Urban Active Environment (UAActivE)
Action plan (2016-2017)

Palermo, Italy

www.cesie.org

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1. Introduction

The SPAcE Action Plan for developing a sustainable active urban environment has been developed as a strategy for the city of Palermo, Italy, supported by local government, academics, NGOs, enterprises and local communities towards realising a more healthy and activity-friendly city with increased physical activity levels among the local population.

The Action Plan is part of the project Supporting Policy and Action for Active Environments (SPAcE), reference number 2014-3140 / 006-001 which is a three year project co-funded by the Sport: Collaborative Partnerships action of the Erasmus+ Programme. SPAcE aims to integrate active transport programmes (i.e. walking to school, cycle to work schemes etc.) into public policy across the European Union. The overall aim of the SPAcE project is to make the healthy choice the easy choice through creating sustainable urban active environments in cities and towns across the European Union.

The implementation of this plan has been led by CESIE www.cesie.org an NGO and European centre of studies and initiatives, established in 2001 in Sicily Italy, inspired by the work and theories of the sociologist Danilo Dolci (1924-1997). CESIE contributes to the active participation of people, civil societies and institutions through the implementation of projects on various thematic areas, towards the promotion of growth and development, always valuing diversity. CESIE strongly believes in the cross-cutting of organisations cooperating within different cultures, fields and sectors.

Palermo faces particular challenges in the development and infrastructure of active-friendly environments that calls for decisive action and innovation at policy level. Importantly within this plan, together with local and regional government, communities, residents, enterprises and civil society organisations play a crucial role in supporting not only its implementation by providing ideas and guidance, but in ensuring its sustainability within policy and practice, and furthermore in reaching the goals of the Action Plan for urban active environments.

Urban active environments (UActivE) are environments that prioritise walking, cycling and taking public transport where possible. These environments involve practices that aim to facilitate, promote and increase population (community) physical activity levels.

Therefore, the Action Plan for the city of Palermo calls for a multi-layered approach to the development and integration of policy and intervention, into action at a local level. The Action Plan has a particular focus on the implementation of specific activity programmes targeting the social environment of School and its beneficiaries that will be school-aged children and young people, the school education sector and the wider school community including general public.

Work on the Action Plan began in March 2016 with the launch of the Palermo UActivE Working Group. This group of local experts facilitated by CESIE and involving 16 members working in the field of sustainable mobility and the environment supported CESIE through meetings and direct consultation to develop the UActivE Action Plan for the city of Palermo. Local and regional government planners for mobility, decision makers in the field of sustainable transport, teachers and academics, experts in planning and sustainability, students, sport persons, architects and youth workers met to discuss about the best actions to take inside and outside the schools environment who established the goals and targets that would make Palermo a more active-friendly city.
Working Group Member List:

- Giusto Catania, Deputy Officer of Mobility, Palermo City Council
- Fabio Lo Verde, Lecturer of Sociology, University of Palermo
- Angelo Badalamenti, Medielettra, Owner (leading company in solar panel installation in Italy)
- Domenico Schillaci, Push, Founder (Regional and development company in the field of Sustainable Architecture)
- Tommaso Castronovo, Legambiente Sicilia, Responsible for Renewable Energies (the most important environmental organisation in Italy and Sicilian region)
- Valentina Governali
- Giuseppe Potestio, Liceo Scientifico Benedetto Croce, Teacher
- Carmelo Sardegna, VERDI Palermo, Teacher (Green party in Italy)
- Andrea Baio, Mobilita Palermo, Responsible (an organisation specialised in Shared Mobility and Mobility issues in Sicily)
- Rachid Berradi, Athlete
- Mariano Genovese, Architect
- Marco Maenza, Liceo Scientifico Benedetto Croce School, Student
- Matteo Favaloro, Liceo Scientifico Benedetto Croce School, Student
- Pasquale Sidoti, Environmentalist
- Florian Giraudo, Youth Worker
- Chloe Negrini, Youth Worker

Furthermore, a large-scale public consultation event within a local school in Palermo called “Liceo Scientifico Benedetto Croce” supported by Working Group member and Teacher Giuseppe Potestio, was held on 27th May 2016 organised by CESIE involving more than 50 students (aged 14-17 years old) and teachers. The event was aimed at gaining direct feedback on the goals and action steps for Palermo and providing specific input into the finalisation of the activities outlined in the UActive Plan.

Further information about SPAcE can be found at www.activeenvironments.eu.
2. Background

2.1 Historical context, population and demographics

The region of Sicily is rich in history and culture noted for its Roman, Arabic, Greek, Norman, Spanish rule. With its treasures of historical, cultural and natural importance, it has six sites listed on the UNESCO World Heritage List. Some of the best Greek archaeological sites are to be found here, as well as Roman catacombs and aqueducts, resplendent Byzantine mosaics, and stunning Arab and Norman architecture. On Sicily’s eastern edge is Mount Etna, one of Europe’s highest active volcanoes.

The city of Palermo was founded by the Phoenicians in 736 BC and was included in the Roman Empire and then in the Byzantine Empire, for over a thousand years. From 827 to 1071 it was under Arab rule during the Emirate of Sicily when it first became a capital. Following the Norman re-conquest, Palermo became capital of the new Kingdom of Sicily (from 1130 to 1816) and then united with the Realm of Naples to form the Kingdom of Two Sicilies, until the Italian unification (1860).

Palermo is located in the North West coast of Sicily and is the largest of the Italian islands and the largest island in the Mediterranean Sea separated from the Continent by the Strait of Messina and surrounded by the Ionian, the Tyrrenian and the Mediterranean Seas. Palermo is one of the warmest cities in Europe with an average annual ambient air temperature of 18.5 °C. It is one of the most famous cities of the Mediterranean area both for its maritime climate and for the historical monuments that have been preserved.

In terms of population levels, Italy is the 5th most populated country in Europe with a population count of 60,665,551 inhabitants\(^1\) as of 31\(^{\text{st}}\) December 2015 of which more than 5 million of which have foreign citizenship: 8.3% at national level and 10.6% in central-northern regions. The region has a population now reaching 5,074,261 inhabitants as of 1\(^{\text{st}}\) January 2016. Palermo is the capital of the Sicilian region and the Province of Palermo. There are 8 other regions on the island, Agrigento, Catania, Caltanissetta, Enna, Messina, Ragusa, Siracusa and Trapani. Palermo is 5th most populated city in Italy with a population of 1,271,406 inhabitants of which 615,028 inhabitants are male and 656,378 are women. In the central area, the city has a population of around 678,492 people\(^2\).

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The population levels in Palermo in previous years has been on a steady increase from 2012 - 2014 as figure 2 shows, however in 2015 only a very small increase has been recorded in the population levels of Palermo, with a slight decrease in 2016. Immigration levels have been the main cause of population increases in this period.

![Graph showing population levels in Palermo from 2012 to 2016]

**School Population**

At age 6, children start their formal, compulsory education in Scuola Primaria (Primary School) also known as Scuola Elementare (Elementary School). Following kindergarten, Scuola Primaria lasts for five years for children from 6 - 10 years old. Classes are small with between 10 - 25 pupils. At the age of 11 they begin their Secondary school education (commonly called "middle school"). In 2014, the population of school students in Palermo was recorded as in table 1:

<table>
<thead>
<tr>
<th>Age</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6.542</td>
<td>6.124</td>
<td>12.666</td>
</tr>
<tr>
<td>7</td>
<td>6.375</td>
<td>6.175</td>
<td>12.550</td>
</tr>
<tr>
<td>8</td>
<td>6.520</td>
<td>6.171</td>
<td>12.691</td>
</tr>
<tr>
<td>9</td>
<td>6.632</td>
<td>6.324</td>
<td>12.956</td>
</tr>
<tr>
<td>10</td>
<td>6.856</td>
<td>6.412</td>
<td>13.268</td>
</tr>
<tr>
<td>11</td>
<td>6.628</td>
<td>6.287</td>
<td>12.915</td>
</tr>
<tr>
<td>12</td>
<td>6.641</td>
<td>6.515</td>
<td>13.156</td>
</tr>
<tr>
<td>13</td>
<td>6.831</td>
<td>6.333</td>
<td>13.164</td>
</tr>
<tr>
<td>14</td>
<td>6.713</td>
<td>6.401</td>
<td>13.114</td>
</tr>
<tr>
<td>16</td>
<td>6.822</td>
<td>6.601</td>
<td>13.423</td>
</tr>
<tr>
<td>17</td>
<td>7.225</td>
<td>6.637</td>
<td>13.862</td>
</tr>
<tr>
<td>18</td>
<td>7.363</td>
<td>7.061</td>
<td>14.424</td>
</tr>
</tbody>
</table>

Table 1: Children in Palermo by school age

2.2 Health

2.2.1 Physical activity levels in adults and young children

Italy currently has no national health monitoring and surveillance system for physical activity for adults and children of all ages therefore this means it is difficult to find large quantity of statistics for Sicily measuring physical activity and inactivity for large sector of the population. The national recommendations in Italy address youth (children and adolescents) and older adults. According to national data for 2010 - 2013 by the Italian Ministry of Health’s Behavioural Risk Factor Surveillance System (Progressi delle Aziende Sanitarie per la Salute in Italia (PASSI)), conducted by the National Centre for Epidemiology, Surveillance, and Health Promotion, 36% of Italian adults (aged 30 - 60 years) and 24% of older adults (aged 60+ years) meet the recommended physical activity levels. From these findings, there is a significant difference among men and women aged 30-60 years old with just 37% of females compared to men (63%) who meet the recommended physical activity levels.

In comparison to other EU countries, in particular in the Mediterranean region, the percentage of adults in Spain (aged 18—69 years) who reach the WHO recommended physical activity levels, range from 66.4% for adults and 68.1% for older adults with slightly lower values among females (62.6%) compared to males (70.8%). Italy has much lower levels compared to Greece in which 84.6% of the adult population (18+ years) meet the recommended physical activity levels with males being much more likely (87.6%) to meet the physical activity recommendations than females (81.8%).

Italy uses the international cut-off point for children and adolescents reaching the recommended physical activity levels, as endorsed in WHO’s Global recommendations on physical activity for health (2010). The national data for 2010 - 2013, collating together the data for children and adolescents, show that 43% of children and adolescents (aged 6 - 17 years old) meet the WHO recommended physical activity levels, with more boys (46%) being slightly more physically active than girls (44%).

Statistics below provide an overall picture of physical activity levels in children in Italy:

- 16% of children did not perform any physical activity during the day preceding the survey,
- 18% practice sport for more than an hour a week,
- 1 in 4 children went to school on foot or cycling,
- 54% of schools provide extra-curricular physical activities

Although as mentioned previously there has been no national health monitoring and surveillance system for physical activity for adults and children of all ages, since 2008 however the project OKkio

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alla SALUTE (OKkio to HEALTH)\(^{10}\) has been set up as a surveillance system established to monitor overweight and obesity in primary school children (6-10 years old) and related risk factors. OKkio alla SALUTE was born out of a project "Sistema di indagini sui rischi comportamentali in età 6-17 anni" (System of surveys on behavioural risks in the age 6-17 years), promoted and funded by the Ministry of Health / CCM. It is coordinated by the National Centre for Epidemiology, Surveillance and Health Promotion (CNESPS) Institute of Health (ISS) in collaboration with the regions, the Ministry of Health and Ministry of Education, University and Research.

In May 2016, a new online national report "Il Sistema di sorveglianza OKkio alla Salute: risultati 2014" (The surveillance system OKkio to Health: results in 2014)\(^{11}\) was released with further data on health and physical activity promotion among school children aged 6-10 years old and the school system in promoting physical activity. Results showed that much higher percentages of inactivity exist in South of Italy and the centre. In Sicily, 13.9% of school children aged 6-10 years old do not participate in any weekly physical activity and 24.3% participate in only one or two days of weekly physical activity. The majority of children who participated were 8 years old (76.4%) and 9 years old (20.7%). It is important to note that from the findings, no specific sub group differences have been identified between the different regions in Sicily or between male (51.2%) and female (48.8%) children who participated.

2.2.2 Trends in overweight and obesity in children and young people

Although the obesity problem in Italy might be considered mild in comparison to many of its neighbouring constituents (the country boasts one of the lowest adulthood obesity rates in Europe [approximately 10% of the population]), childhood obesity rates are notoriously considered one of the highest (36% for boys and 34% for girls). In addition, WHO projections forewarn that by 2030 rising prevalence could see disease rates nearly double for certain populations.\(^{12}\)

Slightly higher levels in overweight and obesity among children exist in the South of Italy. The overweight levels in Sicily (including obesity) is at 40% compared to the North of Italy at 30%\(^{13}\). The average rate of childhood obesity in Sicily is high with 24.1% of the school population identified as overweight, 13.4% are obese (compared to the national average 22.2% overweight and 10.6% obese). Links to poor diet, lack of sport and health enhancing physical activity are prevalent. In Sicily, only 33% of children carry out regular sports activities (at least twice a week). Table 2 gives an overview of the state of health and presence of chronic diseases among children in Italy\(^{14}\)

<table>
<thead>
<tr>
<th>Age</th>
<th>Good health</th>
<th>1 chronic disease</th>
<th>2 chronic diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>96.6</td>
<td>8.8</td>
<td>1.4</td>
</tr>
<tr>
<td>15-17</td>
<td>93.2</td>
<td>13.6</td>
<td>2.4</td>
</tr>
<tr>
<td>18-19</td>
<td>91.6</td>
<td>16.8</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Table 2: Children in Italy as per age the state of health and presence of chronic diseases (per 100 people).

\(^{10}\) [http://www.epicentro.iss.it/okkioallasalute](http://www.epicentro.iss.it/okkioallasalute)
\(^{14}\) [ISTAT](http://dati.istat.it/Index.aspx?DataSetCode=DS_ALBT_HEA3&Lang=#)
- Obesity level among children in 2014 in Italy:
  - 20.9% of children are overweight
  - 7.6% of children are obese
  - 2.2% of children are severely obese

Children in the southern and central regions percentage of overweight and obese children is higher. In Sicily, these rates are higher as shown in Table 3 where obesity is described in two different ways:

- 23.2% of children are overweight
- 10.2% of children are obese
- 3.7% of children are severely obese

Figure 3: Childhood overweight and obesity levels in Italy and the Italian regions

2.3 Walking and cycling levels in Italy and Sicily

In 2014, 15000 Italians aged 15-80 years old were surveyed across the north and south of Italy as part of the ISfort La Domanda di mobilità degli italiani report 2014. The report showed levels of walking among the Italian population had increased to 15.9% from 13.7% in 2013. At the same time, use of bicycles had increased to 3.8% from 3.1%, while private car use decreased by 3.6% to 66.4% compared to 70% in 2014.

When comparing bike use across Italian regions the report shows higher use in the North of Italy compared to the centre and the south. Overall levels in bike use across all regions have increased with North-West at +0.4%, North-East +0.9%, the centre at +0.9% and south +1%. Importantly, changes in attitudes in using the private car have been seen in the Centre/South. The use of the private car has been reduced to 5% from 9%. Therefore, data on bike use points to possible increases within the city of Palermo.

Looking specifically at walking and cycling data for the region of Sicily in 2015, the ISfort report\(^\text{17}\) shows that in 2014 and 2015 people walk for a distance of 1.6 km on average per day. In 2014, the average time of walking was 14.6 minutes and in 2015 14.3 minutes. The average speed for people walking was 7.5km per hour in 2014 and 7.4 km per hour in 2015. Moving by bike, 3.6 km was the average length of the trip for 2014. In 2015, the length of trips by bike in Sicily was 3.4Km. The average time of a single trip by bike was 16 minutes in 2014 and 16.4 minutes in 2015. No specific data on Palermo has been published.

2.4 Cyclist and pedestrian mortality

The Istat Incidenti Stradali 2015 report\(^\text{18}\) reported that in 2014 in Italy, 578 pedestrians (356 Men and 222 women) and 273 cyclists (233 males and 40 females) have died due to traffic accidents. The pedestrian is one of the most vulnerable among the people involved in road accidents. The risk of death and injury is particularly high for the elderly population, more frequently involved as a pedestrian on the road. In 2014, the highest number of victims (mostly men) is detected in the range of aged between 80 and 84 years. The bicycle continues to maintain, even in 2014, the third position in the ranking, behind cars and motorcycles, in terms of victims. For the 273 cyclists who were victims of road accidents in 2014, the majority were women at 16.4% against 11.4% of men.

For Palermo, specific data on mortality for pedestrians and cyclists is unknown, however according to the report, interestingly regarding road traffic causalities in urban areas Palermo has seen an overall decrease by 38.5% in the total number of deaths, compared to 2010. This could suggest that Palermo has seen an overall decrease in fatality rates for pedestrians and cyclists in recent years.

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\(^{17}\) ISfort report 2015 Osservatorio sui comportamenti in mobilità degli individui

3. Infrastructure for the promotion of physical activity

3.1 Local environment

Palermo city centre maintains original medieval and Arab characteristics with small streets and alleys displaying Baroque, Arabic and Norman monuments and Byzantine street markets of the "Ballarò", "Vucciria" and "Capo" invade the populated medieval quarters of the city. Palermo has undergone a number of changes during the past thirty years. Its suburbs were "assaulted" by a mass of concrete and subsequently the city has been "salvaged" in various stages from damage left after the second world war, however slow restoration and bureaucracy in the government has left many structures and buildings with poor standards of maintenance and services.

Palermo is the fourth most congested European city (based on all city sizes). The congestion level in Palermo in 2014 was recorded at 42%, with a morning peak of 66% and evening peak of 68%. Challenges in the local environment are also created by road infrastructure and the very nature of the historical centre (narrow streets, with lack of parking facilities). The development and facilitation of active environments at local level are hindered due to lack of green spaces and parks. Limited public transport networks are highlighted by the fact that only 14% of residents in Palermo are satisfied with public transport in their city, among the lowest recorded out of the cities surveyed.

Further to this, the results from the EC Quality of life in European Cities 2015 survey which measured local perceptions of the quality of life in 79 cities, outlined a number of key issues for Palermo. 68% of residents in Palermo expressed dissatisfaction with regards to green spaces in the city such as parks and gardens. Added to this challenge both at structural and organisational level is the large amount of waste on the streets, much of it non-recyclable. 92% of residents in Palermo are dissatisfied with the cleanliness of Palermo, showing an increase from 89% recorded in the last survey carried out in 2013. Further to this a generally high number of residents in Palermo, 57% in total are dissatisfied with public spaces such as markets, squares and pedestrian zones.

For Palermo, there is no specific data on the number of adults and young people using the main modes of transport and in relation to the introduction of the “isole pedonali” in the city centre. Data measuring changes as a result of introduced pedestrians zones has not yet been analysed or made public for review.

The “URBES” Report 2015 on sustainable welfare in Italian cities gives some indicators on mobility in Palermo. For example, in 2013 in Palermo the density of bike path was 13.1% for 100 km of city surface (national figure is 18.9%). The pedestrian areas are 9.3 metres square per 100 inhabitants (33.4 at national level). It is expected that data for Palermo will be different to national data in particular data for the north of Italy. However, no statistics have been found just for Palermo.

29 TomTom, (2014). TomTom Traffic Index [online]. Available at: www.tomtom.com/it_it/trafficindex/#/list
3.2 Physical education and activity in Schools

Physical education and activity is managed by the Ministry of Education with national guidelines 2012 for physical education recommends for all schools in Italy to provide at least 2 hours per week, 66 hours per school year of physical education. For the Ministry of Education learning goals at the end of the fifth grade of primary school include actively participate in various forms of play, also organised in the form of race, collaborating with others and recognising the relationship between diet, and exercise in relation to healthy lifestyles.

When meeting the national recommendations of 2 hours of physical activity in schools, the research carried out by OKcio alla SALUTE provides valuable information on the current situation in schools in Sicily. Research was undertaken with 230 schools and their facilities and about 256 classes were respectively sampled across all 8 regions of Sicily (Caltanissetta, Palermo, Messina, Catania, Siracusa, Agrigento, Enna, Ragusa and Trapani). Research interviewed school leaders, teachers, school children and parents of school children, and found that the majority of schools (63.8%) usually include classes with two hours of physical activity, 14.7% of schools report that almost all do physical activity and approximately 4.8% half, while 16.7% of the practical classes do very little physical activity.

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25 Ministero dell’Istruzione, dell’Università e della Ricerca - La scuola del primo ciclo - Indicazioni Nazionali 2012
Figure 5 shows the amount of schools that provide students with the recommended 2 hours of physical activity in the regions of Sicily. The results do not indicate specific differences within the regions nor does there seem to be a common policy for each school in facilitating physical activity seems to be set up as a basis for monitoring levels of physical activity for each school and within each region. Importantly, this is an area that the Action Plan for Palermo could seek to develop within its goals. The main reasons cited for non-performance of physical activity in schools include:

- School hours and structure of school timetable (36.9%)
- Lack of a gym (41.7%)
- Excessive distance of the gym to the school (5.8%)
- Gym not usable due to damage or in poor condition (14.8%)
- Lack of or unavailability of outdoor spaces (13%)
- Teachers choice not to do physical activity with students (16.2%)  

School facilities

Further to the reasons for poor implementation of physical activity in the school environment mentioned above, the National plan for the promotion of sport 2014 - 2015 guidelines show that there is a significant lack of infrastructure for sports in Italy, especially in the South of Italy. The XV report Legambiente ecosystem School 2014, which surveyed the quality of school buildings and services found that only 60% of schools have a gym or adequate structure for sport within the school building. What emerges from the comparison of annual reports of Legambiente is that the number of sports structures in schools has decreased since 2007, although 2013 saw an increase from previous years in the number of school sports facilities available. There is a need to identify what schools in Palermo have a garden, playground or other form of outdoor space that could be developed or regenerated and used to facilitate physical activities.

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>School buildings with sports structures</td>
<td>63,4%</td>
<td>66,6%</td>
<td>59,3%</td>
<td>52,1%</td>
<td>52,6%</td>
<td>52,2%</td>
<td>60,0%</td>
</tr>
</tbody>
</table>

Table 3: The percentage of school buildings with sports structures in Italy

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28 XV Rapporto di Legambiente sulla qualità dell’edilizia scolastica, delle strutture e dei servizi (2014) [https://www.legambiente.it/sites/default/files/docs/ecosistema_scuola_-_xv_rapporto_def1311.pdf](https://www.legambiente.it/sites/default/files/docs/ecosistema_scuola_-_xv_rapporto_def1311.pdf)
Traveling to school

Measuring children’s physically activity in school is also important to assess the methods of how children will reach the school building, on foot or by bicycle, consistent with the distance of the school from its home. The interventions proposed by the Action Plan to increase active commuting and improve the physical activity levels among children can aim to have a positive impact on the statistics presented by OKkio alla SALUTE.

OKkio alla SALUTE found that 25.7% of the children in Sicily were reported to have went to school on foot. Very few children go to school by bicycle, just 0.2%, while 65.6% use means of private transport\(^\text{29}\). Although not further explained in the report, the majority of children travelling to school by private car could also be related to long distance from home to school, poor public transport links, cultural habits coupled with worry of parents to allow children to travel to school unaccompanied.

![Modalità di raggiungimento della scuola (%)](image)

Figure 6: Ways of reaching school (%)

3.3 Partners promoting physical activity among children and young people

**Parco della Salute\(^\text{30}\)** has been built in the Foro Italico area of Palermo’s historical centre and open to the public by end of November 2016. Parco della Salute is a social project promoted by Sano Vivi Onlus, social promotion association composed of more than seventy volunteers. The goal of the initiative is to promote healthy lifestyles and physical activity, active outdoor and environmental protection and features a botanical garden for informational and educational purposes.


\(^\text{30}\) Parco della Salute [http://parcodellasalute.it](http://parcodellasalute.it)
The Department of sustainable mobility Palermo City Council (Palermo Mobilità Sostenibile) – Promoting air quality and sustainable mobility are the goals of two initiatives promoted by Palermo City Council. Currently it administers and manages the development of the roads, traffic and public transport networks including the new Tram network, the development of the pedestrian areas, the ZTL traffic restriction zones enforcement, parking zones, car and bike sharing schemes for citizens. The department has also set up a portal online for citizens to find information about traffic plans, services for mobility, permits and authorisations.

Piedi Bus is an association founded in Padua, Italy in 2003. Piedibus means foot-bus in Italian and is a bus journey with a driver but no vehicle. Staff members and parental volunteers instead walk students to school. Schools from across 18 cities and towns in Italy participate in the initiative. Palermo has participated in Piedi Bus in previous years but currently it is not implemented in Palermo. Piedi Bus was set up with the aim of becoming a meeting point for all those who are involved in their school, in their neighbourhood or in their city. An important result from schools participating in Piedi Bus is the interaction with other children on the way to school and fostering a walking culture.

Figure 7: Parco della Salute and location

Figure 8: Piedi Bus activity

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31 Palermo Mobilità Sostenibile https://mobitasostenibile.comune.palermo.it
32 Piedi Bus www.piedibus.it
Bimbimbici\textsuperscript{33} is the main national event promoted by FIAB - Federazione Italiana Amici della Bicicletta onlus which is an environmental non-profit organisation that brings together more than 100 local associations throughout Italy, promoting cycling as a means of ecological transport and for a healthy and environmentally friendly city\textsuperscript{34}. Bimbimbici is held annually in May and takes the form of a ride through the city and urban areas. It addresses mainly children, but encourages citizens of all ages. It aims to raise awareness among citizens and policy makers to encourage the construction of cycle and pedestrian paths, traffic and speed reduction projects in urban areas. Bimbimbici’s annual event “Tutti a scuola a piedi o in bicicletta” (Everyone to school by foot or by bike) provides the opportunity for school children and their families to design routes for a walking bus and cycling route in their city. In Sicily, Catania and Siracusa normally take part in the event but there no evidence of Palermo as a main contributor. Although there has been high-level promotion, only 5\% of schools overall participated in the event which shows further work is needed to engage schools in such initiatives.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure9_Bimbimbici_event_May_2016.png}
\caption{Bimbimbici event May 2016}
\end{figure}

\textbf{Legambiente Siclia\textsuperscript{35}} is one of the most widespread environmental organisations in Italy and part of the national organisation Legambiente. The organisation is active in research, promotion and information exchange on climate change, energy conservation, alternative, sustainable and renewable sources, and the promotion of cultural heritage. The organisation has carried out research on school buildings and facilities and lobbies for interventions to support the development of energy efficient facilities in schools and proper maintenance of school buildings and facilities.

\textbf{Associazione Mobilita Palermo\textsuperscript{36}} project was born in 2008 in Palermo offering informative and proactive website, which aims to lay the groundwork for a cultural change in viral effect and involves citizens and institutions in a project that converges in common interest, economic and infrastructural development. In 2013, the association was included in the national handbook for smart cities drawn up by the ANCI (National Association of Italian Municipalities).\textsuperscript{37}

\begin{footnotes}
\footnotetext[33]{Bimbimbici \url{www.bimbimbici.it}, \url{www.facebook.com/Bimbimbici}}
\footnotetext[34]{FIAB \url{www.fiab-onlus.it}}
\footnotetext[35]{Legambiente Siclia \url{http://legambientesicilia.it}; Legambiente Italy \url{https://www.legambiente.it}}
\footnotetext[36]{Associazione Mobilita Palermo \url{http://palermo.mobilita.org}}
\footnotetext[37]{ANCI (National Association of Italian Municipalities \url{http://www.anci.it}}
\end{footnotes}
PUSH\textsuperscript{38} was founded in 2013 in Palermo and involves professionals from different backgrounds: from design to information technology, from digital media to business management. PUSH is mainly focused on Applied research; Design consulting; Idea acceleration. The organisation is partner of the World Urban Campaign\textsuperscript{39}, the UN Global Compact\textsuperscript{40} and the Code for Europe network.

VERDI Palermo\textsuperscript{41} is the main green party in Italy active in environmental issues connected with slow mobility and sustainable development.

4 Policies for the promotion of physical activity in local environment and school settings

Having a standalone physical activity plan still represents a gap for Italy. There is not a system that promotes and monitors physical activity at national level, which represents an opportunity for improvement at local regional and national level. Regions are responsible for organising and delivering primary, secondary and tertiary health-care services as well as preventive and health promotion services. In this context, it is easy to imagine that different management, results, health expenditure and different planning for health promotion do exist. Some Italian regions have realised local interventions or experimental surveys in order to promote physical activity among a particular group of the population, but only one national project was developed in 2007 called “Guadagnare salute” (gaining health) \textsuperscript{42}, although there are no results available. There is a strong need to suggest and plan new strategies at national level to promote physical activity in different settings. The GoPa! Italian cards summarised this situation in 2015 and represents an advocacy tool to be used at a country level to highlight these gaps\textsuperscript{43}.

4.1 Schools

National plan for the promotion of sports 2014 - 2015

The national plan relates to the interventions in the field of educational value and healthy sport, with particular reference to schools. It defines for the school year the aims to be achieved and the resources to be committed for the promotion of sporting activities and the modernization of sports facilities in schools, the initiatives of the student card related to the sport and the drafting of new guidelines for physical education activities, physical and sport. Initiatives have been developed in collaboration with the Ministry of Education, the Ministry of Health, the University of Ferrara and Salerno, Regions Puglia and Friuli Venezia Giulia, the Italian Olympic Committee and the CIP have been completed or are nearing completion.

The priority guidelines of the Government in the field of sport focus in particular on the following objectives including the promotion of sport for young people and in schools; the modernisation and the enhancement of the development of sports facilities. Key objectives have been to promote

\textsuperscript{38} PUSH \url{http://www.wepush.org}
\textsuperscript{39} World Urban Campaign \url{http://www.worldurbancampaign.org}
\textsuperscript{40} UN Global Compact \url{https://www.unglobalcompact.org}
\textsuperscript{41} VERDI Palermo \url{http://www.verdi.it}
\textsuperscript{42} Guadagnare salute. \url{http://www.guadagnaresalute.it/attivita/AttivitaArchivio.asp}
\textsuperscript{43} Italy physical activity country profile: results from the first set of country cards of the Global Observatory for Physical Activity - GoPA!
sports facilities, use the practice of sport and the values of cohesion, solidarity and integration; support initiatives to raise interest among students and facilitate the implementation of projects in favour of youth and students and the practice of sport for educational and social function, using resources provided by the ERASMUS+ programme at EU level.

**Sports spaces in schools and other sports facilities**

In September 2014 an agreement was signed by the Protocol of Understanding between the Council of Ministers, the Institute for Sports Credit, the National Association of Italian Municipalities (ANCI) and the Union of Italian Provinces (UPI). The aim is to strengthen and modernise school sports facilities to encourage the development of the practice sport, resulting in improved physical and mental condition and health of young people and the processes of socialisation and integration. Under the agreement, the Istituto per il Credito Sportivo earmarked a total of 75 million euro of financial resources for school sports providing 500 loans of 150,000 euros each, to be repaid in 15 years without interest and at no cost.

Measures will be equally distributed on a regional basis in according to the percentage of school-age population. Specifically, it will be possible to provide funding to organisations and local owners of schools wishing to:

- Create new spaces and school sports facilities;
- Implementing measures for restructuring, modernizing, expansion, completion, conversion, adjustment technology, extraordinary maintenance, remediation asbestos, adjustment of regulations on safety and removal of architectural barriers, increase efficiency energy space and existing school sports facilities.

l'Istituto per il Credito Sportivo allocated 75 million euro for the granting of additional 500 loans for the construction / renovation of sports facilities of basis. Recipients include local authorities, sports clubs, sports associations, parishes, institutions and other private entities. The overall funding limit of 75 million euro is divided as to 50%, on an equal footing among all regions in Italy and for the remaining 50% according to the resident population. Current data on the impact of this policy on Palermo schools is unknown however. This suggests that for the city of Palermo there is potential opportunities through funding at national level for the development of new facilities that will support the goals of the Plan

**Sport di Classe**

The Sport di Classe programme is an initiative promoted and implemented by the Ministry of Education, University and Research and CONI, which is a concrete and coordinated response to the need to spread sport and physical education starting from primary schools, to promote educational and training processes of the younger generation in Italy. The project is aimed at students, teachers, and school leaders. Now in its 3rd year, the project involves the presence of a school sports tutors, the organisation of the games in spring and end of the school year, promotion of educational values of sport and educational content within the curricular and inclusion of disabled children. The project is open to all primary schools and the requirement for participation to the programme is the inclusion by the school of at least two hours a week of physical education within educational

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45 Sport di Classe [http://progettosportdiclasse.it](http://progettosportdiclasse.it)
planning, in addition to the mandatory two hours a week of physical activity for primary and secondary schools.

The results of the Sport di Classe programme in 2015-2016 for the region of Sicily\textsuperscript{46} were:

- School institutions: 398
- School facilities/buildings: 870
- Classes: 7,894
- Pupils: 157,880
- Tutors: 504

\textbf{Figure 10 – Sport di Classe project results}

\\textsuperscript{46} Sport di Classe results 2015-2016 \url{http://progettosportdiclasse.it/risultati-sport-di-classe-2015-2016.html}
4.2 Transport infrastructure on active commuting and physical activity

Urban Traffic Plans implemented by the Urban Mobility Service of Palermo:

- Improve pedestrian mobility, with definition of squares, streets, routes or pedestrian areas and limited traffic zone
- Improve the mobility of collective public transport (thinning of paths) with definition of any lanes and/or roadways reserved for them
- Reorganisation plan of the movement of private motor vehicles, by definition is the general scheme of vehicular traffic (for the main road network)
- Reorganisation plan for the parking of private motor vehicles, by definition is street parking and parking areas at grade out of roadways

During 2013-2016, local residents and tourists have seen a significant increase in the political environment and policies launched concerning traffic, transport and active commuting in Palermo.

“Isole pedonalì” Pedestrian zones

Mainly from July 2015 saw the zone from Corso Vittorio Emmanuele, from Porta Nuova to Quattro Canti and Via Maqueda from Teatro Massimo to Quattro Canti, two of the main touristic routes in the historical centre become the main restricted pedestrian zones. In Via Vittorio Emanuele in the stretch from Via Matteo Bonello Piazza Villena, has allowed the improvement of urban quality and the development of the path of protected area that enhances the UNESCO World heritage Sites monuments. The zone covers around 2.5 km in distance and further work has begun on the opposite side of Via Maqueda increasing to just under 3 km in total.

At the beginning of the project, cars could still drive down the street during 12pm – 3pm. Since June 2014, access is forbidden all day, from 10am to 10 pm, from Monday to Sunday, and thanks to the success of the initiative, the City Council extended the “pedestrianisation” of via Maqueda until midnight. Access during these hours is only for residents who have a special authorisation, which they have to show to the police who regularly patrol the street.

Importantly, the development of the pedestrian zones backed by the Mayor of the city, Leoluca Orlando, was owed to local business and associations such as Mobilità Palermo or Palermo Indignata that were created with the goal of gathering citizens to back initiatives to make the city more liveable. These organisations used social media to advocate changes in the city e.g., Facebook group “Via Maqueda Pedonale” with more than 5930 likes.

Tram network

In support of the new pedestrian zones, a new tram line, the first of a future tram network, was launched in July 2014 in Palermo, with the aim of cutting traffic congestion and reducing emissions from transport. The network services operated by Palermo transport authority AMAT is expected to accommodate 30,000 passengers daily and the City Council believes that each tram on the new line will cut by 100 the number of daily car journeys and reduce Palermo’s CO2 emissions by 5 kilos which is equates to an annual CO2 reduction of 430 000 tonnes. It will form the basis of a new tram network

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47 http://www.provincia.palermo.it/pls/provpalermo/V3_S2EW_CONSULTAZIONE_mostra_pagina?id_pagina=1161
48 Extension of the “pedestrianisation” of via Maqueda: http://www.comune.palermo.it/noticext.php?cat=1&id=7770
49 The facebook page is available at: https://www.facebook.com/maquedapedonale
with 3 lines and over 15 km long. The project received in the region of 340 million euros for the construction of the three tram lines in Palermo.

![Sistema Tram Città di Palermo](image)

**Figure 11: Palermo tram network**

### Palermo ZTL pass 1

With the objective of limiting the air pollution and noise factors in particular in the central area of the city of Palermo, from 10th October 2016, a restricted traffic zone has been established by the City Council of Palermo. The ZTL\(^50\) is active from Monday to Friday from 8:00 to 20:00 and Saturday from 8:00 to 13:00 excluding sundays and national and regional holidays. The restricted traffic zone will extend from Piazza Giulio Cesare at Via Cavour and Porta Nuova Porta Felice, in what the General Traffic Plan indicates as the ZTL 1. Importantly, the newly developed pedestrian zones of Corso Vittorio Emmanuele and Via Maqueda are within the ZTL restriction zone.

Drivers will be able to enter the restricted zone with a special pass, requested online via AMAT Palermo S.p.A. (Socio Unico Comune di Palermo)\(^51\). For residents, the pass will cost 90 Euros annually for the most polluting vehicles (Euro 0, 1 and 2 petrol and cars Euro 0, 1, 2 and 3 diesel) and 80 euros annually for the less polluting cars. For non-residents, the pass will cost 100 euros\(^52\).

![La mappa della ZTL](image)

**Figure 12: ZTL traffic zone in Palermo**

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\(^{50}\) ZTL traffic zone Palermo [http://www.inchiestasicilia.com/2016/03/16/ztl-a-palermo](http://www.inchiestasicilia.com/2016/03/16/ztl-a-palermo)

\(^{51}\) AMAT Palermo S.p.A [www.amat.pa.it](http://www.amat.pa.it)

\(^{52}\) ZTL traffic zone Palermo [http://palermo.repubblica.it/cronaca/2016/08/20/news/ztl_a_palermo_ecco_come_sara_la_mappa_dei_divieti-146300986](http://palermo.repubblica.it/cronaca/2016/08/20/news/ztl_a_palermo_ecco_come_sara_la_mappa_dei_divieti-146300986)
Bike Sharing in Palermo

After the public consultation took place in 2012 with the use of a Bike Sharing Survey\(^53\) which involved 280 citizens potentially interested in the bike-sharing service, the council of Palermo in 2015 launched a new bike sharing initiative for the city of Palermo called BiciPA\(^54\) (www.bicipa.it) and received 1,407,725.28 euros to deliver the project.

A total of 31 workstations have been installed with a budget of 420 bicycles (400 traditional & 20 electric bicycles) distributed between the centre and the west of the city, making it the third largest bike sharing in Italy. The annual subscription costs 25 euros, weekly pass is 8 euros and a day pass is 5 euros. Furthermore integrated with car sharing it will cost 35 euros a year. As the scheme as just recently launched officially in 2016, data collected yet on its success is limited. Bike sharing service is passing from a start-up phase to a better service. To convince people to use shared mobility, the City Council decided that the first 30min of bike sharing is free. From December 2016, when the service started, 270 people subscribed to the bike sharing service in Palermo and almost 36000 minutes of usage were registered. In total Palermo has now 37 bike sharing stations\(^55\). The number of registered users to bike sharing Palermo has increased to 170 subscribers in 2016 since the service began in December 2015\(^56\).

5 Swot Analysis

Reviewing the findings of the Plan, a SWOT analysis has been developed to identify internal strengths and weaknesses as well the external opportunities and threats for the city Palermo in regards to its ability to sustain a physically-active friendly environment.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• City Council support</td>
<td>• Town layout makes it difficult to make structural adaptations to roads</td>
</tr>
<tr>
<td>• Historical town centre with medieval structural layout with 6 sites listed on the UNESCO World Heritage List within the region</td>
<td>• Safety risks for cyclists and pedestrians in traffic congestion areas</td>
</tr>
<tr>
<td>• Work of NGO’s and associations</td>
<td>• Lack of physical activity programmes at local level for local residents with focus on children and young people</td>
</tr>
<tr>
<td>• Increase in policies and initiatives launched in recent years to reduce pollution and promote active commuting and sustainable transport</td>
<td>• Underdeveloped bike lanes</td>
</tr>
<tr>
<td>• Increase in policies and initiatives to innovate school education and reduce educational challenges through use of sport and physical activity</td>
<td>• Bad parking of cars that disrupt bike lanes</td>
</tr>
<tr>
<td>• New infrastructure supporting active commuting and active lifestyles</td>
<td>• Low implementation of physical activity national requirements within school systems</td>
</tr>
<tr>
<td></td>
<td>• Lack of sports infrastructures in local environment and schools</td>
</tr>
<tr>
<td></td>
<td>• Poor use of facilities in schools for sports and lack of provision for extra-curricular physical activities</td>
</tr>
</tbody>
</table>

\(^53\) Bike Sharing Palermo survey results can be found at: [http://www.siciliabikesharing.it/bikesharingsurvay](http://www.siciliabikesharing.it/bikesharingsurvay)

\(^54\) Bike Sharing Palermo website [www.bicipa.it](http://www.bicipa.it)

\(^55\) [http://www.ilsicilia.it/bicigrossa-nuova-promo-per-il-bike-sharing-in-citta](http://www.ilsicilia.it/bicigrossa-nuova-promo-per-il-bike-sharing-in-citta)

\(^56\) [http://tgs.gds.it/2016/01/03/bike-sharing-boom-di-richieste-a-palermo_457314](http://tgs.gds.it/2016/01/03/bike-sharing-boom-di-richieste-a-palermo_457314)

22
- Strong tourism - increase in the number of tourists visiting Palermo every year and making use of the pedestrian zones – economic value is highlighted
- Lack of green areas, recreational areas and pedestrians dedicated areas
- Little use of public transportation among residents e.g. underused tram network
- Poor promotion among families to increase physical activity levels
- Lack of data

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergence of new regional and local policy for infrastructure supporting active commuting/lifestyles in Palermo</td>
<td>• Lack of overall funding and bureaucracy “red tape” that will hinder the development of new ideas for establishing active environments</td>
</tr>
<tr>
<td>• Local government support for innovative ideas from bottom up</td>
<td>• Local residents don’t access initiatives promoting active commuting e.g. bike sharing</td>
</tr>
<tr>
<td>• Establishing links between the areas of tourism, culture and physical activity</td>
<td>• Lack of support from local residents and businesses for changes within the city that promotes active commuting e.g. demonstrations against ZTL</td>
</tr>
<tr>
<td>• Work of local associations working in the field of sustainable mobility, sustainable energy and physical activity</td>
<td>• Lack of support from Schools as already bombarded with structural changes and little funding</td>
</tr>
<tr>
<td>• Partnership links with other initiatives</td>
<td>• Unable to develop collaboration that is sustainable between public and private associations for developing physically active friendly spaces</td>
</tr>
<tr>
<td>• European funding</td>
<td>• Migration of families out of the city and region</td>
</tr>
<tr>
<td>• Strong argument linking inactivity with poor educational attainment - Statistics on high obesity levels together with high early school leaving among children in Palermo and Sicily</td>
<td></td>
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</tbody>
</table>
6 Action Plan

6.1 Priority for intervention and specific setting

In review of the information presented in regards to infrastructure and policy for the promotion of active environments with a focus on children and young people, the key priority for intervention for the UActivE Action Plan for Palermo will be the school environment.

6.2 Vision

“Palermo – home of active and healthy school communities” (Sede di comunità di scuole attive e salutistiche)

The vision reflects the consensus among the group that the Plan should target children and young people and the school environment. It should promote viable solutions for naturally improving physical activity among children and young people in Palermo with support from the wider school community. This should be implemented whilst tackling challenges and the issues associated with:

- childhood overweight and obesity prevention
- Low share of children and young people walking and cycling as forms of active commuting to travel to school
- infrastructure for the promotion of regular physical activity within the school environment
- development and use of school facilities for increasing physical activity
- physical activity combatting educational challenges such as early school leaving

This vision will be used in all communications and promotional activities ensuring a branded and clear message for the objectives of the Plan.

6.3 Aim and objectives

The overall aim of the UActivE Action Plan is to create a school culture that promotes active lifestyles among children and young people and support the development of school environments that facilitate and increase regular physical activity, reducing inactivity and preventing childhood overweight and obesity.

Objectives:

- To educate children and young people about the benefits of physical activity to contribute to counteracting childhood overweight and obesity and give them the opportunity to participate in the planning and decision making of physical activity in their school environment
- Provide teachers, educators and youth workers with new methods and approaches to increase opportunities for a variety of physical activity throughout the school day
- Enrich the school environment through physical activity which will help to improve academic achievement and make positive impact on the well-being of children, young people and the wider school community
- Advocate policy that will implement effective strategy and infrastructure to increase access to and encourage physical activity for all school children.

Quantified targets have been formulated on p. 28 under Expected Results.
6.4 Target groups and beneficiaries

This intervention will see the following groups targeted:

**Phase 1 Development - Target Groups:**
- 1st – Key decision makers in school education i.e. Principles, school boards and councils, parents and families, civil society organisations
- 2nd – Teachers, educators, youth workers and other professionals within school education
- 3rd – Policy makers in school education and health i.e. local municipalities, education authorities, health planners

**Phase 2 Implementation - Target Groups:**
- 1st – Children and young people (School-aged)
- 2nd – Teachers, educators, youth workers
- 3rd – Stakeholders in the decision making and policy making process within schools/school community i.e. parents, school service providers, local municipalities and education authorities, civil society organisations

**Final Beneficiaries:**
- Children and young people (School-aged) and their families
- School education sector
- Wider school community including general public

6.5 Activities

The Action Plan will see the proposal of two main goals that will meet the Plans vision of ensuring “active and healthy school communities” in Palermo.

- **Urban Trails - Urban trekking from home to school to playground**

The idea was developed from identifying the factors that affect students walking to school, local parks, public playground etc., such as parents and children’s perceptions about their local area, safety, traffic and convenience. The idea also took into account the challenges that a) exists in encouraging parents of school children to use active transport methods (cycle to school, walking to school etc.) and b) adapting tried and tested methods in Palermo to encourage children walking to school e.g. Piedi Bus57 mentioned in chapter 5 which did not become an integrated practice within school policies in Palermo.

Urban Trails will include the following:
- School children as a group would walk and from school and playground areas led by School leaders (teachers, educators and youth workers) who would be “Urban Trail Guides”
- Guides would accompany the children on a particular route to ensure that the children pass various monuments, buildings and interesting cultural landmarks combining physical activity with education ensuring links with studied subjects and greater knowledge of the city
- The walking activity would be discussed in class with the teachers in related class subjects to encourage the children to learn about their city and collaborate with their teachers in planning the walking bus to and from school and playground areas using historical routes.

57 [http://www.piedibus.it/](http://www.piedibus.it/)
The distance from home to school is modelled using an innovative analysis of roads and ‘urban paths’ as part of the children’s educational activities. It is foreseen that a 3km walk return journey from home to school at least twice a week would be implemented (each child walking an additional 6km per week) in the first part of the intervention with the aim of increasing the number of walks to three times a week (each child walking an additional 9km per week).

The idea of encouraging school children to walk to school through Urban Trails also exploits the increase in tourism, the ZTL congestion zone and development of the pedestrian zones in the central area that include the world heritage sites. In particular, the children move on planned routes that will be supervised by municipalities, in which support should be offered to monitor the roads crossed by children. The image below (figure 9) shows an example of the monuments and areas of the city centre where Urban Trails could take place.

A year following the implementation of the Urban trekking from home to school across schools in Palermo, it is foreseen that further activities will be developed and implemented to support active community within school communities. Trekking from home to school using the bicycle will be encouraged among school children and their families as a follow on initiative to ensure sustainability of the Urban Trekking Programme.

Figure 13: Map of Palermo central area with cultural and historical monuments

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Active School Districts

The idea was borne from a) the idea to address overweight and obesity in children b) the need to increase the level of physical activity among children and young people by making use of school recreational facilities after school hours and b) need to improve the facilities offered by school buildings for maintaining a physical active friendly environment within local communities.

The Active School Districts also address the issue that only 64% of school regularly meet the recommended national requirement for physical activity of 2 hours a week and only 60% of schools have a gym or a structure for sport within the school building. Therefore, the goal is to make sustainable school sports structures facilitating physical activity after school hours. Using public and private management schemes to create mixed projects to develop new facilities whilst upgrading and maintaining existing ones and ensuring these are accessible to students. Relating back to the vision, an objective would be for schools to continue providing their students and the local community with the facilities needed to maintain active healthy lifestyles, without incurring many additional costs for this provision and making efficient use of public space and money.

Figure 14: Example map of possible urban trekking routes in Palermo central area
**Active School Districts** will include the following:

- School facilities are open after school opening hours e.g. sports hall, playground, gym, field
- Some of the activities will be structured and facilitated by sports coaches and guides
- Partnerships between schools, agencies and local associations to develop specific activities
- Activities with parents, families and wider school community to raise awareness about the potential use of shared school facilities as an intervention of childhood overweight and obesity and to increase physical activity levels among children and young people

**6.6 Expected Results**

The UActivE Action plan for Palermo will implement a:

- Programme for children and young people to increase their physical activity in and out of school
- Programme for teachers to stimulate physical activity among their students
- Proposals for school leaders to change and innovate infrastructure of school environments

This intervention aims to see at least 25 schools (3.2%) in Palermo from the overall number of 424 primary schools, 167 secondary schools 1st grade, and 184 secondary schools 2nd grade pilot at least one of the two activities increasing to 110 schools (15%) after the completion of the first pilot activities. Specifically for these activities, this will result in:

- An increase in the percentage of schools who regularly meet the recommended national requirement for physical activity of 2 hours a week from activity-promoting changes in the school environment
- An increase in the number of school sports facilities made available for use after school hours for school children in the school area to facilitate physical activity
- The pilot of an after school activity programmes in which at least 1000 school children with support from parents access school sports facilities after school hours
- The pilot of an urban trekking programme in which at least 1000 school children with support from parents to participate in the walking activities

**6.7 Advocacy planning and implementation**

An important part of the UActivE plan for Palermo is advocacy. On the Plan’s key objective is to advocate policy that will implement effective strategy and infrastructure to increase access to and encourage physical activity for all school children. With the information presented, the plan supports activities at local and regional level that will identify opportunities and key messages to gain influence on the agenda in urban active environments at local and regional level. It will adopt a bottoms-up approach to ensure consultation with school communities together with developing partnerships between local authorities, public agencies and private associations in order to promote the Plans identification of problems yet solutions through policy intervention, using the media to get the message across and monitor and evaluate its impact. An advocacy strategy should be implemented working alongside the UActivE plan including the following steps:
6.8 Partners and networks

- Comune di Palermo [https://www.comune.palermo.it](https://www.comune.palermo.it)
- Legambiente Sicilia [www.legambientesicilia.it](http://www.legambientesicilia.it)
- Piedi bus [www.piedibus.it](http://www.piedibus.it)
- Parco della Salute [http://parcodellasalute.it](http://parcodellasalute.it)
- Liceo Scientifico Benedetto Croce [http://www.liceocroce.it](http://www.liceocroce.it)
- FIAB [www.fiab-onlus.it](http://www.fiab-onlus.it) and Bimbimbici [www.bimbimbici.it](http://www.bimbimbici.it)
- Medielettra [http://medielettra.it](http://medielettra.it)
- VERDI Palermo [http://www.verdi.it](http://www.verdi.it)
- Università di Palermo [http://www.unipa.it](http://www.unipa.it)
6.9 Advocating policy using HEAT [www.heatwalkingcycling.org](http://www.heatwalkingcycling.org)

<table>
<thead>
<tr>
<th>Age Distribution (E 2016)</th>
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<tbody>
<tr>
<td>0-9 years</td>
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<tr>
<td>63,780</td>
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</tbody>
</table>

Table 5: Age distribution of the population in Palermo 2016

The adult population in Palermo aged 20-74 years old is approx. 470,000. Although the Action Plans focus is on children and young people, HEAT tool can be used to advocate policy through the communication of key messages concerning the economic value of increasing physical activity levels among the population, with focus on developing infrastructure for the promotion of walking.

If the adult population of Palermo walked for 10 minutes extra every day, it would prevent 81 deaths at a value of €222 million per year

**HEAT estimate**

**Reduced mortality as a result of changes in walking behaviour**

The walking data you have entered corresponds to an average of 10 minutes per person per day. This level of walking provides an estimated protective benefit of 6% (compared to persons not walking regularly)

From the data you have entered, the number of individuals who benefit from this level of walking is: 470,000

Out of this many individuals, the number who would be expected to die if they were not walking regularly would be: 1,762

The number of deaths per year that are prevented by this level of walking is: 81

**Economic value of walking**

*Currency: EUR, rounded to 1000*

| The value of statistical life in your population is: | 3,556,000 |
| The annual benefit of this level of walking, per year, is: | 287,144,000 |
| The total benefits accumulated over 10 years are: | 2,871,445,000 |

When future benefits are discounted by 5% per year:

| the current value of the average annual benefit, averaged across 10 years is: | 221,725,000 |
| the current value of the total benefits accumulated over 10 years is: | 2,217,254,000 |

### Action Plan Goals

**Goal: School Urban Trails Programme - Urban trekking from home to school to playground**

Set clearly defined goals which are realistic and achievable. Break tasks down into steps/tasks. Break down any large steps into smaller components.

<table>
<thead>
<tr>
<th>Action Step</th>
<th>Responsibility</th>
<th>Support</th>
<th>Time Frame</th>
<th>Necessary Resources</th>
<th>Media and communication</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Data on existing and future pedestrian routes in development in Palermo</td>
<td>Mobility department of Palermo City Council</td>
<td>Palermo City Council</td>
<td>End 2017</td>
<td>Access to data, support from Urban mobility planners from Palermo City Council</td>
<td>Internal communication with City Council officers</td>
</tr>
<tr>
<td>2.</td>
<td>Data on Cultural monuments and world heritage sites in the vicinity of the pedestrian routes</td>
<td>Tourism department of Palermo City Council</td>
<td>Palermo City Council, Working Group members</td>
<td>End 2017</td>
<td>Access to data, support from Tourism Officers from Palermo City Council</td>
<td>Internal communication with City Council officers, Working Group</td>
</tr>
<tr>
<td>3.</td>
<td>Study possible pedestrian routes to schools including historical monuments and world heritage site, measuring distance from homes to school and playground areas</td>
<td>School Principles, Deans and Teachers, Department of education in Sicily, Mobility department of Palermo City Council, Parents, Project Managers and Youth Workers from NGOs and local youth associations</td>
<td></td>
<td>Mid 2018 (3 months to analyse possible pedestrian routes to school and level of interest from parents and school children)</td>
<td>The pilot schools, collected data from City Council, questionnaire/survey tool</td>
<td>Communication with Department of education in Sicily, School Principles, Deans, Teachers; participation in school governance meetings to present the idea to teachers and parents; questionnaire/survey distributed to the pilot schools to assess the interest on a larger scale of how many parents are</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Stakeholders</td>
<td>Expected End Date</td>
<td>Activities</td>
<td>Funding</td>
<td>Outcome</td>
</tr>
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<tr>
<td>4.</td>
<td>Development of the School Urban Trails Programme a) planning the walks of 3km return distance to and from home to school and playground areas of pupils, the most safest route and timings for each one</td>
<td>School Principles, Deans and Teachers, Department of education in Sicily and parents of school children</td>
<td>End 2018 (3-5 months to plan the specific trails for the programme)</td>
<td>Answers from the questionnaire/survey, workshop, funding to deliver workshops; funding to ensure safety of routes and for any developments or improvements to be made, recruitment of the Urban Trail Guides (volunteers expenses), safety handbook</td>
<td>Department of education in Sicily; Internal communication in schools; student consultation workshops; communication across regional schools networks; public awareness campaign - press releases, articles, news coverage online print and TV on Urban Trails Programme launch</td>
<td>At least 12 schools signed up to the programme. 4 routes developed for 4 districts/zones. Number of school children registered on each route, % increase in the number of children overall walking to school and playground areas using the School Urban Trails Programme.</td>
</tr>
<tr>
<td>5.</td>
<td>Development of the School Urban Trails Programme b) the activities in the classroom between teachers and students</td>
<td>School Principles, Deans and Teachers, Department of education in Sicily</td>
<td>NGOs local youth organisations, Students who can work with teachers to suggest activities</td>
<td>End 2018 (3-5 months to plan the specific activities in the classroom)</td>
<td>Small funding of 250 euro per school to pay for additional materials for delivery of the classroom activities e.g. workshop materials, 500 euros per school for printing of customised maps &amp; safety handbook, 200 euro per school for the purchase of a bicycle as a prize to the student who performs the best in the classroom activities</td>
<td>Department of education in Sicily; Internal communication in schools; student consultation workshops; communication across regional schools networks; public awareness campaign - press releases, articles, news coverage online print and TV, on Urban Trails Programme launch</td>
</tr>
<tr>
<td>Identification of next phase of project activities for School Urban Trails Programme - cycling trekking from home to school and playground areas</td>
<td>Mobility department of Palermo City Council, Parents, Project Managers and Youth Workers from NGOs and local youth associations</td>
<td>Mobility department of Palermo City Council, Parents, Project Managers and Youth Workers from NGOs and local youth associations</td>
<td>end 2019 (3-5 months and after implementation of the first walking programme to plan the specific cycling trails)</td>
<td>3000 euros funding to pay towards bicycles and cycling equipment for the overall programme, development, 1500 euros for printing of customised maps for cycling routes and safety handbooks.</td>
<td>Department of education in Sicily; Internal communication in schools; student consultation workshops; communication across regional schools networks; public awareness campaign - press releases, articles, news coverage online print and TV on Urban Trails Programme launch</td>
<td>At least 24 schools signed up to the programme. 4 cycling routes developed for 4 districts/zones. Number of school children registered on each route % increase in the number of children overall cycling to school and playground areas using the School Urban Trails Programme</td>
</tr>
</tbody>
</table>

**Progress notes:**

The people and associations responsible for reporting and overall evaluation of the programmes in the schools are foreseen to be School leaders, teachers, parents of the school children in collaboration with educational and sports associations and Staff in mobility department at the Palermo City Council. Students from the different schools will also play a key role in developing and championing the adoption of the Urban Trails Programme in their schools through student led activities to study and plan possible pedestrian and cycle routes from their home to school including historical monuments and world heritage sites. We advise that a steering group with these key members is set up in the initial stage and maintained throughout in order to share responsibility for monitoring the implementation and progress of the goals, delivering key activities as well as ensuring sustainability after the project ends.
### Goal: Active School Districts
Set clearly defined goals which are realistic and achievable. Break tasks down into steps/tasks. Break down any large steps into smaller components.

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<tbody>
<tr>
<td>1.</td>
<td>Data on existing school sports facilities in Palermo accessible and non-accessible after opening school hours</td>
<td>Department of education in Sicily</td>
<td>Palermo City Council, regional school networks</td>
<td>End 2017</td>
<td>Access to data, support from regional school networks and Palermo City Council</td>
<td>Internal communication with Education Department in Sicily and schools network</td>
</tr>
<tr>
<td>2.</td>
<td>Valuate with feasibility study the schools that can implement the Active School District and their current facilities for physical activity</td>
<td>School Principles and Deans, Department of education in Sicily</td>
<td>Palermo City Council, teachers and sport associations, Architects from Working Group</td>
<td>End 2018 (12 months to survey sports facilities available for after school opening hours)</td>
<td>The pilot schools, collected data from schools network, survey tool</td>
<td>Communication with Department of education in Sicily, School Principles, Deans, Teachers; participation in school governance meetings to present the idea to the school teachers and parents; survey among schools to find out a) type of school facilities and physical activities implemented b) availability after school opening hours c) how many schools are willing to become an Active District and which areas</td>
</tr>
</tbody>
</table>
### Development of Active Districts with the identified schools

| School Principles and Deans, Department of education in Sicily | Palermo City Council, teachers and sport associations, Architects from Working Group, private sports agencies | End 2018 (12 months develop the Active Districts) | Answers from the feasibility study and school survey, assessment of what funding is needed for improvements of facilities, identification of Sports coaches and Guides | Public consultation workshops with parents and school children, meetings with public and private agencies; public awareness campaign - press releases, articles, news coverage online print and TV Active Districts launch | At least 10 schools signed up to take part in the Active School Districts from 4 main areas in Palermo to the programme, number of parents and children who confirmed participation in the programme. |

### Development of specific activity programme to Support the Active Districts

| NGOs, teachers and sport associations, private sports agencies | NGOs local sports associations, parents and students who can work with teachers, Sports coaches and Guides to suggest activities | Mid 2019 (6 months to develop an activity programme) | Funding of 7500 euro to pay for additional sports equipment if needed for the activities e.g. footballs, gym mats, equipment etc, identification of Sports coaches & Guides to lead activities. 3000 euros in staff costs for Sports Coaches & Guides | Public consultation workshops with parents and school children, meetings with public and private agencies to plan and develop the activities; public awareness campaign - press releases, articles, news coverage online print and TV Active Districts launch | Activity programme to take forward to the 10 schools from 4 areas |

### Progress notes:

The people and associations responsible for reporting and overall evaluation of the programmes in the schools are foreseen to be School leaders, teachers, parents of the school children in collaboration with educational and sports associations and Staff in mobility department at the Palermo City Council. We advise that a steering group with these key members is set up in the initial stage and maintained throughout in order to share responsibility for monitoring the implementation and progress of the goals, delivering key activities as well as ensuring sustainability after the project ends.