various Actions, information will be further disseminated; this will in particular take place during the launch phase of the various Actions

Table 05a: supporting activities

Objective	
<i>To understand how the urban landscape contributes to obesogenic environments</i>	
Activities	Supporting activities include going out on site in order to understand the urban landscape; this has been done numerous times throughout the lifespan of the project and will be continued when launching the various Actions

Table 05b: supporting activities

Objective	
<i>To identify obesogenic environments & make recommendations for upgrading to a more user-friendly environment</i>	
Activities	The site visits also included the identification of potential locations that warrant upgrading and has formed part of the overall project

Table 05c: supporting activities

Objective	
<i>To actively encourage healthier lifestyles</i>	
Activities	This active encouragement will be conducted between the various stakeholders, particularly when launching the Actions; stakeholders primarily include the Planning Authority, the Health Department and the Local Council

Table 05d: supporting activities

Objective	
<i>To create opportunities for citizens to lead healthier lifestyles</i>	
Activities	The recommended Actions will lead to the creation of opportunities for healthier lifestyles; supporting activities include the promotion and encouragement of said Actions

Table 05e: supporting activities

Objective	
<i>To test an SSA that will encourage healthier lifestyles</i>	
Activities	The SSA (mobile app) is currently being developed and tested; there will be an official launch and media event once the app is ready for public use; further activities include data collection from the app platform and analysis of such data

Table 05f: supporting activities

Objective	
<i>To introduce a greener element into the city</i>	
Activities	Most Actions include a 'green' element in their make-up; therefore, supporting Activities will be to ensure that this 'green' element is included in the Actions

Table 05g: supporting activities

Objective	
<i>To encourage a shift in emphasis in health and planning policies, to focus more on lifestyle issues</i>	
Activities	During various policy developments and updates, it will be possible to introduce new emphasis on health issues; this supporting Activity will be conducted as and when new policies are being developed or existing policies updated

Table 05h: supporting activities

Objective	
<i>To upgrade the general environment with consideration for the above</i>	
Activities	Individual Activities will form part of the general implementation of the recommended Actions, keeping in mind the identified Objectives

Table 05i: supporting activities

The above Objectives set the strategic framework for the anticipated improvements to the city of Senglea, in line with the URBACT Healthy Cities project's overall aims and objectives. The strategy identifies the ideal future scenario within the city at a higher level i.e. the future vision for the city's environment with a focus on actively encouraging healthier lifestyles. In order to achieve these Objectives, a number of supporting Actions have also been identified and are recommended in more detail in Section b) below. These Actions take the strategic objectives and come down to a realistic level of measures that can actually be implemented. The identified Actions are realistic proposals that can be implemented with relative ease and within do-able timeframes. The Actions also form a 'package' of measures that, together, complement each other and work towards the overall aim. Individual Actions in isolation will have some benefit but the whole 'package' implemented within a reasonable time-period will of course result in a more successful outcome, with noticeable changes and improvements to the general environment, with more opportunities created for active, healthy lifestyles.

	Year One												Year Two												Year Three													
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12		
To create awareness of the national obesity issue																																						
information campaigns																																						
promotion of the various Actions																																						
this will take place during the launch phase of the various Actions																																						
To understand how the urban landscape contributes to obesogenic environments																																						
supporting activities such as going out on site to understand the urban landscape																																						
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This will be continued when launching the various Actions																																						
To identify obesogenic environments and make recommendations for their upgrading to a more user-friendly environment																																						
identification of potential locations that warrant upgrading																																						
To actively encourage healthier lifestyles																																						
conducted between the various stakeholders																																						
particularly when launching the Actions																																						
To create opportunities for citizens to lead healthier lifestyles																																						
the Actions will lead to the creation of opportunities for healthier lifestyles																																						

b) Recommended Actions

The first stage in the identification process for the Actions was to actually visit Senglea and get a feel for the place, understand the localised issues and to get accustomed to the environment of the city. In a case such as this, one needs to understand the place 'on the ground' in order to develop proposals that would be suitable and appropriate. The 'desk-top' research phase is of course important but a thorough understanding of the study area is essential, so that the recommendations will be focused on local needs and issues.

Following this, the ULG was asked to put forward suggestions; each ULG member was asked to submit what they felt would be appropriate measures to actively encourage more active lifestyles and healthier mobility within the city. This resulted in about 30 suggestions received; some suggestions were common and the list was consolidated into 20 possibilities. These possibilities were further researched, both from external experiences as well as their suitability for the local environment. Following this exercise and in agreement with the ULG, the recommended Actions finally numbered 12 and were grouped into 4 categories.

A number of the suggested Actions were legislative in nature, such as introducing restrictions on the sale of fast-food close to schools. However, Malta is too small to have significant localised legislation and it would be very difficult to establish such measures in very localised environments. Therefore, such suggestions were not considered further in the development of the IAP. Having said this, the development of proposals through this URBACT project can be used as a basis to develop such policies at a national level and to try influence planning regulation and guidance, particularly when plans and policies are being reviewed and updated.

Following the discussions and agreements with the project team and the ULG, the recommended Actions list is categorised and summarised below:

Strategy	
<i>General direction to encourage active mobility; these Actions aim to address these issues:</i>	
A	Provide options to increase active travel, including for people with mobility difficulties and children.
B	Developing targets for the development of housing and infrastructure (e.g. cycle lanes; green spaces) that promote more activity, less reliance on motorized transport provides the potential for win-wins for health as well as the environment and the economy at the same time.
C	Introduction of shared streets/woonerf ¹ concept, where possible and feasible.

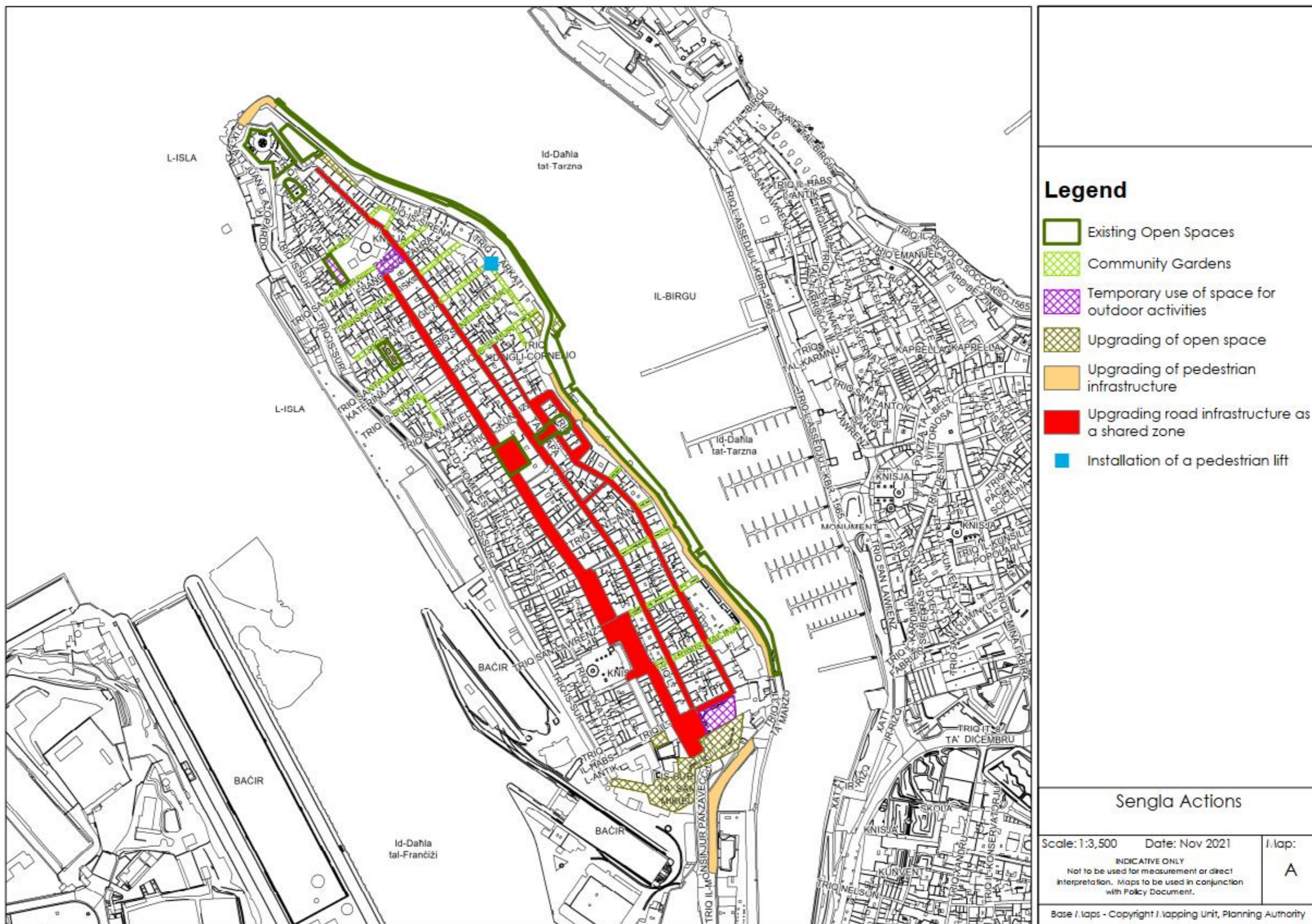
¹ A woonerf is a living street, as originally implemented in the Netherlands and in Flanders (Belgium); techniques include shared space, traffic calming and low speed limits.

Physical Interventions	
<i>Physical changes to the built environment:</i>	
A	Construction of a road-based moveable platform (used for seating, greenery etc.) in lieu of a parking space.
B	Installation of closed-circuit television (CCTV); perceptions of safety can influence residents' engagement with outdoor spaces; the installation of CCTV would make the supervised zone safer, thus accessible to all.
C	Installation of water fountains; introduction of potable water fountains along the walking routes.
D	Installation of a pedestrian lift, to connect the waterfront with the higher level inner core of the city, thus providing connectivity.
Efficient Use of Spaces	
<i>Identification of spaces or locations on a map base to upgrade the urban environment:</i>	
A	Underutilized open spaces for embellishment/greening potential and physical exercises; public spaces around schools and other public buildings to create a safer, more pleasant environment.
B	Restricted spaces that may be utilized for green walls, edible balconies or community gardens.
C	General improvement of the public realm e.g. identify pedestrian desire lines; upgrade pavements and sidewalks; try to remove physical barriers that prevent smooth personal travel; introduce landscaping and shading.
D	Temporary use of space for outdoor activities.
E	Upgrading of pedestrian infrastructure.
Conservation	
A	Cataloguing and conservation of old street paving, where still extant.

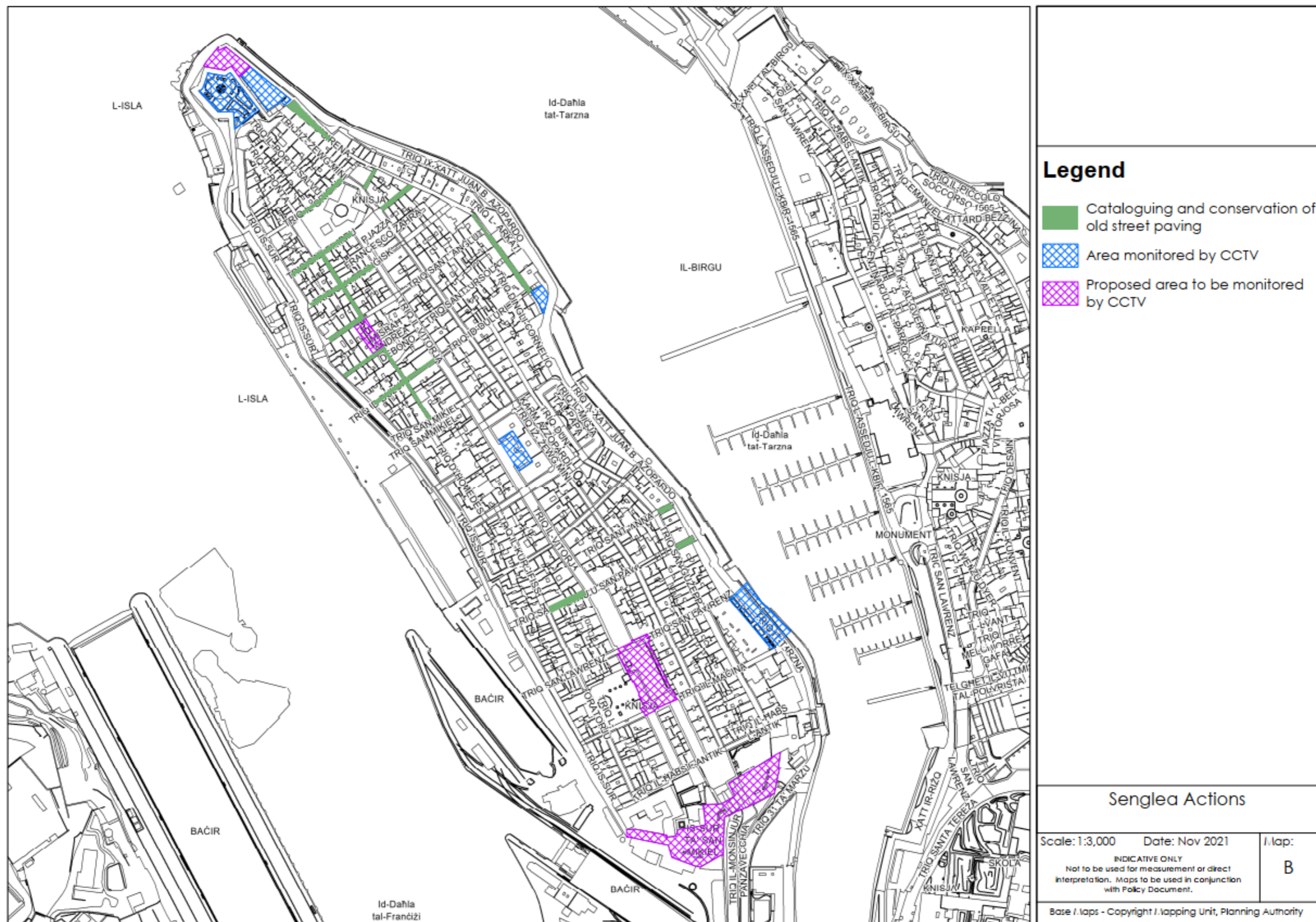
Table 07: Summary of recommended Actions

It should also be noted that during the lifespan of this project, some of the above measures have already been implemented, either partially or in full. Examples of these include:

- the formalisation of an under-utilized space into an outdoor gym, along the waterfront road;
- a partial network of CCTV cameras in some areas of the city, with a view to extending the coverage to further public spaces;
- an initial design for the proposed pedestrian lift;
- identification of those streets with the original paving surface.



Map 02: all recommended Actions



Map 03: all recommended Actions II

Further to the Summary Table on pages 27-28 above, further details of each Action are presented in the table below.

Strategy	
<i>General direction to encourage active mobility; these Actions aim to address these issues:</i>	
A	It is often indicated that the environment is not always suited to greener modes of transport; in order to encourage walking, the aim is to create environments that are more conducive and encouraging; the Actions proposed through this IAP aim to address that.
B	However, there is a need to measure the success or otherwise of such a strategic approach; once there is agreement on the Actions, measurable targets need to be established, together with a system of surveying and recording changes.
C	Given the predominantly residential nature of Senglea and the limited space available, the introduction of shared streets will help to create better environments for walking and physical activity, whilst also using the available land in more efficient way.
Physical Interventions	
<i>Physical changes to the built environment:</i>	
A	This will be a good example of a simple measure that can be implemented relatively easily; it can also be moved around the city and set up in various locations, as and when differing needs arise.
B	People often feel secure in outdoor areas, particularly quieter areas; the installation of CCTV can add peace of mind for users and a network across Senglea will make more spaces accessible and safe.
C	A regular intake of water is important for people, even more so after vigorous exercise; therefore, the installation of a small network of potable water fountains will encourage more physical exercise and walking throughout the city; furthermore, the immediate availability of drinking water will also lead to less need for buying/usual plastic bottles.
D	Given the significant differences in level throughout the city, there is often a lack of connectivity between spaces; the installation of a lift will create a connection between the waterfront and the inner core, which is at a higher level; this will also enable those with mobility difficulties to have access to the various parts of the city.
Efficient Use of Spaces	
<i>Identification of spaces on locations on a map base to upgrade the urban environment:</i>	
A	There are a number of small urban spaces dotted around Senglea that are currently underutilized; there is potential to make better use of such spaces; the idea is not to urbanize every single space but to provide some facilities that will make these spaces more usable and attractive; most dwellings do not have gardens and therefore, this is an opportunity for residents to enjoy more time outdoors.

B	Further to the above, some spaces are too small or too vertical to be used; therefore, such spaces may be dedicated to urban greening possibilities, thus bring nature into the city and not letting dead space go to waste.
C	This is a more general Action that may be applied across the city; improving pedestrian sidewalks would encourage walking, as would the upgrading of connection routes; apart from surface treatments, such upgrading would also include landscaping.
D	There are several larger urban spaces that would benefit from upgrading and re-use; however, due to the limited space and current traffic system, it would not be possible to close off these spaces in their entirety; therefore, this Action proposes the temporary use of these spaces for alternative activities; this could show how the spaces could be used without the need for major overhauls of traffic circulation.
E	Senglea is a historic city but times have changed and pedestrian needs are different to the needs of 450 years ago; therefore, the pedestrian infrastructure needs to be updated to modern needs whilst respecting the historical aspect.
Conservation	
A	Some streets in Senglea still have their original paving, in the form of large paving slabs; these need to be conserved, as an example of historic infrastructure; there is also a requirement to bring the environment up to date to accommodate 21 st century lifestyles; the recording of these surfaces is important from a historical perspective.

Table 08: details of recommended Actions

It is further being recommended that the implementor of these Actions prioritises the recommended Actions in the first place. This prioritisation could take the form of easiest to implement, cheapest to implement, most popular to implement etc. This way, there will be a tangible start to the implementation of the IAP.

There is further scope for the involvement of the local community, both residents as well as the business community. For example, when encouraging residents to take up local greening initiatives, a design style could be defined, where the Local Council might provide the plant pots, with the understanding that the residents will maintain them. This gives impetus to begin the process, whilst also establishing a 'style' that would be harmonious with the area.

For larger scale initiatives, local businesses could be encouraged to fund or sponsor an initiative. This would upgrade the local environment whilst providing exposure to the businesses concerned.

These are just too examples of how the community can be involved in the implementation of the IAP, which also creates a sense of community spirit/identity and 'belonging'.

Some examples of where the above Actions may be implemented are shown in the photographs below:



Image 02:

Example of 'dead space' that may be utilized more efficiently e.g. vertical garden



Image 03:

Example of under-utilized urban space, ideal for upgrading and more efficient uses



Image 04:

Example of a stepped street, with informal greening initiative by residents



Image 05:

Example of original street paving, worthy of conservation whilst bringing up to date for modern usage

Some examples of the issues faced by the city and where the above Actions may be implemented are shown in the photographs below:



Image 06:

The significant difference in level between the waterfront and the city emphasizes the need for a vertical connection e.g. a lift



Image 07:

Competing uses for the same limited space: pedestrians, cars and boats



Image 08:

Large urban space dominated by motorized vehicles, which could be put to better community uses



Image 09:

Example of an urban space not realizing its full potential

	Year One												Year Two												Year Three													
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12		
Strategy																																						
S-A: increase active travel																																						
S-B: development targets																																						
S-C: shared streets																																						
Physical Interventions																																						
P-A: moveable platform																																						
P-B: CCTV																																						
P-C: potable water fountains																																						
P-D: pedestrian lift																																						
Efficient Use of Space																																						
E-A: embellishment													Ongoing, as and when sites are identified																									
E-B: green walls													Ongoing, as and when sites are identified																									
E-C: general improvements													Ongoing, as and when sites are identified																									
E-D: temporary use of spaces													Ongoing, as and when required for events and activities																									
E-E: pedestrian infrastructure																																						
Conservation																																						
C-A: catalogue & conservation																																						

Table 09: anticipated timescales for Actions

Key to colour coding:

Identification:		Marketing:	
Design:		Implementation:	

The above Table identifies possible timeframes for implementing **the Recommended Actions**, as anticipated from the current baseline position. Of course, these may change over time, due to changing priorities, sourcing funds, materials, third-party input, public tenders etc.

c) Implementing the Small-Scale Action (SSA)

One of the requirements within this URBACT framework is to actually implement one of the Actions (as opposed to solely recommending Actions). The Malta partner developed a mobile application, based on the historical landmarks of the city, to explore historical and walkable trails within the city. This product encourages walking with the goal to learn and discover the beauties of the city, whilst making walking interesting and playful. In the end, people will be motivated to shift to active mobility and the forgotten places of the city will be connected and promoted through the application and the suggested walking routes.

In order to identify a small-scale solution, close collaboration with the local council within which this will be implemented was required, together with the ULG and other relevant stakeholders. The Small-Scale Action incorporates the use of technology to promote walking and active lifestyles in Malta's urban and rural environments, using Senglea as test base. The use of such a tool is replicable and may therefore have the potential to influence a relatively large number of people, both from the locality as well as from other areas in Malta who visit the locality.

From a software development point-of-view, the app itself has been developed; this was developed in-house by the PA's ICT section. The app was tested between September and November 2021 (both remotely as well as on site), with the official launch taking place in December 2021. The testing was carried out by the project team initially and the scope of the testing phase was then broadened to include third parties e.g. members of the ULG, representatives from the LC and other local contributors. The official launch of the app took place at the beginning of December 2021, with a dedicated event in Senglea. This included the project team and ULG, representatives from the Planning Authority and Local Council, together with a selection of local personalities. The event took the form of an introduction to the project and the app; all present then downloaded the app and one of the walks was trialled, with a short ceremony closing the event off at Gardjola Gardens, at the tip of Senglea. The event was recorded, both by photographs as well as videos and two short video clips were subsequently produced, one in Maltese and one in English. Further advertising initiatives were carried out, including some brief spots on local television programmes, where members of the project team described the app, its features and capabilities.



Images 10 and 11: the official launch of the mobile app

Apart from the development and launching of the app, there is a significant amount of time dedicated to back-of-house work. This involves monitoring app usage, such as number downloads (including the location from where the app was download, indicated by country of origin). Data from the app is also obtained, mainly related to user type. One of the safeguards built in to the app was negating the possibility of identifying the actual users. All users are anonymous to the app managers and are only data entries, with no personal identifiers. Monitoring of app usage is being carried out, with monthly downloads of data taking place. So far, it is still too early in the process to make any significant analysis; once a sizeable batch of data is available, then more detailed data analysis will be carried out.

In the meantime, the project team is looking at other ways of further marketing the app and securing appropriate exposure for it. It is hoped that this initiative will be taken up by other local councils and that the app may be further developed for use in other locations as well as the test base of Senglea. Ultimately, it is hoped that if the app is developed for other localities, eventually, all walking trails will be linked into one 'mega' app, encompassing all areas that have developed walking trails along similar lines.

A YouTube video and article on the Planning Authority's website may be found here:

<https://youtu.be/jzbDvmO1QNk>

<https://www.pa.org.mt/en/news-details/discover-senglea-with-new-smart-phone-app-and-stay-healthy>

The app may be downloaded from the Google Play Store and is available for Android 7 and above:

<https://play.google.com/store/apps/details?id=mt.gov.urback&hl=en&gl=US>



Map 04: the mobile app walking routes

Further to the above description of the mobile app, below are some images from said app, showing the platform and different screen views.

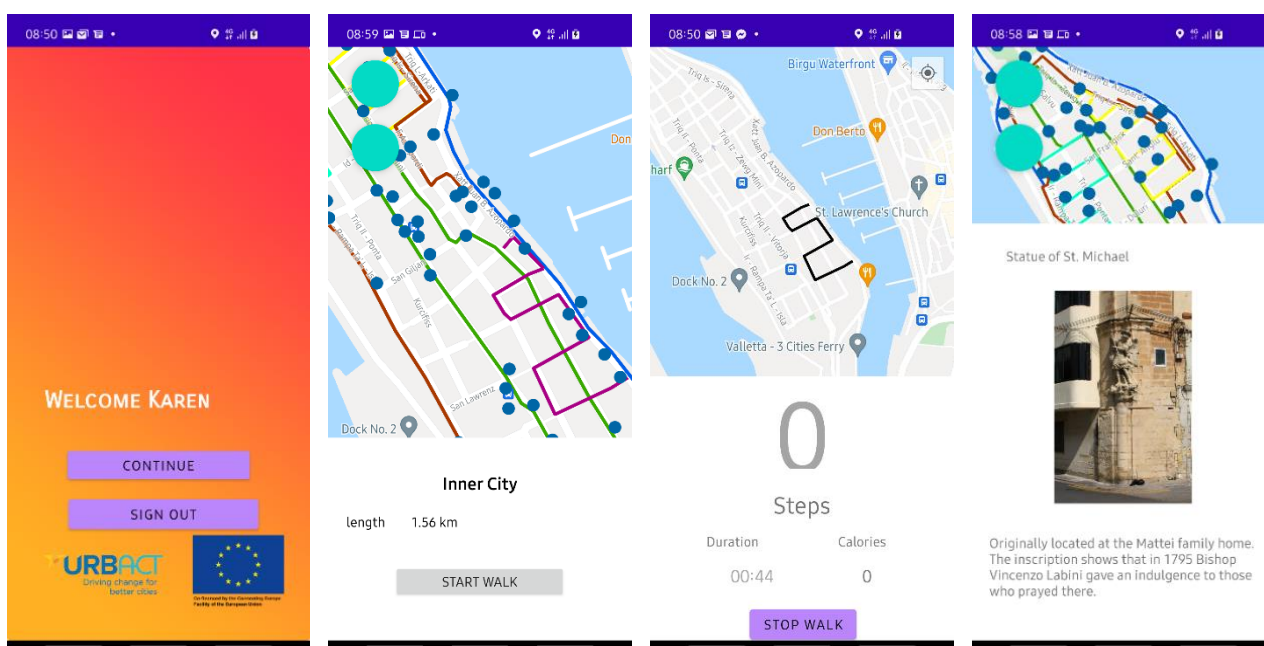


Figure 03: screenshots from the mobile app

d) The relationship with health

Background:

As urban populations continue to accelerate, urban planning needs to be used to generate healthy lives and drive the transformation of city spaces. The creation of walkable streets, clean air and access to calming green spaces are all keys to a healthy lifestyle and all factors of planning.

Scientific evidence shows how urban design affects health; despite this, health and planning are rarely considered as two supporting disciplines. As part of this URBACT project, a Healthy Cities Generator (HCG) tool was developed. This is an online tool that bridges the gap between 'what we know' and 'what we do', making it easier for urban planners and policy makers to incorporate health factors into urban planning and urban factors into health policy.

This is a simple process that integrates all aspects of health into all stages of planning. With this practical, interactive tool, practitioners can quickly assess the health impact of their whole plan and see how small adjustments could make a big difference to the lives of local people. This HCG is a hands-on, practical planning tool designed to give actionable indicators for anyone looking to integrate health into planning.

Based on a systematic review of scientific peer-reviewed publications linking urban determinants and their impact on health, the tool automatically calculates the health impact of urban planning actions. Combining these science driven insights with an easy-to-use interactive interface, the tool provides unique support to decision makers, planners, citizens and health professionals.

From the planning perspective, the user can easily enter their own planning actions and immediately visualise the specific health effects of changes to density, mobility, mixed uses, landscape and housing. The results provide a clearer picture of how the plan affects health.

For health, the tool includes an assessment to help citizens and practitioners understand their areas' strengths and weaknesses and guides the user to the urban planning and social actions that will improve their health results.

When viewed from a health perspective, the Recommended Actions may be summarised and understood as follows:

Action	Health Objective	Inclusivity and Determinants
Strategy		
increase active travel	Encourage healthier lifestyles, walking and exercise	All residents are targeted and not specific groups
shared streets	Providing spaces for people to be able to be more active	All will benefit from shared streets; children will also have outdoor play areas
Physical Interventions		
moveable platform	Moveable green space that encourages spending time outdoors and discourage car use	Since this is moveable, it can be placed at various locations, thus all may benefit at various times
CCTV	Personal well-being in the knowledge that public areas are being monitored, thus making more use of outdoor spaces	All users of public areas covered by CCTV will benefit from peace of mind
potable water fountains	Drinking and water intake is a crucial factor in personal health; having drinking water readily available encourages more outdoor activity	All those leading active lifestyles can benefit from available potable water; there is also the possibility to include similar facilities for pets
pedestrian lift	Connects various levels of the city; provides connectivity for the less mobile, thus providing opportunities for ore time outdoors	This particularly benefits the aged and less mobile and provides them with city connectivity
Efficient Use of Space		
embellishment	Improved environments make them more attractive, thus people will make more use of them and spend more time outdoors	This would benefit all users, both residents and visitors alike
green walls	Greening provides visual improvements as well as help with personal well0being	Those without a private garden may enjoy the possibility of planting and growing
general improvements	Better spaces mean they will be used more; spending time outdoors is conducive to personal health and well-being	This would benefit all users, both residents and visitors alike
temporary use of spaces	Temporary activities can encourage those who might not lead active lifestyles to try out different possibilities	Different activities will attract different user groups; it is important that activities are varied
pedestrian infrastructure	Pedestrian infrastructure is important to encourage more outdoor activities	This would benefit all users, both residents and visitors alike
Conservation		
catalogue & conservation	The creation and upgrading of urban environments leads to a more relaxed atmosphere and thus improve general health	This would benefit all users, both residents and visitors alike and maintain historical features

Table 10: summary of health impacts of Actions

Health Impact Assessment (HIA):

According to the World Health Organisation (WHO), "Health Impact Assessment is a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population and the distribution of those effects within the population," (WHO, 1999).

The HIA is a tool for integrating health into decision-making and can be applied to programmes, policies and projects as a reference tool. The HIA process is designed to understand the positive and negative health impacts and increase the positive and minimize the negative. It can reveal the co-benefits of a specific project and it supports the creation of an integrated vision. The HIA can deal with both short-term and long-term goals.

Planning professionals are in a position to promote public health through their work by designing and implementing spaces where people live, work and play in a manner that promotes health. Planners can thus help ensure that health is given due priority in decision making across a range of sectors.

In the case of this project, the HIA is used to forecast the potential health impacts of the proposed Actions that are included in the IAP; therefore, the HIA was carried out on the recommended Actions; where appropriate.

Based on a number of parameters, local urban determinants were identified; these related to the impacts on the urban environment and include density, connectivity, land-use mix, landscape, traffic and transport. Based on available data and local knowledge, it was then possible to identify whether the proposed Actions would have an effect on these urban determinants.

A visual summary of this exercise is provided in Chart 02 below, with full details provided in Appendix III. As can be seen, the greatest impact is on physical activity, which corresponds well with the overall aim of what the Actions intend to achieve, that is the improvement of the urban environment to encourage healthier lifestyles.

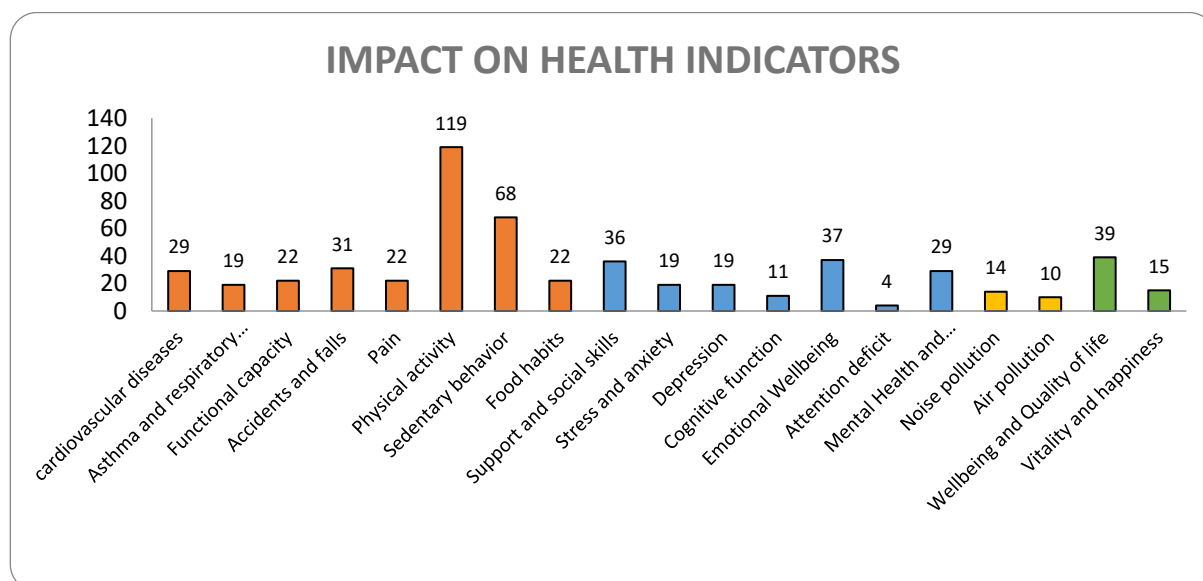


Chart 02: overall HIA output (original as derived from the XL sheet)

Healthy Cities Generator:

Following the development of the online HCG tool, this was applied to the proposed Actions for Senglea. The tool was applied individually to each Action, resulting in a pictorial output in the form of graphs. All graphs for all Actions are reproduced in Appendix I. The summary graphs i.e. the combined outputs for all Actions are reproduced below (Chart 02 and Chart 03).

The final results, with an overall score of 8/10, in both instances show that the top scorer is Physical Activity. This confirms the initial requirement to encourage more active lifestyles in the city of Senglea. The proposed Actions and corresponding activities are aimed at encouraging more active and healthier lifestyles by providing opportunities for physical activity and improving the public realm (each is dependent on the other for greater success). Therefore, the Healthy Cities Generator tool has confirmed that the Actions proposed will, in principle, lead towards creating a more suitable environment that can lead to more active lifestyles.

There are some categories with low scores, such as those relating to building density, business density, social services, housing quality and cycling. Although these are major issues for Senglea, it was felt to be more beneficial, within the scope of the project, to focus on 'smaller' issues that may be tackled immediately and within a relatively short space of time and with a reasonable budget. Therefore, it was decided early on in the project to focus more on such localised issues that will be of benefit to all people within the city. In fact, the process resulted in the identified Actions for this plan.

Full details of the Healthy Cities Generator output may be found in Appendix I and here: <https://malta.starke.services/>



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Final Results

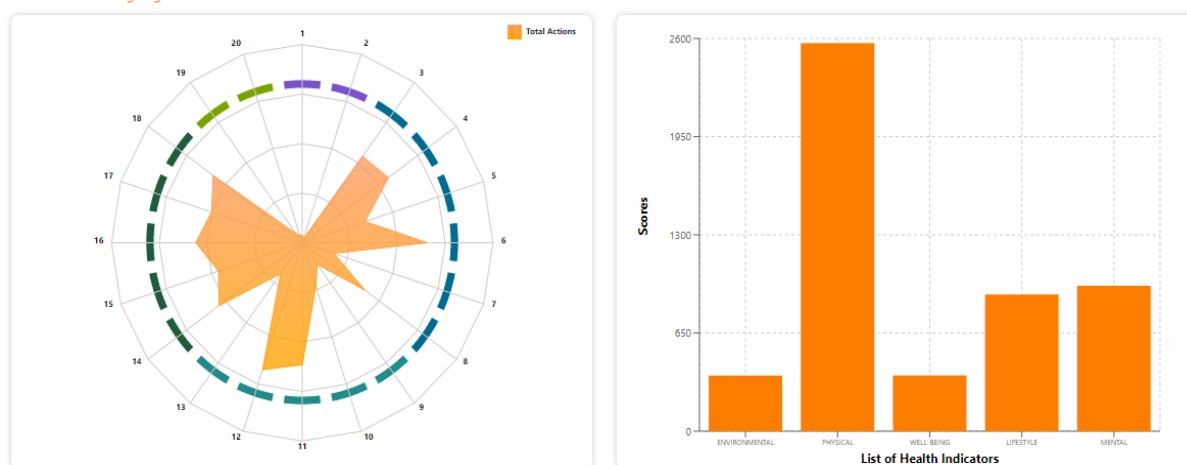


Chart 03: overall healthy cities generator output (updated, as derived from the HCG tool)

d) Resourcing

Resources:

As an IAP project team, the recommended Actions have been designed in such a way that each one is a standalone Action and is therefore not dependent on other Actions for its implementation. This allows for flexibility in the introduction of the Actions. Most of the groundwork has been prepared. Therefore, the main resource required will be the funding of the Actions. Once funding is in place and timeframes established, then the main resource will be that of contractors to implement the works. It is not envisaged that any major or significant physical infrastructure will be directly required as a resource. Premises will be required in the case of official launches of the Actions, although these will likely take place on the site of the Action.

Potential Sources of Funding:

There are a number of potential sources of funding that may be tapped in order to implement the recommended Actions. Access to these funds is very much dependent on the scale of the Actions, eligibility, the budget and competition. Such sources of funding include, though are not limited to, the following:

- EU funding (ERDF, ESF, Interreg, Horizon etc.);
- The Planning Authority's Development Planning Fund;
- The Local Council's annual budget;
- Other ad hoc government funding schemes.

Relationship to ERDF and ESF priorities:

Although the Operational Programmes for the ERDF and ESF programmes for Malta are currently being drawn up and still under discussion, the Country Specific Recommendations for Malta mention an emphasis on economic recovery and also strengthening the resilience of the health system. Screening of the final ERDF and ESF Operational Programmes will be carried out once these will be made available.

Relationship to other EU Urban Initiatives:

Other EU Urban Initiatives offer the possibility for uptake of funds for projects in relation to the urban environment. These are the Urban Innovative Actions (UIA), Horizon Europe (HE), Interreg programmes and, of course, URBACT. Whilst the latter is the ideal funding programme for anything related to urban matters, the other funding programmes are more earmarked for research and innovation, especially the HE and UIA respectively. Interreg programmes, such as Interreg Europe, explore various themes but are more focused on networking and the inter-regional learning experiences rather than implementing a physical project on site.

Nonetheless, activities earmarked as Actions in the IAP may be either explored through local funds or else through ERDF and ESF funds, if the Operational Programme earmarks such projects as a priority and if projects are eventually approved. The exchange of experience emerging from these projects may be further explored through the Interreg programme.

e) Delivery Framework

Details of who will deliver actions; roles & responsibilities of stakeholders:

The prime mover of these Actions will be the Local Council. The recommendations are very localised and aimed primarily at the community of Senglea, although there will be an element of visitors also making use of and benefitting from the implemented Actions.

In terms of physical interventions, these will be led by the Local Council, with support from other entities, where required. In the case of Actions that may be subject to a development planning application, then there will be support from the Planning Authority. In the case of health promotion issues, then there will be support from the Health Department.

The ULG includes representatives from all relevant stakeholders; thus this is a team effort and a good networking set-up has been created; and there will be support from all quarters, depending on the nature of the Action and priorities at that particular time.

Details of governance during and after URBACT support:

This is very much dependent on the Local Council's programme of works; priorities; funding opportunities and availability; including draft timescales i.e. level of 'easiness' to implement the recommended Actions.

f) Risk analysis

As with any project, there are a number of risks involved. Such possible risks have been identified and discussed in further detail below.

IAP not taken up:

The main risk is that the IAP will not be taken up by the relevant bodies once the IAP has been finalised and presented. However, given the localised nature of the project, it is most likely that the Local Council will be taking over responsibility for implementing the recommendations of this IAP. To this effect, the Local Council was represented in the ULG and is aware of all the discussions that led to the recommended proposals. Of course. If there is a change in the composition of the council e.g. following local elections, it is possible that the new council may not agree with the contents of this IAP

Lack of funding:

The second major risk is the lack of funding to implement the recommendations contained within this IAP. This is the perennial problem of most public projects. However, the Local Council frequently carries out projects and there are various options available with regard to sources of funding; there are both local and EU sources of funding available. Therefore, there would be a need to tap into such funding options in order to implement the measures.

Lack of agreement (from third parties) on the proposals:

Although the project considers localised issues, there is the possibility of third-party disagreement with the proposals. This could potentially be very likely in the case of specific interests. For example, any changes to the waterfront promenade would affect the different users battling for the same limited space and disagreements could ensue. These objections would however only become known at the implementation stage.

Categorisation of risks:

Action	Risk		
	Low	Medium	High
IAP not taken up	👎		
Lack of funding			👎
Lack of agreement		👎	

Table 10: categorisation of risks

Outline of steps which could be taken to mitigate risk:

Action	Mitigation
IAP not taken up	The overall project and IAP process are being conducted in collaboration with the LC; frequent discussions are held with the LC, both through the ULG as well as on an ad hoc basis; therefore, the LC is up to date with the progress and recommendations.
Lack of funding	This is always the perennial issue; the IAP identifies possible sources of funding, both local and international; therefore, there will be a requirement to tap into these sources of funding.
Lack of agreement	If this issue arises, it will be at the implementation stage; it is important to keep residents informed of developments and proposals and to stress on the positive aspects and outcomes of such proposals.

Table 11: mitigation of risks

Lessons from URBACT Networks: Integrated Action Plan Self-Assessment

There are a number of experiences gained and lessons learned through this Healthy Cities project process. These are summarised below:

- Experiences of online meetings, utilising various platforms and different set-ups; apart from formal online meetings, experience was gained in the use of supporting tools that allowed meeting participants to interact with each other, such as online whiteboards, polls etc.;
- Despite the Covid19 situation, work, events and projects continued at the same pace and in some cases, productivity increased;
- eUniversity helped us explore the tools and options available;
- Online meetings helped with continuation; meetings could be held more regularly (without the need to travel) and on a spontaneous basis e.g. if some guidance was required on a particular aspect, it was possible to contact the person concerned directly and organise a meeting in a short space of time;
- More planning involved when an event is held online, given the different scenarios, platforms and set-ups;
- More people could be involved since most events were held online, as opposed to limitations when physical travel is required;
- Deep-Dive hosted online, an important part of the project process, normally held live; we still managed to have interactive working groups;
- More things to go wrong, mainly due to technology and connectivity issues; it is recommended that a trial run is carried out beforehand, especially where there are a number of different presentations to be shared.

Further to the above, the following self-assessment issues have been identified:

- Exercise where we went into significant detail of the impacts of the urban environment on health;
- The above should be extended to other areas and other cities too;
- The Covid experience has shown us how important the outdoors is, for both physical and mental well-being; it has also shown that there is the technology in place to continue with our usual work programme and ethics, where it is possible for most aspects to be carried out online;
- Although the recommended Actions are often a desk-top exercise, they can also be used as a springboard to implement further measures on site;
- With regard to the City-2-City events, seeing is believing - we could tangibly observe practical solutions on the ground in partner cities e.g. extended pontoon which would resolve our limited land space by the waterfront.

Web-Links and other Online Resources

During the compilation of this IAP, a number of external web resources were referred to. Where information has been used or referred to in the text, the relevant web links have been recorded in this section. These are listed alphabetically:

https://www.citypopulation.de/en/malta/admin/southern_harbour/01104_senglea/

<https://en.wikipedia.org/wiki/Senglea>

https://en.wikipedia.org/wiki/Claude_de_la_Sengle

<https://extension.unr.edu/publication.aspx?PubID=2810>

<https://www.healthycitiesgenerator.com/>

<https://localgovernment.gov.mt/en/lc/Senglea/Pages/default.aspx>

<https://malta.starke.services/>

[https://nso.gov.mt/en/publicatons/Publications_by_Unit/Documents/02_Regional_Statistics_\(Gozo_Office\)/Regional%20Statistics%20MALTA%202019%20Edition.pdf](https://nso.gov.mt/en/publicatons/Publications_by_Unit/Documents/02_Regional_Statistics_(Gozo_Office)/Regional%20Statistics%20MALTA%202019%20Edition.pdf)

<https://pa.org.mt>

<https://www.pa.org.mt/en/news-details/discover-senglea-with-new-smart-phone-appand-stay-healthy>

<https://www.parlament.mt/media/79970/06265.pdf>

<https://play.google.com/store/apps/details?id=mt.gov.urbact&hl=en&gl=US>

<https://www.pwc.com/mt/en/publications/assets/weighing-the-cost-of-obesity.pdf>

<https://urbact.eu/>

<https://urbact.eu/integrated-action-plans-study>

<https://www.who.int/tools/health-impact-assessments>

https://www.who.int/health-topics/health-impact-assessment#tab=tab_1

<https://youtu.be/jzbDvmO1QNk>

Appendices

Appendix I: Actions Templates

This section includes the corresponding Action Templates for each of the recommended Actions, with their corresponding analysis as generated through the Healthy Cities Generator (HCG).

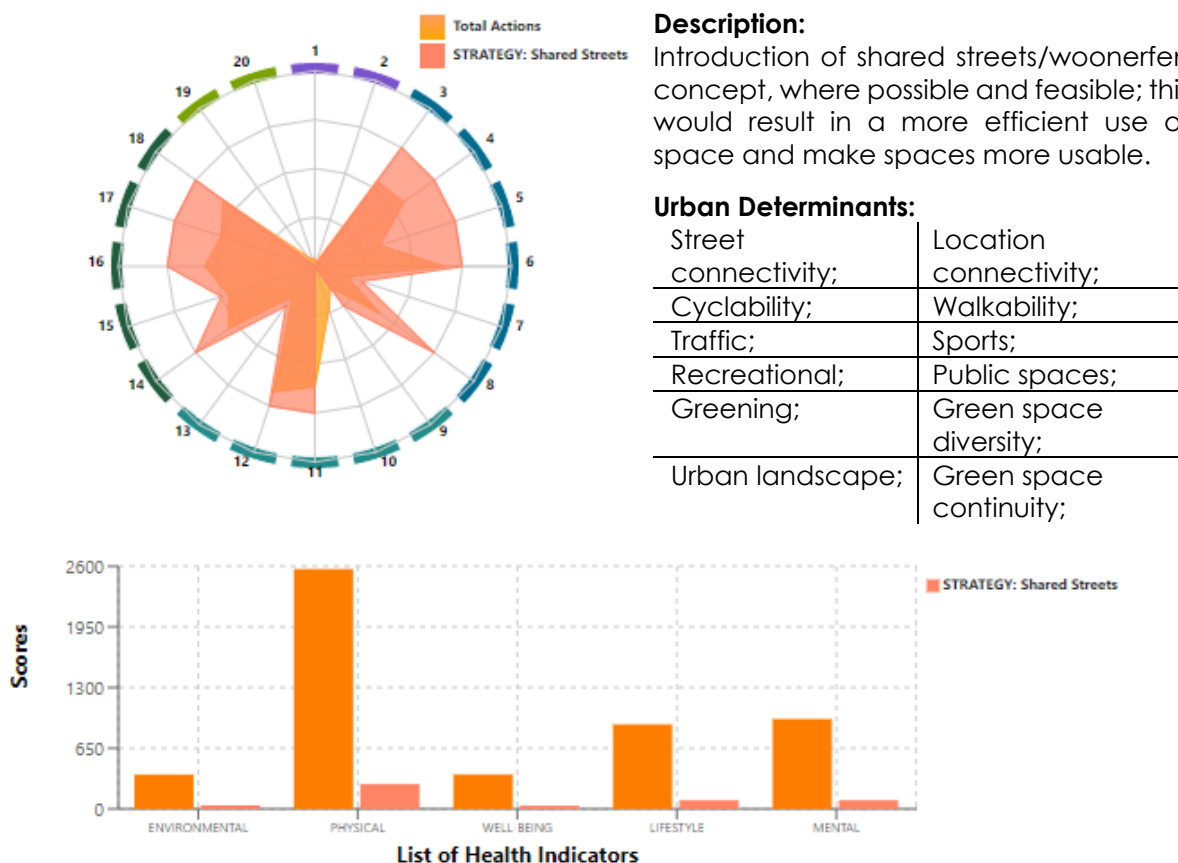
As explained in 'The Relationship to Health' section of this Plan (pg. 38 onwards), an HCG tool was developed in order to assess the recommended Actions from a health perspective and identify the impacts of the Actions on health and well-being.

In general, the 'orange' colour output represents the impacts of the Total Actions (i.e. all Actions combined), whilst the 'salmon' colour output represents the impacts of the particular Action, as indicated by the image title.

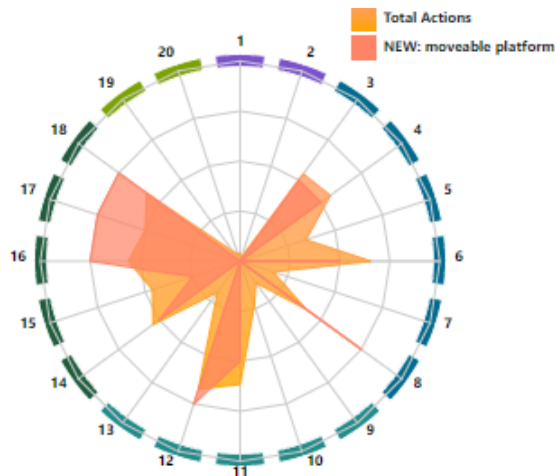
The outputs put into visual form the specific health effects of changes to density, mobility, mixed uses, landscape and housing, thus showing how the Actions impact on health (the bars on the charts). The outputs also provide a visual assessment that helps with the understanding of where the strengths and weaknesses in the proposals. Further details may be accessed from the online tool: <https://malta.starke.services/>

The HCG was used for those Actions that involve physical interventions; outputs for strategic/policy actions would not provide much relevance in the assessment of the proposals and are therefore not included.

Action: Strategy C: shared streets



Action: Physical Interventions A: moveable platform

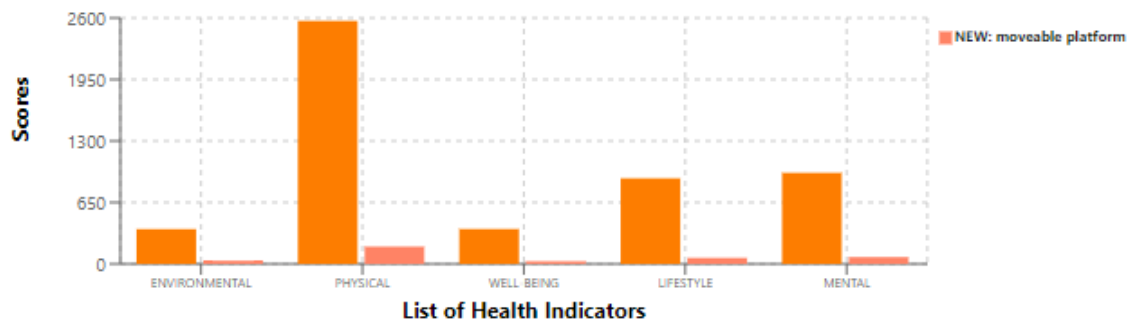


Description:

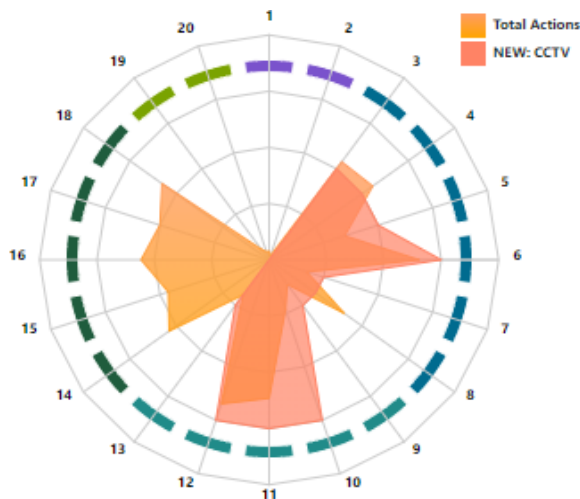
Construction of a moveable road-based platform in lieu of a parking space that can combine various uses e.g. greening, wi-fi, drinking water, charging stations etc.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



Action: Physical Interventions B: CCTV

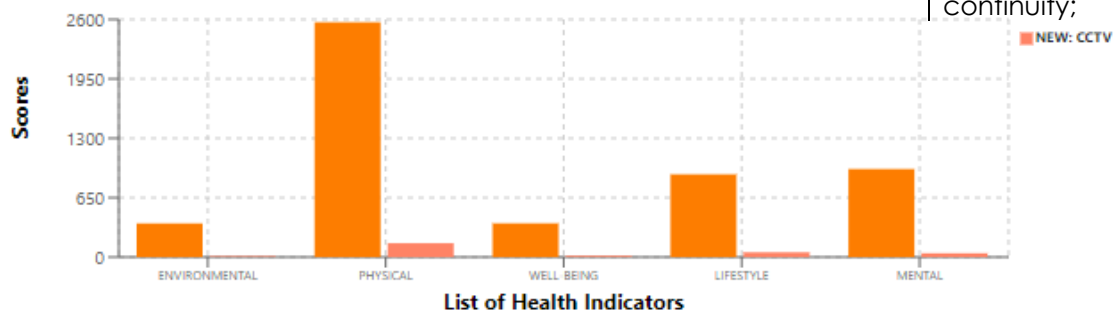


Description:

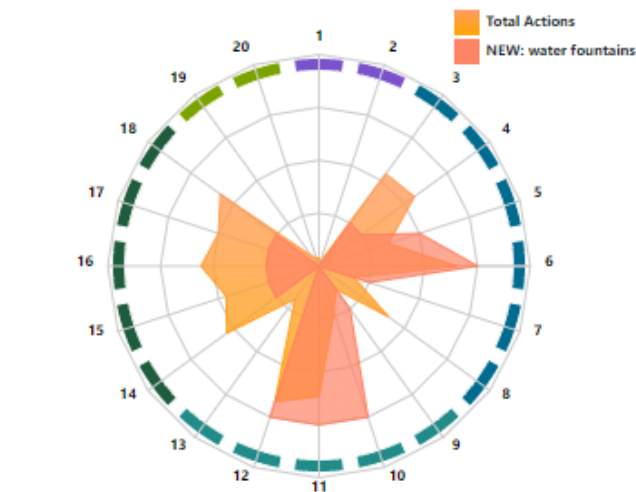
Installation of CCTV around important public locations within the city, for peace of mind and personal safety; the knowledge of having CCTVs will mean areas will be used more.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



Action: Physical Interventions C: potable water fountains

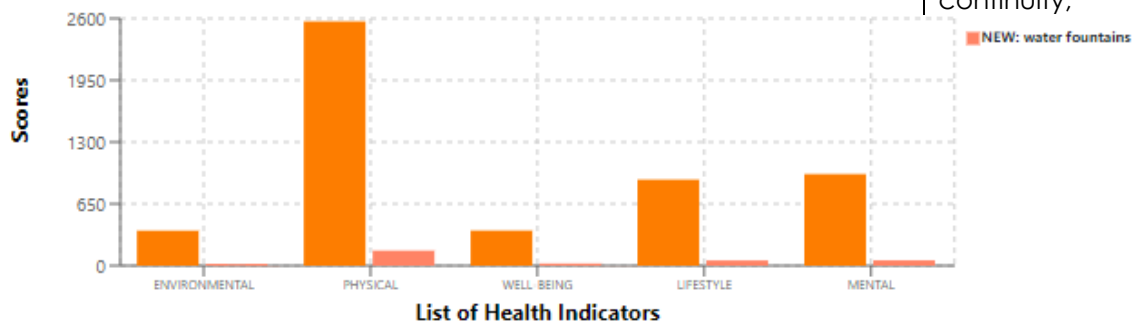


Description:

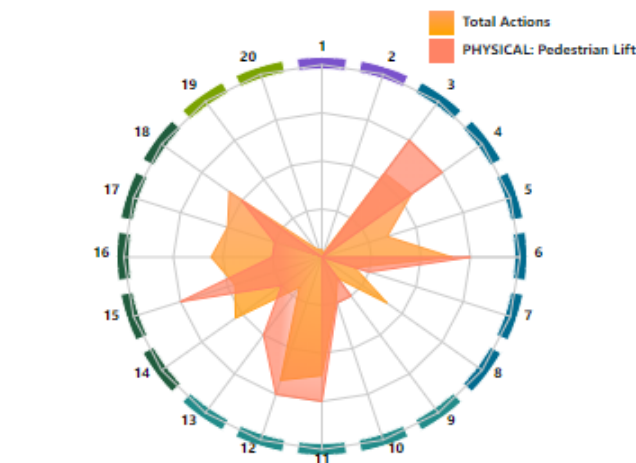
Installation of potable water fountains along walking routes; providing drinking water is an important aspect of healthy well-being; a network of fountains will support the walking routes and people will be able to replenish whilst on the move.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



Action: Physical Interventions D: pedestrian lift

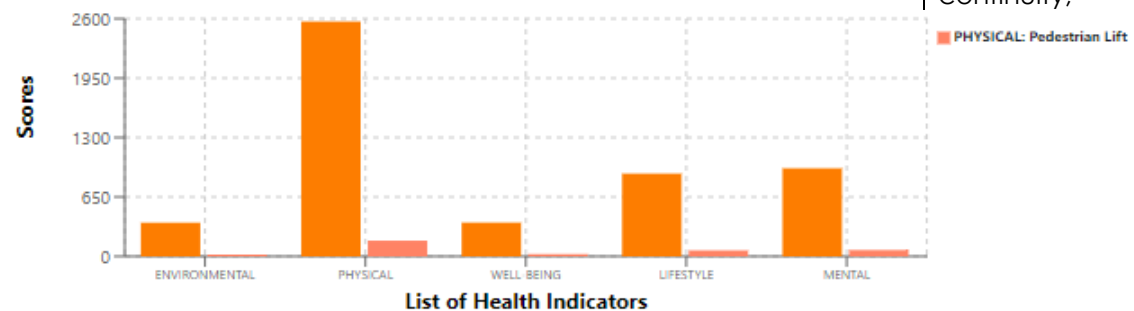


Description:

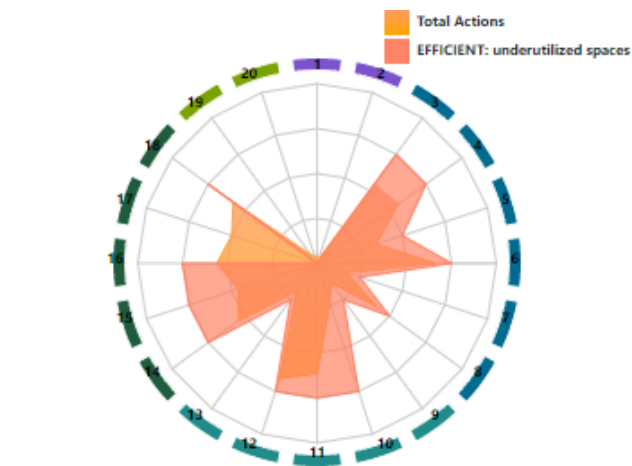
The installation of a pedestrian lift will ease connectivity between the different levels of the city, provide accessibility to the different parts of the city and also provide accessibility for the less mobile.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



Action: Efficient use of Space A: underutilised open space

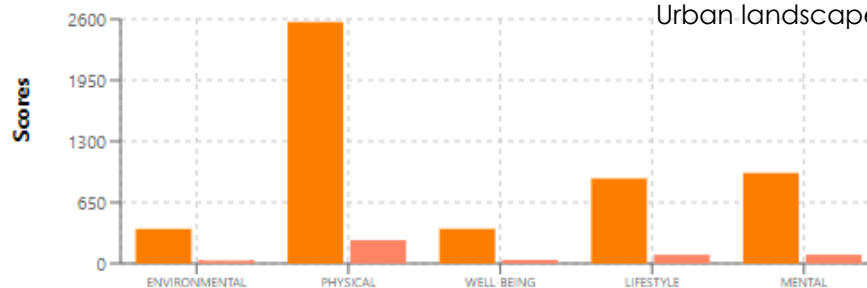


Description:

Re-purposing underutilized open space for embellishment/greening potential and physical exercise; various 'dead areas' could be better used; through formal upgrading or used informally by residents; an informal use could allow for different activities to take place.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



List of Health Indicators

Action: Efficient use of Space B: green walls

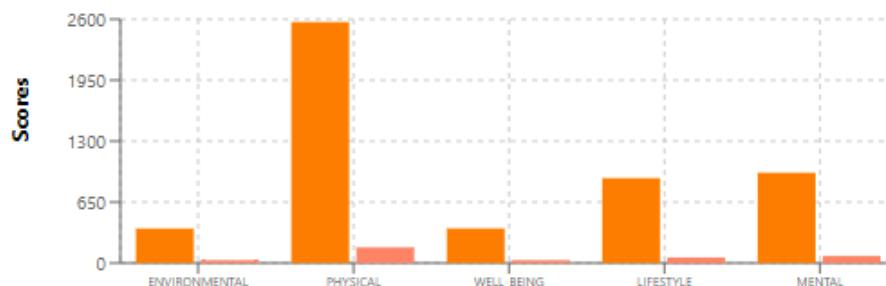


Description:

Use of restricted space for green walls, vertical gardens, edible balconies etc., as a community initiative; such public spaces may be used by residents in place of personal gardens whilst also greening the city

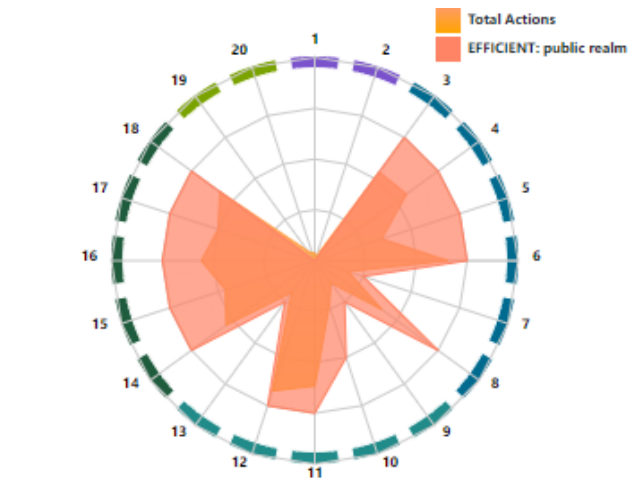
Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



List of Health Indicators

Action: Efficient use of Space C: general improvements

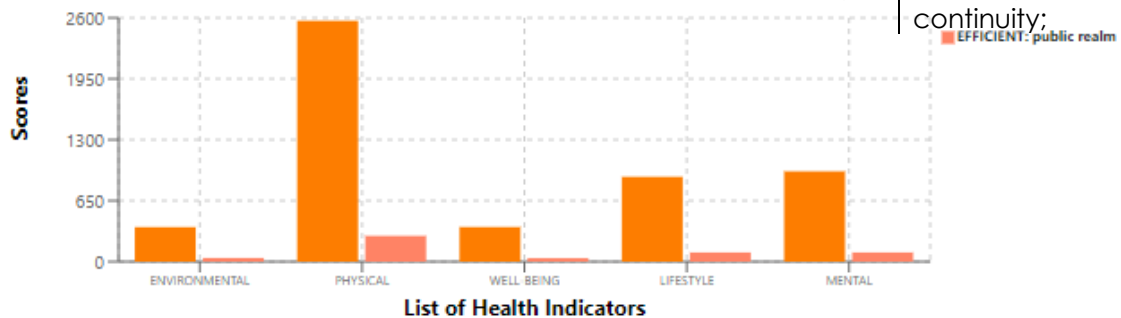


Description:

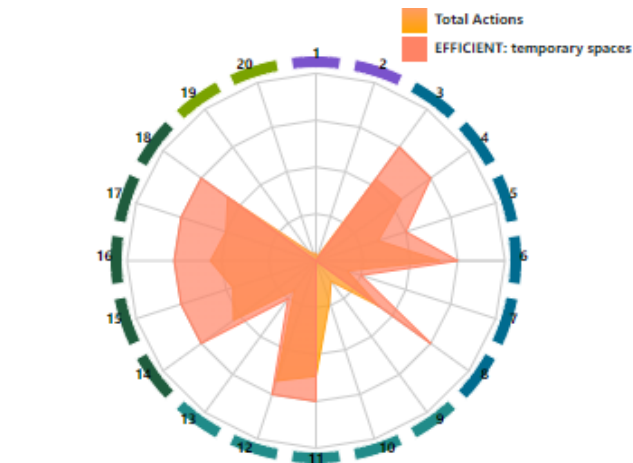
General improvement of the public realm; this is a general approach to improve the urban environment of Senglea; a general clean up plus upgrading of areas and zones, leading to an overall improved urban setting.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



Action: Efficient use of Space D: temporary use of space

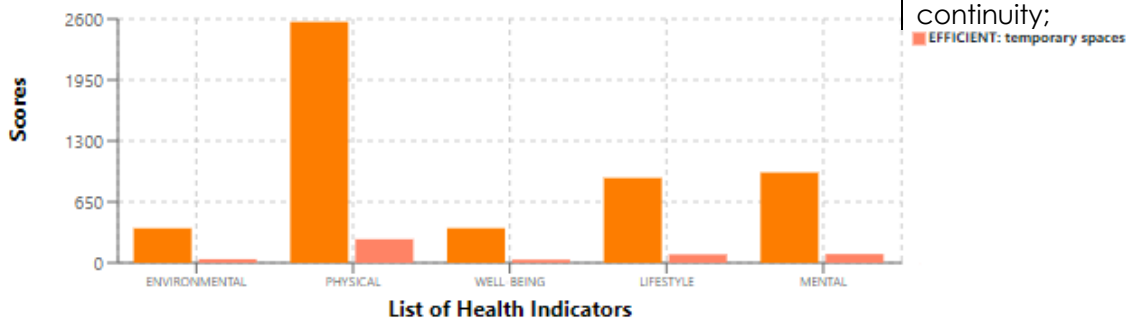


Description:

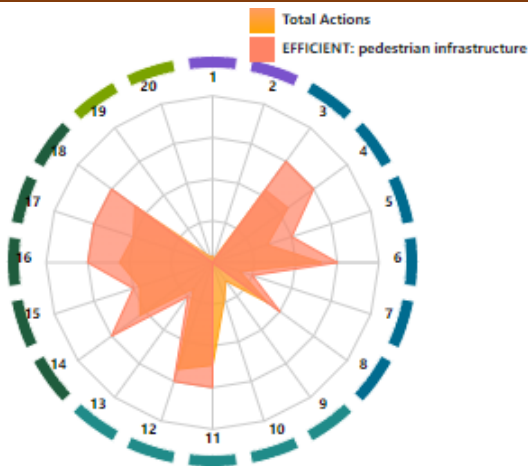
Temporary use of space for outdoor activities; where permanent road/space closures are not possible, such areas may be used for temporary activities; they may also be used as testing grounds for possible future more permanent solutions.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



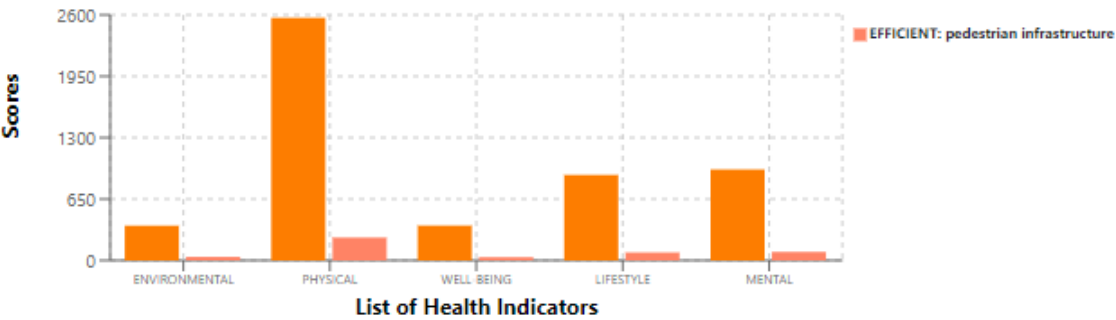
Action: Efficient use of Space E: upgrading pedestrian infrastructure



Description:
General Action to upgrade pedestrian infrastructure; this would result in making spaces more user-friendly and appealing, thus used more by residents and visitors.

Urban Determinants:

Street connectivity;	Location connectivity;
Cyclability;	Walkability;
Traffic;	Sports;
Recreational;	Public spaces;
Greening;	Green space diversity;
Urban landscape;	Green space continuity;



Appendix II: Further Actions for consideration

Following the City-2-City event, hosted by Senglea between 26th and 28th April 2022, various discussion ensued around the proposals contained within this IAP. Apart from these discussions, a number of site visits were held, where participants could experience the city at first-hand and see the issues that are being addressed through the IAP and recommended Actions. As a result of this on-site interaction, a number of further proposals were put forward. These are listed below, in no particular order. It was felt that it was important to include them here, so as to provide further areas to explore and develop further actions for the city of Senglea, beyond the lifespan of this URBACT project.

Suggested Action	Description
<i>Micro Possibilities</i>	
Additional uses of street space	use the middle part of wider streets for greening and facilities such as charging, sitting, cycling to renew energy needed to charge mobile phones (combining activity to charge phone);
Design principles	introduction of a more holistic colour palette and materials for benches, bins, footpaths etc. and have it as a localized design guidance document;
Upgrading	extend footpaths wherever possible (e.g. one-way streets);
Design features	introduction of drop kerbs to improve accessibility;
Design features	road traffic calming measures to be used as footpaths, to make pedestrians a priority;
Greening	climbers with wires, greenery coming up the walls (to be native plants); choose the less historic areas for green canopies; pick those you would like people to walk through;
Greening	using the existing green spaces better;
Design features	improve the bus stop in front of the basilica i.e. there are cars parked between the physical bus stop and where the bus actually stops;
Design features	rearrange parking spaces and introduce a platform to create a better access to the bus;
Focus	focus on the two stops that are existing in the city;
Electric vehicles	small electric vehicles for residents that need assistance in reaching their own homes; door-to-door service already exists (access bus); no need for apps or mobile devices for elderly people;
<i>Shared Spaces</i>	
Design features	use different materials to zone certain areas, to avoid areas taking over the entire space i.e. one of the dangers with shared spaces is that cars tend to take over the spaces; it is possible to define the road space in the traditional way (carriageway, pavements etc.) through the use of different colours of textures of paving material

	whilst still having a single flat surface across the road space; other street furniture can also be used to define spaces, such as sensitively-designed bollards, benches etc.
<i>Accessibility</i>	
Lift details	lift to connect lowest point to the highest; try to identify the most suitable location for this i.e. connecting high and low points that also have high levels of pedestrian traffic and connect particular points of interest/services; perhaps involve the local community in identifying the preferred location;
Lift details	if a lift might prove too expensive, too intrusive or with insignificant benefits, there is a possibility to replace this proposal with an alternative method of connecting different levels of the city, such as a chair-lift for some of the stepped streets; this would be cheaper to install; this could also be supported by further investment in a reliable, effective, localized bus service; such a service should not be the typical large buses but smaller vehicles that may penetrate deeper within the city's various neighbourhoods;
Lift details	identity of the lift: avoid significant impact on the visual landscape;
Vehicles	type of vehicles: appropriate to the narrowest parts of the city (scooters, e-bikes, buggies; would this be taken up by the local community or just be used by tourists?);
Residents	place residents at the centre of all proposals: a healthy city is also a place where residents and visitors can live comfortably, avoid excessive noise, too many tourist services, etc.
<i>The Waterfront</i>	
Design features	there is a need for space for residents to walk and enjoy within the city: the waterfront is an ideal location but it is difficult to walk comfortably due to competing uses for the limited space, such restaurants, boats, cars, etc.;
Design features	create floating decks for the restaurants: these can be seasonal, be removed to adapt to needs; in practice, restaurants do not stick to their concessions and take up a lot more space in a disorganized way, occupying space where there are public benches, etc.; such floating or overhanging decks will clearly define the restaurant spaces whilst maintaining appropriate pedestrian walking areas, thus meeting the needs of both user groups; this would clear up the pavement area so that it can be dedicated to walking;
Community involvement	plan activities around spaces (e.g. cooking workshops, exercise etc.) at specific moments; Involve residents, local

	organizations etc. to provide the activities: win-win opportunity;
<i>Community</i>	
Community involvement	identify areas where the local community tends to congregate informally, such as benches that are comfortable to use; grow and expand such areas to increase community appropriation (building locations: parish, band clubs, political party clubs etc.) but also in outdoor locations; how do we facilitate it as planners: street furniture, how are people using the facilities, is there shade? Important to involve Local Councils.
<i>Sports</i>	
Efficient use	the football pitch is one of the largest open areas within the city and should therefore accommodate more uses, for more people, ages, genders and activities; places for other types of leisure and not be exclusive to the football club;
Efficient use	it could be used to re-generate this area, attracting people to continue walking along the waterfront road;
Efficient use	there is scope to make better use of the large flat spaces on roof-tops e.g. sports/play facilities on the school's rooftops; involve Sports Malta as an expert in this field; the school has no formal/sizeable outdoor play area, therefore there is the possibility to transform the school's rooftop, for example, for sport activities.; this would obviously need to be supported by appropriate safety features.

Appendix III: Health Impact Assessment Parameters

Prior to identifying the Recommended Actions in any significant detail, it was important to understand the current conditions within the city of Senglea, with a particular focus on health and obesity issues, considering one of the main objectives of this project is to increase active lifestyles amongst the population and visitors. Therefore, a thorough review of the city and its urban environment was carried out; issues related to accessibility, the physical urban environment, green coverage, traffic and transportation, cyclability and so on. These were gauged through personal knowledge of the area and experiences gained through regular site visits. The Lead Partner drew up an Excel sheet, which was used to establish the current situation with regard to the various urban determinants that could impact people's wish to lead healthier lifestyles. The summaries of the health impact assessment parameters are provided in the images below. Having this thorough understanding of the city and its environs lead to the ultimate identification of the Recommended Actions.

Urban Determinants:

OBJECTIVE/ACTION DESCRIPTION AND ANALYSIS

Partner name	
Title of your final objective or Action	Walking (mobile) App
Analysis	As part of the project, a mobile app is being developed; the aim of this app is to encourage healthier lifestyles through the identification of walking routes in the city of Senglea; in order to maintain interest, points of historical and cultural interest are also included in the app; furthermore, the routes make use of the topography of the city and are graded according to difficulty; the app also recommends supporting exercises and the locations where such exercise may take place.
Planning and Design	The app is being developed in-house by the Planning Authority's ICT team; the target date for finalising the programming is June 2021, where testing of the app will be carried out by the project team; the official launch of the app (for public use) is targeted for September 2021.
Governance	The Malta Urban project team is the main driver behind the app; the ICT section is developing the app from a technical side; stakeholders include the Department of Health (for health benefits, exercises etc.), the Senglea Local Council (including experts on local historical and cultural assets).

URBAN DETERMINANTS OF THE OBJECTIVE/ACTION

TYPE	URBAN DETERMINANT	MEASURABLE INDICATOR	YOUR FINAL OBJECTIVE/ACTION INVOLVES THIS URBAN DETERMINANT (YES/NO)	(IF YES) IMPACT (HIGH/MEDIUM/LOW)
		inhabitants per km ²	No	
		housing units per ha	No	
DENSITY	Population and residential density	height of buildings	No	
		stores per inhabitant / retail ratio	No	
	Business density	Gross income per capita	No	
	Number and type of intersections (junctions)	nº of intersections with 3 or more streets per km ²	No	All Senglea: 89 intersections; the mobile app will connect 45 of these intersections via the walking routes
	Number and type of intersections (junctions)	nº of physical barriers for pedestrians or cyclists	Yes	MEDIUM: Waterfront Route (1.28km): tables & chairs; boat storage; Inner City (1.55km) and Over the Bastions to Waterfront Routes (1.84km): parking on pavements (due to narrow streets); 3 Routes along Stepped Streets (1.5km) stepped streets impede cyclists and those with limited mobility (although inclusion of stepped streets is purposefully to encourage further exercise);
		distance between block intersections	No	
	Number and type of intersections (junctions)	linear m of bike lanes	No	
		interruption points	No	
		separate bike lanes on the widest streets	No	

CONNECTIVITY	Cycling infrastructure / Bike lanes / cyclability	width of bike lanes	No	
		continuous vegetation on cycling infrastructure	No	
		% streets with pavements wider than 1.5 m	Yes	HIGH: Most pavements within Senglea are of 1.0m or less; also, in narrow streets, parking on pavements occurs; the waterfront promenade has significantly wider pavements along most of its route (approx. 800m of pavement wider than 1.5m);
		availability of pedestrian crossings (ramps, level crossings, etc.)	Yes	LOW: 4 along the waterfront; 2 within the city
	Walkability	continuous vegetation on walking infrastructure	No	
		interconnection with other active modes of transport	No	
	Public transport	access to a public transport stop (<300 m to bus stops / <600 m to metro/tram stop / <800 m to train station)	Yes	LOW: 3 bus stops within Senglea and linked to Over The Bastions and Inner City routes; harbour ferry connecting the 3 Cities with Valletta and linked to the Waterfront Route;
		average distance to nearest stop	Yes	LOW: Approximately 200m between bus stops
	Health, welfare and community services	average distance to nearest store health / community services per 20,000 people	Yes	LOW: Official town centre designated in the Local Plan, which includes local shops; Inner City Route passes through the town centre; 900m distance to Cospicua Health Centre
LAND USE MIX	Entertainment, culture and recreation services	closeness to facilities (average distance)	Yes	LOW: Given Senglea's small size, all services and facilities are within a reasonable walking distance; all Walking Routes connect with these facilities
	Physical and sports infrastructure (free time and sports)	closeness to sports services (average distance)	Yes	LOW: Local gym within the town centre; football ground beneath Gardjola Gardens; 1.3km to Cottonera Regional Sports Centre
		distance to public open space >0.5 ha (< 300m)	Yes	LOW: Waterfront; Bastions; Gardjola Gardens
		distance to public open space >5 ha (< 2 km)	No	
		distance to public open space >15 ha	No	
	Public open spaces	percentage of people who have a green-area public open space less than 300 m away	Yes	100%
	Public open spaces	built-up land percentage	Yes	Senglea has a total built up area of 80,050sqm which is equivalent to 50% of the total Senglea Local Council area
LANDSCAPE	Green and blue areas (greenness index, trees, vegetation, lakes, rivers, etc.)	m ² of green-area open spaces per inhabitant		LOW: Waterfront; Bastions; Gardjola Gardens; existing 10,125 sq.m of open spaces. This is equivalent to 3.7 sqm of open space per inhabitant
		no. trees / inhabitant		MEDIUM: Tree coverage is minimal in Senglea; >100 trees overall; Waterfront, Inner City and Over the Bastions routes
		% streets with vegetation	No	
		Aesthetic perception survey	No	
	Urban furniture	no. of benches, benches, bins, fountains per 1000 inhabitants	Yes	LOW: Overall number for Senglea; along the Waterfront Route and Inner City and Over the Bastions Routes, within the Gardjola Garden; no fountains within the city
		Maintenance and lighting	No	
	Type of traffic	nearness to truck routes	No	
		average speed of traffic	Yes	LOW: As per national speed limit; check with LC whether there are any speed limit signs within Senglea
		percentage of land used for streets and car parks	Yes	31% of the total Senglea Local Council Area
		traffic calming and speed reduction measures		Ask Local Council
TRAFFIC	Traffic density	car traffic / day	Yes	LOW: Refer to transport model outputs; traffic flows along walking routes available from these maps; >500 v/h AM peak

Explanation/Description of Urban Determinants:

DENSITY
<div>Population and residential density</div> <div>Population density refers to the number of people per area unit. Residential density refers to the type of housing (single-family, multi-family). - Living in areas with higher density is associated with greater walkability, an increase in physical activity and a decrease in obesity as well as a reduction in the risk of depression. - However, it is also associated with higher levels of particulate air pollution.</div>
<div>Business density</div> <div>Business density refers to the number of businesses or economic activities per area unit.</div>

CONNECTIVITY
<div>Intersections</div> <div>It refers to the ability to move easily between destinations as well as the number and type of intersections.</div>
<div>cycling infrastructure</div> <div>It refers to the presence or absence of bike lanes or a road network suitable for cycling or other non-motorised modes of transport. - Interruptions in the layout of the bike lanes will discourage physical activity. - Cycling for active leisure is related to the network of paths connecting points of natural interest, while cycling for daily transport is related to actual connectivity between points of interest in the city or activity areas.</div>

<div>Walkability</div> <div>It refers to the ability to travel conveniently and safely to different parts of the city. Pavements, benches, fountains and trees will facilitate walkability, as will the existence of retail facilities and activities</div>
<div>Public transport</div> <div>It refers to easy and nearby access to public transport</div>

LAND USE MIX
<div>Health, welfare and community services</div> <div>It refers to the existence and closeness of various types of general services.</div>
<div>Entertainment, culture and recreation services</div> <div>It refers to the existence and closeness of various types of services for leisure or social interaction</div>

<div>Physical and sports infrastructure (free time and sports)</div> <div>It refers to the existence and closeness of sports facilities (both outdoor and indoor)</div>
<div>Public open spaces</div> <div>It refers to the proximity to public open spaces</div>

LANDSCAPE
<div>Green and blue areas (greenness index, trees, vegetation, lakes, rivers, etc.)</div> <div>It refers to the amount of green areas (areas zoned as green areas), the presence of urban green space in general (street trees, vegetation, flowerbeds, private green areas, etc.) and the presence of blue areas (rivers, lakes, springs, etc.)</div>
<div>Aesthetic</div> <div>It refers to the overall image of the town, its global appeal.</div>
<div>Urban furniture</div> <div>It refers to the presence of facilities appropriate to the environment (benches, fountains, etc.)</div>
<div>Maintenance and lighting</div> <div>It refers to appropriate maintenance and cleaning of the environment as well as the degree of street lighting and public spaces.</div>

TRAFFIC
<div>Type of traffic</div> <div>It refers to the presence of heavy vehicle traffic, trucks and goods transport and their speed.</div>
<div>Traffic density</div> <div>It refers to the number of vehicles on a given road or in a given area.</div>

Health Determinants:

HEALTH DETERMINANTS

1.Type	2.Risk Factor Category	3.Risk factor	4.Measurable Indicator	5.Measured	6.Healthy Cities Generator Result (Yes/No/Not related)	7.Positive Impact/ Negative Impact (+/-/Not related)	8.Certainty of occurrence (HIGH/LOW)	9.Description of Impact	10.Recommendations
Physical Health	Physical	Obesity and overweight	Body Mass Index	Standardised protocol for clinical measurement of waist circumference and Body Mass Index (BMI) calculated by the formula weight (kg) / height	TO BE FILLED IN WITH MARTA & SOFIA	QUALIFY YOUR ACTION/OBJECTIVE	Select High or low	Add text	Add text
		Type two diabetes	Incidence of diabetes compared to the total population.	-		The main objective of the app is to change sedentary lifestyles and encourage a more active lifestyle within the population of Senglea, with less reliance on the private car; the app promotes walking as an alternative and also proposed various complementary exercises along the 6 routes.	High	increased personal mobility and exercise will address indicated health issues; given that many people are 'attached' to their mobiles, it is likely that the app will have significant downloads; historical/cultural assets provide interest to the app;	Introduce the mobile app via a publicity campaign
		Cardiovascular diseases	Incidence of cardiovascular diseases compared to the total population.	-					
		Asthma and respiratory diseases	Incidence of respiratory diseases compared to the total population.	-					
		Functional capacity	Perception survey.	-					
		Accidents and falls	Risk perception survey	-					
		Pain	Perceived degree of pain	Using the standardised CAU protocol.					
Physical Health	Behavioural	Physical Activity	Minutes per week of moderate and vigorous physical activity	Accelerometers Or International Physical Activity Questionnaire		The main objective of the app is to change sedentary lifestyles and encourage a more active lifestyle within the population of Senglea, with less reliance on the private car; the app promotes walking as an alternative and also proposed various complementary exercises along the 6 routes.			
		Sedentary Behaviour	Minutes per week sitting	time spent seated in a car or on public transport during the previous seven days. WHAT ABOUT OFFICE??					
		Food Habits	Eating five pieces of fruit and vegetables per day	Survey on monthly frequency		The main objective of the app is to change sedentary lifestyles and encourage a more active lifestyle within the population of Senglea, with less reliance on the private car; the app promotes walking as an alternative and also proposed various complementary exercises along the 6 routes.		When engaging in more strenuous activities, users will become more conscious of food intake and type and adjust to healthier eating habits	Additional to the app, health promotional material to be provided at the Local Council office
		Food Habits	Drinking alcohol	Survey on monthly frequency					
		Food Habits	Drinking sweetened beverages	Survey on monthly frequency					
Social Health	Psychic, emotional or social	Support and Social skills	No. of people attended to by the Department of Social Welfare and Family	Perception survey on belonging, social isolation and trust in the neighbourhood.					
		Stress and anxiety	Stress perception survey	Using the Stress Perception Scale (SPS) Distress perception survey					
		Depression	Prescription of antidepressants						
		Cognitive function	No. of children with attention deficit disorders	Colour Trails Test (CTT)					
		Emotional wellbeing	Perception survey	-					
		Attention deficit	Rating Scale for Disruptive Behaviour Disorders	Rating Scale for Disruptive Behaviour Disorders					
		Mental health and psychological disorder	No. of people attended to by primary care centres						
Environmental health	Environmental	Noise pollution	Decibels by day/night.	Sensors					
		Air pollution	Levels of PM 10; PM 2.5; Ozone and NO2	Sensors/ weather stations				Less use of the private car will have a positive impact on air quality	
Global Health	Global	Wellbeing and quality of life	Perception survey	perceived health questionnaire (SF12)					
		Vitality and Happiness	Perception survey	-					

OBJECTIVE/ACTION DESCRIPTION AND ANALYSIS

Partner name	
Title of your final objective or Action	
Analysis	The Baseline Study identified 5 objectives: Use the Waterfront to Connect Places and Communities; Encourage Active Lifestyles by Increasing Active Mobility; Making Use of Existing Topography to Increase Physical Activity; Use of Historical Landmarks of City for a Walkable Trail and to Create Better Environments. In order to reach these objectives, a number of Actions have been developed and classified as: Physical Interventions, Efficient Use of Spaces, Active Mobility, Regulation and Conservation.
Planning and Design	Various site visits and desk-top/mapping exercises were carried out, to identify underutilized spaces within the City for potential improved uses, in line with the 5 Objectives. Consultations were also carried out with the ULG discuss and agree on recommendations for these spaces. Further detailed site-specific analysis was carried out, identifying the potentials for each of the identified spaces. Detailed consultations were carried out with the Local Council and Health Department to reach a consensus on the suggested uses for these spaces. Local NGOs (youth organisations, historical experts, sports organisations) were also involved in the process.
Governance	The Malta Urbact project team is the main driver behind the proposed Actions, in close collaboration with the Local Council (who would have to agree with the Actions, as the implementing body) and the Health Department, for the health aspects of the proposals.

URBAN DETERMINANTS OF THE OBJECTIVE/ACTION

TYPE	URBAN DETERMINANT	MEASURABLE INDICATOR	YOUR FINAL OBJECTIVE/ACTION INVOLVES THIS URBAN DETERMINANT (YES/NO)	(IF YES)IMPACT (HIGH/MEDIUM/LOW)	Notes/Comments
	Population and residential density	inhabitants per km ²	Yes	Overall area 0.16sq.km; population: 2,720 (2019 data)	
		occupied housing units-per-ha	Yes	1,177	Source: Electoral Register (April 2018) - occupied dwellings
		height of buildings	No		
		stores per inhabitant /retail ratio	No		
DENSITY	Business density	Gross income per capita	No		
	Number and type of intersections (junctions)	n° of intersections with 3 or more streets per km ²	No		All Senglea: 89 intersections; the mobile app will connect 45 of these intersections via the walking routes
		not physical barriers for pedestrians or cyclists	Yes	MEDIUM: Waterfront Route (1.28km): tables & chairs; boat storage; Inner City (1.55km) and Over the Bastions to Waterfront Routes (1.84km): parking on pavements (due to narrow streets); 3 Routes along Stepped Streets (1.5km) stepped streets impede cyclists and those with limited mobility (although inclusion of stepped streets is purposefully to encourage further exercise);	Reference Action 3: upgrading of pedestrian infrastructure; shared space.
		distance between block intersections	No		

CONNECTIVITY	Cycling infrastructure / Bike lanes / cyclability	linear m of bike lanes	No			
		interruption points	No			
		separate bike lanes on the widest streets	No			
		width of bike lanes	No			
	Walkability	continuous vegetation on cycling infrastructure	No			
		% streets with pavements wider than 1.5 m	Yes	HIGH: Most pavements within Senglea are of 1.0m or less; also, in narrow streets, parking on pavements occurs; the waterfront promenade has significantly wider pavements along most of its route (approx. 800m of pavement wider than 1.5m); through the proposed Actions, 5,100sqm and 17,235sq.m of space will be affected (see Note in next column)	Reference Action 3: shared space. Pedestrian infrastructure (widening of pavements, pedestrian crossings etc.): 5,100sqm; Upgrading of road infrastructure as shared space: 17,235sqm.	
		availability of pedestrian crossings	Yes	LOW: 4 along the waterfront; 2 within the city; through one of the proposed Actions, additional crossings may be provided along the Waterfront (within a stretch of 500m (where most pedestrian activity takes place);		
		accessibility (ramps, level crossings, etc.)	Yes	HIGH: through the proposed Actions, 5,100sqm and 17,235sq.m of space will be affected	Reference Action 2	
		continuous vegetation on walking infrastructure	Yes	MEDIUM: Action proposes greening (community gardens, green walls etc.) of public streets where space permits i.e. stepped streets (no vehicular traffic so more space available); approximately 4,200sq.m of street space	Reference Action 2	
	Public transport	interconnection with other active modes of transport	No			
		access to a public transport stop (<300 m to bus stops / <600 m to metro/tram stop / <800 m to train station)	Yes	LOW: 3 bus stops within Senglea and linked to Over The Bastions and Inner City routes; harbour ferry connecting the 3 Cities with Valletta and linked to the Waterfront Route;		
		average distance to nearest stop	Yes	LOW: Approximately 200m between bus stops		
	LAND USE MIX	Health, welfare and community services	average distance to nearest store health / community services per 20,000 people	Yes	LOW: Official town centre designated in the Local Plan, which includes local shops; 900m distance to Cospicua Health Centre	
		Entertainment, culture and recreation services	closeness to facilities (average distance)	Yes	LOW: Given Senglea's small size (L: 780m; W: 210m), all services and facilities are within a reasonable walking distance; all Walking Routes connect with these facilities	
		Physical and sports infrastructure (free time and sports)	closeness to sports services (average distance)	Yes	LOW: Local gym within the town centre; an outdoor gym is being proposed on the Waterfront; football ground beneath Gardjola Gardens; 1.3km to Cottonera Regional Sports Centre	
		Public open spaces	distance to public open space >0.5 ha- (< 300m)	Yes	LOW: Waterfront; Bastions; Gardjola Gardens; existing 10,125 sq.m of open spaces; through the proposed Actions, an additional area of 4,700 sq.m may be introduced, together with temporary spaces (i.e. parking areas identified for temporary uses) 1,700 sq.m	
			distance to public open space >5 ha (< 2 km)	No		
			distance to public open space >15 ha	No		
			percentage of people who have a green area public open space less than 300 m away	Yes		100%
			built-up land percentage	Yes	Senglea has a total built up area of 80,050sqm which is equivalent to 50% of the total Senglea Local Council area	

LANDSCAPE	Green and blue areas (greenness index, trees, vegetation, lakes, rivers, etc.)	m ² of green-area open spaces per inhabitant		HIGH: Waterfront; Bastions; Gardjola Gardens; existing 10,125 sq.m of open spaces; through the proposed Actions, an additional area of 4,700 sq.m may be introduced, together with temporary spaces (i.e. parking areas identified for temporary uses) 1,700 sq.m; This will result in a total of 16,525 sqm of open space equivalent 6 sqm of open space per per inhabitant, an increase of 2.3 sqm per inhabitant from the current 3.7 sqm	Reference Actions 2 and 3
		no. trees / inhabitant		LOW: Tree coverage is minimal in Senglea; <100 trees overall; Waterfront, Inner City and Over the Bastions routes; although the IAP is not specifically proposing additional tree coverage, there is potential to increase tree coverage within the city	
		% streets with vegetation	Yes	MEDIUM: Action proposes greening (community gardens, green walls etc.) of public streets where space permits i.e. stepped streets (no vehicular traffic so more space available); approximately 4,200sq.m of street space which is equivalent to 8% of the total area occupied by streets and carparks.	Reference Action 2
	Aesthetic	perception survey	No		
	Urban furniture	no. of banks , benches, bins, fountains per 1000 inhabitants	Yes	HIGH: Overall number for Senglea; along the Waterfront and Inner City and Over the Bastions, within the Gardjola Garden; no existing fountains within the city; the identified open areas will include street furniture and also water/drinking fountains as per recommended Action.	Reference Action 1 Drinking Fountains Action
		Maintenance and lighting	No		
	Type of traffic	nearness to truck routes	No		
		average speed of traffic	Yes	MEDIUM: As per national speed limit; with the proposed Actions in places, traffic speeds in these areas should be reduced; 17, 235sq.m of road space will be affected by this Action.	Reference Action 3 Updating of Road Infrastructure as Shared Zones
		percentage of land used for streets and car parks	Yes	31% of the total Senglea Local Council Area	
		traffic calming and speed reduction measures		Ask Local Council	
TRAFFIC	Traffic density	car traffic / day	Yes	LOW: Refer to transport model outputs; traffic flows along walking routes available from these maps; >500 v/h AM peak	

Explanation/Description of Urban Determinants:

DENSITY

Population and residential density

Population density refers to the number of people per area unit. Residential density refers to the type of housing (single-family, multi-family). - Living in areas with higher density is associated with greater walkability, an increase in physical activity and a decrease in obesity as well as a reduction in the risk of depression. - However, it is also associated with higher levels of particulate air pollution.

Business density

Business density refers to the number of businesses or economic activities per area unit.

CONNECTIVITY

Intersections

It refers to the ability to move easily between destinations as well as the number and type of intersections.

cycling infrastructure

It refers to the presence or absence of bike lanes or a road network suitable for cycling or other non-motorised modes of transport. - Interruptions in the layout of the bike lanes will discourage physical activity. - Cycling for active leisure is related to the network of paths connecting points of natural interest, while cycling for daily transport is related to actual connectivity between points of interest in the city or activity areas.

Walkability

It refers to the ability to travel conveniently and safely to different parts of the city. Pavements, benches, fountains and trees will facilitate walkability, as will the existence of retail facilities and activities

LAND USE MIX

Health, welfare and community services

It refers to the existence and closeness of various types of general services.

Entertainment, culture and recreation services

It refers to the existence and closeness of various types of services for leisure or social interaction

Physical and sports infrastructure (free time and sports)

It refers to the existence and closeness of sports facilities (both outdoor and indoor)

Public open spaces

It refers to the proximity to public open spaces

LANDSCAPE

Green and blue areas (greenness index, trees, vegetation, lakes, rivers, etc.)

It refers to the amount of green areas (areas zoned as green areas), the presence of urban green space in general (street trees, vegetation, flowerbeds, private green areas, etc.) and the presence of blue areas (rivers, lakes, springs, etc.)

Aesthetic

It refers to the overall image of the town, its global appeal. Urban furniture

It refers to the presence of facilities appropriate to the environment (benches, fountains, etc.)

Maintenance and lighting

It refers to appropriate maintenance and cleaning of the environment as well as the degree of street lighting and public spaces.

TRAFFIC

Type of traffic

It refers to the presence of heavy vehicle traffic, trucks and goods transport and their speed.

Traffic density

It refers to the number of vehicles on a given road or in a given area.

Health Determinants:

HEALTH DETERMINANTS

1.Type	2.Risk Factor Category	3.Risk factor	4.Measurable Indicator	5.Measured	6.Healthy Cities Generator Result (Yes/No/Not related)	7.Positive Impact/ Negative Impact (+/-/Not related)	8.Certainty of occurrence (HIGH/LOW)	9.Description of Impact	10.Recommendations
Physical Health	Physical	Obesity and overweight	Body Mass Index	Standardised protocol for clinical measurement of waist circumference and Body Mass Index (BMI) calculated by the formula weight (kg) / height	TO BE FILLED IN WITH MARTA & SOFIA	QUALIFY YOUR ACTION/OBJECTIVE	Select High or low	Add text	Add text
		Type two diabetes	Incidence of diabetes compared to the total population.	-		The Baseline Study identified 5 objectives: Use the Waterfront to Connect Places and Communities; Encourage Active Lifestyles by Increasing Active Mobility; Making Use of Existing Topography to Increase Physical Activity; Use of Historical Landmarks of City for a Walkable Trail and to Create Better Environments. In order to reach these objectives, a number of Actions have been developed and classified as: Physical Interventions, Efficient Use of Spaces, Active Mobility, Regulation and Conservation.	High	increased personal mobility and exercise will address indicated health issues; given that many people are "attached" to their mobiles, it is likely that the app will have significant downloads; historical/cultural assets provide interest to the app;	Introduce the mobile app via a publicity campaign
		Cardiovascular diseases	Incidence of cardiovascular diseases compared to the total population.	-					
		Asthma and respiratory diseases	Incidence of respiratory diseases compared to the total population.	-					
		Functional capacity	Perception survey.	-					
		Accidents and falls	Risk perception survey	-					
		Pain	Perceived degree of pain	Using the standardised CAU protocol.					
Physical Health	Behavioural	Physical Activity	Minutes per week of moderate and vigorous physical activity	Accelerometers Or International Physical Activity Questionnaire		The Baseline Study identified 5 objectives: Use the Waterfront to Connect Places and Communities; Encourage Active Lifestyles by Increasing Active Mobility; Making Use of Existing Topography to Increase Physical Activity; Use of Historical Landmarks of City for a Walkable Trail and to Create Better Environments. In order to reach these objectives, a number of Actions have been developed and classified as: Physical Interventions, Efficient Use of Spaces, Active Mobility, Regulation and Conservation.			
		Sedentary Behaviour	Minutes per week sitting	time spent seated in a car or on public transport during the previous seven days. WHAT ABOUT OFFICE??					
		Food Habits	Eating five pieces of fruit and vegetables per day	Survey on monthly frequency					
		Food Habits	Drinking alcohol	Survey on monthly frequency					
		Food Habits	Drinking sweetened beverages	Survey on monthly frequency					
Social Health	Psychic, emotional or social	Support and Social skills	No. of people attended to by the Department of Social Welfare and Family	Perception survey on belonging, social isolation and trust in the neighbourhood.					
		Stress and anxiety	Stress perception survey	Using the Stress Perception Scale (SPS) Distress perception survey					
		Depression	Prescription of antidepressants						
		Cognitive function	No. of children with attention deficit disorders	Colour Trails Test (CTT)					
		Emotional wellbeing	Perception survey	-					
		Attention deficit	Rating Scale for Disruptive Behaviour Disorders	Rating Scale for Disruptive Behaviour Disorders					
		Mental health and psychological disorder	No. of people attended to by primary care centres						
Environmental health	Environmental	Noise pollution	Decibels by day/night.	Sensors					
		Air pollution	Levels of PM 10; PM 2.5; Ozone and NO2	Sensors/ weather stations				Less use of the private car will have a positive impact on air quality	
Global Health	Global	Wellbeing and quality of life	Perception survey	perceived health questionnaire (SF12)					
		Vitality and Happiness	Perception survey	-					

