Supporting mobility across European cities through physically active-friendly urban environments

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Keywords

Action Plan; Active transport; physical activity; policy intervention; UActivE; urban active environments.

Abstract

Active transport i.e. cycling or walking as well as using public transport for everyday journeys is an effective approach with multiple social and environmental benefits for transforming urban environments into active urban environments. Although cycling and walking often remain on the margins of transport planning and infrastructure, there are new approaches emerging along with policies relevant to the creation of urban environments conducive to active travel.

Interventions and policies for developing physically active-friendly environments across towns and cities in Europe are central to facilitating the promotion of physical activity and sustainable transport among the local population. A 3-year Erasmus+ project called SPAcE (Supporting Policy and action for Active Environments) involves local government partners and an NGO developing policies and interventions to promote physically active-friendly environments in five European towns/cities: Latvia [Tukums], Italy [Palermo], Romania [Brasov], Spain [Toledo] and Greece [Trikala]. The project has focused on cities with recorded low physical activity levels.

5 working groups across these towns/cities have started co-production to develop Urban Active Environments (UActivE) Action Plans aimed at influencing policy and practice for active transport programmes promoting the use of cycling and walking. Action plans are based on international guidance for healthy urban planning as remaining project partners include universities and an NGO who have provided support, advice and mentoring. Cooperation and co-production with public health professionals, local government officers, education authorities and transport agencies is a key approach to the project.

Creating sustainable active urban environments is a key to healthier, cleaner, and economically successful cities. This goal can be reached by increased carbon-free forms of transportation such as walking and cycling. The SPAcE project aims to capture both the challenges and solutions for the development of active transport in urban spaces translating evidence into policy and practice and ensuring innovation at the policy level.

1. Supporting policy and action for active environments

Urban environments are central to facilitating physical activity for public health and promoting multiple social and environmental benefits. In supporting the development of urban environments and the integration of active transport programmes incorporating walking and cycling into public policy across Europe, the 3-year Erasmus+ project SPAcE has brought together a diverse mix of local government, non-profit and academic partners to develop and test approaches to increase the physical activity level of diverse communities (physical and social environments), and to support and encourage social inclusion through more active participation, policy intervention, and dialogue.
Launched in January 2015, SPAcE aims to develop policies and interventions across five European cities in the form of an Action Plan (an Urban Environment Action Plan [UActivE]) to promote physical activity-friendly environments and to learn from policy and best practice implemented across the different European cities.

In redesigning urban environments for active transport, project partners have adopted the following definition of ‘active environments’:

“physical or social environments that provide positive encouragement in helping people to be physically active, and to make the active choice.”

The 5 specific sites led by the local government and nonprofit organizations include Tukums (Latvia), Palermo (Italy), Brasov (Romania), Castilla-La Mancha (Spain) and Trikala (Greece). The remaining project partners include higher education institutions (Gloucestershire, Oxford, Zurich, Thessaly) and non-profit government-funded organization (Fit for Life national physical activity promotion program Finland) who each provide specialist support and advice in the development of the UActivE Action Plan incorporating current evidence, healthy urban planning and mentoring.

To summarise, 10 institutions from 8 European countries make up the SPAcE consortium which is comprised of:

- University of Gloucestershire (UK – Coordinator),
- University of Oxford (UK),
- University of Thessaly (Greece),
- University of Zurich (Switzerland),
- Fit for Life Program, LIKES Foundation for Sport and Health Science (Finland),
- Castilla La Mancha Regional Government of Education (Spain),
- Tukums Municipality (Latvia),
- Brasov Metropolitan Agency (Romania),
- CESIE (Italy),
- The Municipality of Trikala (Greece).

They are in line with numerous other World Health Organisation (WHO), EU and national policy documents that support the use of an integrated approach to intervention design, development and implementation such as the EU White Paper: A Strategy for Europe on Nutrition, Overweight and Obesity; EU White Paper; Promoting Healthy Diets and Physical Activity; EU Workplan for Sport 2011-2014. The project also exchanges with relevant WHO activities and networks, HEPA Europe, and national and regional governments of the partner countries in order to support the activities across the partner countries and to support the sustainability of the methodology and key findings into policy across Europe to encourage local communities to take part in physical activity as part of their everyday life.

This paper will present the methodology and the main results achieved during the SPAcE project to support the facilitation of physical activity-friendly urban environments through the development of UActivE. It will review the effective multi-layered approaches in combining research and practice from challenges and solutions sought to develop and integrate policy and intervention into action at a local level in order to transform urban environments. The 5 UActivE Action Plans presented, each one diverse in specific goals and intervention priorities will demonstrate the different strategies, tools and policy approach to promote active transport in European cities and towns. The complexities of the different environments presented and planning through co-production and collaboration at different levels of public policy and community participation, reviewing both physical and social environments will be discussed. Conclusions will be drawn from the lessons learned from the final results and through the tested model for creating sustainable urban active environments. Furthermore, future directions for collaborative research and practice in the field of UActivE will be presented.

2. The UActivE concept in promoting physical activity in social and built environments

UActivE has been designed to help organizations and the local population increase physical activity of the involved communities and support and encourage social inclusion through more active participation in their local environment. Evidence-based local policy intervention strategies have been brought to the forefront in new approaches relevant to the diversity of the cities involved and stimulated enhanced participation in physical activity through the promotion across local communities and at the policy level of the concept of UActivE.
methodology adopted for developing and implementing UActivE can help to develop a change in culture across the population where physical activity and an active lifestyle becomes both the easier and the preferred choice.

The concept of UActivE has been defined in the following characteristics:

- UActivE Action Plan which is defined as a model for developing an urban Active Environment is a co-produced comprehensive plan which includes a vision for the future. The plan aims to achieve that vision. It details actions and specific goals for a specific setting and/or population groups, for example, children/schools, urban town center/community.

The review of both the built environment and social environment is central to the Action Plan and its implementation. Built environments can include a town center with reduced car access, cycling/pedestrian infrastructure, parks and green spaces, free outdoor exercise equipment, school playgrounds, etc. Social environments can include policies at local or national government level that actively prioritize physical activity including walking and cycling campaigns, social media that actively promotes physical activity.

3. Co-production approach for the development of UActivE

Co-production is one of the main parts of the project’s methodology and it has been central to the development of the UActivE Action Plan. Firstly through the collaboration among 10 organizations across 8 different countries, the project has brought together partners in implementation sites who have identified their own community needs and aim to have a more active urban environment. Through the diverse activities of the project, all partners have worked together to implement Action Plans in the five sites and develop tangible outputs as a result. Partners not identified as intervention sites are however either experienced in policy development and implementation, have a relevant specific academic subject specialist, and/or have a practical application of such projects, and have ensured the co-production within the project. The project adopts the Diffusion of Innovation (DOI) Theory (Rogers, 1962) whereby knowledge, expertise, drive, determination, and place are shared and contribute collectively to the development of the finished product.

In detail, a multi-agency and transnational approach has formed the development of the UActivE Action Plans in Tukums led by Tukums Municipality (Latvia), Palermo by CESIE (Italy), Brasov led by Brasov Metropolitan Agency (Romania), Castilla-La Mancha led by Castilla La Mancha Regional Government of Education (Spain), and Trikala led by the Municipality of Trikala (Greece). These 5 partners have been supported in their Action Plan development by experienced academics, policymakers, and practitioners of the partner countries. The University of Gloucestershire and University of Oxford (UK), University of Zurich (Switzerland) Fit for Life Program (Finland) and University of

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Thessaly (Greece) have each provide specific support to each site. Support has offered expert input and review of the Plans development process and finalization and importantly in assessing their economic value and impact to the environments in focus. During this process, partners have raised awareness across key representatives and stakeholders of the importance of health-enhancing physical activity through promoting active transport programmes within the urban environment.

It is import to review how the UActivE Action Plans have been developed across the 5 cities. Their development took between 12 and 18 months and a specific six-step process was adopted which included:

- Evidence review: sharing of current good (evidenced-based) practice of the implementation and promotion of an Urban Active Environment (UActivE) to increase population level (community) physical activity levels;

- Consultation and co-production: establishment of stakeholder working groups in the five EU member states to co-develop the UActivE Action Plans with a focus on creating environments to support physical activity to foster a more physically active environment;

- Example action plans and template for UActivE plan: to support the member states to develop and embed the UActivE Action Plan into policy/practice in each designated city/town;

- Expert input and review: to support Member states in developing competencies in the assessment of the value of the UActivE Action Plan through training in the use of the Health Economic Assessment Tool (HEAT).

- Endorsement: adoption by local government or municipalities and ensuring support from elected members of the communities involved in the Plans development.

- Implementation and evaluation: co-implementation with stakeholder groups, evaluation of progress and implementation, together with ensuring visibility of results

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3.1 Environments for physical activity in Europe: A review of Evidence and Examples of Practice

The development of tangible outputs which are central to support the development and sustainability of the Action Plans have ensured a review of research, practice, and lessons learned from the Plans development. The aim of the Summary of Evidence and Good Practice report was to provide an explanation of how an Active Environment Action Plan can be developed, drawing on the good practice and learning from the SPAce project. It includes an explanation of how to develop an Action Plan, what it needs to include and summary examples of five action plans from the SPAce implementation sites.

In the development of UActivE, the partnership has carried out an extensive scoping exercise of evidence and good practices across all partner countries. Firstly through research carried out in their respective countries on different case studies which demonstrate examples of urban active environments and specific challenges that have been overcome. Scientific evidence on the influence of the environment on physical activity was identified as relevant and realistic good practice examples. Three examples per partner were characterized in detail to serve as knowledge pool for the development of the individual UActivE Action Plans. Secondly through a large scale event - Learning and Sharing of Good Practice Symposium and Workshop took place in Palermo (Italy) in October 2015 to facilitate the sharing of practice, experience and knowledge across partners and workshop on UActivE Action Plans and case studies selected.

As a result of the evidence collected, the partnership produced the EU UActivE Summary of Evidence and Good Practice document led by The University of Oxford.

3.2 Collaborative working to develop UActivE

Working Groups have been established in each of the 5 sites which were made of key professionals in the field of policy, regional government, transport planning and development, sustainable mobility, health officials and local community beneficiaries. Working Groups led the process of the Plans development together with partners to ensure their relevance to policy and community needs. Collaboration with the working groups took place through meetings, action planning events, and community consultation. It is worth noting that the strategic partners and organizations which formed the working groups have been crucial in ensuring the Action Plans relevance and sustainability.

4. UActivE Action Plans across European cities and towns

The main results have been the development of the 5 UActivE Action Plans with specific visions, goals, and outcomes:

4.1 Tukums

The town of Tukums in Western Latvia has around 19,000 inhabitants in the central area and 10 rural municipalities. The town has good infrastructure for sport and activity: 9 sports grounds; 9 sports gymnasiums; 11.3km of bicycle lanes; and 2 parks. In 2014, Tukums Municipality became a member of Latvian Healthy Cities Network. It gave a lot of possibilities to communicate more with inhabitants about healthy lifestyle, to promote preventive measures, to support healthy aging, to cooperate with other municipalities in this field, to get political support for solving public health problems in the municipality.
<table>
<thead>
<tr>
<th>Action Plan Case study</th>
<th>Vision</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Tukums, Latvia</td>
<td>In motion in Tukums!</td>
<td><strong>Goal 1: Develop the infrastructure for safe pedestrian flow in the town</strong></td>
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<td></td>
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<td>- Identifying the pedestrian flow in the town, 2017</td>
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<td>- Develop the plan of infrastructure for safe pedestrian flow, 2017</td>
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<td>- Create the infrastructure for safe pedestrian flow, 2018</td>
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<td><strong>Goal 2: Develop the infrastructure for safe cycling in the town</strong></td>
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<td>- Pupils’ involvement in designing of the bicycle routes, 2017</td>
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<td>- Route development in line with the designed ideas and existing bicycle lines</td>
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<td>- Create the bicycle infrastructure in line with the designed plan, 2020</td>
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<td>- Design the standardized bicycle parking spot, 2018</td>
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<td>- Location of safe bicycle parking spots, 2020</td>
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<td>- Involvement of enterprises in the location of safe bicycle parking spots, 2020</td>
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<td><strong>Goal 3: Development of recreation areas</strong></td>
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<td>- Inhabitants involvement in designing of the recreation areas and recreation</td>
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<td>and sports routes, 2017</td>
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<td></td>
<td>- Development of routes to link the recreation territories (for walking,</td>
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<td>Nordic walking, running, bicycling))2018</td>
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<td></td>
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<td>- Marking of the developed route map, 2018</td>
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<td></td>
<td>- Organizing joint work sessions to facilitate the lakes involving</td>
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<td>entrepreneurs, associations, and population, 2017</td>
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<td>**Goal 4: Improvement of the information available on sports and recreational</td>
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<td></td>
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<td>infrastructure**</td>
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<td></td>
<td>- Improve the access to the information on sports infrastructure, 2017</td>
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<td>- Locating the stands for runners and Nordic walkers with information on</td>
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<td>proper warming-up, the performance of exercises and warming-down in the</td>
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<td>identified recreation areas, 2018</td>
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<td><strong>Goal 5: Promotion of health contributing activities</strong></td>
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<td></td>
<td></td>
<td>- The announcement of initiatives for proactive people.(2018)</td>
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<td>- Addressing the state-level competition organizers on organizing certain</td>
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<td>- Development of routes to link the recreation territories (for walking,</td>
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<td></td>
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<td>Nordic walking, running, bicycling)(2018)</td>
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<td>- Promotion and development of traditional events in the municipality like</td>
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<td>Family day, Heath and Sports Festival, Mobility week (2018)</td>
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<td>- To include different pupil-attractive sports activities in sports lessons,</td>
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<td>including swimming, skating, etc. (2017)</td>
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<td>- Organising activity promoting day camps for children.(2017)</td>
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5.2 Palermo

Palermo is the capital of the Sicilian region of Italy and the Province of Palermo. It is located in the northwest of the island of Sicily, and is the 5th most populated city in Italy, with an urban area of 855,285 inhabitants. Although Palermo has many beautiful tourist attractions, it also has problems. The development and facilitation of active environments are hindered due to lack of green spaces and parks. 60% of Palermitans are dissatisfied with the lack of green spaces. The action plan and its development have been facilitated by CESIE.

Table 2 – Summary of the UActivE Action Plan realized in Palermo, Italy

<table>
<thead>
<tr>
<th>Action Plan Case study</th>
<th>Vision</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Palermo, Italy</td>
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<td>Goal 1: Urban Trails - Urban trekking from home to school</td>
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<td>School children as a group walk from home to school led by school leaders (teachers, educators, and youth workers) who would be “Urban Trail Guides”. Children collaborate with their teachers in planning the walking bus using historical routes.</td>
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<td>- 4 routes identified &amp; designed and classroom activities to be developed for the identified routes</td>
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<td>- 12 schools signed up to the Urban Trails programme</td>
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<td>- At least 1000 school children with support from parents to participate in the walking activities</td>
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<td>Goal 2: Active School Districts</td>
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<td>- Increase in the number of school sports facilities made available for use after school hours for school children to facilitate physical activity.</td>
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<td>- Develop partnerships between schools, agencies and local associations to develop specific activities</td>
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<td>- Activities. with parents, families and wider school community to raise awareness about the potential use of shared school facilities.</td>
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<td>- At least 10 schools signed up to take part in the Active School Districts from 4 main areas in Palermo.</td>
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<td>- Set up of after-school activity programmes in which at least 1000 school children with support from parents access to school sports facilities after school hours</td>
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</tbody>
</table>
Figure 2 – Palermo’s urban trekking route “from home to school”.

5.3 Brasov

The City of Brasov, is a medium-sized city in the center of Romania, with around 290,000 inhabitants. It is in a mountainous area, but the city itself is relatively flat, allowing for easy cycling in most areas of the city. Cycling is increasing in the city, especially among the young, despite the significant barrier of the cold weather during the 3-5 winter months each year. The municipality is investing in cycle lanes across the city: there are approx. 30 km of cycling lanes in the city of Brasov, both dedicated as well as shared space. There are also plans to include cycle lanes as part of any new road construction or maintenance. Brasov’s first Sustainable Urban Mobility Plan includes a focus on active mobility (walking & cycling) and will include distinct measures to switch from car use to walking and/or cycling. The action plan and its development have been facilitated by Brasov Municipality Agency.

<table>
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<tr>
<th>Action Plan Case study</th>
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<th>Characteristics</th>
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<tbody>
<tr>
<td>Brasov, Romania</td>
<td>Brasov - the city where cycling is a way of life</td>
<td><strong>Goal 1</strong>: The creation of the urban planning of the setting of cycle lanes and related facilities.</td>
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<td>- The evaluation of the current cycle lanes network and related facilities (lengths, areas, safety degree offered, quality of infrastructure, parking, rental centers etc.)</td>
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<td>- The development of a study on cyclists’ number</td>
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<td>- The financial and technical analysis possibilities regarding the extension of the cycle lanes network and related facilities; using HEAT for selecting investments with the greatest impact</td>
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<td>- The selection of the projects for the extension and improvement of the cycle lanes network (prioritization and identification of the funding sources)</td>
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<td><strong>Goal 2</strong>: The extension of the bike paths network (and related infrastructure) by 2023</td>
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<td><strong>Goal 3</strong>: The creation of recreational facilities for bicycle users.</td>
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<td>- Elaborating the design themes to carry out the technical and economic documentation (feasibility studies)</td>
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<td>- The launch of the tenders documentation (including the application form - if the investment is based on the Structural Funds)</td>
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</table>
- Receiving the technical and economic documentation and the submission of the application form (if the investment is made through Structural Funds)
- Contracting the necessary funds for the investment (if the investment is made through Structural Funds)
- The launch of the tender for the investment
- Projects implementation

Goal 4: Promoting the bicycle for transportation and recreational purposes among residents.

- Raising awareness of the public authorities on the importance/need for cycle lanes by involving the citizens
  - Policy on bicycle
  - Family on bicycle Day
  - Competition of ideas for urban projects, bike trails and related facilities
    "Brasov - the bike-friendly city"

Information and communication activities
- Information/awareness materials oriented towards the population
- Communication through classical media: press conferences, press releases, appearances and interviews, print, radio/TV
- Outdoor communication
- Online communication: web, social media, blog

Civic participation activities
- Public consultations through online questionnaires
- Organising Critical Mass
- Organizing regular information actions with the traffic police on the traffic laws and rules for cyclists
- Annual intra-school competition "Biking safely"
- Women bikers Parade
- Brasov cultural cycling
- Establishing partnerships with different HORECA stakeholders in Brasov to offer bike parking infrastructure

Figure 3 – Brasov’s bike lane network.

5.4 Castilla-La Mancha

Toledo is a municipality and a city in Spain. Toledo is the capital of the Castilla-La Mancha autonomic community. It has 83226 citizens and it is the second most populated municipality in the province, and the forth of the autonomic community. The old town is the center of the city and the area most touristic. However, in this
area resides only less than 14% of the total population. Santa María de Benquerencia neighborhood is the most populated area of the municipality and, it is located 8 km away from the old town. It is characterized by a duality of an industrial and residential area, and it has grown a lot during the last years. The action plan and its development have been facilitated by Castilla La Mancha Regional Government of Education.

Table 4 – Summary of the UActivE Action Plan realized in Castilla la Mancha, Spain

<table>
<thead>
<tr>
<th>Action Plan Case study</th>
<th>Vision</th>
<th>Characteristics</th>
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</table>
| Castilla La Mancha, Spain | Active mobility will become an easy, sustainable and popular alternative in Toledo, for an efficient, safe and healthy daily transportation. | **Goal 1**: To improve roads and equipment needed for a better connection, on foot or by bike, from Santa Mª de Benquerencia to the old town.  
- To improve pedestrian routes  
- To create a cyclist route from Santa Mª de Benquerencia to the old town  
- To install bicycle parking in all the different activity centers  
- To design a specific mobility plan for the industrial polygon  

**Goal 2**: To implement projects of Active mobility – walking to school programmes in the schools from both neighborhoods.  
- Dynamisation and economic support to schools which implement Active Mobility programmes – a safe way to school  
- Security in opening and closing school times (Municipal police)  
- Signposting of routes and center environment  

**Goal 3**: To promote participatory and social dynamics that support and encourage active mobility.  
- To revise the actual plan  
- To develop workshops with sports clubs within the neighborhood  
- To develop workshops with neighboring associations  

**Goal 4**: Increase awareness and educate the population and social agents.  
- Communication campaign  
- Basic courses for active mobility  
- To disseminate the project within the autonomic community. |

Figure 4 – Cyclist routes from Toledo to Santa María de Benquerencia neighborhood.

5.5 Trikala

The city of Trikala is located in central Greece. It is one of the oldest cities in Greece. Trikala lies at the very same location of the ancient city of Trikky or Trikkai, home of the legendary founder of the modern medical practice, Asclepius. The city of Trikala is the capital of the Prefecture of Trikala, which is one of the four prefectures of the
Region of Thessaly. The Municipality of Trikala consists of the city of Trikala and another 39 small settlements. It covers a total area of 608.48 square kilometers. The city of Trikala constitutes the urban center of a predominantly agricultural and stockbreeding area. The main financial, cultural, leisure, sport and other activities of the of the Prefecture are concentrated here. The action plan and its development have been facilitated by The Municipality of Trikala with support from the University of Thessaly.

Table 5 – Summary of the UActivE Action Plan realized in Trikala, Greece

<table>
<thead>
<tr>
<th>Action Plan Case study</th>
<th>Vision</th>
<th>Characteristics</th>
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</thead>
</table>
| Trikala, Greece        | Eliminate all car-use from the extended city center converting all current roads to pedestrian and introducing cycling lanes. | **Goal 1: Improvement and extension of the current cycling paths network.**  
- Survey on cyclists to include HEAT related data.  
- The launch of the ring cycle lane in the city center.  
- Recording on use of current cycle lanes (no of cyclists/per week).  
- Production and distribution of a City Map marking Cycling and Walking Paths.  
- Digital Application for Cycling and Walking.  
- Promotional Campaign for cycling targeting women.  
- Study on cyclist’s perceptions and recording a cycling lanes use.  
- Launch event of the Action Plan & Results of 2 HEAT studies in the context of SPACE.  
- Technical Study for the improvement and extension of current cycling lanes based on current SPACE document.  
- Public consultation and review of the technical study.  
- Implementation: the improvement and extension of current cycling lanes.  |

**Goal 2: Improvement and extension of the current pedestrian streets network.**  
- Technical study for the development of school footpath for student’s walking  
- Technical Study for the improvement and extension of current pedestrian streets based on current SPACE document.  
- Public consultation and review of the technical study.  
- Projects implementation.  

Figure 5 – Bike lanes in Trikala center.
5. A review of the effective approaches for transforming urban environments into active urban environments

Informed by evidence (Good Practice Document), there is a clear argument to show that aspects of the environment that can promote physical activity such as walking and cycling should be emphasized. Alongside this, results show there is justification for supportive policies that influence a supportive environment. The examples of practice and the methodology adopted by SPAcE, have demonstrated that across Europe there is a great effort being put into developing and implementing policies that help to shift the emphasis in towns and cities away from the private car and towards walking and cycling and public transport. The diversity of policy approaches from the case studies demonstrates that there is no ‘one size fits all’ and that local priorities need to be uppermost when deciding on the range of interventions to be applied at local level.

The results from UActivE following a 6 step process has demonstrated how the environment (built and social) through different mobility approaches can promote the development of physical active-friendly urban environments across European cities and towns. Multi-agency, transnational collaboration has produced real-life UActivE Action Plans within five countries in Europe, based on published evidence, real-life experience, consultation and collaborative working with other organizations and communities across the EU. In following the recommendations from the EU Guidelines for PA and also in the GAPA document (2008), SPAcE demonstrates effective shared learning and co-production in Action Plan development to promote and develop urban active environments. Evidently, the various approaches, goals, and characteristics presented through each Action Plan adopted to ensure its relevance at the local level.

6. Conclusions

A clear need for active transport to facilitate physical activity in urban environments has been identified developing the Space project. There is already policy and practice in the area of creating Active Urban Environments (see, for example, WHO Developing national action plans on transport, health and environment, 2014, and some excellent examples of good practice of infrastructure projects (more detail provided in E.3)), but much of the implementation is not consistent. Although some good practice exists, the reality is that many towns and cities across the EU do not have the resources to implement many of the suggested policies and practices or access to the required expertise. The SPAcE project addresses this economic challenge by combining academic, policy and practice experienced partners with partners who have identified their own need to develop a more enhanced active urban environment. The project focuses on transferring EU and national policies into local Action Plans and implementation, resulting in guidance documents and a media resource to support the sustainability of ‘how to do it’ beyond the lifetime of the project.

The examples of practice document which was a catalyst for the Action Plans development, show vast diversity in approaches to promoting physical activity through modifications to different social, natural and built environments. While some cities choose to tackle the challenge of road transport, others promoted physical activity through sport and recreation. However, the examples of practice also demonstrate some of the problems and challenges that need to be overcome to create active environments.

The Action Plans are a reflection of the different environments and approaches which although have similar overall objectives, show the needs in their own local environments for change and have successfully translated these needs to key goals that can be implemented within policy and intervention strategies. For enhancing, promoting and redesigning active travel programmes in urban environments, these Plans can be used as key examples of how co-production can support the transformation of cities for e.g. mobility infrastructure to develop bike and pedestrian paths for residents, facilitating physical activity within the school environment to address childhood overweight and obesity. Importantly, results have provided some lessons learned from the process of the UActivE Action Plan development in order to support other cities and regions to develop a UActivE. Lessons learned from results include:

- The process of critical review of the draft plans was helpful in developing the Plan.
- Convening a working group of local stakeholders to develop the UActiveE Action Plan and where possible, co-produced the Plan. Whilst this process of consultation and engagement was familiar to most of the case study sites, the development of a detailed Action Plan focussing on the active environment was a new experience.
- The constitution of the steering group was critical: in many sites, it was easy to find interested parties (e.g. cycling groups) but harder to convince influential politicians or decision-makers to become involved.
- Money is a critical barrier: while some sites produced ambitious plans, they worry they may not be funded.
Cycling seemed to be a more prominent focus compared to walking, perhaps because the infrastructure is more distinct and the advocacy groups more visible.

Next steps will include the review of the Action Plans priorities, dialogue for policy intervention and advocacy in assessing the economic value of the plans in reference to the Health Economic Assessment Tool (HEAT). Expert input and review which have been supporting partners to developing competencies in the assessment of value of the UActivE Action Plan through training in the use of HEAT and at the end of the project inform policy through specific key messages and evidence-based results to demonstrate the potential economic value of each Action Plan and its impact on the urban environment. Further outputs will include a Guidance document ‘How to Create and Evaluate an UActivE’ including case studies from project partners and: ‘How to’ guidance on measuring value of an UActivE to ensure practice and lessons learnt from the Plans development will be available at EU level to a wide range of interested stakeholders informing policy and action. How can we collaborate further to address challenges and develop solutions in promoting physical activity through active transport?

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