



ANNEX

TO THE GUIDELINES FOR DEVELOPING AND IMPLEMENTING
A SUSTAINABLE URBAN MOBILITY PLAN (2nd Edition)





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Annex C – Good Practice examples

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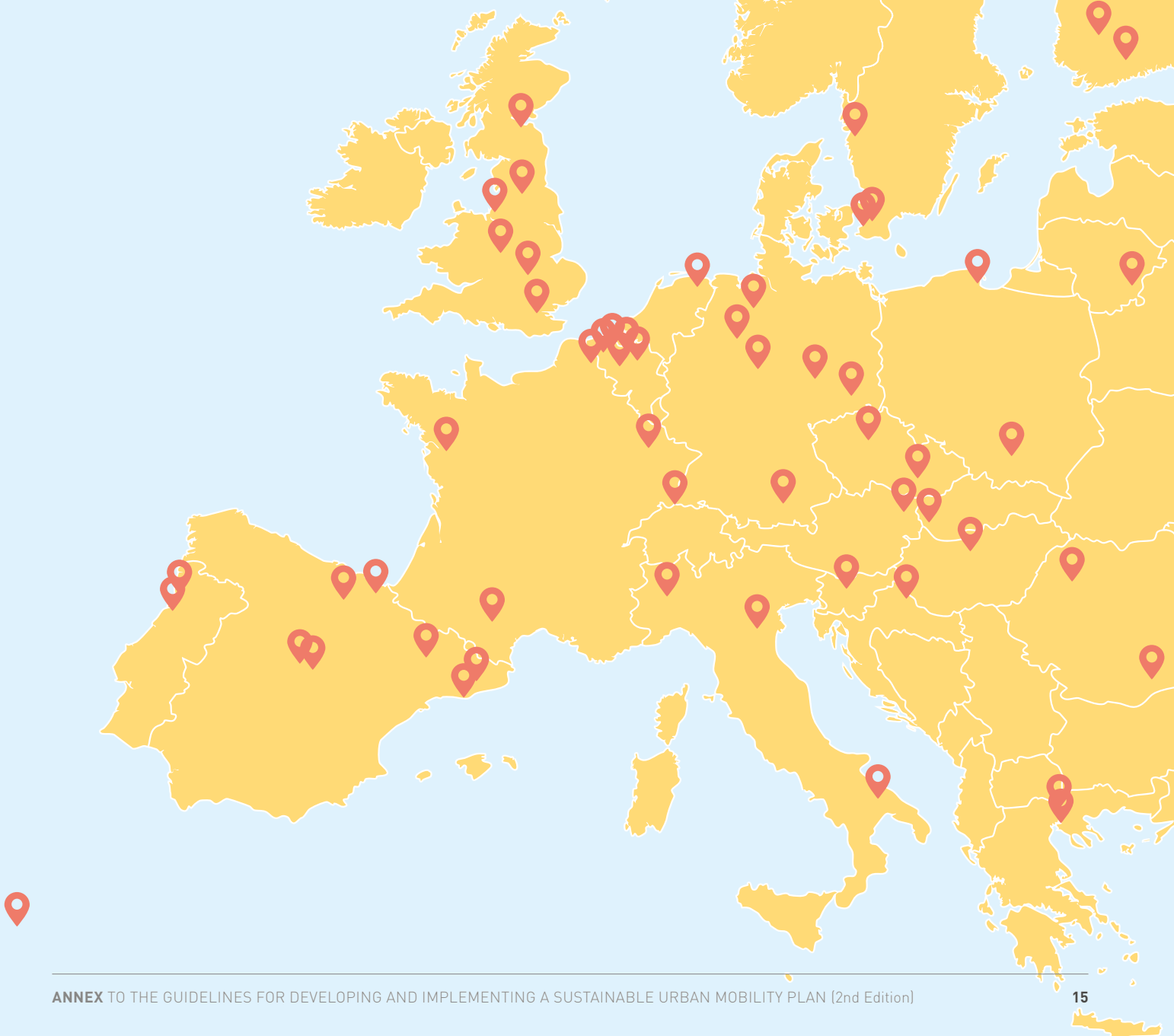
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Learning from others – 63 Good Practice Examples from European SUMP cities

More and more cities across Europe and beyond are implementing SUMPs. In the following pages, 58 European SUMP cities describe their experience with one (or more) of the 32 activities that make up the 12 steps of the SUMP cycle. The cities explain what the specific activity looks like in their context, allowing us to understand the content and depth of the 12 steps of the SUMP cycle and how they can be translated into practice. For example, we see how Tampere, Finland used the construction of a new tram in the city to introduce new mobility management actions; how Monzón, Spain linked its SUMP development with a Sustainable Energy and Climate Action Plan; how Thessaloniki, Greece set up a mobility forum for action planning or how Malmö, Sweden developed its own accessibility index as part of its indicator set.

All cities can learn from one another, whether they have already implemented a SUMP or are just beginning to plan. The experience generously shared by these cities allow new SUMP cities to avoid potential pitfalls and to face the challenges of developing their own SUMP with increased knowledge and confidence. While courageous, innovative ideas don't always work out as planned, something can be learnt from every experience. These good practice examples show what has worked well and, sometimes, what should best be avoided.

The descriptions also include valuable information about costs and about the resources needed to implement the various SUMP activities.



Activity 1.1: Evaluate capacities and resources

Koprivnica, Croatia: Early external support for the SUMP team

Context

- The City of Koprivnica is a small city of 30,854 inhabitants and is located in the north western part of Croatia.
- Sustainable mobility was always a part of the city's history and culture. Because of its favourable geographical layout and compact structure, Koprivnica was always known as the city of bicycles. Nevertheless, due to changes that have occurred within the last 30 years, the city has witnessed a shift towards motorised transport. Koprivnica was among the Croatian cities to top the "cars per 1,000 inhabitants" chart. Changes were needed to be made in order to reverse this trend.



Description of activities

The first stage in the development of the SUMP of the City of Koprivnica involved research regarding the steps and resources that are needed in order to develop such a document. In parallel with this process, the SUMP team was searching for potential experts in Croatia with enough experience to guide the Koprivnica SUMP team in the development process.

After the completion of the planning phase, the process of development was started. The entire process was based upon the EU "Guidelines on the development and implementation of a Sustainable Urban Mobility Plan." With the help of external experts, status analysis was conducted. A large baseline traffic survey was undertaken in order to set up the initial data that is necessary in order to develop the document. The results were then presented during two public workshops and

the whole process was finished within the first half of 2015. The results revealed all of the problems that were presumed, including problems connected to the ineffective transport infrastructure that connects the city centre with the outskirts, as well as road safety issues in the city. Upon the completion of the document in July 2016, the City Council of the City of Koprivnica adopted the SUMP.

Lessons learnt

As an outcome of the document and the plans laid out within it, Koprivnica managed to maintain and slightly improve the share of cyclists and pedestrians as well as to increase the number of cycling and pedestrian paths. Koprivnica further managed to become the smallest city within Croatia to have a fully functioning public transport system that is based purely on electric buses.

Costs and know-how

The main costs of developing the SUMP were about 70,000€, including the person month (PM) of the staff involved and costs of involving external experts. The total amount of investments initiated by the SUMP is not known at this stage.

For details see:

<https://www.eltis.org/discover/case-studies/sustainable-urban-mobility-plan-city-koprivnica-0>

Author: Nebojsa Kalanj, collected by ICLEI



Images: City of Koprivnica

ACTIVITY 1.2: Create inter-departmental core team Edinburgh, UK: Multi-disciplinary Spatial Policy Team

Context

- Edinburgh is a mid-sized city with a population of around 513,000 inhabitants covering a geographic area of 264 km².
- Intermediate level of SUMP experience – the new SUMP will replace the city's Local Transport Strategy.

Description of activities

One of the critical elements involved in the production of a SUMP has been a team comprising officers with a range of skills and specialisms from different departments within the City of Edinburgh Council. The SUMP is being produced by the Council's Spatial Policy Team, which is working on three major inter-related projects: SUMP; a city centre transformation strategy; and the introduction of a Low Emission Zone in Edinburgh. The core Spatial Policy Team comprises transport and mobility planners, air quality professionals, as well as urban, landscape, and spatial planners. The wider team draws on the skills and knowledge of specialists from a range of transport teams (active travel, public transport, road safety engineering), land-use planners, sustainable development officers, economists, and communication experts.

Lessons learnt

The key success factor in developing the SUMP has been the early and continued involvement of a wide range of experts. It has also been positive that the plan development process was led by a multi-disciplinary, spatially-focussed planning team. We would recommend that cities involve officers with a wide range of knowledge and expertise, not just transport professionals. While it is important that a SUMP is produced with the involvement of transport planners; it is also important to involve specialists in other fields.

Project governance has been a challenge, however. During the early stages of production, governance was unsettled, leaving officers to make key decisions. As the SUMP process progressed and high-level support increased, the governance structure became more settled. It is recommended that governance is arranged at the outset – this will ensure that the SUMP can be produced with the support and buy-in needed from politicians and senior managers.

Costs and know-how

The bulk of the costs linked to plan development involve staff time. Two members of the team work full-time on the SUMP, which equates to around 72 hours per week. Other members of the team contribute part of their time to the plan while also working on other projects. Involvement in the CIVITAS SUMP's-Up learning programme has allowed the city to fund various consultation events and to participate in conferences and workshops – the costs of this to date have been approximately 7,500€. The core team and wider team members have provided the majority of the required know-how. Additional support has been required for some elements of production. For example, an academic research institute was commissioned to undertake a review of the existing transport strategy and a consultant has been engaged to produce a strategic environmental assessment of the plan.

For details see:

<https://www.edinburgh.gov.uk/say/city-plan-2030-city-mobility-plan/1>

Author: City of Edinburgh Council, collected by Wuppertal Institute

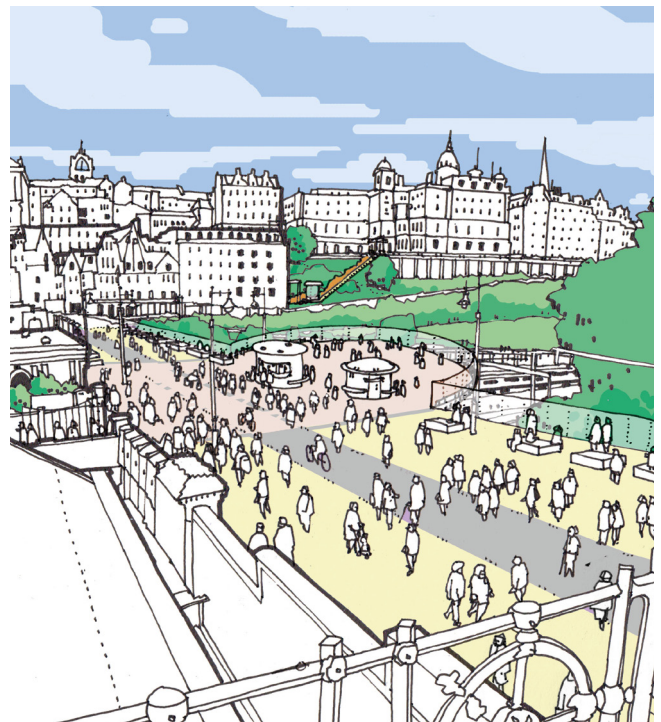


Image: Edinburgh City Centre Transformation Plan ©The City of Edinburgh Council

Activity 1.2: Create inter-departmental core team

Bielefeld, Germany: Inter-departmental core team supported by wider steering group of experts and stakeholders**Context**

- Bielefeld is a mid-sized city with a population of 340,000 inhabitants.
- In 2019, Bielefeld's mobility strategy was approved and it is the groundwork for complementing plans for cycling, walking, and public transport.
- Bielefeld has a vision to reduce the proportion of motorised cars, currently 51%, to 25% by 2030.

Description of activities

The main goals for the creation of a SUMP team were:

- (1) to establish a management structure for developing the SUMP;
- (2) to analyse the mobility situation and planning practices; and
- (3) to closely involve stakeholders in order to develop a mobility vision that has broad support in the city.

For the development of a SUMP, Bielefeld created a „core team” comprising five members from the city administration and the local public transport provider. Members of the core team were representatives from:

- the office of mobility;
- the office of urban planning;
- the office of environmental protection;
- the office of the Head of Department of urban and mobility planning; and
- the local public transport provider.

They were supported by an external consultant who was well-experienced in the development of SUMPs. The core team acted as the link to political actors and stakeholders and ongoing projects, such as projects regarding local city logistic planning, sustainable school journeys, the development of cycle traffic, etc. Thus, the core team was also directly involved in related planning issues.

Lessons learnt

To ensure the successful collaboration among the members of the SUMP team, it was of great benefit to have strong support and mandate from the administration

and the City Council. Furthermore, the consultancy brought in SUMP expertise and additional knowledge and experience that was complementary to the skills of the SUMP team. For the team itself, good team spirit, the ability to work on concrete questions, equality, and a neutral moderation of discussions were crucial. The development of a mobility vision defines the aim and objectives of the integrated mobility planning policy for the coming years. A SUMP can be the cornerstone for integrated urban development. An important part of the process was the participation of stakeholders, ensuring also that all have an equal say in the process (a possible method being small discussion groups). It is crucial to organise a structured consultation with relevant stakeholders and to involve all actors that will be directly or indirectly involved in implementing the SUMP.

Costs and know-how

The costs for the external expert were about 50,000€. Each member of the core team used at least 150 hours of their annual resources for the work carried out in the SUMP team, depending on the differing tasks of the members.

For details see:

https://bielefeld.wideviu.de/wp-content/uploads/sites/88/2019/05/Rupprecht_Consult-1.pdf
(available in German);

<https://urbact.eu/citymobilnet> (available in English)

Author: Olaf Lewald, City of Bielefeld, collected by Polis



Image: Grafikbüro Wilk

Activity 1.3: Ensure political and institutional ownership

Budapest, Hungary: Regular roundtable meetings for decision makers**Context**

- Budapest is a capital city with a population of 1.75 million.
- Intermediate level of SUMP experience - the first SUMP of Budapest has been approved and the measures and projects are under implementation.

Description of activities

In March 2017, BKK Centre for Budapest Transport – as the integrated mobility manager of Budapest – started to plan regular roundtable discussions on sustainable urban mobility planning. The CEO of BKK formed a ‘SUMP Committee’, the Balázs Mór Committee, to support a new form of institutional decision-making for SUMP measure planning. The Committee was established in March 2018 as a new platform for decision makers to negotiate their different plans related to transport development. It serves as a forum to speak about and coordinate measure and project plans in Budapest.

The Committee is made up of 21 members with voting rights from the main expert stakeholder institutions: The Municipality of Budapest, ministries, governmental institutions of transport planning, the national railway company, the regional council, main operators, and independent experts from universities. It also includes professionals and moderators who are helping the work of the above members, but who do not have voting rights. During regular roundtable meetings, the Committee members inform each other about their new ideas and can decide on the direction that main development will take. The Committee can also make suggestions and proposals to the City Council about new SUMP measures. The Committee has thus far had four meetings during the planning period and it

further plans to meet two times per year during the implementation period.

Lessons learnt

The management of the transport organising company (in Budapest it is BKK) – or the institution who is responsible for the SUMP – must be committed to sustainable urban mobility planning. It should use its influence to convince the potential members of the value of such a decision maker committee.

It was challenging to establish the Committee and to convince the different municipal stakeholders of the importance for having a formalized forum for transport developments. The decision makers were involved in the planning process and in making decisions about milestones related to the project appraisal methodology. In parallel with this, there was an active two-way communication with decision makers and awareness-raising activities.

Costs and know-how

Very low costs, and a high-quality organisation of events is necessary for forming an effective committee. An independent moderator and three to four staff members are required to prepare and help in the meetings: inform members about the committee meetings, prepare presentations, write notes and memos, and send feedback about decisions and results.

For details see:

Budapest Mobility Plan <http://bit.ly/2xY53Zl>;

SUMP, approved in 2019 (available in Hungarian) <http://infoszab.budapest.hu/list/fovarosi-kozgyules-nyilvanos-ulesei?id=100859;type=5;parentid=11032;parenttype=2>

Author: BKK Centre for Budapest Transport, collected by UBC



Image: BKK Centre for Budapest Transport

Activity 1.3: Ensure political and institutional ownership

London, Brussels, Dresden, Groningen, Ljubljana: Strong mayors for SUMP

Context

- All cities, from small towns to large cities, benefit from strong political support for Sustainable Urban Mobility Planning.
- High-level political support is equally important for starter cities, which need an impulse to start planning for sustainable mobility, as it is for more experienced cities, which need to take strong decisions to further improve their policies.
- The featured examples all are advanced SUMP cities, where past political support has already paid off. This is a non-exhaustive list of cities and political figures have played a central role in promoting sustainable mobility in many other cities including Paris, Barcelona, Madrid, etc.

Description of activities

In the recent past, several high-level politicians in European cities have offered strong support to sustainable mobility and to their cities' respective SUMP: In one of the largest cities, **London** (UK), the Mayor's Transport Strategy reflects the vision of the highest local political authority on mobility. The Strategy, adopted in 2018, focusses on creating "Healthy Streets" and shows the strong ambitions of Sadiq Kahn to make transport accessible to all in the British capital city and to dramatically decrease the impact of transport on air pollution. In the **Brussels** region (Belgium), the former regional minister for mobility and person currently responsible for urban development, Pascal Smet, fully supports the implementation of a progressive SUMP. He is a strong supporter of the shift from a car-oriented city to a city made for people and one with a lot of space dedicated to pedestrians and cyclists. In **Dresden** (Germany), the Deputy Mayor in charge of transport, Raoul Schmidt-Lamontain, is a strong advocate for sustainable urban mobility and the SUMP 2025plus, which he is now evaluating with his team. He proudly promotes the "MOBI" branding, which applies to all sustainable mobility modes and services in Dresden, including public transport, shared mobility, electric charging, and information services. In **Groningen** (the Netherlands), Vice-Mayor for Mobility, Philip Broeksma, pursues the long bicycle-friendly tradition of the city and supports the development of sustainable and innovative mobility solutions within it. As the local sustainable mobility champion, he was the host of the 2019 European

SUMP Conference and a strong European advocate of the SUMP. This role at the European level is also assumed by his counterpart from **Ljubljana** (Slovenia), Vice-Mayor Dejan Crnek. Vice-Mayor Crnek chairs the CIVITAS Political Advisory Committee (PAC) and has, together with his team of experts, significantly contributed to the development of sustainable alternatives to cars and multimodality in his city.

Lessons learnt

The involvement of politicians from the very beginning of the SUMP preparation process is crucial, as it allows some of the key measures selected by these political figures to be included in the plan. The inclusion of strong and visible measures (e.g. Low Emission Zone, promotion of cycling, re-branding of mobility solutions, etc.) in the SUMP helps political figures to get a feeling of ownership of these measures and the SUMP in general. The integration of the SUMP in a wider city strategy, a good 'marketing' image, and/or an alignment of the timing of the main SUMP milestones with the political timing (e.g. campaigns, elections, etc.) can also help to receive the support of politicians. The full support of a key political figure, such as the Mayor or Vice-Mayor for Transport, for the local SUMP guarantees legitimacy and certainty for the technical team developing and implementing the SUMP. However, a strong involvement of politicians in sustainable urban mobility planning can also "politicise" issues. This bears a risk of political resistance by the opposition for strategic reasons, and sometimes a longer and more complex adoption process. If possible, broad political coalitions in favour of SUMP should always be strived for.

For details see: <https://civitas.eu/pac>

Author: Polis



Image: Members of the CIVITAS Political Advisory Committee meeting with European Commissioner Violeta Bulc © Polis

Activity 1.4: Plan stakeholder and citizen involvement

Brno, Czech Republic: Citizen engagement strategy combining classical and online formats**Context**

- Brno is the second largest city in the Czech Republic, with about 370,000 inhabitants.
- Brno developed several separate topical plans for different transport modes. The plans were brought together in the SUMP, which was approved in September 2018.

**Description of activities**

In cooperation with a consultancy specialised in communication and participation, the City of Brno developed a SUMP engagement strategy that was regularly updated during the SUMP process. The strategy set out the overall aims of participation, target groups, communication channels, and involvement techniques, specified the schedule and the financial framework, as well as defined cooperation requirements between the city administration and the contracted consultancy.

The strategy included classical activities such as public discussions, roundtables, and communication through a dedicated website. However, it included also new approaches, such as the “Brno Mobility – 2050 Vision – Experts Workshop” to develop the Brno SUMP vision with the help of experts. This was a one-day workshop in which 50 experts from different fields (transport, economy, demography, environment, and urban planning), coming from research and transport institutions, universities, and political parties, participated. The results were presented to the Mayor and City Council members.

During the engagement process from 2015 to 2018, more than 2500 comments from citizens were analysed, more than 500 people were involved in an additional 30 events, and workshops with citizens, experts, city districts,

municipalities and politicians took place. The website for online participation is still in operation.

Lessons learnt

Cooperating with professionals to communicate mobility topics proved to be helpful in establishing the dialogue between citizens and the city administration. As a result of this experience, a new position for a communication manager was established at the Transport Department with the aim to open the discussion on all mobility and transport topics to citizens.

On the other hand, some of the citizen groups were hard to reach (e.g. car drivers, city district politicians) through the prepared activities and events. Additional events and activities therefore had to be organised, such as tailored online communication, exhibitions, outdoor campaigns, information in municipal magazines, etc. Also, some aspects of SUMP preparation (e.g. the process of SEA – Strategic Environmental Assessment) took a long time. It is important to communicate and explain what is happening during these periods, when most of the work is done within the organisations.

Costs and know-how

The SUMP development process of Brno lasted from 2014 until 2018. The costs of the engagement and communication activities were around 70,000€, including the costs of contracting the external consultancy.

For details see:

<http://www.mobilitabrno.cz/o-projektu> (available in Czech)

Authors: Iva Rorečková (Machalová) and Lukáš Bača, City of Brno, collected by EUROCIITIES



Images: © Marie Schmerková (Brno City Municipality)

Activity 1.4: Plan stakeholder and citizen involvement

Vilnius, Lithuania: Comprehensive engagement achieving broad ownership of the SUMP**Context**

- Capital and largest city of Lithuania, with a population of 617,000 inhabitants.
- Starter city with little previous experience with Sustainable Urban Mobility Planning.

Description of activities

The first step of SUMP development was to prepare a roadmap to define the project management process and the stakeholders involved. The roadmap defined different strategies on how to work with the direct participants of the project (Vilnius Municipality Vice-Mayor L. Kvedaravičius, the working group, project coordinator, project team and team leader, consultants) and indirect participants (politicians, SUMP committee, NGOs, interested citizens, related municipal departments and ministries).

Four clear aims for stakeholder and citizen involvement were defined:

- 1) To clarify expectations;
- 2) To inform about the process constantly;
- 3) To reach specific target groups (students, seniors, people with disabilities, etc.); and
- 4) To organize awareness-raising events.

Vilnius collaborated with behavioural scientists and sociologists to identify the most effective ways of communicating with different target groups (politicians, stakeholders, citizens). Based on behavioural data, they developed solutions for the aim to change mobility habits in Vilnius city. Their report contained small selling points to politicians, such as footrests for cyclists with attractive visual signs (reading 'Vilnius loves cyclists') or a pop-up window in a parking app that informs customers that part of their parking fee is spent on constructing a bicycle path on a particular street. It also suggested solutions for working with citizens – such as parklets, liveable public spaces, information through art, competitions, etc. – some of which were implemented.

The second key aspect necessary to achieve an effective engagement process was the collaboration with a public relations agency. A professional communication strategy with clear plan and timeline of activities was developed. Its main elements were:

- A designated website containing all relevant information (facts about Vilnius, project documentation, information about events, related articles, etc.);
- The SUMP was presented in more than 27 events and 15 articles and interviews; and
- Mobility conditions were tested with underrepresented target groups to make sure their perspective was considered (families with small children, people with disabilities, cyclists, etc.).

Lessons learnt

- To coordinate the communication and involvement process, a designated person in the project team is necessary.
- Budget is essential to organise an effective communication campaign.
- Clear objectives and KPIs for the campaign have to be set at the start.

Costs and know-how

- Report on solutions for changing mobility habits in Vilnius city – 7,800€.
- Communication campaign – 9,000€. Additionally, more than 100 staff hours for the preparation of and participation in events and interviews.
- One full-time position for different tasks, including communication, in the SUMP project.

For details see:

www.judumas.vilnius.lt (available in Lithuanian)

Author: Kristina Gaučė (Vilnius SUMP coordinator), collected by UBC



Images: © Citizen workshop 2017 © Saulius Žiūra

Activity 2.1: Assess planning requirements and define geographic scope (based on 'functional urban area')

Basel, Switzerland: Cross-border planning cooperation for a trinational agglomeration**Context**

- Around 200,000 inhabitants live in the Canton of Basel-Stadt.
- The first version of the 'Verkehrspolitisches Leitbild' (SUMP) came into force in 2015. In 2018, new measures and projects for the next three years (2018-2021) were defined.

Description of activities

The SUMP of the Canton of Basel-Stadt contains various cross-border measures (across Switzerland, France and Germany). A lot of effort was put into facilitating multimodality in the entire cross-border functional urban area, while also promoting sustainable, eco-friendly and space-efficient ways of travelling. The clear aim is to reduce car commuter traffic and limit congestion during peak hours.

The most effective measure was the creation of the 'Pendlerfonds', a fund that collects revenue from parking management within the Canton. This fund is used to finance projects - within the whole trinational agglomeration - that have a proven positive effect on commuter traffic to and from Basel. Most of the financed projects are Bike and Ride and Park and Ride facilities at important stations within the regional railway network. Since the establishment of the fund in 2012, a total of 394 bicycle and 966 car parking spaces have been co-funded at many different railway stations. The possibility to receive funds this way is a strong factor in making such projects attractive for smaller municipalities with tight budgets, and it can benefit both the urban core and the surrounding areas.

In addition to infrastructure improvements, it is crucial to adapt, coordinate and integrate the different ticketing systems. Moreover, the costs linked to the development of tramline 3 between Switzerland and France are shared between all partners involved.

Lessons learnt

Cooperation and coordination among so many different actors across borders is a challenge, especially due to the different organisational structures and languages. As a first step, it is important to take on board project partners from all administrative levels and to make sure that they are financially strong. Moreover, trust and

steady power should be built and nurtured from the beginning. It takes a lot of endurance and patience to reach goals in this context, but it is useful to remind everyone involved that sustainable developments benefit all. It is very important to keep the long-term vision in mind and to keep pushing in its direction. After all, a unilateral approach that does not include the tri-national partners is unfeasible and ineffective in regional planning and transport.

Costs and know-how

It not only requires working hours and resources from the Office for Mobility, but also from the many other departments, such as the Police, the Education Department, the Sports Department, etc.

For details see:

<https://www.mobilitaet.bs.ch/gesamtverkehr/mobilitaetsstrategie/verkehrspolitisches-leitbild.html>
(available in German)

Author: Martin Dolleschel, Canton of Basel-Stadt, collected by EUROCIITIES

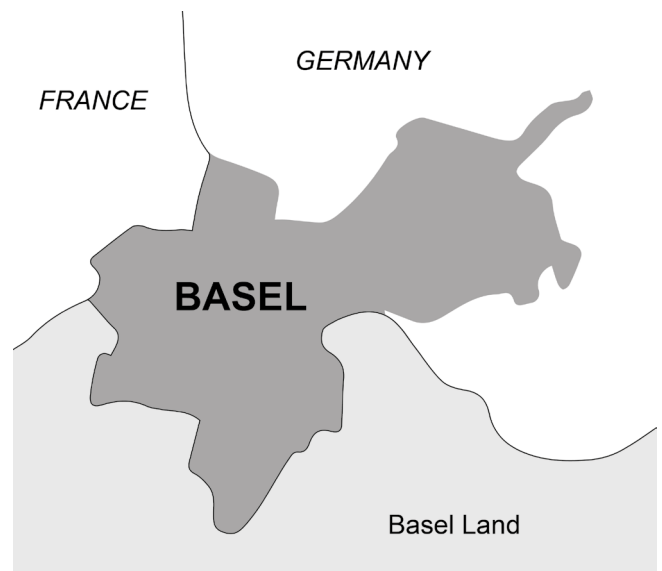


Image: Geographic area of Basel-Stadt © EUROCIITIES

Activity 2.1: Assess planning requirements and define geographic scope (based on 'functional urban area')

Kassel, Germany: Synchronised development of municipal and regional SUMP

Context

- City with a population of around 200,000 inhabitants, plus approximately 130,000 in the metropolitan area.
- Intermediate level of SUMP experience - from 2011 to 2015, the City of Kassel elaborated the mobility development plan, "SUMP Kassel 2030".

Description of activities

"SUMP Kassel 2030" was realised in collaboration with the administrative union, Zweckverband Raum Kassel (ZRK), the Kassel transportation authority, Kasseler Verkehrsgesellschaft (KVG), and the regional transport association, Nordhessischer Verkehrsverbund (NVV). The plan defines Kassel's strategic principles and guidelines for future mobility development. It contains a holistic development strategy for all modes of transport. "SUMP Kassel 2030" has now reached the implementation and evaluation phase.

Due to the dense interweaving of the regional transport network of Kassel and the surrounding area, it was necessary to extend the perspective beyond the boundaries of the city. To achieve this, a regional mobility development plan was developed in parallel. Where "SUMP Kassel 2030" places emphasis on inner-city transport and traffic flows, the regional mobility development plan focusses on regional transport and accessibility (interconnectedness between Kassel and the surrounding municipalities, as well as between the municipalities around Kassel).

Both plans were synchronised in terms of content and spatial dimensions. A regional traffic model has been established as the basis for both plans, and it includes the regional area around Kassel, the City of Kassel, and the ZRK. Following the participation process and the analysis, a differentiated set of targets was developed that consists of nine key objectives. The common target set guides the development of measures and actions in both plans and sets the standards for subsequent evaluation. Both integrated action concepts contain a coordinated programme of measures for implementation. Some of the measures have already been realised, while others are currently being prepared.

Lessons learnt

Using different participation formats, various target groups in the City of Kassel were reached and involved. This process was very helpful in developing the content and a strategic direction that benefits not only the city, but the entire region. The interdepartmental and interdisciplinary project group accompanied both SUMPs, so that one common strategy, timeline and process could be followed. This approach makes it easier and quicker to implement important measures that go across municipal borders.

Costs and know-how

The process was co-led by two people, one from the City of Kassel and one from the ZRK. Also, a moderator for the interdepartmental and interdisciplinary project group was hired (approximately 40 hours for all meetings and preparation).

For details see:

https://kassel.de/buerger/verkehr_und_mobilitaet/verkehrsentwicklungsplan/verkehrsentwicklungsplan.php
(available in German)

Author: Simone Fedderke, Centre of Competence for Sustainable Urban Mobility (CC-SUM) – State of Hessen and City of Kassel, collected by Rupprecht Consult

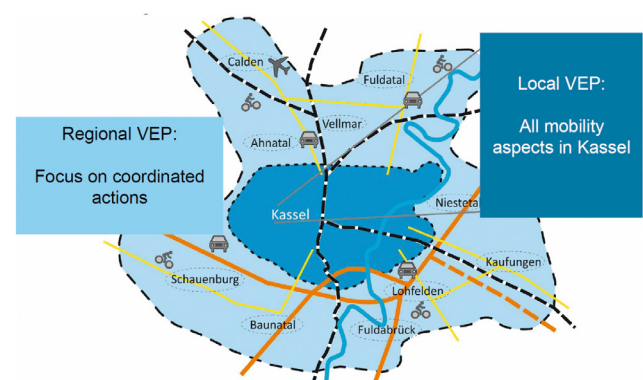
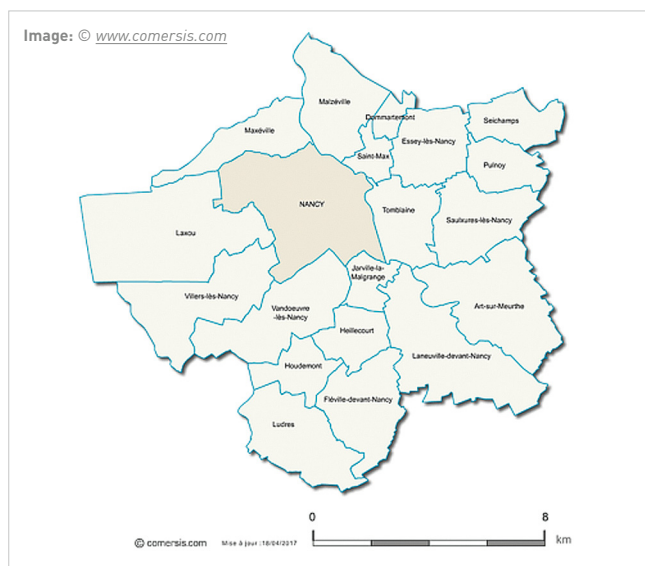


Image: City of Kassel

Activity 2.1: Assess planning requirements and define geographic scope (based on 'functional urban area')

Grand Nancy, France: Metropolitan inter-municipal urban plan for housing and development**Context**

- Grand Nancy Metropole is a formal metropolitan authority with a population of around 254,000 inhabitants spread across 20 municipalities.
- Strong tradition of municipal SUMPs in France. Development of the metropolitan inter-municipal plan started in 2015.

**Description of activities**

Grand Nancy is elaborating a metropolitan inter-municipal local urban plan (PLUi-HD), which determines its spatial development strategy for the next 10 years. The plan will integrate several sectorial plans into a single one. By pooling resources and skills at the agglomeration level, this unique document aims at harmonising public policies on urban planning, housing, mobility, economic and commercial development, and the environment to achieve a shared, coherent, and united territorial project. Such an approach is not mandatory in France, but is rather based on the political decision of the Grand Nancy metropolitan council to have an effective tool to tackle the challenges of the territory in a harmonised way.

In practical terms, the elaboration of the PLUi-HD is carried out by a transdisciplinary technical team that comprises staff from the urban planning, housing, economic development, sustainable development and mobility departments of the Grand Nancy metropolitan authority, and is supported by the regional agency for development and urban planning. The different steps of

the development process are first discussed by the metropolitan technical team, which then coordinates with the technical staff of the different municipalities covered by the PLUi-HD. This phase is then followed by discussions with political representatives at both the metropolitan and municipal level. The new PLUi-HD intends to improve the attractiveness and accessibility of the territory it covers by developing a proximity urbanism, for instance; committing to sustainability by reducing fossil fuels dependence and reconnecting nature and public space; and promoting public transport (railways, trams and intermodality) and active mobility.

Lessons learnt

This comprehensive approach requires political endorsement in the metropolitan area. Grand Nancy invested time to align expectations and to create a common language among the different departments and politicians involved, especially at the beginning of the process, which proved to be crucial. Regular and frequent meetings among departments, as well as the political buy-in of the concerned councillors, were key for success.

Costs and know-how

Since the process to develop a SUMP for a metropolitan area is longer and more complex than that linked to the development of a SUMP for a city, it is important to ensure that the timeline is realistic and that enough resources are allocated.

For details see:

<http://plui.grandnancy.eu/accueil/> (available in French)

Author: Aurélie Dore-Speisser, Grand Nancy Metropole, collected by EURO CITIES



Image: <http://plui.grandnancy.eu>

Activity 2.2: Link with other planning processes

Bologna, Italy: Metropolitan SUMP linking territorial, mobility and logistics planning

Context

- Seventh most populous city in Italy, with over 370,000 inhabitants in the urban centre and almost one million in the agglomeration.
- Before Bologna’s first SUMP, there was a different kind of plan that was based on a more territorial approach.

Description of activities

Bologna took the innovative approach in developing a mobility plan that is integrated on both a territorial and thematic level: its SUMP has been developed for the entire metropolitan area and has been harmonised with land-use and logistics planning.

To plan mobility on a metropolitan level, integrated governance between the metropolitan and municipal level was established. A common office between the Metropolitan City (public body leading mobility and territorial planning for 55 municipalities) and Bologna City Council was created with the specific purpose to deal with the SUMP as a unique entity. It being a key aspect to integrate land-use and mobility planning, the subsequent development of the Metropolitan Territorial Plan (MTP), based on the SUMP’s results, is seen as the first possible tangible success of the plan.

In terms of thematic integration, Bologna has closely coordinated the development of its main operative plan (the SUMP) with its operative and sectorial plans: The General Urban Traffic Plan (PGTU), the Sustainable Urban Logistics Plan (SULP), and the Metropolitan Bike Plan. To achieve a common planning process for the SUMP and SULP, the team of the Mobility Planning Office planned, from the start, to bring them together. A permanent Freight Quality Partnership was included in the SULP; alongside this, the SUMP/SULP process incorporated one meeting every three months.

Lessons learnt

Stakeholders engagement is a crucial aspect of any decision-making process in a metropolitan area. The establishment of a “Freight Board” helped to engage private parties within the planning process, which contributed to important results. Freight and logistics should be an integral part of any SUMP – either directly integrated in the main plan or in a separate, but well-connected, Sustainable Urban Logistics Plan.

The main challenge is to find feasible and effective ways for policy makers to steer urban logistics, which is a market dominated by private businesses with often little municipal planning experience. To overcome this, Bologna’s approach focussed strongly on:

- Building a joint vision on how to make logistics locations more sustainable and which policies are viable to steer urban logistics;
- Localisation of the specialised logistic settlement;
- List of measures and actions to sustainably integrate logistics with people movements; and
- Broadening participants’ perspectives by benchmarking Bologna against other successful European cities.

Costs and know-how

- External costs: 100,000€
- Internal staff: one person part-time for three years
- Required fields of competence: city planning, transport planning, statistics, economy, facilitation, and design.

For details see:

<http://pumsbologna.it/> (available in Italian)

Author: Catia Chiusaroli, Metropolitan City of Bologna, collected by Polis

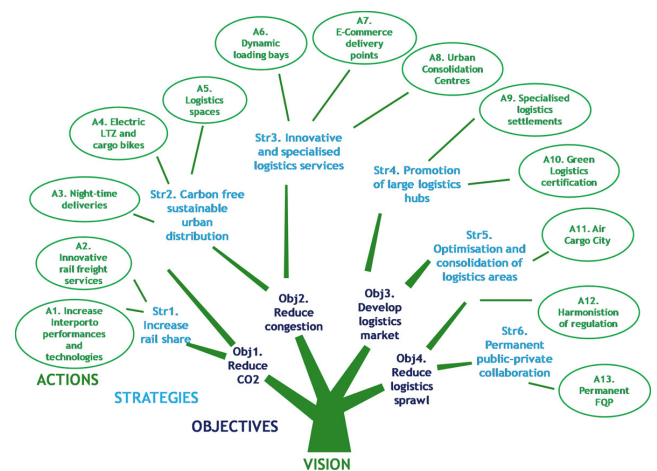


Image: © Metropolitan City of Bologna

Activity 2.2: Link with other planning processes

Monzón, Spain: Harmonised development of SUMP and SECAP**Context**

- Small city, with 17,115 inhabitants, that is located in the North-East of Spain.
- First SUMP and SECAP were approved in February 2019.

Description of activities

Monzón has followed the “Guide for the harmonization of sustainable urban mobility planning and SECAPs” in order to develop its SUMP and Sustainable Energy and Climate Action Plan (SECAP) in an integrated way. The main activities included:

- (1) Setting up a harmonisation team to be in charge of developing both plans and of exploiting the synergies among them. It was coordinated by the technician of the Environmental Department of Monzón and consisted of two teams: a team of technicians belonging to Monzón Municipality as well as an external team subcontracted by the municipality. The external team, responsible for the technical development of both plans, closely communicated with the harmonisation team to collect all needed information and to report on progress.
- (2) Sharing the transport emissions inventory among both plans in order to save resources and increase the quality, reliability and coherence of information.
- (3) Using the same reference year for the inventory of emissions. It is useful to also align the monitoring activities of both plans in the years following their approval.
- (4) Carrying out a study to identify which measures can be included in both plans. Many measures identified in the SUMP were included as part of the SECAP’s transport measures (e.g., reduction of private car use, transition from fossil fuel to electric vehicles, reduction of speed limits in the city centre, etc.).
- (5) Prioritising SUMP measures according to their “impact on SECAP” criteria, amongst others. This analysis made it possible to prioritise measures that contribute to the objectives of both plans.
- (6) Involving all municipal departments that could be affected by SUMP and SECAP implementation in joint meetings. This promoted smooth collaboration and made the final plan revisions easier for the departments that were only indirectly involved in the process (e.g., service department, urban department, etc.).

Lessons learnt

The high commitment of the coordinator of the harmonisation team (i.e., the environmental technician) was a key success factor. In addition, the SUMP-SECAP harmonisation guide was an important tool for planning the process. A high commitment and collaboration from both the politicians and technicians of the municipality during the entire process is crucial. Furthermore, subcontracting external experts can be a solution, especially in small- and medium-sized municipalities, to overcome a lack of technical expertise, time and budget.

Costs and know-how

The harmonisation process does not require any extra costs in comparison to a standard separate development of SUMP and SECAP, since synergies allow for duplications to be avoided (e.g., inventory emissions for transport). In addition to urban and energy planning know-how, good internal management is needed.

For details see:

<http://www.simpla-project.eu/media/82321/monzon-sump.pdf> (available in Spanish)

Author: Andrea Conserva, Circe Foundation, collected by EUROCIITIES



Image: © SIMPLA Project Guidelines

Activity 2.2: Link with other planning processes

Lahti, Finland: Integration of land-use and mobility planning

Context

- Lahti is a Finnish mid-sized city, with a population size of 120,000.
- As Lahti is working on the first SUMP for the city, it can be considered a SUMP starter city.



Image: © Pasixxxx, Wikipedia.org

Description of activities

The City of Lahti has developed an integrated strategic process, called “Lahti direction”, for combined and integrated land-use and sustainable urban mobility planning. The new approach was approved by the City Council in 2017 and is being developed and implemented during the 2017-2020 period. The process is on-going and the plan will be updated every four years, or each council term. The aim of Lahti direction is to build a sustainable city in cooperation with citizens, stakeholders, experts, and decision makers. It includes the city plan, Sustainable Urban Mobility Plan (SUMP), environmental programme, and service network programme.

The strategy has its own steering group and a working group for master planning, and both gather monthly. A similar working group has been set up for the SUMP. However, there will be members who will join both groups in order to keep up the good cooperation. Additionally, the aim is to set up a citizen panel that would gather two to four times per year to discuss questions related to public transport and other mobility planning themes.

Lessons learnt

One success factor was the very developed master planning process, as it offered opportunities to build upon and integrate other aspects into it.

The integrated approach is still in its first development phase, but has already proven to work well so far. It enhances cooperation between land-use and mobility planners and improves the comprehensive engagement of citizens in the mobility planning process. One lesson learnt is that the SUMP working group should have been set up at an early stage of the whole process. The team working on mobility for Lahti focusses more on general mobility management and not specifically on SUMP development. The members, functions and tasks for both groups need to be sorted out and clearly decided upon for a successful planning process to ensue.

Costs and know-how

Cooperation across all units of the urban environment and other departments of the city is essential for successful SUMP development. The process, as such, should be incorporated into the daily work, but the implementation of the measures, of course, requires investments. In order to gain the acceptance among local politicians and citizens, the planned measures must be well justified and this might also require additional resources.

For details see:

<https://www.lahti.fi/paatoksenteko/strategia-ja-talous/lahden-suunta> (available in Finnish)

Author: Anna Huttunen, City of Lahti, collected by UBC

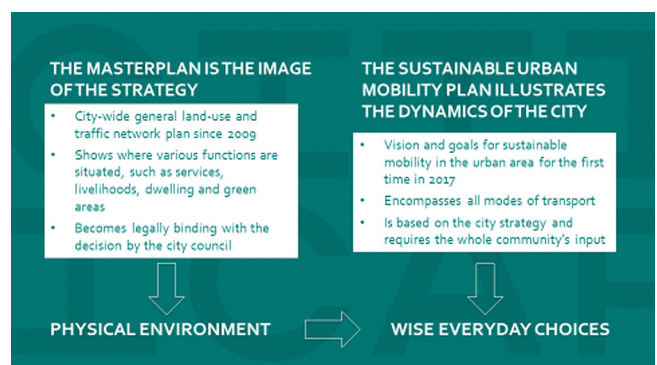


Image: © City of Lahti

Activity 2.4: Consider getting external support

Cluj-Napoca, Romania: SUMP development driven by external consultants**Context**

- Romanian city of 322,108 inhabitants that spans a total area of 179.5 km².
- First Sustainable Urban Mobility Plan, developed mainly to access European funds, but some previous experience with strategic spatial plans.

Description of activities

Cluj-Napoca's Urban Mobility Plan (UMP) is one of eight plans for growing Romanian cities that was funded by the European Bank for Reconstruction and Development (EBRD). The contract for its elaboration was initiated by the Ministry of Regional Development in 2014 and finalised and signed in November 2015. The plan was subsequently developed by an external consultancy under the coordination and guidance of JASPERS and EBRD. The team was comprised of external experts, but also internal, local experts who supported the process by providing valuable knowledge on the local context.

A Regional Monitoring Committee was established to ensure coherent and fast coordination both with other relevant sectors and across political levels. The monitoring committee included decision makers and representatives from the entire metropolitan area (e.g., the City Hall of Cluj-Napoca Municipality), the Cluj-Napoca County Council, the County Inspectorate of Traffic Police, transport operators (including railway transport operators), the Association of Intercommunity Development (ADI), and the Regional Development Agency. The technical expert team requested sustained support from Regional Monitoring Committee.

While the consultants were in charge of organising and implementing the entire process, including training and task assignment for the city staff, the city played an important role for several planning steps. It helped to depict the existing mobility situation, define the vision for the city, and develop possible scenarios. Data collection, analysis of the existing situation, and the development of the transport model were technical activities for which the team of consultants took the lead. The SUMP Action Plan has also been developed by the consultants. Frequent meetings and discussions have been organised with representatives from the SUMP Coordination Committee and other targeted groups in order to collect necessary information – status of SUMP development, approval of intermediary phases, etc. – for the elaboration

of the project. For the monitoring and evaluation of the actions, an emphasis was put on collaboration, coordination, and communication both within the Monitoring Committee and among the departments of the administrative units within the metropolitan area.

Lessons learnt

Since this is the first generation of SUMP in Romania, hiring consultants has undoubtedly brought technical expertise and has improved efficiency for developing measures and projects. Nevertheless, the internal staff was closely involved in all of the steps, as they are the ones who better understand the local context, and they thereby helped the team of experts to develop tailor-made solutions. Working with the experts has helped the city understand that it is vital to have a clear planning vision, a robust funding strategy and measurable objectives.

Costs and know-how

The total amount of the contract was around 500,000€.

For details see:

<http://www.adizmc.ro/pmud.html> (available in Romanian)

Author: City of Cluj-Napoca, collected by ICLEI



Image: © © City of Cluj-Napoca

Activity 2.4: Consider getting external support

Thessaloniki, Greece: Expert support to set up a mobility monitoring centre**Context**

- Second largest city in Greece, with an urban area of 19.3 km² and more than 325,000 inhabitants.
- Local SUMP currently being developed by the Municipality of Thessaloniki. The Metropolitan Area adopted its first SUMP in 2014.

Description of activities

Based on European and National specifications, the local authority of Thessaloniki needs to follow specific procedures for the development of its SUMP, including appropriate data collection methods for modelling analysis and measure monitoring. In order to complement the core skills of the Municipality with specific scientific skills on sustainable mobility planning, ITS, big data management, and transport modelling, the Municipality signed a cooperation agreement (2016 - 2019) with a research institute (Hellenic Institute of Transport – HIT) for the development of its SUMP. This cooperation followed a previous synergy (also involving other main authorities), during which the Mobility Monitoring Centre (MMC) of Thessaloniki was created (2009). The MMC, which is operated by HIT, collects and analyses real and historical mobility data, as well as provides specific services to the public.

For the SUMP development of the City of Thessaloniki, the institute gave specific instructions for the appropriate data that must be collected and the data analysis that should take place for mapping the current situation of the city and creating future scenarios. It also took over the responsibility to develop and implement specific methodologies for highlighting the city's priorities, vision, strategies, and targets.

Finally, the institute used its expertise and data integration capacities for modelling development and traffic simulation, as well as for formulating the indicators that will be integrated and monitored by the MMC, thus establishing a solid mobility monitoring mechanism for the SUMP as well. Available data provided by the MMC were used throughout the whole SUMP development process.

Lessons learnt

Cooperation between the Municipality of Thessaloniki and the institute is key to ensuring that the SUMP is developed with a high-skilled mix of technical work and scientific methodologies and that integration with existing data collection and monitoring tools is achieved. Through this cooperation, the city authority not only increased its competence, but it also exploited the existing data and know-how of the MMC.

Costs and know-how

The resources for SUMP development came from the city's own funds. The cooperation with the research institute did not exceed 100,000€ (including modelling and scenario testing), while the scientific support of HIT did not cost more than 20,000€. On the other hand, the MMC was developed as part of a greater project funded by the European Economic Area, with a total budget of almost 600,000€.

For details see:

<http://www.svakthess.imet.gr/> (available in Greek);
www.mobithess.gr (available in English)

Authors: Maria Zourna, Municipality of Thessaloniki, Georgia Aifantopoulou and Maria Morfoulaki, CERTH / Hellenic Institute of Transport, collected by Polis

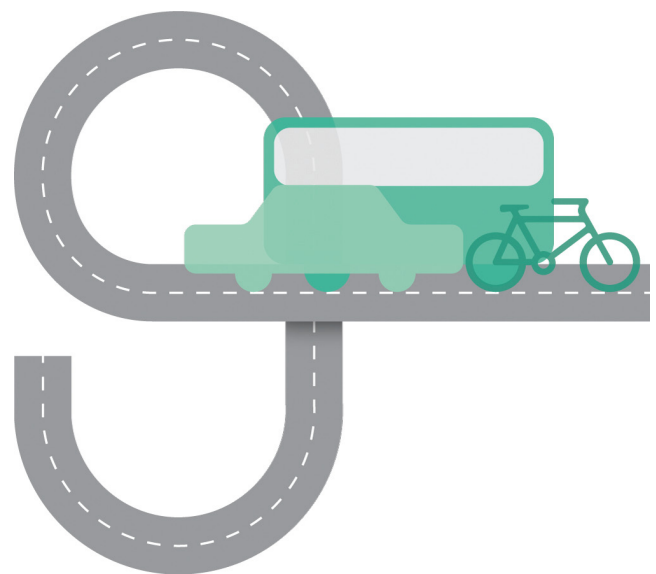


Image: © Thessaloniki's SUMP

Activity 3.1: Identify information sources and cooperate with data owners

Gdynia, Poland: Partnership for data collection between municipality & public transport authority**Context**

- Mid-sized harbour city with 246,000 inhabitants.
- Intermediate level of SUMP experience. SUMP for 2016-2025 developed within the European project, Civitas DYN@MO. Currently evaluating the first three-year Action Plan of the SUMP.

Description of activities

ZKM Gdynia – Gdynia’s Public Transport Authority (PTA) – carries out research on the mobility preferences and behaviour of Gdynia’s inhabitants every three years (in 2018 already for the 12th time). About 2% of the population is interviewed, sampled in proportion to the number of residents in the districts of the city. Based on this research, transport planners receive information on: commuting patterns, transport behaviour (modal split, aims of travel, time needed to walk to PT stops, etc.), reasons for using different means of transport, transport preferences in PT, and the assessment of the quality of PT services.

Gdynia uses several of its projects and campaigns to collect data from GPS devices and from Google Maps/ Open Streets (European Cycling Challenge, Interreg CoBiUM project, Bike2Work campaign). Based on this data, the planners prepare heat maps and animations of the cycling flow in the city. This is then complemented with surveys or interviews with cyclists, depending on the topic.

Very important is also the research conducted at the street level. Based on observations and interviews with pedestrians, drivers, and shop owners, traffic movements, such as deliveries in the city centre and pedestrian flows on chosen intersections, were conducted.

Lessons learnt

- To establish a good partnership for data collection, it is important to approach the topic as widely as possible.
- Do not eliminate partners before you get information about what kind of data they can provide you with or collect. In the field of mobility, Gdynia cooperates with institutions such as the Parking Management Office or Main Gdynia’s Port Office.

- It is good to have municipal staff that is – in cooperation with specialised companies – able to design marketing research (e.g. interviews), analyse data, and prepare conclusions.
- The collection of high-quality data is crucial in the process.
- To produce good heat maps and surveys, it is important to use universal technology, plugs and extensions.
- Stakeholder cooperation at every stage is necessary to build ownership of a project.
- Personal data protection strongly affects sampling in marketing research. Skilled staff who are responsible for personal data protection as well as law specialists are needed.

Costs and know-how

- The costs depend on the scope and type of data collection (e.g., data from electronic devices require extra money for analysis, but can be used in other ways in the future).
- Municipal staff needs to have a good grasp of data collection methods and the approaches used in other cities.

For details see:

<http://bit.ly/SUMPGdyniaENG>

Author: Dorota Gajda-Kutowinska, City of Gdynia, collected by UBC

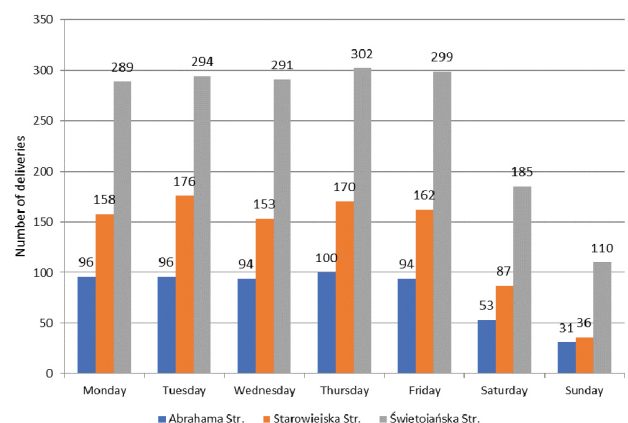


Image: Number of deliveries on three main streets in the city centre (2017) © City of Gdynia

Activity 3.1: Identify information sources and cooperate with data owners

Bremen, Germany: Online citizen participation to assess the mobility situation**Context**

- The Free Hanseatic City of Bremen is a harbour city in north western Germany, with a population of about 570,000 inhabitants.
- In 2012, Bremen started the process of developing a Sustainable Urban Mobility Plan (SUMP 2025), which was politically unanimously adopted in 2014 and awarded with the European SUMP Award in 2015.

Description of activities

Bremen has a history of strong citizen participation. In addition to collecting various transport data, such as air quality monitoring or traffic counts, the most important data was provided by citizens.

The process of SUMP development consisted of very innovative online participation modules and a proactive participation strategy (e.g., in shopping centres, SUMP in gamification tools). The participatory process enabled the public to give comments and feedback during every phase of the SUMP planning process. The key groups were citizens, politicians from the city's 22 neighbourhood councils, and public interest groups.

In an online tool, citizens were asked to provide information for the following two questions: "Where are things running badly?" and "Where are they running smoothly?" (with online 'stickers' on a map). This geo-referenced tool allowed a level of transparency that was not known before. Everyone could comment on given proposals – and it became obvious that there is no 'silver bullet' solution for making everybody happy. A basic conflict was, of course, about the use of the limited street space – more bike parking or widening sidewalks means converting some car parking – and this led to quite different comments. But also new aspects were mentioned – like feeling disturbed by smokers at bus stops.

The online portal received more than 100,000-page views as well as over 4,000 contributions, 9,000 comments, and approximately 100,000 "like" or "dislike" comments from the public.

The process to develop Bremen's SUMP thus utilised both crowdsourcing-based data collection methods and the traditional methods of transport data collection.

Lessons learnt

- The online tools created more transparency about the range of opinions and involved a rather younger group of participants;
- In contrast, regional citizens' forums were characterised rather by men and a participant group of a higher average age;
- The combination of offline and online participation formats led to a more balanced representation of citizen interests;
- The comments were sorted by modes (car, bike, walking, other) and showed the typical conflicts of interest (e.g., more space for bike parking vs. car parking).

Costs and know-how

The SUMP process that was carried out in Bremen cost approximately 600,000€.

For details see:

https://www.bauumwelt.bremen.de/sixcms/media.php/13/SUMP_Bremen2025_web.pdf

Author: Michael Glotz-Richter, City of Bremen, collected by ICLEI



Image: © City of Bremen

Activity 3.2: Analyse problems and opportunities (all modes)

City of Malmö, Sweden: Comprehensive approach including manual, mechanical, survey and app-based data collection**Context**

- The City of Malmö is Sweden's third largest city, with a population size of 330,000.
- The first SUMP was adopted in 2016 and has since then played an important part in city planning.

Description of activities

To ensure that the efforts and plans that are being carried out in Malmö have the correct preconditions and to evaluate the effects of measures, the City of Malmö puts high importance on measuring and following up on traffic flows. The data collected is used to communicate and estimate the current mobility situation, including noise pollution, air pollution and potential improvements. The City of Malmö measures motorised traffic (manually and mechanically) during two periods in spring and autumn. Mechanical collection is carried out using different methods, including built-in tubes in the roads that register passing vehicles' weight class, speed, and direction, rubber tubes, as well as radar and video analysis for data collection on bicycle and pedestrian traffic. Manual collection is done by people who are hired for traffic counting, using a special counting device. The traffic is counted Tuesday to Thursday since the most consistent peak traffic in the city occurs on these days.

A travel survey is done every five years to monitor change in travel habits and provide input to infrastructural investments. The travel survey is used to monitor how people chose to travel and the factors that influence mobility behaviour, including trips (number of daily trips, distance travelled) and characteristics of the participants (gender, age, occupation, income, access to transport modes). Next to the traditional way, the last survey was set up to be used in an online application for mobile phones using the phones' GPS. The online survey shows high potential for improving the collection of data, while decreasing the amount of work required to be put into it. Users report directly via the app and this also provides the chosen route of travel and includes all trips, some of which could be forgotten in the traditional survey.

Lessons learnt

The key success factor in this step is to connect the data collected to the traffic model, supporting decision

makers in their decisions. Bigger cities can benefit a great deal by having traffic modelling expertise in-house, while smaller cities could manage with having a consultant that updates the model when it is deemed necessary.

A lesson learnt is that the travel survey should not be conducted more often than every five years, even though it may seem tempting. Malmö found that this reduces the will to participate and the changes are not as significant. A total of 12,000 citizens of Malmö, aged 15-84, were asked to participate and about 37% answered the last survey.

Costs and know-how

The City of Malmö has one employee who is focussed on data collection and one employee who is working with computer modelling. Apart from this, there is an annual budget of 170,000€ for data collection.

For details see:

<https://malmo.se/Service/Var-stad-och-var-omgivning/Stadsmiljon/Laget-i-staden/Trafikmatningar.html> (available in Swedish);

Malmö's SUMP: <http://bit.ly/30Q5KAd>

Author: Andreas Nordin, City of Malmö, collected UBC



Image: © City of Malmö

Activity 3.2: Analyse problems and opportunities (all modes)

Deinze, Belgium: Accessibility screenings for children and the elderly**Context**

- Deinze is a small city of 43,500 inhabitants. It has set an example for many other Belgian cities with its progressive cycling policies.
- The second-generation SUMP was approved in June 2018 and replaces the SUMP of 2010. Since Deinze has merged with the neighbouring Municipality of Nevele in January 2019, the next step will be to have a common SUMP for the functional city.

Description of activities

The SUMP of the City of Deinze includes accessibility screenings for public space and road design that connects different activity places in the city. The focus of the screenings lies on the target group, namely on children and the elderly. The screenings allow the city to increase the accessibility of schools for children and of residential care centres for the elderly. The aim is to create high-quality public space, and dense and safe walking networks, with sufficient resting areas, to connect these activity places for the elderly and children with the city centre. With this measure, the City of Deinze wants to tackle the issue of mobility poverty for inhabitants with certain disabilities or disadvantages compared to other groups. The focus points of the screenings will be:

- wide and obstacle-free pavements;
- surface characteristics (i.e., sufficiently even, contiguous and non-slip);
- safety for blind and partially sighted inhabitants;
- height differences on walkways and crossings; and
- slope of the walkways.

Finally, easily-accessible public transport stops are also a priority for the City of Deinze in the next coming years.

Lessons learnt

The accessibility screenings, here focussing on walking, are an example of how the city applies the principles and objectives of 'prioritising modes (STOP¹)', 'attention to vulnerable target groups' and 'proximity', as defined in the Flemish SUMP programme, starting from analysis already.

¹ Dutch abbreviation prioritizing modes – walking, cycling, PT, (sharing) and only last private cars as a thread in SUMP planning for all Flemish cities and municipalities.

**Costs and know-how**

The background know-how for accessibility screenings is delivered by several guidelines that have been developed for the use of cities and transport professionals in Flanders. Important criteria for monitoring and evaluation are proximity, directness of the network, safety, comfort, quality of experience and design, dimensions and standards, etc.

The accessibility screenings follow a cyclical process (ambitions, public support, analysis, policy plan, integration into SUMP) and can be supervised by experts (www.inter.vlaanderen.be). The involvement of all related stakeholders and users is important. Cities can define internally how far their ambitions will reach; this will also have cost-benefit consequences.

For details see:

<https://www.mobielvlaanderen.be/overheden/artikel.php?id=2041>

<https://www.deinze.be/mobiliteitsplan> (available in Dutch)

Author: City of Deinze, collected by Mobiel 21



Images: © City of Deinze

Activity 4.1: Develop scenarios of potential futures

Maia, Portugal: Scenarios of different ambition to achieve the agreed vision

Context

- Maia is a mid-sized city, with a population of 136,769 inhabitants, and is located in the Porto Metropolitan Area.
- Maia adopted its first SUMP in 2013. In 2015, the city approved its first Action Plan for sustainable mobility. Both are currently under revision.

Description of activities

After finalising the baseline report, Maia developed a future vision about mobility in the city, namely one that promotes sustainable transport modes and facilitates the public transport system. Considering this, Maia defined three different scenarios:

- Trending or Business-As-Usual (BAU) scenario;
- Intermediate scenario, with a set of measures that were both desirable and feasible;
- Proactive Scenario, with a set of measures that were more ambitious. This scenario corresponds to the implementation of a set of measures capable of reversing mobility patterns, regardless of whether the measures are of a more or less controversial nature and produce a higher level of resistance.



Image: © Elaboração do Plano de Mobilidade Sustentável do Concelho da Maia

The next step was to organise a second workshop that was programmed for the scenario-planning procedure. The workshop included the main stakeholders (transport operators, transport authorities, technicians), except citizens. Despite the fact that the proactive scenario had the best evaluation, the municipality and the stakeholders concluded that it was overly ambitious, either because of lack of resources or possible social resistance. Thus, Maia decided to implement the intermediate scenario.

Lessons learnt

The SUMP process and development of scenarios has enabled Maia to learn new planning methodologies, especially concerning stakeholder participation, that were highly important for the success of subsequent phases along the process. Still, and because the external conditions are constantly changing, Maia considers it necessary to strengthen participatory activities to allow key actors to be part of the decision-making process and to train and prepare city staff for subsequent follow-up.

Costs and know-how

The costs, know-how, and required staff hours vary depending on the level of ambition for this step, including the number of scenarios a city wants to develop or the types of analysis it wants to consider (quantitative, such as cost-benefit assessment, or qualitative, such as measure impact assessment). An interdisciplinary team spent approximately 400 hours for scenario building (approximately 20,000€, plus VAT).

For details see: <https://www.cm-maia.pt/pages/444>

Author: Energy and Mobility Division, City of Maia, collected by ICLEI

Quadro 6.3 – Avaliação de cenários para a área

	Objetivo 1 - Assegurar a coesão territorial multifunção	Objetivo 2 - Equilibrar e utilizar os transportes individuais	Objetivo 3 - Melhorar a atratividade do transporte público	Objetivo 4 - Promover a utilização de bicicletas	Objetivo 5 - Promover o espaço pedonal	Objetivo 6 - Equilibrar e criar espaço público	Objetivo 7 - Assegurar a qualidade ambiental	Objetivo 8 - Garantir a segurança das deslocações
Ordenamento do Território								
Concentrar as potenciais novas de expansão urbana junto a áreas de maior densidade TC	Forte	Forte	Forte	Fraco	Fraco	Negligenciável	Fraco	Negligenciável
Definir critérios para a localização de novos empreendimentos de habitação	Forte	Forte	Forte	Fraco	Fraco	Negligenciável	Fraco	Negligenciável
Transporte Individual								
Melhoria da capacidade da rede rodoviária através da eliminação de pontos de estrangulamento	Negligenciável	Fraco	Negligenciável	Negligenciável	Negligenciável	Negligenciável	Fraco	Fraco
Adoção de medidas de reorganização da circulação	Negligenciável	Forte	Fraco	Fraco	Fraco	Forte	Forte	Forte
Transportes Coletivos								
Restauração e hierarquização da rede TC	Forte	Fraco	Forte	Negligenciável	Negligenciável	Negligenciável	Forte	Negligenciável
Melhorias ao nível da informação ao público	Fraco	Fraco	Forte	Negligenciável	Negligenciável	Negligenciável	Fraco	Negligenciável
Promoção da integração tarifária	Forte	Fraco	Forte	Negligenciável	Negligenciável	Negligenciável	Fraco	Negligenciável
Melhorar os abrigos das paragens	Fraco	Fraco	Forte	Negligenciável	Negligenciável	Fraco	Fraco	Negligenciável
Estacionamento								
A alargamento das áreas de estacionamento tarifado na política Maia, Águas Santas, Castelo da Maia	Fraco	Forte	Forte	Negligenciável	Negligenciável	Fraco	Fraco	Fraco
A alargamento das áreas de estacionamento tarifado em zonas de comércio e serviços	Forte	Forte	Forte	Negligenciável	Negligenciável	Fraco	Fraco	Fraco
Tarifação do estacionamento em algumas ruas	Forte	Forte	Forte	Negligenciável	Negligenciável	Fraco	Fraco	Fraco
Modos Suaves								
Criação de uma rede pedonal	Forte	Fraco	Negligenciável	Negligenciável	Forte	Forte	Forte	Fraco
Adaptação da rede ciclovias	Forte	Fraco	Negligenciável	Negligenciável	Forte	Forte	Forte	Fraco
Melhorar o transporte de bicicletas nos serviços TC	Fraco	Fraco	Negligenciável	Forte	Negligenciável	Forte	Forte	Fraco

Image: © Elaboração do Plano de Mobilidade Sustentável do Concelho da Maia

Maia measured the impacts of the measures included in each scenario, scoring them, in order to obtain a linear value between levels, and a relative assessment of what would be the expected evolution compared with the trending or BAU scenario. As expected, the proactive scenario showed a higher score, and one that was 40% higher than of the intermediate scenario. The proactive scenario had the best evaluation results, as the evaluation process did not consider possible constraints (especially costs and social resistance).

Activity 4.1: Develop scenarios of potential futures

Leipzig, Germany: Scenario building supported by transport modelling**Context**

- Leipzig is a considerably growing city of currently 600,000 inhabitants.
- The “Mobility strategy 2030 for Leipzig” from 2018 gives Leipzig strategic guidance until 2030. Before, the mobility planning in the city was based on the VEP (Transport Development Plan).

Description of activities

For its “Mobility strategy 2030 for Leipzig”, six different scenarios were developed:

1. Continuation of current mobility strategy: Without changes to the current mobility strategy and with constant expenditures for traffic in structure and quantity, a significant decrease in the quality of mobility and an increase of environmental stress, congestion and noise are expected.

2. Continuation of current mobility strategy with constant fares: Rise in PT ridership (2%) through constant fares lead to decrease of modal split for car ridership (2%). Congestion and increase in individual passenger ridership are expected.

3. Sustainability scenario: Politics focus on increasing the share of PT, biking and walking, accompanied by an investment shift that favours these modes. Significant increase in PT ridership, together with improved air quality and noise will be the result.

4. Bicycle-City scenario: Promotion of bicycle traffic, including the extension of a cycling network and additional space for infrastructure and services. A high-quality mobility system, together with the achievement of municipal climate targets and a modal shift, would be expected.

5. Public transport priority scenario: Prioritisation of public transport development, including the maximisation of market penetration and demand as well as accompanying measures (e.g., parking restrictions). Public transport use will increase, also through decreasing traffic quality for car drivers.

6. Community scenario: Public transport is financed by a community investment model, which includes a solidary fee for citizens, resulting in a high increase in PT usage and a significant decrease in car ridership.

Objective assessment criteria (of equal importance) with different sub-criteria were established (attractiveness for users, ecological attractiveness, economic attractiveness, systemic attractiveness). Next to a qualitative assessment, some criteria were also evaluated quantitatively (accessibility and need for financial adjustment, revenues). The general evaluation resulted in the prioritisation of the 1. bicycle-scenario, 2. sustainability scenario, and 3. PT scenario.

Lessons learnt

The method of using scenarios was successful in comparing solutions with partly competing objectives. Holistic scenarios with plausible and consistent objectives could be complemented by cost estimations, which made the scenario development process a valuable method in strategy development.

Costs and know-how

The City of Leipzig led the process in cooperation with external actors and the city administration, and was supported by a specialised consultancy. The process duration was three years.

For details see:

<https://www.dobramesta.cz/download/538>

Author: City of Leipzig, collected by Rupprecht Consult



Image: © Tom Thiele

Activity 4.2: Discuss scenarios with citizens and stakeholders

Prague, Czech Republic: Scenario building with strong stakeholder and citizen participation**Context**

- Prague is the capital city of the Czech Republic and has around 1.3 million inhabitants plus 0.8 million inhabitants in the suburban area.
- Since 2015, the first SUMP for Prague and its suburbs in Central Bohemia (metropolitan region) has been in development.

Description of activities

The Prague SUMP working group designed three possible scenarios that represent different ways to achieve a sustainable mobility vision that is in line with the Prague Strategic plan: Prague Effective, Prague Rational, and Prague Liberal. To select the best scenario for Prague, a workshop for stakeholders and a sociological survey for citizens were set up. The workshop aimed to acquire an opinion about the mobility vision for Prague and the agglomeration, raise awareness about the risks and complement the preferred mobility scenario with further elements, and find a compromise among all the experts. Fifty-seven experts from most of Prague's districts discussed the scenarios in groups and selected one preferred scenario for further elaboration and discussion. Surprisingly, every roundtable voted for the "Efficient Prague" scenario and some of them recommended to add some improvements from the other scenarios.

The sociological survey asked for the opinion of citizens on the three scenarios, based on 18 mobility questions. The respondents had to assess some solutions related to one of the three scenarios by using a predefined ranking scale. Data was collected through telephone interviews (CATI = 773 participants) and interviews conducted on an online panel (CAWI = 1,451 participants).

Based on the opinion of stakeholders and citizens, the City of Prague developed the final transport strategy, which was mainly based on the Prague Effective scenario, but also contained some aspects of the Rationale Scenario.

Lessons learnt

As a precondition, cities should have a future sustainable mobility vision approved by the city assembly and scenarios prepared in advance. Well-defined questions approved by sociologists and statistics experts, and a

statistical evaluation of the survey (depending on the scale of survey/number of respondents) are crucial. A very well-prepared and organised workshop (for example, preparation of the discussion in the form of a game) is also helpful. For both the survey and the workshop, stakeholders should be selected in a representative and balanced way. The idea of designating a workshop for advanced users and a sociological survey with essential, easy questions for statistical purposes is an effective solution for involving a wide range of stakeholders in scenario selection. It also provides a powerful basis vis-à-vis political approval, as it is based on broad and balanced expert opinions.

Costs and know-how

The sociological survey cost approximately 16,000€ (around 2,200 respondents, of which 30% participated in telephone interviews (CATI) and 70% in interviews on the online panel (CAWI)).

For details see:

<http://en.iprpraha.cz/mobilityplan>

Author: Václav Novotný, Prague Institute of Planning and Development, collected by EUROCITIES

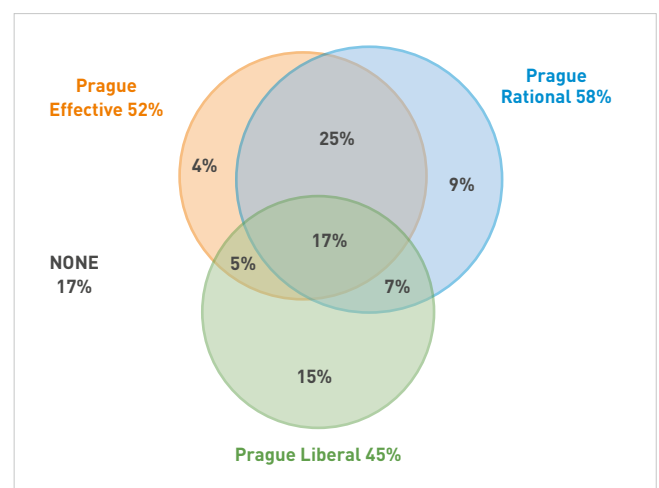


Image: Intersections of mobility scenarios as a result of sociologic survey © City of Prague

Activity 4.2: Discuss scenarios with citizens and stakeholders

Antwerp, Belgium: Broad integration of citizens, policymakers and experts in scenario discussions**Context**

- The City of Antwerp is a port city in Belgium and has a population totalling more than 524,000 inhabitants, making it the largest city in the Flemish region.
- The City of Antwerp adopted its second SUMP in 2015. Antwerp is currently working on Routeplan2030, the regional mobility plan.

Description of activities

The City of Antwerp has decided to unite different stakeholders and involve citizens to achieve the vision that has been set for the city. Antwerp has introduced innovative governance methods to alter the ways in which the city moves and to improve the quality of life within it.

To bring the vision to life, an examination of possible future scenarios was carried out. A steering group then selected the scenario that was most in line with the ambition of Antwerp and that included adequate and relevant projects for the region. The city worked together with citizens and stakeholders to develop innovative ideas designed to set Antwerp on a path that would lead it to the desired scenario.

This integration of different actors in mobility-related discussions is highlighted in the case of the ring road. The case refers to the decision to cover the ring road, which is characterised by high traffic volumes. Numerous discussions followed and meetings were held with a wide range of actors to develop and collect innovative ideas for the different uses that the new areas of land on top of the resulting tunnel could be dedicated for. Fifty workshops were held and 100 working sessions organised, in which approximately 3,500 experts and policymakers as well as 3,000 citizens and organisations participated. Multidisciplinary design teams used participation and co-creation tools to shape input from citizens.

In another example, Smart Ways to Antwerp consists of stakeholders who work together to shift the city towards sustainable mobility, by informing, raising awareness, supporting the development of innovative mobility solutions, and achieving behavioural change through various projects. Included among these projects is the Marketplace for Mobility, a platform for public-private partnerships through which the city supports innovative

solutions. As part of the project, Antwerp is working together with more than 60 partners in different frameworks.

As a consequence of these and other examples of how different actors have been integrated in the SUMP process, the City of Antwerp was presented with the prestigious 2019 CIVITAS “Citizen and Stakeholder Engagement” award.

Lessons learnt

- All stakeholders must be mapped and this information shared with the project team.
- “If you invest in liveability, citizens are the experiential experts. Citizens do not know everything ... but experts do not know either” said Alexander D’Hooghe, intendant, Over the Ring project.

Costs and know-how

It is necessary to have cooperation between different city services with know-how related to communication and participation as well as the different neighbourhoods. These were further supported by a communication agency.

For details see:

<https://www.degroteverbinding.be/> (available in Flemish)

Author: Annelies Heijns, City of Antwerp, collected by ICLEI



Image: © City of Antwerp

Activity 5.1: Co-create common vision with citizens and stakeholders

Leuven, Belgium: Widely accepted Leuven Climate Vision**Context**

- Leuven is a Belgian city located 20 km away from Brussels and is home to over 100,000 inhabitants.
- Leuven has a long tradition of Sustainable Urban Mobility Planning, with the second SUMP having been implemented in 2019. The newest SUMP is integrated in the Spatial Structure Plan of Leuven - 2017: Leuven Tomorrow.

Description of activities

The importance of working towards climate neutrality in Leuven was first expressed in 2010 by civil society organisations, the University (KUL), and the municipality. This declaration was followed one year later when the Mayor of Leuven, Mr. Mohamed Ridouani, decided that Leuven would join the Covenant of Mayors as a signatory.

These actions initiated a larger consultation process, which resulted in the creation of the association Leuven Climate Neutral 2030 (or Leuven 2030) in November 2013. This association was created by 60 founding members, including residents, companies, knowledge institutions, (semi) public authorities and the municipality. The municipality is deeply involved in the discussions and decisions as it is represented in several bodies of the association (e.g. board of directors, board of experts). This association provides the framework for defining a general long-term vision for the City of Leuven. The vision of a climate neutral city is supported by a wide range of stakeholders and citizens. Furthermore, the goal of reducing greenhouse gas emissions is applied to different sectors and is reflected in the local SUMP through related targets.

Lessons learnt

Having an independent association that brings together residents and local stakeholders, is distinct from municipal institutions (which are still involved), and is open to all organisations was key for the success of Leuven 2030. This cooperation model was one of the reasons Leuven won the European Green Leaf Award 2018. The consensus reached on climate neutrality provides legitimacy for sustainable urban mobility measures. Nonetheless, the translation of the vision of a climate neutral city into SUMP measures created some protests, especially from local shopkeepers. However, the direct consultations and positive feedback received

from different stakeholders allowed for the adoption and implementation of an ambitious and progressive SUMP, especially the traffic circulation plan. The increase of the cycling modal share in the city centre from 32% to 41% and the decrease of car use from 63% to 54% after the implementation of the circulation plan are very promising.

Costs and know-how

Leuven Climate Neutral 2030 is an independent association that receives financial support from the municipality in the amount of approximately 75,000€ per year and has an annual budget of 175,000€. The association employs a small team with skills in transition management, stakeholder management and communication. Other expertise and contributions are sought within the membership of the association and its different bodies.

For details see:

<https://www.leuven.be/circulatieplan> (available in Flemish)

Author: Tim Asperges, City of Leuven, collected by Polis



Image: © Karl Bruninx

Activity 5.1: Co-create common vision with citizens and stakeholders

Gothenburg, Sweden: A “Vision Zero” approach for road safety

Context

- Gothenburg is a city of 570,000 inhabitants and can be considered an advanced city with much experience in sustainable mobility development.

Description of activities

Gothenburg adopted a long-term “Vision Zero” approach to road deaths and serious injuries, which mainly focusses on traffic calming. In 1978, Gothenburg had one speed-hump. In 2019, there were around 2500 traffic calming measures, and citizens are asking for more, especially in residential areas where the recommended speed limit is 30 km/h. Measures to achieve this were mainly the following:

- Raised pedestrian-crossings;
- Raised footpaths;
- Bus-stop central island;
- Road-humps;
- Lateral deflections;
- Roundabouts; and
- Raised intersections.

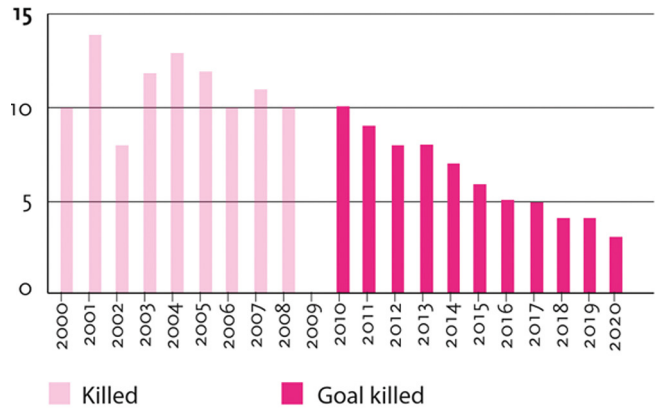
Lessons learnt

Maria Kraft, head of traffic safety at the Swedish Transport Administration, said the key to Vision Zero’s success is that it involves treating the traffic network as “a complete system”, namely a system that should be designed to minimise the harm of potential human errors.

“People will always make mistakes. You can’t count on that never happening,” Kraft said, “For instance, if you need to have an intersection on a road where the speed limit is 80 kilometres per hour, then you design the road in a way that ensures you bring down the speed of cars successively so as to prevent fatal collisions at that intersection. You may add a roundabout ahead of it, for instance,” said Kraft.

The idea is that safety aspects should be built into the traffic system and included when planning, designing, and building infrastructure projects. In practice, the Vision Zero policy has involved measures like separating car lanes with physical barriers and building so-called two-plus-one roads, which consist of a two-lane section in one direction and one-lane section in the other, allowing for safe overtaking.

Number of killed in traffic 2000-2008 and goal for year 2020:



Traffic calming measures helped to shift around 650,000 km travelled by motor vehicles per day from local city roads to arterial or national roads, on which vehicles can travel at higher speeds and where possible conflicts with pedestrians or cyclists are less frequent. The city’s intermediate targets are to reduce the annual number of road deaths from nine to three and serious and moderate injuries from 227 to 75 over the period 2010-2020.

Costs and know-how

A study conducted by the Swedish Transport Research Institute (VTI) estimated that traffic calming, together with the separation of active travel from motorised traffic, contributed to three quarters of all reductions in serious road traffic injuries on Gothenburg’s roads from 1990 to 2003. Over the same period, the investment and maintenance costs of traffic calming measures were € 21 million, while the socio-economic benefits achieved through a reduction of road deaths and serious injuries have been estimated to be €1 billion. Every €1 invested brought 48€ in socio-economic benefits.

For details see: <https://bit.ly/2FnQn9B>

Author: Dirk Engels, Transport & Mobility Leuven, collected by Rupprecht Consult



Images: © Swedish Association of Local Authorities and Regions 2006

Activity 5.1: Co-create common vision with citizens and stakeholders

Madrid, Spain: Defining objectives for the peripheral areas**Context**

- Madrid is a capital city, with a population of around 3.2 million.
- Madrid approved its SUMP in 2014 (Plan de Movilidad Urbana Sostenible de la ciudad de Madrid - PMUS Madrid), which includes 95 specific measures with the aim to reach a 6% reduction in car traffic by 2020. It is currently under revision.

Description of activities

In the past, mobility measures had been mainly confined to the central areas of the City of Madrid. With the new SUMP, a strong focus is put on strategies and measures for the peripheral districts, especially those raised in Madrid's Regeneration Strategy Plan, "Madrid Recupera", for the urban renovation of the city's most vulnerable suburbs. This plan aims at territorial rebalance and consists of 376 initiatives on regeneration, open space and mobility, as well as identifying targets for operations through a participatory process. As a matter of fact, the elaboration of Madrid Recupera is rooted on a set of participatory activities with neighbours to collect information about needs and problems in the different peripheral districts. Also, a full day of structured dialogues was organised with technicians, experts, associations, and groups of citizens to present the working strategic lines of the mobility plan, analyse specific problems and propose possible approaches or solutions. With the support of the CIVITAS ECCENTRIC project, the objective of the new SUMP is to territorialise the proposals by developing pilot actions to make the action lines of the plan visible in the city, evaluate them, and easily reproduce them in other parts of the city. That is why the plan has been directed towards the so-called "challenges", which cover the main aspects of a public mobility policy. Those are:

- Recover public space and the quality of life of citizens, in line with the regeneration strategy, Madrid Recupera, and with the incorporation of neighbourhood demands;
- Reduce the environmental impact of transport, not only in terms of air quality, but also in terms of the carbon footprint;
- Optimise the mobility model, enhancing the co-existence of various forms of transport and more sustainable and efficient transport;

- Promote sustainable urban planning, taking into account the mobility model;
- Move forward towards more inclusive mobility, that takes in account the needs of all citizens, in terms of gender and accessibility.

Lessons learnt

Citizen participation is a fundamental aspect of the initiative to evaluate the effectiveness of measures from the vulnerable groups' perspective. The added value of the new plan is to consolidate and unify existing plans and identify the connection with the central area.

Costs and know-how

The preparation of the plan is being carried out through a contract with an external consultant, which amounts to 117,500€ (VAT excluded).

For details see:

<https://planmadre.madrid.es/index.php/pmus/>
(available in Spanish)

Author: Cristina Moliner Hormigos, Madrid City Council, collected by EUROCIITIES



Image: Madrid SUMP ©PMUS Madrid

Activity 5.2: Agree objectives addressing key problems and all modes

France: Mandatory objectives adapted to cities of different sizes

Context

- In France, SUMP (PDU – Plan de déplacements urbains) are compulsory for urban areas with over 100,000 inhabitants.
- Many smaller cities voluntarily develop either a full PDU or a simplified plan.

Description of activities

In France, the process and objectives for developing a Sustainable Urban Mobility Plan are legally defined. Since 1996, when PDU was first legally defined, successive laws have built up the framework, so that a PDU must now aim to achieve eleven mandatory objectives. Local mobility authorities have to integrate all of them by formulating their own strategic objectives in relation to the diagnosis and challenges of their area, while the way to achieve these objectives remains free. The ability of a SUMP to reach these objectives is checked by state experts, possibly leading to rejection of the SUMP.

While the first three objectives are cross-thematic, the other eight are thematic and can be considered as contributors to the cross-thematic objectives. This set of objectives has been designed for large cities, where a PDU is mandatory. However, it is seen as quite complex and demanding for medium-sized cities, where mobility problems and resources are different. Therefore, Cerema developed a lighter methodological framework that is adapted to these cities.

The rationale behind this is that medium-sized cities should focus on core objectives in their first plan. The optional objectives would usually be chosen only for the second- or third- generation plan, when they have raised their ambitions.

As key objectives for organising a mobility system, core objectives form a coherent set, the first three being cross-thematic general objectives and the next four, equally important, being more operational. The suggested levels of ambition for these objectives are similar to those of a classical PDU. The four optional secondary objectives are assigned a lower ambition, so that there is room for flexibility, depending on the individual ambitions of each local authority.

Ongoing discussions in France are likely to lead to a legal, but flexible, definition of this simplified mobility plan after 2020.

Lessons learnt

When defining the objectives of your plan, find a balance between ambitions and resources.

For starter cities, keep in mind that your plan is the first one of a (hopefully) long series: move one step at a time!

For details see:

<https://www.eltis.org/mobility-plans/member-state/france>

Author: Thomas Durlin, Cerema, collected by Rupprecht Consult

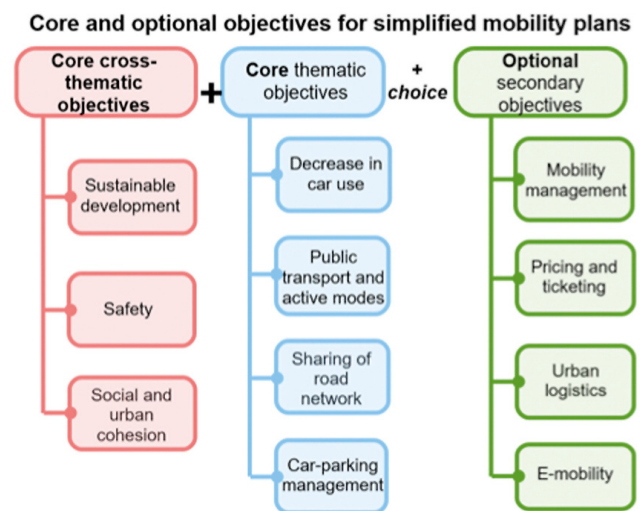


Image: © Cerema

Activity 5.2: Agree objectives addressing key problems and all modes

London, United Kingdom: Objectives for healthy streets

Context

- London is the United Kingdom's largest city and is home to 8.9 million inhabitants.
- The Mayor's Transport Strategy is London's leading transport planning document.

Description of activities

To produce an effective sustainable transport strategy, a vision needs to be specified with ambitious and measurable objectives that have been developed with the help of stakeholders.

A great example of this is the Healthy Streets Approach that has been adopted by Transport for London (TfL). The Healthy Streets Approach puts people, and their health, at the heart of decision making. The Healthy Streets Approach uses 10 evidence-based indicators of what makes streets attractive places. Working towards these will help to create a healthier city, in which all people are included and can live well, and where inequalities are reduced.

The Healthy Streets Approach is the overarching theme of the current Mayor's Transport Strategy of London, and features in every chapter. The Mayor's Transport Strategy outlines a number of high-level objectives that are delivered through the Healthy Streets Approach:

- 80% sustainable mode share by 2041
- 20 minutes of active travel per person per day by 2041
- Zero deaths on London's transport network by 2041.

Lessons learnt

The key success factors of the approach were:

- Embedding the Healthy Streets Approach into the Mayor's Transport Strategy;
- Ensuring the approach was evidence based; and
- Utilising the Health in All Policies (HiAP) approach and ensuring that public health staff were embedded within a transport authority.

The main key factors to implement the approach successfully are:

- Political support;
- Organisational support;

- Community support; and
- Being able to demonstrate, using data, that the strategy is having the desired effect over time.

Costs and know-how

Public health professionals need to be embedded within transport authorities. Additionally, it is important to deliver training across the transport authority and across relevant local authorities.

For details see:

[Healthy Streets Approach](#)
[Mayor's Transport Strategy](#)

Author: Chris Billington, Transport for London, collected by Walk 21



Image: © Transport for London

Activity 5.2: Agree objectives addressing key problems and all modes

Munich, Germany: Extensive stakeholder workshops for shaping the objectives**Context**

- With more than 1.5 million residents in the city and more than three million in the region, Munich is the main urban centre and state capital of Bavaria.
- Munich's VEP (Transport Development Plan) was approved in 2006, as the core project of the urban development programme, PERSPECTIVE MUNICH.

Description of activities

Munich's VEP is a conceptual, high-level steering instrument that sets out the objectives and strategies of urban development in transport over a period of 10-15 years. Priority is given to measures that aim to shift the current system towards ecologically sustainable means of transport. The goal is to increase the number of routes travelled by foot, bicycle, and public transport.

Over the last few years, the different stages of the Transport Development Plan (VEP) were discussed with residents, district and neighbouring committees, as well as various institutions and associations during numerous public events. The VEP was discussed with a range of stakeholders in a multi-stage participation process. The draft of the "Traffic Development Plan Munich - action and action concept" was sent out for comments to the city's district committees, the counties, cities, and municipalities of the region, various Munich city departments, institutions, associations, as well as to the bearers of public interests and initiatives. Specific issues were emphasised in the suggestions:

- Support for securing mobility for all road users and all modes of transport;
- Cooperation with the region (e.g., Chamber of Commerce, Regional Planning Association Munich, Planning Association Outer Economic Area Munich);
- An integrated view of infrastructural, operational, organisational and informational ("soft") measures; and
- Integration of the traffic planning perspective into the considerations and requirements for urban, site, and settlement developments.

A mobility workshop was held in 2019 to discuss, with more than 100 residents and stakeholders, how mobility in Munich should look like in the future. The results of the mobility workshop will be incorporated into the city's

mobility plan, which sets the direction for future transport planning.

Lessons learnt

- Consider not only car traffic and public transport, but also walking, cycling, impact on the environment, the barrier-free design of streets, as well as public transport facilities;
- Discuss transport problems and solutions with citizens, stakeholders, politicians, and relevant authorities. This will make it easier to find solutions for all and to realize them afterwards;
- Elaborate a strategy, action plan, and priorities to realise the measures;
- The planning process should not occupy too much time since people want to see results and solutions.

Costs and know-how

Prospectively about 300,000€ for external support (participation, simulations, etc.). Two employees will work on it for the next three years.

For details see:

<https://www.muenchen.de/rathaus/Stadtverwaltung/Referat-fuer-Stadtplanung-und-Bauordnung/Verkehrsplanung/Mobilitaetsplan.html>
(available in German)

Author: Georg Koppen, City of Munich, collected by ICLEI



Image: © Evisco/LHM

Activity 6.1: Identify indicators for all objectives

Milton Keynes, UK: Easily measurable and available set of strategic indicators**Context**

- Milton Keynes is an English city of 260,000 inhabitants, located to the North-West of London.
- The city authority has already developed and implemented several SUMP. The latest one has been adopted in 2018 and covers the period 2018-2036.

Description of activities

To assess the overall performance of the SUMP, the City Council has selected a number of indicators. These include:

- Road network condition;
- Average journey time;
- Public transport journey time;
- Public transport satisfaction;
- Air quality; and
- Road safety.

These indicators were selected because they:

- Allow for a correct assessment of the impact of the SUMP. For instance, the Road Safety indicator is linked with the SUMP objective, 'Protect transport users and the environment'.
- Are easily measurable. For example, for Public Transport Satisfaction, the city authority already collects relevant data via an annual survey of bus users; and
- Are available or easily accessible. This is the case with Road Network Condition, as this data is already collected as part of the city authority's asset management processes and must be reported to the national government department.

Lessons learnt

It was important to define a clear set of SMART (specific, measurable, achievable, relevant, time-bound) objectives for the SUMP. Logic mapping assisted with breaking these objectives down into their various inputs, outputs and outcomes, which then informed the types of indicators to select to monitor SUMP delivery. Failure to do this can result in the selection of indicators that are not aligned with the strategy. When looking into which data is already available, it was possible to identify data gaps: for instance, the lack of reliable data on cycle

activity and mode share. This provided a justification for investment in new data collection exercises. While technology is continuously generating new data, Milton Keynes remained alert to opportunities for new or improved indicators. For example, the use of traffic sensors and traffic management technology to provide traffic count data, instead of undertaking annual programmes of data gathering from traffic loop counters. Where possible, the SUMP team tries to utilise indicator methodologies that are used elsewhere. This increases the likelihood that the data is readily available and is likely to be collected in the future. Milton Keynes subscribes to several resident and public transport satisfaction surveys that other cities participate in and uses them for some indicators. This is where the SUMI initiative is very helpful, as it provides common indicator methodologies, enabling benchmarking.

Costs and know-how

Costs are mostly dependent on the officer time required to develop the SUMP and the indicators to monitor it, which was estimated in Milton Keynes to be one to two years. This task requires knowledge of transport planning and an understanding of the wide range of issues and objectives this entails (e.g. environment, economic, social, or health). Additionally, some new data collection activities may be costly.

For details see:

<http://bit.ly/30Eujju>

Author: James Povey, Milton Keynes Council, collected by Polis



Image: © Milton Keynes Council

Activity 6.1: Identify indicators for all objectives

Malmö, Sweden: The Accessibility Index as an indicator example**Context**

- Malmö is the third-largest city of Sweden, with about 300,000 inhabitants.
- In 2016, Malmö adopted its first holistic SUMP and won the 4th SUMP Award in the same year.

Description of activities

More Malmö for more people equals a more accessible Malmö – this is the main assumption in the work towards a more sustainable city and traffic system. The overarching goal of Malmö's SUMP is to have walking, cycling and public transport as the first choices for transport, while accessibility with sustainable transport modes is crucial for the development of sustainable transport modes. Therefore, Malmö developed a normative Accessibility Index, based on relevant measurements, that can assess the impact of measures undertaken and uses maps to illustrate sustainable accessibility.

The Accessibility Index can function as support for decisions in planning and in weighing different investments and actions. It also allows for comparisons between different areas and population groups. The Accessibility Index can constitute support for follow-up on how accessibility in the transport system develops over time and can thus be one of several indicators of how well SUMP goals are reached. The following eight criteria for sustainable accessibility are included in the Accessibility Index:

1. Travel time by walking to 10 destinations;
2. Travel time by cycling to 10 destinations;
3. Travel time ratio bicycle/car to 10 destinations;
4. Travel time ratio public transport/car to city centre, nearest commercial area/shopping mall, and nearest public transport node;
5. Distance to nearest bus stop (with good headway);
6. Distance to nearest major public transport node;
7. Distance to nearest car sharing facility; and
8. Range of travel opportunities, i.e., access to several sustainable transport modes with good accessibility (freedom of choice).

In order to analyse today's accessibility, geographical data, with Malmö divided into 225 zones, is processed. All zones get analysed based on the eight criteria and for 10 different destination types (e.g. nearest school, nearest grocery store, nearest park, etc.).

The map below shows the 15 sub-areas that constitute the SUMP areas. The result of the aggregated Accessibility Index from 2013 can be seen in the map and its legend below. In total, half of the areas have acceptable accessibility or better. Approximately 59% of Malmö's population live in these areas. Many of the areas with poor accessibility have relatively few inhabitants and low population density.

Lessons learnt

The Accessibility Index proved to be useful for status reports, comparing different investment options, comparing accessibility between areas, and for population groups, evaluating the effectiveness of various measures and monitoring progress over time.

For details see:

<http://bit.ly/30Q5KAd>

Author: Andreas Nordin, City of Malmö, collected by Rupprecht Consult

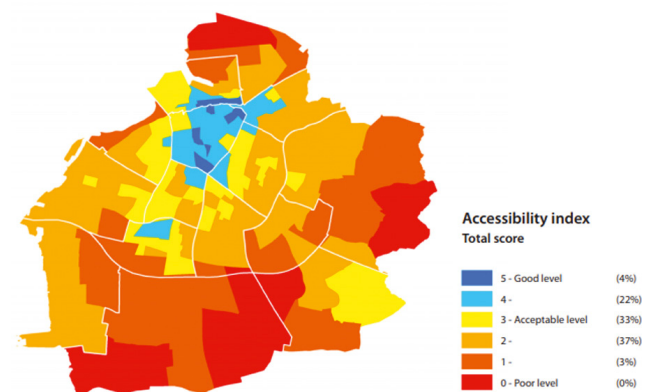


Image: Malmö's Accessibility Score © Sustainable Urban Mobility Plan Malmö

Activity 6.2: Agree measurable targets

Dresden, Germany: Strategic targets developed by intensive roundtable process**Context**

- Dresden is a large city in eastern Germany, with 560,000 inhabitants.
- Dresden developed its SUMP from 2009 until 2014 and evaluated it in 2018.

Description of activities

The SUMP planning process started with the constitution of boards, analysis, and discussion of targets. The targets of mobility and transport development in Dresden until 2025 were elaborated by stakeholders in the SUMP roundtable in a very intensive and controversial process in 2010. The roundtable created a consensual paper on transport development targets for Dresden. The targets were agreed by all stakeholders and adopted with little modification by the City Council in March 2011. The agreed targets formed the basis for SUMP elaboration, setting a common vision for a strategy across a wide range of stakeholders. The Dresden SUMP is structured around four main objectives:

1. Enduring, sustainable and eco-friendly transport and mobility standards;
2. Socially just participation in mobility – considering specific needs resulting from different living conditions;
3. Achieving and maintaining high-quality levels regarding the city and the environment by raising the efficiency of integrated transport systems and reducing the use of natural resources for transport purposes;
4. SUMP to be an open planning and decision-making process.

The objectives are translated into 34 sub-targets that constitute the basis of the whole SUMP. Examples (with a time horizon to 2025) include:

- 1.7 Barrier-free adaptation of links between local public and private transport (cycle, car, pedestrian traffic) (100%);
- 2.4 Raising the safety of all transport users by adapting or redesigning transport facilities that are critical to safety (half the number of injuries and avoid traffic deaths);

- 3.5 Reducing the burden of through traffic in the city centre and residential areas, and instead shifting traffic into the high-quality network of thoroughfares (-5%).

Lessons learnt

Key success factors included a neutral discussion moderated by an external moderator and the involvement of the University of Technology Dresden for the editorial work. Politicians were informed about the target selection process – as members of the SUMP roundtable. For both SUMP elaboration and SUMP implementation, it is crucial to have politically adopted targets for planning certainty and for ensuring a high level of acceptance. The initial SUMP evaluation in 2018 showed that more measurable targets were needed.

Costs and know-how

The whole process of agreeing on targets took about five months. It was organised by the municipality and consisted of four SUMP roundtable meetings and additional meetings with specific interest groups to find consensus. The scientific advisory board and a neutral roundtable moderator supported the discussions.

For details see:

www.dresden.de/vep

Author: Kerstin Burggraf, City of Dresden, collected by EUROCIITIES



Image: © Joe Breuer, pixabay.com

Activity 6.2: Agree measurable targets

Örebro Municipality, Sweden: Three key targets for traffic development**Context**

- Örebro is a mid-sized city with about 153,000 inhabitants.
- The Swedish city can be considered as having intermediate to advanced experience with SUMP development. Its first SUMP was adopted in 2014, and the second one is currently in the development process.

Description of activities

In the process of elaborating the SUMP, three targets were set for traffic development, all with year 2020 as target year:

1. Increase of walking, cycling and public transport trips to 60% of the modal split (from 44% in 2011);
2. Decrease of the absolute number of fossil fuel-driven cars; and
3. Improvement of travel time quota between car, bus and bicycle, while the travel time quota between bus and car should be less than two and between bicycle and car less than 1,5.

In the process of setting the targets, one step was to reflect on how to monitor them:

- What indicators does our city already measure and report in our annual report about the municipality?
- Which indicators could the national statistics office provide?

Targets in a SUMP can be connected to a travel survey/census, such as one regarding modal split data for the related target, for example. The municipality has done a travel survey about every five years and had a baseline from 2011 for the modal split target. The second target deals with the fuel of cars - "the number of fossil fuel-driven cars should decrease in absolute numbers until 2020". These kinds of numbers can, for example, be provided by the national statistics office or the regional office. The third target regarding travel time quota between car and bus as well as car and bike can be compared by actual travel time data to important destinations, such as major residential areas or the location of an important employer in the city. Data from public transport or map services can be used as well.

Lessons learnt

The key success factor is to choose targets that can be relatively easily evaluated and/or evaluated with a certain interval according to the ordinary monitoring of traffic indicators. For example, the modal split can be monitored using the results of a travel survey. The biggest challenge was to measure the progress of the third target, as it was done manually for certain distances. The exact distances were not selected during the SUMP process, which resulted in higher effort for the monitoring than expected.

Costs and know-how

- Costs for a travel survey, costs for national statistics, costs for follow up travel time quota.
- Know-how required: traffic planner, statistician.

For details see:

www.orebro.se (search for 'SUMP')

Author: Lovisa Blomér, City of Örebro, collected by UBC



Image: © Örebro Municipality

Activity 7.1: Create and assess long list of measures with stakeholders

Metropolitan Area of Porto, Portugal: Classification of measures for the measure selection in different municipalities**Context**

- The Metropolitan Area of Porto (AMP) is made up of 17 municipalities, which altogether account for approximately 1.7 million inhabitants.
- The Metropolitan Area of Porto and its 17 neighbouring municipalities have developed the Action Plan for Sustainable Urban Mobility (PAMUS), which will be ready for implementation in 2020.

Description of activities

The PAMUS is responsible for framing the financial support that the municipalities intend to apply for as part of the Regional Operational Program. Cities apply for these funds in order to be able to implement the types of actions that respond to the programme's investment priority 4.5. - "Promotion of low-carbon strategies for all types of territories, particularly urban areas, incorporating the promotion of sustainable multimodal urban mobility and adaptation methods relevant to mitigation". The proposals for measures to be implemented were subdivided according to the typologies defined under the 4.5 investment priority, namely: Soft modes; Multimodal integration (ticketing); Interfaces; BUS, BRT and LRT corridors; Real-time information systems for users; Traffic management systems; DRT (Demand Responsive Transport) solutions; Multi-typology; Others. To implement the PAMUS strategy, 258 measures were developed for all municipalities in the AMP, excluding nine measures intended for the metropolitan level. Of the 258 measures, 46% focussed on "soft modes", 18% on "interfaces", and 13% on BUS, BRT and LRT corridors. The majority of the measures were defined by each municipality according to the diagnostics carried out and the objectives defined in the PAMUS. Having defined a long list of measures to be implemented, it was very important to evaluate how the nine typologies could effectively contribute to the implementation of the defined mobility strategy. To do this, a cross-matrix analysis of the typologies and the objectives set out in the PAMUS framework was developed. The available financial instruments to support the implementation of these measures are an important aspect in the assessment of the measures, such as the Operational Programme North 2020. A working group coordinated by the AMP was responsible for narrowing down the list of proposals by selecting the measures.

However, for most of the measures, the final decision belonged to the elected Municipal Councils.

Lessons learnt

The main success factor was the high-quality participation of and collaboration among the municipalities and the AMP. On the other hand, the short period of six months had several drawbacks, including:

- A poor inventory;
- Lack of involvement of important stakeholders, such as transport operators, and national entities with responsibilities in transport; and
- No participation of the general public or their representatives.

Costs and know-how

The total cost spent on external expertise was approximately 100,000€. In addition, more than 600 staff working hours were required from the municipalities and the AMP.

For details see:

http://portal.amp.pt/media/documents/2016/12/06/relatorio_final_pamus_amp_MuztqgN.pdf;

http://portal.amp.pt/pt/3/projectos20/226#FOCO_3 (available in Portuguese)

Author: Carmo Tovar, Metropolitan Area of Porto, collected by ICLEI

Objetivo Estratégico	Modos suaves	Integração multimodal (bilhética)	Interfaces	Corredores BUS, BRT e LRT	Sistemas de informação aos utilizadores	Sistemas de gestão de tráfego	Soluções DRT	Multi tipologia
1	✓✓✓	✓	✓✓	✓✓✓	✓	✓	✓✓✓	✓✓✓
2	✓✓	✓✓	✓✓✓	✓✓✓	✓	✓	✓✓✓	✓✓✓
3		✓✓✓	✓✓✓	✓✓✓	✓✓	✓	✓✓✓	✓✓
4	✓✓	✓✓	✓	✓✓	✓	✓	✓✓	✓✓
5	✓	✓✓	✓✓	✓✓			✓✓	✓
6		✓✓	✓✓	✓✓			✓✓✓	✓
7	✓			✓			✓	✓
8				✓		✓		✓
9		✓	✓✓	✓	✓✓	✓✓✓		✓
10	✓		✓	✓	✓✓	✓	✓✓	✓
11		✓✓	✓✓✓	✓	✓✓	✓	✓	✓
12	✓	✓✓✓	✓✓	✓	✓✓✓	✓✓✓	✓✓✓	✓
13		✓✓✓	✓	✓	✓✓	✓	✓✓	✓
14						✓✓✓		
15	✓✓	✓	✓	✓	✓	✓	✓	✓

Image: © PAMUS Metropolitana do Porto

Activity 7.1: Create and assess long list of measures with stakeholders

Granollers, Spain: Participatory measure assessment informed by evaluation of previous SUMP

Context

- Granollers is a Spanish city with approximately 60,700 inhabitants and is located in the central Catalonia region.
- Granollers approved its first SUMP (PMUS) in 2009. A revision of the document started in 2016 and was approved at the end of 2018.

Description of activities

For the development of the second PMUS, the implemented measures of the first PMUS were evaluated to support decision makers in the prioritisation of measures, based on the impact already achieved within the first implementation phase. The selection and prioritisation of measures was conducted with different stakeholders and involved the organisation of specific activities and debates:

- Participation and informative sessions relating to the approval of the first PMUS with members of the Mobility Council and Health Council;
- Participation sessions with the technical staff of different departments of the City Council; and
- Specific participation sessions with economic and social agents, as well as with citizens and users of public transport or bicycles.

The technical staff presented the data and the fundamental proposals of the second PMUS. During the different sessions, feedback on the technical proposals was gathered from the participants. The prioritisation of the measures was carried out by considering a measure’s continuity with the first mobility plan as well as the impact the measure would have on the city’s modal shift. Prioritised actions were considered those that could increase walking, the development of the network of cycling routes, and all measures that promote clean vehicles.



Image: © City of Granollers

MOBILITAT A PEU	11	Criteris d’actuació sobre l’espai per a vianants
	12	Ampliació de l’illa de vianants i zona de trànsit restringit
	13	Itineraris de connexió amb barris i conurbació
	14	Senyaltzació d’itineraris per a vianants
	15	Milora de l’accessibilitat a les estacions de transport públic
	16	Milora de les connexions amb els polígons industrials
	17	Connexions a peu dels nous desenvolupaments urbanístics
	18	Manteniment de l’adaptació dels itineraris escolars
	19	Campanyes de promoció dels desplaçaments a peu
	110	Creació de zones pacificades als barris
MOBILITAT EN BICICLETA	21	Criteris per la creació i ampliació de la xarxa ciclable
	22	Xarxa interna
	23	Xarxa de connexió amb la conurbació
	24	Xarxa de connexió amb la RMB
	25	Criteris i previsió d’aparcaments per a bicicletes
	26	Oficina de la bicicleta
	27	Pla de senyalització d’itineraris per a bicicletes
	28	Crear el registre de bicicletes
	29	Campanyes a favor de la bicicleta
	210	Distribució urbana de mercaderies amb bicicleta
MOBILITAT EN TRANSPORT PÚBLIC	31	Milora de l’intercanviador modal de la Pl. Serrat i Bonastre
	32	Milora de la informació del servei Transgran
	33	Increment d’autobusos a la xarxa actual
	34	Nova línia d’autobus
	35	Estudi per a la millora del servei urbà a la conurbació
	36	Desdoblament de la línia R3
	37	Parades amb informació dinàmica

Image: Part of the list of measures included in the Granollers PMUS and grouped by mode of transport © Pla de mobilitat urbana sostenible 2018 - 2024, Ajuntament de Granollers

Lessons learnt

It was of great importance to consider the first SUMP and its implemented measures, and to avoid measures that were not economically viable, considering the financial condition of the municipality. Discussing the measures with the different stakeholders was also important to determine and understand their needs. In addition, citizen involvement in decision-making stages allows for the development of ownership for the measures and an easier implementation. The measures were analysed separately without considering the benefits of a joint implementation, which could have improved the selection of measures and their impact. This has been learnt for the next generation of SUMP development.

Costs and know-how

The time allocated for defining actions and determining the costs and phases of implementation was substantial since these steps are fundamental elements of the plan. The cost to take into account were approximately 40 staff hours for organising the sessions and analysing their results. It took at least four hours to prepare each session, the sessions each took about two hours, and another eight hours were required to collect all of the information provided.

For details see:

<https://www.granollers.cat/mobilitat/pla-de-mobilitat-2018-2024>

Author: Laura Llavina Jurado, City of Granollers, collected by ICLEI

Activity 7.1: Create and assess long list of measures with stakeholders

Bremen, Germany: Multi-criteria assessment with structured expert workshops

Context

- Bremen is a city in North-West Germany, with a population of 570,000 inhabitants.
- Bremen first implemented a traffic development plan in the mid-nineties. The Bremen SUMP (Verkehrsentwicklungsplan Bremen 2025), adopted in 2014, was awarded with the European SUMP Award in 2015.

Description of activities

Bremen developed a specific two-step evaluation methodology to select the measures included in its SUMP. In the first step, 16 qualitative indicators were developed to evaluate how each measure contributed to the achievement of the SUMP's goals and sub-goals. In the second step, additional evaluation indicators, such as goal conflicts, transport effectiveness, structural feasibility, political acceptance, etc., were included through a plausibility and weighting process.

In the first step, measures were evaluated according to the following grid:

- Measure effectiveness in terms of goals (from -3 to +3 points);
- Spatial impact (big, average or small); and
- Assignment of the results in five effectiveness classes based on the weighted use points (1 being low and 5 being strong).

For each of the 16 evaluation indicators, the effectiveness contribution of each individual measure was qualitatively determined using the Delphi method. As part of the Delphi method, decisions are taken through a structured communication relying on a panel of experts. A ranking of effectiveness, impact and cost classes and then of plausibility was carried out by four independent evaluators for each measure.

The evaluation result was categorised into one of five effectiveness classes. The annual cost of a measure decides the assignment of each individual measure into one of five cost categories. The intersection of effectiveness and cost categories in the results are shown in a cost effectiveness matrix.

Measures with a strong effect and low costs have a very high degree of target achievement. A high or middle degree of target achievement is represented in intermediate levels. The measures with low effectiveness but high costs score as low.

Lessons learnt

The rating based on 16 target indicators, spatial effects and annual costs were not enough to select the measures, so more criteria were considered (e.g., feasibility, goal conflicts, etc.). The involvement of experts, rather than the general public, is more appropriate in this phase and it was key to evaluate and select the right measures.

Costs and know-how

Given the complexity of this measure selection process, the participation of qualified politicians and stakeholders with a broad basis of transport expertise is crucial to understand the task/situation and be able to process the results. In the case of Bremen, the decision-making process and the securing of results would not have been possible without a project advisory committee for the overall coordination.

For details see:

https://www.bauumwelt.bremen.de/sixcms/media.php/13/SUMP_Bremen2025_web.pdf

Authors: Ulrich Just, Rebecca Karbaumer, City of Bremen, collected by EUROCITIES

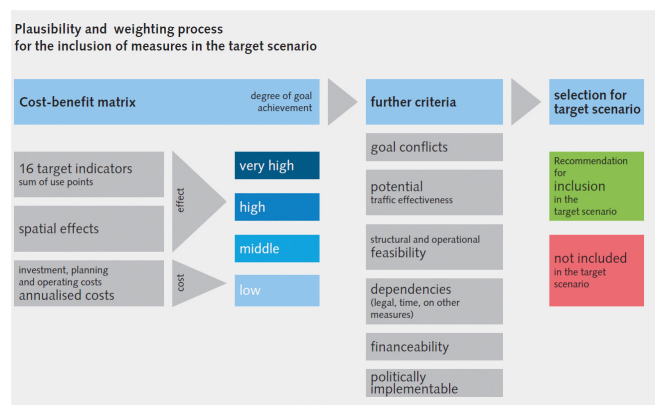


Image: © Sustainable Urban Mobility Plan Bremen 2025

Activity 7.2: Define integrated measure packages

Krakow, Poland: Combination of parking management with traffic limitation and public transport measures**Context**

- With about 760,000 inhabitants, Krakow is the second largest city in Poland.
- Next to prior experience in sustainable urban planning, Krakow is now working on the development of its first Sustainable Urban Mobility Plan.

Description of activities

The City of Krakow considers parking management policy as a means to respond to goals wider than only car parking issues. As a partner of the CIVITAS Park4SUMP project, the Polish city is considering several parking measures to be included in the SUMP in order to reinforce some other measures. In concrete terms, parking management measures are used to achieve the general goals of improving air quality and decreasing congestion. For several years, the Municipality of Krakow has combined the implementation of parking measures (e.g., removal of parking spots, extension of the paid parking zone) with the implementation of traffic limitation measures (e.g., implementation of a limited traffic zone) and the implementation of public transport measures (e.g., integration of public transport services, renewal of rolling stock with a better level of service, improvement of public transport connection and hubs). Taken together, these measures have the potential to decrease the overall number of private vehicles – by both limiting their use and providing alternatives, thus contributing to reducing congestion and increasing air quality outcomes. Krakow has also introduced the permission for shared vehicles and low-emission vehicles (electric) to park in certain areas at a reduced rate or even for free.

Lessons learnt

The combination of different types of measures is crucial for reaching high-level goals, as single measures have more limited impact. In addition, providing alternatives to car use helps to achieve public acceptance of the parking regulation. Some improvements in public space (i.e., removal of big parking lots at squares in the centre) were done “drastically”. However, a step-by-step approach is often better accepted by stakeholders. It is very important to improve the visibility of sustainable

modes to raise awareness among citizens and contribute to their behaviour change (e.g., expanding the bike sharing scheme, mobility management actions in companies and schools, etc.).

Costs and know-how

The packaging of measures as such is not costly as it is integrated in the wider SUMP development process. In the case of Krakow, the know-how and resources required for studying the packaging of measures are provided by the CIVITAS Park4SUMP project.

The implementation of the parking measures costs approximately 100,000€ (excluding major investments like new P&R facilities) and provides a revenue of approximately 12M€ per year (income from paid parking zone) to the municipality budget. This share of municipal revenues coming from parking fees will be reinvested in the implementation of mobility measures and will therefore further contribute to the sustainable development of Krakow.

For details see:

<https://park4sump.eu/>

Author: Tomasz Zwoliński, City of Krakow, collected by Polis



Image: © ELTIS_Harry Schiffer

Activity 7.2: Define integrated measure packages

Tampere, Finland: Mobility management leveraging the opportunity of a tramway project**Context**

- Tampere is a Finnish mid-sized city and the second-largest urban area in Finland, with 235,000 inhabitants.
- Tampere is preparing its first SUMP.

**Description of activities**

Without modern public transport, Tampere cannot keep itself attractive and meet the mobility needs of the people. In 2016, Tampere decided to build its first tramway line. This was an important, almost historical step towards sustainable mobility in Tampere. Since then there has been an intensive tram construction in the city centre and on many central routes. At the same time, Tampere aims to be carbon-neutral by 2030. The share of sustainable traffic modes needs to increase drastically, so that the city can meet its emission reduction targets.

The construction of the tramway influences the daily mobility of a large group of inhabitants and may require changing regular daily routes. As part of the tramway project, Tampere has introduced mobility management actions targeted especially at car drivers. Many actions and pilots are taking place during construction time, such as new Park&Ride facilities or the promotion of public transport and cycling in certain areas. Together with the tram construction, new high-quality bike lanes and more space for cyclists and pedestrians will be built. Tramway traffic on the first part of the network will start in 2021. Years of significant car traffic disturbances in the city centre help to make it easier to encourage people to shift their mobility habits towards walking, cycling or taking public transport, instead of taking the car. This goes hand-in-hand with the construction of the tram

because people are more open to break their routines since they need to find new modes and routes to take during the construction period.

Lessons learnt

Large traffic infrastructure investments should not take place without smart mobility management and extended communication with citizens and stakeholders. Construction sites in the city are a disturbance to traffic but can offer a moment for a change. It is important to make sustainable modes more attractive than the private car. Pilot projects and the testing of the mobility management measures are very important for finding the most effective ways to change people's mobility habits. Sticks and carrots go hand-in-hand. With traffic planning projects, there need to be resources budgeted for communication and mobility management.

Costs and know-how

Costs depend on the volume of the campaigns and mobility management pilots. Generally, mobility management can be a very cost-effective way to influence mobility. Mobility management needs interdisciplinary planning teams: people with various professional backgrounds and know-how working together.

Author: Sanna Ovaska, City of Tampere, collected by UBC



Images: As one of the measures of the mobility management package, electric bikes were offered in winter to come to work © Veli-Matti Lahdenniemi (City of Tampere)

Activity 7.2: Define integrated measure packages

Vitoria-Gasteiz, Spain: Integration of mobility measures in the superblock model**Context**

- Vitoria-Gasteiz is a Spanish mid-sized city with 250,000 inhabitants.
- Vitoria-Gasteiz' SUMP (SUMPSP) was adopted in 2007.

Description of activities

The Sustainable Mobility and Public Space Plan (SUMPSP) was designed to drastically extend space for pedestrians through the implementation of a new scheme called the superblock model. A superblock is a geographical space that covers several city blocks. This scheme reserves the space inside the superblock for pedestrians, cyclists, services, and neighbours' cars, while other private cars and public transport are restricted to the streets surrounding these blocks (the so-called main roads). Following this scheme, a new urban space framework composed of 77 superblocks was identified to be progressively implemented. The measure was first implemented in one demonstrative superblock, thanks to the complete refurbishment of the pavement in the inner streets and the integration of other measures proposed to improve the mobility situation. Together with the superblock, complementing measures were implemented, such as a new public transport network, new traffic lights regulation, new pedestrian and bicycle lanes network, urban freight logistics and the redesign and expansion of the regulated paid parking space, all of them according to the integrated approach behind the superblock model.

Lessons learnt

The model has worked properly in the pilot superblock, reaching the targets and objectives set in the plan:

- pedestrian surface increased from 45% of the total surface to 74%;
- noise levels reduced from 66.5 to 61.0 dBA; and
- there was a reduction of 42% in CO₂ levels, 42% in NO_x levels, and 38% in PM₁₀ particles.

The main obstacle is that the infrastructural design of a superblock is very expensive and is therefore not applicable in the short-to medium-term to the whole city. That is why the approach was extended to other superblocks by adopting lighter and cheaper actions,

such as direction changes, the narrowing and reduction of the number of car lanes, installation of elements, and the use of bicycle lanes to reduce vehicle speed. In any case, when a complete renovation is carried out in a particular street or neighbourhood, the final design fits the superblock scheme.

To avoid initial concerns from some citizens and shopkeepers directly affected by the change, a permanent contact with citizens associations was kept by the municipality. Also, a communication and awareness campaign was launched to create a favourable perception towards a new culture of sustainable mobility. At first, there was also opposition among some municipal officers and political stakeholders, but that was overcome thanks to the existence of a permanent working group that meets weekly to assure a strong consensus regarding the measures to be implemented.

Costs and know-how

The total cost of the implementation of the demonstrative superblock was 6,078,625€. Integrated work from several municipal areas is required: mobility (public transport, mobility network), traffic (traffic lights, parking regulation), public space (accessibility), and environment (noise-pollution measurements).

For details see:

http://sump-network.eu/fileadmin/user_upload/SUMPs/PROSPERITY_Vitoria_Gasteiz_SUMP_summary_EN.pdf

Author: Juan Carlos Escudero, City of Vitoria-Gasteiz, collected by Rupperecht Consult

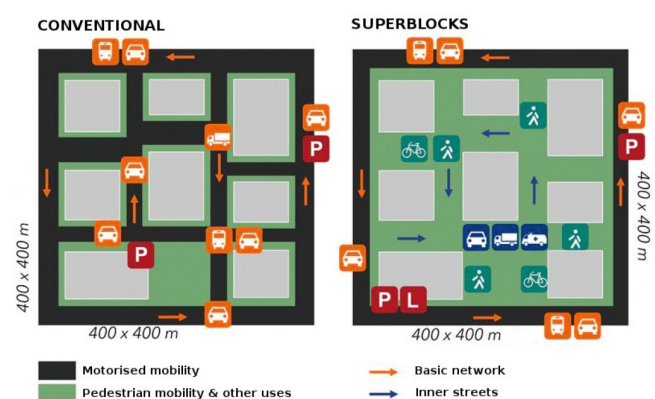


Image: © Agencia de Ecología Urbana

Activity 7.3: Plan measure monitoring and evaluation

Toulouse, France: Ambitious monitoring process led by cross-institutional committees**Context**

- Toulouse is located in the Southwest of France and is the fourth largest French metropolitan area, with 760,000 inhabitants (SUMP/Tisséo's area concerns one million inhabitants).
- Tisséo Collectivités - the public transport and mobility authority of Greater Toulouse - adopted a new SUMP in February 2018 to anticipate future mobility: The Mobility Project "2020.2025.2030" (including a third metro line).

Description of activities

The SUMP of Toulouse includes an ambitious plan for monitoring and evaluation. Several committees have been appointed for regularly monitoring the SUMP and its measures, each of them meeting at least once a year. The committees are composed of different institutional, technical, civil society, and research organisations. The main monitoring committee is composed of representatives of the State, the region, the province, and different local authorities, as well as the transport authorities. It must ensure that the action plan is implemented correctly and timely. Five other committees are also appointed for monitoring the SUMP and ensuring its technical implementation, territorial consistency and effectiveness as well as contribution to other strategies or sectoral objectives (e.g., economic development). These committees are the technical committee, the partnership committee, the territorial committees, the committee for the organisation of transport, and the development committees. To ensure the proper monitoring of the measures, the committees are provided with different tools:

- A SUMP observatory which indicates – for each measure - the initial objectives, the resources allocated, and the expected results, as well as the indicators, which are updated due to regular surveys;
- A trip cost tool that assesses the costs of trips per mode, for both users and for the society; and
- A mobility dashboard to list all measures and track their implementation at the territorial level.

In addition, in the SUMP, there is a list of pre-defined indicators, which help to assess the impact of the measures on reaching the objectives. For instance, for the first measure of the SUMP, which refers to the creation of a new metro line, a set of indicators are

provided: those related to customers, to travel time and to air quality.

Lessons learnt

Due to the SUMP renewal process, many institutional, technical and associate partners have been involved in the definition of new objectives and measures. Their involvement in the monitoring and evaluation of the SUMP is a logical continuation of their involvement in the SUMP preparation phase. The SUMP team clearly identifies the involvement of partners in the monitoring activities as a success factor.

Costs and know-how

Planning for measure evaluation and monitoring as such is not necessarily a costly task. However, the actual monitoring activities have a cost. It is, for instance, estimated that the budget for running the SUMP observatory will be approximately 2.5M€, mostly to undertake surveys.

For details see:

<https://tisseo-collectivites.fr/file-download/download/public/641> (pp 214-218, available in French)

Authors: Mary Malicet, Christophe Doucet, Tisséo Collectivités / Toulouse, collected by Polis

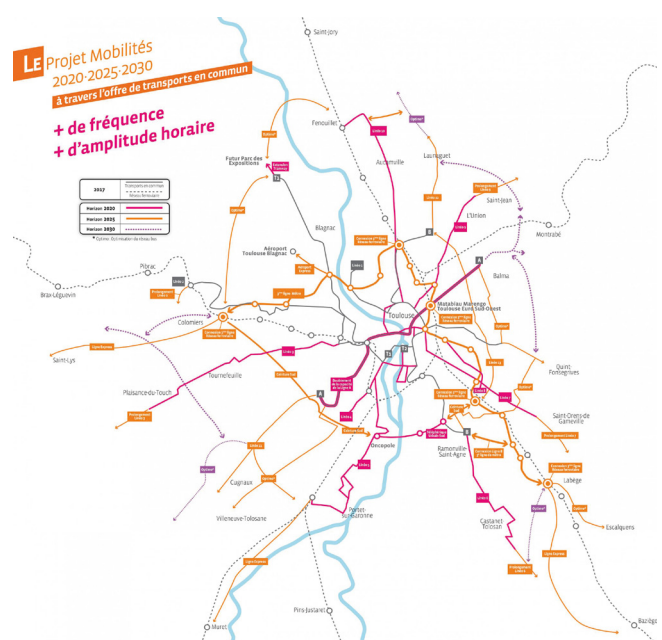


Image: © Le Projet Mobilités 2020-2025-2030

Activity 8.1: Describe all actions

Birmingham, UK: Programme of actions with clear priorities

Context

- Birmingham is a large city region with a population of 1.1 million inhabitants.
- Birmingham produced Birmingham Connected, the city’s SUMP, in 2014.

Description of activities

Birmingham Connected acts as the umbrella for all transport planning activity across the city. Four main principles are used to turn the Birmingham Connected vision into schemes and initiatives:

- 1) Enabling different travel choices – not to focus on one particular mode or solution, but provide everyone with the opportunity to have access to the transport options they require;
- 2) A transport system for everyone - to create a more equitable transport system;
- 3) A corridor approach - balancing competing needs, not taking a single scheme in isolation; and
- 4) Deliver learning lessons - Birmingham must consider a long-term programme and coordinate the delivery of projects on the same or nearby corridors.

In order to achieve the city’s vision, a number of outcomes and measures have been identified. These will be delivered through a five-year rolling programme of actions. The details of these 40 new transport schemes are set out in the short-term delivery plan, which includes an indication of the funding status and the proposed delivery period of individual actions. Within the main document and preparatory work, consideration has been given to how actions and schemes can be delivered, including sources of funding and collaboration.

This programme generates detailed schemes from initial ideas and brings them forward for consultation and funding. The timeline is aligned with central government funding allocation and enables Birmingham to react quickly to funding opportunities and have schemes ready to be delivered. A suite of Technical Work packages has also been developed to provide more detail, these include the key Birmingham Connected measures, associated actions and also potential funding sources.

Lessons learnt

Political support from the outset was important to ensure that the SUMP set out bold measures and actions for sustainable and active travel. The city must to be ready to take advantage of unforeseen funding opportunities coming from central government and European sources. Often funds for pilot projects or specific types of initiatives become available at relatively short notice.

Costs and know-how

£4 billion of investment over the next 20 years is the estimated amount needed to support the transformation of Birmingham. This is based on initial cost estimates for some of the big individual schemes that are being considered, as well as on the amount equivalent European cities spend on their urban transport systems.

Consultancy support was used to meet the tight timeline set by politicians to complete this transformation and to deliver the different promises within a specific timescale.

For details see:

https://www.birmingham.gov.uk/downloads/file/1932/birmingham_connected_white_paper

Author: Helen Jenkins, City of Birmingham, collected by ICLEI

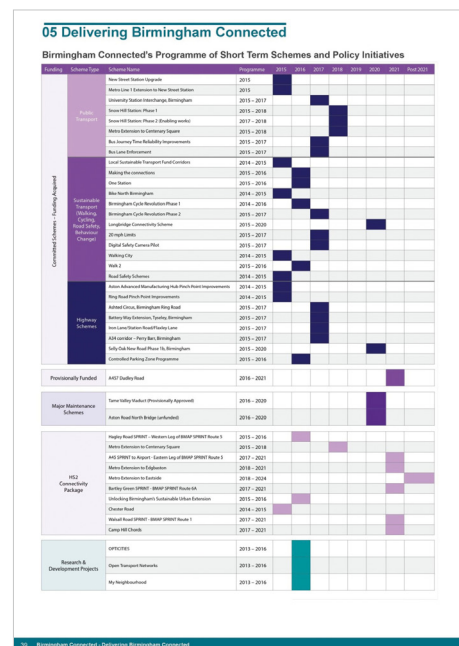


Image: © Birmingham City Council, 2014. Birmingham Connected: Birmingham Mobility Plan White Paper

Activity 8.1: Describe all actions

Turin, Italy: Comprehensive measure factsheets**Context**

- Turin is the capital of the Piedmont Region and has a population of approximately 900,000 people.
- Turin's SUMP was adopted in 2008, with a horizon to 2018, and is currently under revision.

Description of activities

The objective of Turin's SUMP is to make collective transport more competitive and accessible to everyone, as well as to discourage individual travel and therefore reduce congestion and improve access to urban and metropolitan areas. It promotes an integrated urban transport system through intermodality between private and public transport. The SUMP consists of seven guiding principles, which are further divided into targets and measures. For instance:

3a Improve air quality (Guiding principle)

3a3 Promote alternative forms of sustainable mobility (Target)

3a3.2 Activation of "bike sharing" (Measure)

Each measure is then described in great detail, including the following characteristics:

- Connection to the guiding principle;
- Connection to the target;
- Type of sustainable aspect;
- General description and objective of the measure;
- Responsible entity;
- Implementation mode;
- Aim of the measure and corresponding indicator;
- Implementation period; and
- Economic resources needed.

The measures have been defined in close cooperation with the ten administrations, the category associations and the different stakeholders. In some cases, already planned projects have been described and included in the list of measures; whereas in other cases, the specific interventions have not yet been detailed, as they are still being analysed.

Lessons learnt

The SUMP must be intended as a flexible plan, which in the course of its validity can be integrated with additional or revised actions and measures, provided that they comply with the basic principles that support it.

Costs and know-how

The development of the plan lasted 16 months, including seven months for the identification of critical mobility issues, analysis, description of the planned actions and their comparisons to the plan's objectives, and definitive drafting and approval by the city council.

For details see:

<http://geoportale.comune.torino.it/web/sezioni-tematiche/piano-urbano-della-mobilita-sostenibile-introduzione> (available in Italian)

Author: Chiara Ferroni, Torino Wireless, collected by EUROCITIES

Guiding principle 3a: Improve air quality

Target 3.a.3. Promote alternative forms of sustainable mobility

Measure 3.a.3.2. Activation of "bike sharing"

Sustainability aspect: Environment and Economics

Description and objective: Implementation of a bike sharing system that responds to the needs of residents and commuters, while aiming to encourage intermodal travel behaviour. The system foresees a wide diffusion in the city (up to 390 stations), permanent availability of bikes, easy and immediate accessibility and high-quality equipment. In the initial phase, 130 stations for a total of 1300 bicycles will be implemented in the central area of the city. Further implementation depends on the results of the first phase, management issues, and resources.

Responsible entity: Department of Environment

Implementation mode: Co-financing by the Ministry of Environment and the Piedmont Region

Aim and indicator: 58 bike stations

Implementation period: 58 bike stations by spring 2010, extension subject to evaluation

Economic resources needed: For the 130 cycle-station phase: €1,972,000.00 (of which €1,379,500.00 from the Ministry of Environment and €292,500.00 from Piedmont Region).

Image: © http://geoportale.comune.torino.it/web/sites/default/files/mediafiles/pums_all3_schede_1.pdf

Activity 8.2: Identify funding sources and assess financial capacities

Bratislava, Slovakia: Parallel development of large tram project and SUMP**Context**

- Bratislava is the capital of Slovakia and is home to 424,428 people.
- Bratislava's SUMP was prepared and approved in the period between 2014 and 2016.

Description of activities

Bratislava's SUMP is based on a clear link between analysis, objectives and measures. This included the preparation of a validated four-stage traffic model. A strong focus was put on sustainable transport modes, organisational and operational areas, in addition to infrastructural issues. In parallel to the development of the SUMP, the main new transport project for the city was also carried out - the new tramway to Petržalka, which was confirmed by previous strategic documents and studies. The project is implemented in several phases, drawing mainly on European structural and investment funds (ESIF). The new SUMP confirmed the strategic importance of the new tramway as well as approved the modernisation and upgrade of the tram system – including its fleet - as one of the main measures for the future of the city.

Author: Neri di Volo, EIB/JASPERS, collected by Rupprecht Consult



Image: © Dopravný podnik Bratislava

Activity 8.2: Identify funding sources and assess financial capacities

Vienna, Austria: Employer tax to finance the metro operation and extension**Context**

- With about 1.9 million inhabitants, Vienna is the capital and by far the biggest city of Austria.
- Vienna's SUMP (Fachkonzept Mobilität) was adopted in 2014. It is a strategic concept under the City Development Plan (STEP2025).

Description of activities

Every business with at least one employee in Vienna is obliged to pay a special "metro tax" ("Dienstgeberabgabe"), which serves as a financial support action for the implementation and extension of the metro network in Vienna. The Vienna metro tax was introduced in 1970 in preparation of the planning, construction and implementation of the metro network. It is based on the state law LGBl 1970/17 (updated in 2012).

The metro tax amounts to 2€ per employee and per week of employment (status: May 2019). It needs to be paid by the employer on a monthly basis. For this purpose, an assigned tax account provided by the city administration is available. To reduce some of the financial load placed on employers, there are exemptions for employees older than 55 years, employees with mental or physical handicaps, part-time employees with only a small amount of weekly work hours, employees of public authorities, soldiers in military service, etc. In 2016, Vienna collected nearly 67M€.

Lessons learnt

Vienna, which is also an Austrian state with legislative power, is a rare example of a city collecting a distinctive metro tax for the purposes of extending high-quality public transport services.

When the tax was introduced in 1970, the negative effects of car-focussed city planning had become apparent and the construction of a high-quality public transport system seemed necessary.

Since the metro tax was introduced a long time ago, there is currently no resistance to it, even if the tax rose from 0,72€ to 2€ in 2012.

While citizens and employers in Vienna are used to paying relatively high taxes and fees for public services such as water or waste management, public transport is affordable, with an annual subscription ticket costing 365€ (= 1€ per day).

Revenues from the increased metro tax and parking management are used to co-fund ticket fares.

Costs and know-how

Introduced in 1970, the metro tax is an integrated and widely-accepted regular tax for employers in Vienna. There are no cost estimations available for the administrative work necessary to carry out related activities by tax consultants. Within the city administration, the yearly tax collection of the metro tax is hard to be quantified. Estimations show that it requires considerably less than 0,5% of tax revenues.

For details see:

<http://bit.ly/2KKXBrS>

Source: Wiener Linien, collected and adapted by Wuppertal Institute



Image: Building the metro line U1 in 1973 © Wiener Linien

Activity 8.2: Identify funding sources and assess financial capacities

Birmingham, UK: Capturing added value of land development**Context**

- Birmingham is a large city region with a population of 1.1 million. It has the greatest population of any local authority area in the UK.
- Birmingham City Council's SUMP Document (Birmingham Connected) was developed to support the delivery of policies set out in the Birmingham Development Plan.

Description of activities

Granting planning permissions for a new development typically increases the value of the affected land, while increasing pressure on infrastructure. The City of Birmingham introduced a combination of two mechanisms to capture parts of the added value and to support the delivery of policies set out in the city's Development Plan:

- Planning obligations (under Section 106 of the Town and Country Planning Act 1990) are negotiated as a result of planning permissions. Revenues are ring-fenced to mitigate or compensate the impacts of new developments (e.g., through introducing a sustainable travel plan, or a new pedestrian crossing adjacent to a new school). S106 funds have contributed significant amounts to the Birmingham Cycle Revolution, such as the creation of new cycle lanes or cycle friendly road crossings.
- Community Infrastructure Levy (CIL) is a charge across certain types of development in certain areas (dependent on viability). Of the funds, 80% is spent on strategic infrastructure to deliver the Development Plan, 15% is passed on to neighbourhoods in which development takes place and the remaining 5% is for monitoring and administration. In Birmingham, CIL is earmarked (as part of a wider funding package) for the redevelopment of Perry Barr train station.

Lessons learnt

Planning contributions are a useful and well-established tool for planning contributions. However, it can be difficult to generate enough money to complete significant infrastructure projects as the funds are ring-fenced for specific projects, in particular areas. CIL is much more flexible and can generate large funds relatively quickly. However, setting up a CIL is costly and

can take over 12 months. It takes time to change CIL rates (i.e., to reflect market conditions), so it is possible that maximum amounts may not be secured.

Costs and know-how

Both planning obligations and CIL require a sound knowledge of Development Viability. Specialists may be needed to assess Viability Assessments for individual planning applications to maximise S106 contributions, and specialist support is needed to develop a CIL charging schedule.

For details see:

<https://www.birmingham.gov.uk/cil>

Author: Helen Jenkins, City of Birmingham, collected by Wuppertal Institute



Image: © Birmingham City Council

Activity 8.3: Agree priorities, responsibilities and timeline

Thessaloniki, Greece: A mobility forum to agree on responsibilities and actions**Context**

- With a population of 1.1 million inhabitants within its metropolitan area, Thessaloniki is the second largest city in Greece.
- TheTA (Thessaloniki's Transport Authority) is responsible for public transport in Thessaloniki's 14 municipalities and has prepared Thessaloniki's first SUMP, which received the Special Prize in the third SUMP Award competition.

Description of activities

After the adoption of the SUMP in 2014, several stakeholders were involved in the actual implementation of the plan, including the Ministry of Transport, the Regional Unity, the municipalities, universities and research institutes (AUF and HIT-CERTH), PT operators, the local Chamber of Commerce and Industry, citizens associations and NGOs. The Mobility Forum acted as an assembly for all stakeholders. The first meeting took place in 2016 and aimed to present the progress of the various measures by the responsible organisations and to discuss and identify the way forward with all participants. Responsibilities were allocated firstly according to jurisdiction and law provision and secondly according to the skills and capacity of organisations. Due to the lack of a clear legislative framework regarding SUMPs at that time in Greece, debates on roles and responsibilities took place. However, the Mobility Forum provided an opportunity for discussion and helped stakeholders reach an agreement and consensus on most of the measures. The proceedings of the Mobility Forum were recorded and sent to participants.

The Mobility Forum was also a framework in which the articulation of the metropolitan SUMP with the municipalities' SUMPs was first discussed. The "Green Fund" was launched in 2019 by the national government, with the aim of increasing the number of SUMPs adopted by Greek municipalities. In 2019, all 14 Municipalities of Thessaloniki's Metropolitan Region were in different stages of developing their individual SUMPs. The challenge lies with the need to integrate all of these SUMPs into a common vision for the functional city, a purpose for which the Mobility Forum appears to provide a solution.

Lessons learnt

Overall, the Mobility Forum created a bond among stakeholders and was an opportunity to debate, update and agree on a common vision on mobility issues. Naturally, administrative and jurisdictional issues rose mainly due to overlapping responsibilities. The implementation of certain measures exceeded the incumbency of elected stakeholders, therefore newly-elected representatives opened the discussion on the merits of specific measures and the allocation of roles. Therefore, a more binding framework is needed to sustain the allocation of responsibilities and priorities, especially in the framework of a "functional" metropolitan area.

Costs and know-how

The cost of organising such an assembly is modest, ranging in the region of a few thousand euros. Negotiation skills are needed as well as organisational and project management skills. The existence of a stakeholder whose role in local transport is considered prominent can facilitate and safeguard success.

For details see:

http://attac-project.eu/sites/default/files/downloads/attachments/thepta_english_sump.pdf

Author: Samuel Salem, TheTA Thessaloniki, collected by Polis



Image: © Dimitris Vetsikas (JIC), pixabay.com

Activity 8.4: Ensure wide political and public support

Ghent, Belgium: Public debate evenings, stakeholder meetings and public consultation

Context

- Mid-sized city in Belgium with a population of 260,000 inhabitants.
- Ghent's SUMP from 2003 was updated in 2015 and selected as one of the three finalists for the 2014 European SUMP Award.

Description of activities

When developing the city's second SUMP, Ghent applied three different engagement formats:

- 1) public debate evenings where citizens discussed the draft SUMP, guided by a facilitator;
- 2) followed by an extensive consultation round with stakeholders, which included individual meetings with institutions like NGOs, traffic companies, unions, real estate agents, and minority groups; and
- 3) a parallel one-month public inquiry process that allowed every citizen and organisation to send comments, questions or complaints concerning the SUMP.

This was the most extensive participation process that Ghent had carried out so far in mobility planning. Using multiple engagement formats, on the one hand, allowed the SUMP team to reach people from various backgrounds and ages, and, on the other hand, it strengthened public support for the mobility plan and its measures.

To inform citizens and to keep them connected to Ghent's plans, the city also created a dedicated newspaper "de wijze gazet". It was distributed to every household in Ghent. The newspaper contained information about the SUMP process, and lots of examples and testimonials to inspire citizens to adopt more sustainable mobility behaviour.

Apart from that, the city appointed two dedicated mobility coaches, who helped specific audiences (e.g. religious groups, migrant communities, elderly people) to get the necessary information and who supported them in their daily routine.

Moreover, Ghent follows a co-creation approach (e.g., in the form of the "Living Streets" concept), which has strengthened the relationship between residents and the city administration and has fostered joint problem solving.

Lessons learnt

The process of creating a one-time newspaper takes some time, while the confirmation of information takes too long to be able result in a very "up-to-date" newspaper. The mobility coaches provided useful feedback to the communications team, which created extra information tools for specific needs. This included, for instance: a version of the newspaper that was easier to read, for people who are not comfortable with long texts; specific information for hotel guests; a spoken version of the information for people with visual impairments; and an information session for the elderly.

Costs and know-how

The production of a newspaper, including reporting, design, the printing of 225,000 copies, and distribution cost about 70.000€ per edition. This included 12.000€ for distribution; 13.000€ for printing; and the rest of the costs came from purchasing photographs, copywriting, lay-outting, organising coordination meetings, and employing an in-house person to work full-time for two months. For the mobility coaches, their wages, as well as an extra operational budget to create specific tools (such as "how to" videos), need to be taken into account.

For details see:

<https://stad.gent/mobiliteit--openbare-werken/mobiliteit-plannen-projecten-subsidies-cijfers-scholenwerking/het-mobiliteitsplan> (available in Flemish)

Author: Merijn Gouweloose, City of Ghent, collected by EUROCIITIES



Image: © City of Ghent

Activity 8.4: Ensure wide political and public support

Métropole Européenne de Lille, France: Bi-annual political committee to steer parking policies on a metropolitan level**Context**

- The Métropole Européenne de Lille (MEL), covering 95 municipalities, is home to over 1.1 million inhabitants.
- MEL initiated its first SUMP in 1995 (adopted in 2000) and is implementing its “SUMP 2010-2020”, while preparing for the next one.

Description of activities

As in many cities, parking can be a sensitive issue in Lille, both at the political and public level. The MEL has set up a Parking Committee so that political and technical representatives of the metropolitan level and municipal level can reach an agreement on parking policies. Created in 2013, this committee’s main goal is “to adopt a shared vision on the parking policy, at the metropolitan scale [...] in the view of controlling car use and giving public space back to people.” Representatives of all municipalities are invited to Parking Committee meetings, which have taken place twice a year since 2013. This platform allows representatives to discuss regulations and concrete examples of measure implementation. The main policy decisions intend to feed into metropolitan mobility (i.e., the SUMP) and urban planning processes.

This Committee creates a sense of ownership over the parking policy for all of the participants (and therefore all of the municipalities) and later on facilitates the development and adoption of the SUMP and the consistent implementation of parking measures over the whole metropolitan area.

Lessons learnt

The participation of all public authorities – at both the local and metropolitan level – in an institutional framework allowed for fruitful discussions and for reaching a broad political consensus. The transparency and neutrality of the framework is a factor for the success of this Committee.

The next objective of the Committee is to produce a white book on parking policy, which, for instance, aims to define the common principles for parking policy to integrate in the future SUMP.

Costs and know-how

The Parking Committee does not run on a specific budget. It is facilitated by the MEL mobility department, which is also in charge of the SUMP, allowing parking policy to be fully integrated in mobility policy. The department delegates a team of two employees who contribute their technical, legal and political knowledge on mobility and urban planning. These two technicians have a transversal role and work with the technical and political representatives of MEL and the municipalities in order to facilitate the coordination of parking policies that are implemented at different scales (management of parking areas, regulation and control, Park and Ride, etc.). They are also responsible for an annual budget of 1.5M€ for the implementation of parking areas.

For details see:

<https://www.lillemetropole.fr/votre-metropole/competences/amenagement-du-territoire/transports>
(available in French)

Authors: Ellie Deloffre and Olivier Asselin, (Officers for parking policy), MEL, collected by Polis



Image: The MEL team in charge of the parking committee, © Alexandre Traisnel (MEL)

Activity 9.1: Develop financial plans and agree cost sharing

Barcelona, Spain: European funding and financing for renewing Barcelona's public transport**Context**

- Barcelona has a population of 3.1 million within the city. Its urban area extends to numerous neighbouring municipalities and is home to around 4.8 million people.
- The Urban Mobility Plan of Barcelona 2019 - 2024 follows the main lines of the PMU 2013 - 2018.

Description of activities

The Municipality of Barcelona and TMB (Transportes Metropolitanos de Barcelona, public transport operator) can rely on a sound funding and financing plan, especially for the renewal of the public transport fleet.

The local transport operator received the support of ELENA (European Local Energy Assistance), which provided a grant of almost 1.5M€ in order to prepare a large-scale retrofit of diesel and compressed natural gas (CNG) buses into hybrids. The activities carried out between 2011 and 2015 that were covered by the grant included:

- technological studies on electric and hybrid buses, and retrofitting;
- definition of tailored financial instruments to finance bus fleet renewal;
- studies for a new bus network; and
- the deployment of electric buses.

In 2019, the European Investment Bank (EIB) granted a 73.5M€ loan to TMB to further clean the public transport fleet. The loan will be used to purchase a fleet of "254 new, safer, less polluting and more modern vehicles into service." The existing diesel and first-generation CNG vehicles will be replaced with buses running on different technologies: fully electric (116), hybrid (63) and new-generation CNG (75). From 2019 to 2021, they will progressively replace the buses operating on several lines of the local network. In addition, the EIB loan will cover the improvement of on-board information systems and the installation of new electric charging stations.

Lessons learnt

The support of ELENA allowed for the making of preparatory studies for the retrofit of existing vehicles, including the evaluation of the cost of such measures. The project of converting 70 diesel and 13 CNG buses

into hybrid ones was successfully implemented. In addition, TMB was able to buy commercial hybrid buses. However, due to the economic crisis, financial constraints forced TMB to reduce its original investment capacity. Nonetheless, the reactivity and flexibility of the ELENA programme gave the public transport operator the possibility to finalise the project.

Costs and know-how

Staff from both TMB and the Municipality of Barcelona were involved in the activities that were supported by ELENA between 2011 and 2015. Additional staff was hired for the project (one technical senior expert and three technical staff) and support from external consultants was required. The loan of the EIB was prepared by the staff of the Engineering Department of TMB and required 12 months.

ELENA contributed to the project with 1.475M€ and 164,000€ were assumed by the local partners. The cost of the procurement of hybrid vehicles was estimated to be 36,9M€.

For details see:

<http://www.bcnecologia.net/es/proyectos/plan-de-movilidad-urbana-sostenible-de-barcelona-2013-2018>

Author: Josep Maria Armengol Villa, TMB, collected by Polis



Image: © TMB

Activity 9.1: Develop financial plans and agree cost sharing

Bucharest/Ilfov, Romania: SUMP implementation based on comprehensive annual budget planning**Context**

- Bucharest is the capital and largest city of Romania, with about 1.9 million people living in the urban centre and 2.1 million in the metropolitan area.
- In 2014, Bucharest started developing its first SUMP, supported by the European Bank for Reconstruction and Development's funding programme for Romania's Growth Pole cities.

Description of activities

Based on thorough data and problem analysis, a list of priority areas for the SUMP was defined. This led to a range of organisational, operational and infrastructural measures to be included in the final SUMP. A cost estimate for each measure was made. This helped to identify the scale of total investment needed to implement the plan, which was to be put in relation with available financing sources. The SUMP served as a main tool to identify priorities for the programming of EU funds until 2030. These needed to be considered in parallel with state funding, capital expenditure by both the Bucharest and Ilfov administration, loans from IFIs (EIB/EBRD), and additional income from the proposed parking strategy. Meanwhile, it was possible to define the required budget for public transport operating subsidies and also network maintenance over the same period.

For details see:

http://pmud.ro/pdf-files/proiect_pmud.pdf
(available in Romanian)

Author: Alan O'Brien, EIB/JASPERS, collected by Rupprecht Consult

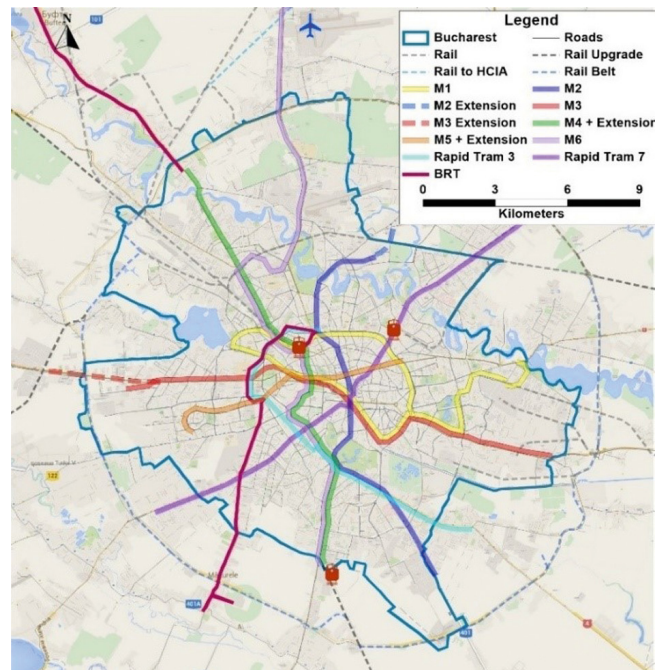


Image: © Planul de Mobilitate Urbana Durabila BI

Activity 9.2: Finalise and assure quality of ‘Sustainable Urban Mobility Plan’ document

Greater Manchester, Malmö, Budapest, Vienna: Award-winning SUMPs with outstanding design**Context**

When it comes to the finalisation of the SUMP, a well-design document that clearly reflects the main vision of the SUMP can help to better communicate and create popular support for the SUMP. Below are examples of nicely designed plans that have all been selected as winners or finalists of the recent editions of the EU SUMP Award.

Greater Manchester

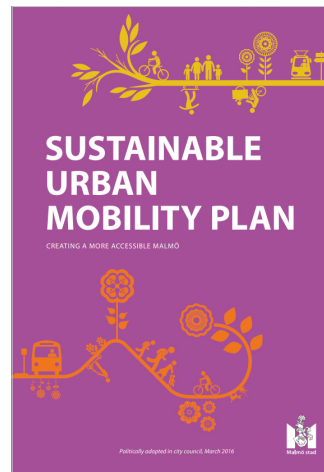
The SUMP of Greater Manchester has been developed by Transport for Greater Manchester (TfGM) and adopted by the Greater Manchester Combined Authority (GMCA) in February 2018. Greater Manchester received the 7th SUMP Award on Multimodality for planning the use of smart, new technologies to increase the share of journeys made using

sustainable modes of transport.

For the design of the SUMP, TfGM used a combination of in-house expertise and external support for creating high-quality, eye-catching imagery, while retaining flexibility to respond quickly to necessary updates.

Stand-alone material, including the SUMP’s cover pages, the animated video, and occasionally more detailed imagery, was developed by a design consultant. This avoided the expense of a dedicated in-house specialist for infrequent requests.

For images specifically related to evolving SUMP content, including maps, infographics and images, TfGM’s in-house design team was involved. This allowed TfGM to quickly prototype and refine content responding to stakeholder feedback received, including consultation. On publication of further updates, it has allowed TfGM to continue adopting the same formatting, maintaining consistency across TfGM’s documents when referring to the SUMP.

**Malmö**

The SUMP of Malmö, “Creating a More Accessible Malmö”, was adopted by the City Council in March 2016. The Swedish city of Malmö won the 4th SUMP Award on multimodality and intermodality for its impressive intermodal transport solutions.

In this SUMP, the project team selected the figures

to be designed and gave instructions to a design agency, which later provided the designed figures. This is something the project managers really recommend as this has been a key feature to make non-experts understand and relate to the challenges of the SUMP.

Budapest

The SUMP of Budapest was developed by BKK Centre for Budapest Transport, the integrated mobility manager of Budapest. In May 2019, the General Assembly of Budapest and the Innovation and Technology Ministry of Hungary approved the full SUMP, named Budapest Mobility Plan.

The design, pictures, photos, and photo editing works of the first volume of the SUMP (BMT - Measures and Objectives) were made by an external design team, in close cooperation with BKK. The team consisted of designers of the Moholy-Nagy University of Art and Design Budapest. BKK needed external help for the design as there was no capacity and resources internally to handle the task. Initially, BKK provided the expectations about the design, some pictures already taken by BKK, some design elements

and ideas and the text in preparation of the plan for the designers as inspiration and guidelines. After several consultation and cooperation workshops, the team provided different design ideas for the cover, content pages, design elements, and pictures to be included. The final design and edited text were then printed and published on the website of BKK for public consultation. On most of the photos found in the BMT there are BKK staff to be seen, as BKK asked its staff to participate as models for the photo-shooting, so that BKK could avoid any personal rights issues and colleagues could feel more committed to the SUMP.

The above-mentioned part of the SUMP was prepared for public consultation and General Assembly decision. It was really important to have an easily-readable and digestible (textually and in design as well) document that helps readers (public and professional reviewers) to understand the essence and role of a SUMP, as this was the first time a SUMP was published for the public in Hungary. The design is unified throughout the document; four colours help to articulate the different parts of the document, as there are four main intervention areas identified in the SUMP.

Vienna



Vienna was a finalist for the 4th SUMP Award on Multimodality and Intermodality. The “STEP 2025 Urban Mobility Plan” was developed by the city administration and adopted by the City Council on 19 December 2014; finishing and printing was scheduled after the political clearing.

The internal PR and communications unit of the Department for Urban Planning and Development intensely supported this phase: They observed that the design features were harmonised to create a recognisable “brand” of strategic urban planning documents – within and beyond mobility. The contracting of services and specialists for design, printing, etc., was also handled by that unit. The contents of diagrams, photo topics, etc., were developed in close cooperation between the mobility experts working on the project and the various contractors. Amongst others, the City of Vienna worked with a professional photographer

to include inspirational photos, taken in Vienna, that directly related to the technical content in the document. This was in addition to pictures used to illustrate different measures, which were provided either by internal or external sources.

Costs and know-how

The above-mentioned cities have made use of both their in-house design departments (when existing) and external agencies. In both cases, the SUMP teams insist on the importance for them to work closely with the graphic designer. Even when working with a recognised design office, the (unpreventable) lack of in-depth knowledge regarding the topic results in great efforts in time for coordination on both sides. In addition, cities which used pictures to illustrate the SUMP recommend not to underestimate the time and effort needed to adhere to property laws – e.g. by generating own material or collecting approvals. Finally, the cities advise to consider carefully whether it is necessary to translate the long version of the document into other languages, especially if budgets are tight.

As for the costs, in the case of Malmö, a budget of 7,000€ was spent on designing figures and tables for the SUMP. This was done in dialogue with a design agency over four months.

In comparison, for the SUMP of Vienna, the overall costs for layouting, illustrations, photos, editing, translation and printing (of more than 10,000 - all versions) accumulated to approximately 70,000€. It must be noted that both the short and long versions of the SUMP of Vienna are available in both German and English. The length of the document (number of pages) is relevant for the total cost as it affects all of the above-mentioned aspects.

For details see:

- *Greater Manchester’s SUMP:* <https://tfgm.com/2040>
- *Malmö’s SUMP:* <http://bit.ly/30Q5KAd>
- *Budapest’s SUMP:* <http://bit.ly/2xY53Zl>
- *Vienna’s SUMP:* <http://bit.ly/2KKXBrS>

Authors:

Ben Brisbane, Transport for Greater Manchester;
Andreas Nordin, City of Malmö;
BKK Centre for Budapest Transport;
Gregory Telepak and Thomas Vith, City of Vienna;
Collected by Polis

Activity 10.1: Coordinate implementation of actions

West Yorkshire, United Kingdom: Project management to ensure a constant dialogue**Context**

- West Yorkshire is a metropolitan county with 2.2 million inhabitants.
- With the creation of the West Yorkshire Combined Authority (WYCA) and the implementation of many sustainable mobility projects, West Yorkshire has developed a strong framework to support the development of its SUMP.

Description of activities

The structure and articulation of hierarchy for the decision-making process for SUMP implementation in West Yorkshire is clearly defined in an organogram and Assurance Framework.

The executive prepares the SUMP and its implementation programmes, and politicians make decisions on the SUMP content and delivery priorities. They must be informed on a semi-regular basis as the SUMP document and delivery plans progress. A (political) Transport Committee acts as a project board to consider matters relating to statutory transport functions. It oversees the preparation and implementation of the SUMP and considers alignment with external stakeholders. A separate (political) Investment Committee makes decisions on whether to approve funding for the implementation of SUMP projects and programmes. Both Committees report to the Combined Authority for final decisions. Finally, Thematic Work Package Leads are responsible for developing elements of the SUMP (e.g., Strategic Connectivity, Bus, Rail, Active travel, Future Mobility, etc.). They are advised by Thematic Panels (including WYCA staff and politicians, councils, and private sector representatives).

Coordination is ensured through monthly officer conversations across all partner councils at both the senior manager and practitioner level, and includes key public sector stakeholders as well as bi-monthly meetings with the political board and consultations with public and stakeholders.

In addition, WYCA operates a Local Assurance Framework, which shows the transparent and robust processes that are used to ensure value for money regarding investment decisions, and how WYCA is accountable.

Lessons learnt

Achieving effective and efficient management in the SUMP preparation and implementation process is of particular importance because efficient organisation helps to deliver a SUMP that is accepted and effective in practical and financial terms.

The selection of involved actors is a process that, although to some extent informed by national or regional policy and practice, has to be carried out within the specific local context. Constrained resources, competing objectives and timings, as well as leadership and the clarity of roles are all common challenges within SUMP governance that need to be taken into consideration.

Costs and know-how

The WYCA SUMP is developed by a Transport Policy team of 21 staff members within a policy department that has expertise in various fields, such as in transport modelling. This team is responsible for the engagement and coordination of stakeholders during the preparation of the SUMP and its programmes. The SUMP and its programmes are then handed over to delivery colleagues for implementation, who are working in a separate team.

The Assurance Framework for the delivery of SUMP projects and programmes is administered by a Portfolio Management Office (PMO) of 11 staff members, who are employed full-time.

For details see:

<https://www.granollers.cat/mobilitat/pla-de-mobilitat-2018-2024>

Author: Steve Heckley, WYCA, collected by Polis



Image: © West Yorkshire Transport Strategy 2040 (SUMP)

Activity 10.1: Coordinate implementation of actions

Groningen, Netherlands: Regional public-private partnership for coordination and cooperation of actions**Context**

- Groningen is a Dutch mid-sized city with 230,000 inhabitants.
- Groningen is a SUMP-advanced city in terms of interventions and impacts, but rather intermediate in terms of being an exact SUMP cycle follower.

Description of activities

A new long-term strategic 2035 vision for the city was adopted in 2018, after an intensive participatory process of co-creation and the involvement of stakeholders. For coordinating the implementation of the city-region strategy, Groningen has formally established the enabling body called Groningen Bereikbaar: A public-private partnership organisation for promoting sustainable accessibility in Groningen. The purpose is to ensure that all parties cooperate effectively and coordinate their work on the various transport-related projects at a city-regional level. All managers of roads, bridges and railways in the region are cooperating intensively in Groningen Bereikbaar, which comprises the Municipality of Groningen, the Province of Groningen, the Directorate-General for Public Works and Water Management, ProRail, the Groningen-Assen Region, and the Province of Drenthe. For establishing the body, a partnership agreement document was signed in 2012, including arrangements on budget contributions and posting of workers.

The body consists of a management team that coordinates the work, a steering group, and several advisory groups, so that the body is represented by all administrative levels (city, province and state) and by the business community. So far, 84 of the largest employers are involved. In addition, student experts are involved through the Student Advisory Council. The steering group, which consists of elected politicians, department managers from the city and provincial level, and representatives from the national ministry for mobility and the national railway infrastructure organisation, makes decisions on actions based on discussions with the other groups. However, the decisions have to be formally ratified in the respective parliaments (city and province). The establishment of the organisation proved to be a successful way to gain political support and increase commitment.

Lessons learnt

Working together in Groningen Bereikbaar means:

- Taking each other seriously and acting transparently - it takes longer sometimes but can also provide unexpected perspectives;
- Increasing awareness of the reciprocal interests of the city and region, such as the connectivity within the daily urban system and the interregional connectivity to other regions;
- Taking small steps and evaluating each time (learning organisation);
- Adaptivity/Resilience, tailor-made solutions are still difficult to manage, as developments appear and change fast, city logistics as emerging challenge

Costs and know-how

Groningen Bereikbaar has pooled together the best available know-how from the public and private sector, academia, and citizens/users, and uses resources from all administrative levels. It is comprised of 17 full-time equivalent staff members and the budget is around 2,5-3M€ per year.

For details see:

www.groningenbereikbaar.nl

Source: GroningenBereikbaar, collected by UBC



Image: 'Captains breakfast' event with the business community © Jeroen van Kooten

Activity 10.1: Coordinate implementation of actions

Brno, Czech Republic: SUMP monitoring tool for action implementation

Context

- Brno is the second largest city in the Czech Republic, with about 370,000 inhabitants and 80,000 students.
- Brno has developed several separate topical plans for various transport modes. The city brought all strategies and plans together and prepared a Sustainable Urban Mobility Plan, which was approved by Brno City Council in September 2018. Under the LOW-CARB project, the Action Plan was prepared using a new monitoring tool that was developed.

Description of activities

The City of Brno developed a SUMP monitoring tool for Action Plan preparation. This tool is a spatial database (GIS) and it contains information about all investments from the Action Plan (budget, year of realisation, etc.) and allows for the detailed analysis of these data. It is used by both experts and the general public.

Experts (mostly stakeholders) use the tool for managing plan implementation. The tool allows for the cooperation of all stakeholders through a single platform, which they can access simultaneously.

This results in significant time saving and better coordination of the implementation process. The public can use the application as a source of information about SUMP implementation and, in the near future, as a tool for citizen participation.

Lessons learnt

Cooperation between experts and the public is beneficial for the Action Plan and for the overall SUMP. The online spatial platform allows for close coordination and adaptation of the implementation process according to citizen needs and reactions.

It is important to prepare and train the experts to work with the spatial database, as it is not common knowledge. Publicity for significant public response and participation is essential, too.

Costs and know-how

The process for developing the Brno SUMP monitoring tool lasted about one year. The costs linked to the engagement and communication activities were around 50,000€.

For details see:

<http://www.mobilitabrno.cz/> (available in Czech)

Author: Lukáš Báča, City of Brno, collected by Rupprecht Consult



Image: © Marie Schmerková (Brno City Municipality)

Activity 10.2: Procure goods and services

Piedmont Region, Italy: Joint Procurement of 19 urban electric buses**Context**

- The Piedmont Region has a population of more than 4.3 million inhabitants.
- The regional plan for mobility and transport for the Piedmont Region was approved in January 2019.

Description of activities

Beginning in 2014, the Piedmont Region applied a joint procurement approach to introduce electric buses into the fleets of regional transport operators. The Region proceeded with the following steps:

- 1) Public transport companies in the region were asked to provide project proposals, which were then assessed by a commission and chosen based on environmental and technical criteria;
- 2) A market survey was conducted in April 2015 to identify possible suppliers and available electric buses;
- 3) A pre-qualification phase was initiated in September 2015 with the publication of an online notice calling for offers from suppliers. Ten offers were received;
- 4) Suppliers who met the technical and financial requirements were selected. Six of the offers met the requirements;
- 5) The selected suppliers were contacted in February 2016 with a request for proposals. Proposals were scored based on an award criterion, which was divided according to the following sections: “economic offer”, “technical offer”, “maintenance and technical assistance”, and “terms of delivery”;
- 6) A tender was finally awarded to BYD EUROPE B.V. in September 2016. Each of the involved public transport companies signed independent contracts with the supplier, which reduced administrative efforts and procurement costs.

As a result of this process, the region financed 90% of the bus purchasing cost, while the transport operators were responsible for the other 10% and the cost of quick charge stations and maintenance services. Despite the high initial cost, the life cycle costs analysis has indicated a savings of approximately 50,000€ in a period of 10 years. Furthermore, the introduction of the electric buses helps to reduce air and noise pollution and to save 769 tonnes of CO₂ per year.

Lessons learnt

The technical requirements of the electric buses were set high, so that the majority of the suppliers was prevented from bidding. A better compromise should be found for requirements, including, for example, the price and range of buses, depending on specific route profiles. Also, the availability of electric buses with high technological standards is still limited on the Italian and European market.

Costs and know-how

The procurement process was based on a programme launched by the Piedmont Region, which provided funding from the resources of the Ministry of the Environment. The city of Turin allocated an extra budget for improving air quality. The total budget was about 15M€, with 13.5M€ managed by the Piedmont Region and 1.5M€ by Turin. The 23 vehicles were produced by BYD and cost roughly 8.5M€.

For details see:

https://www.regione.piemonte.it/web/sites/default/files/media/documenti/2018-10/20180116_dcr_all_a_prmt.pdf (available in Italian)

Source: Chiara Ferroni Fondazione Torino Wireless, collected by ICLEI²



Image: © The Piedmont Region

² Additional source used: SPP Regions (2016). SPP Tender Model: Electric buses - Joint Procurement of 19 urban electric buses in Piedmont. Torino. Available online at: http://www.sppregions.eu/fileadmin/user_upload/Tenders/APE/spp-regions-tender-model-GTT-eng_Final.pdf

Activity 11.1: Monitor progress and adapt
Lund, Sweden: Yearly monitoring reports summarising the status of target attainment

Context

- Lund Municipality is the 12th largest municipality in Sweden, with 123,495 inhabitants, while the City of Lund is home to 91,940 inhabitants.
- Lund developed its first-generation SUMP, LundaMaTs, in 1998. Today, Lund has its third-generation SUMP.

Description of activities

Lund monitors the actions of the SUMP closely and evaluates them against the thirteen targets that were set by politicians during the planning process. As part of this task, the city measures pedestrian traffic, motor vehicle traffic, as well as bicycle and public transport usage annually. When the targets are not met, the actions are intensified or changes are proposed for the following year. To visualise and communicate the results of the monitoring process, a “traffic light” system is used: to indicate if actions are proceeding well and reach the targets (green), if they need adjustment (yellow) or if they need to be re-planned/changed/replaced (red).

- 1) The aim for the modal split for walking, cycling and public transport within Lund Municipality is 75% by 2030, and 50% for commute outside of the municipality’s borders by 2030. For some years now, there has been a considerable increase in public transport, due to the development of the public transport system.
- 2) Traffic safety and the feeling of security have to be increased and the number of people badly injured or killed in traffic has to decrease by 50% by 2030. Improved vehicle and road design, better maintenance, and more frequent use of personal safety equipment has increased safety.

The impact of the SUMP and the proportion of residents in Lund Municipality who state that they have felt the impact of the measures taken under LundaMaTs is to increase. The attitude and behaviour of people affected by the actions of the SUMP have been monitored through a survey that is conducted every fourth year. The survey is sent to 4000 inhabitants between 18-70 years of age.

Lessons learnt

Short-term traffic regulations that do not have a sustainable transport system to back them up are less likely to succeed. Environmental commitment through

city planning and behaviour impact takes time and devotion. To keep up the momentum over decades is a challenge, as is finding new actions to meet the targets and respond to changes in the transport sector over time. A solid strategy with a wide range of stakeholders is important.

Costs and know-how

To keep up and monitor the strategy is not expensive. It requires a few meetings a year with representatives from all of the different departments involved. Regarding the costs, a coordinator for the annual report (200 hours) and copy, layout and printing costs (< 5,000€) need to be calculated in. The new actions to meet the targets are more time consuming and costly. Traditionally, city planners, traffic engineers and economists managed the transportation sector of Lund. The complexity of today’s traffic system also needs other competences, such as behaviour, marketing, communication and environmental sciences.

For details see:

https://www.lund.se/globalassets/lund.se/traf_infra/lundamats/lundamats_iii_eng.pdf

Author: Anders Söderberg, City of Lund, collected by UBC



Image: Lundamats strategy wheel © LUNDAMATS Strategy for a sustainable system in Lund Municipality

Activity 11.1: Monitor progress and adapt

Donostia-San Sebastian, Spain: Interactive monitoring platform for SUMP

Context

- Spanish mid-sized city with 186,000 inhabitants that is located in the Basque Country.
- The first SUMP was approved in 2008, with a horizon until 2024. An update is planned for 2020.

Description of activities

Donostia-San Sebastian was inspired, during city visits to Bilbao and Madrid, to develop SPIDER, a monitoring platform for their SUMP. The platform visualises if the SUMP measures and activities are reaching their targets. In close cooperation, a local company developed the platform according to the city's needs. Both managers and decision makers can easily see, at one glance, what the status of the mobility measures is: "traffic light" colours (green, yellow, red) visualise clearly if an activity is on track. If the objective is below the target, the manager will be alerted to act. The platform automatically generates periodic reports that the manager can use to inform media or the public instantly. In a next development phase, the platform will offer different user profiles, so that also citizens can use it, with the information adapted to their needs.

As it is a tailor-made product, the city has been testing the platform since the initial phases of development. It was necessary to validate the approaches to all aspects of mobility in the platform for each section of the department involved. The mobility monitoring platform integrates seven main aspects of the city's mobility activities: pedestrian mobility, cyclist mobility, vertical transport (e.g. escalators), public transport, the current traffic situation, parking and electric mobility.

By managing the data sources of the city's mobility activities, indicators were identified that characterise each of these aspects, showing their status both in real time and in the duration of service in the city. The platform can also process the daily-used data to determine the degree of compliance with the objectives established in the SUMP or even in other municipal strategic plans. This enables the measuring of the success of the policies applied in the city with the real data that is provided by existing mobility systems, thereby allowing for the obtaining of very precise and reliable valuations.

Lessons learnt

When implementing a mobility monitoring platform, the key success factor is the preparation work done to identify the aspects that should be monitored and to define indicators. Also, gathering the origin of the available data sources in each identified aspect is not to be underestimated. At the same time, it is important to establish mechanisms to measure the quality of the data found in each of the data sources to guarantee the reliability of the information.

Costs and know-how

The platform has been developed within the framework of a European programme. In addition to costs linked to having a company develop the platform, the city also needs to allow for internal human resources to do the preparatory work, supervise the development and testing, etc. To customise the platform to the needs of the city and their SUMP, close cooperation with the company is necessary.

For details see:

<http://www.donostiamovilidad.com/documentos/>
(available in Spanish)

Author: Municipality of Donostia/San Sebastian, collected by UBC



Images: © Municipality of Donostia / San Sebastian

Activity 11.1: Monitor progress and adapt

Funchal, Portugal: Systematic measure monitoring to increase acceptance**Context**

- Funchal is the capital of Madeira, a Portuguese archipelago located in the Atlantic Ocean, and has a total population of 111,541 inhabitants.
- Funchal has developed a SUMP that was successfully approved in 2018.

Description of activities

Funchal's SUMP includes a detailed impact and monitoring methodology that is applied prior to and after the implementation of actions related to pedestrianisation. The method followed a pre-implementation assessment that included a territorial diagnostic focussed on accessibility in order to identify the areas that could benefit from improving conditions for walking. In addition, traffic counts were also collected to identify traffic flows and other patterns to support traffic planning. This data was also used to estimate pollutant emissions before and after implementation.

Prior to the intervention, a questionnaire was also circulated among local shopkeepers to further assess the receptiveness of the measure as well as its potential impact. It also included an awareness campaign for local shopkeepers to show them the benefits of opening the streets for pedestrians (e.g. quality of urban space, local economy).

The technical implementation (architecture and engineering) of the project was then developed by two collaborators within a timespan of two weeks, so that the applications for funding could be submitted to local, national and European stakeholders in the following two months.

Civil works took around nine months and ended with a follow-up awareness campaign, which included the assessment of impacts. This was subdivided into four different actions: a survey geared at local traders, a communication campaign (outdoor display with before and after pictures), a complete estimate of traffic counts and greenhouse gas emissions, and the teamwork application of all corrective measures.

Lessons learnt

It is crucial to assess the impacts of pedestrianisation measures on traffic in the surrounding area. For that, it is imperative to gather traffic data before implementation. The assessment and measurement of implemented measures are necessary to adopt corrective measures. The adjustment of traffic in the area is an example of how Funchal has identified an issue in its pedestrian operation and therefore had to implement corrective measures.

Costs and know-how

As for the total costs, including the civil works, the communication campaign, and taking into account the European grant (FEDER – Operational Programme Madeira 14-20), the intervention for pedestrianisation cost 920,000€.

Author: Jose Augusto Batista Vieira, Câmara Municipal do Funchal, collected by Polis

Traffic volume in the intervention area (%)				Greenhouse pollutants annual emissions (Ton/CO ₂)		
Type of vehicle	2015 (before)	2018 (after)	Difference (%)	2015 (before)	2018 (after)	Difference (%)
Light passenger vehicles	1957	346	-82,3	0,294	0,126	-0,57
Light Duty vehicles	86	30	-65,1			
Total	2043	376	-81,6			

Figure: Impact assessment (traffic and emissions pollutants)

Activity 11.2: Inform and engage citizens and stakeholders

Ljubljana, Slovenia: Temporary street closure during European Mobility Week leading to permanent redesign of urban space**Context**

- Ljubljana is the capital and largest city in Slovenia, its urban area has a population of 292,988 inhabitants.
- Ljubljana's SUMP was adopted in 2012 and updated in 2017 to redefine the objectives.

Description of activities

Every year since 2002, the City of Ljubljana has participated in European Mobility Week (EMW), which connects thousands of European cities in their efforts to create cities for people and with environmentally-friendly options for mobility. In this context, the City of Ljubljana introduces, every year, new permanent measures that contribute to a long-term improvement in the quality of living. Ljubljana is the only city that has twice received the EMW awards for their efforts, namely in 2003 and 2013.

During EMW in 2013, the City of Ljubljana took advantage of the Car-Free Day to start a four-month temporary closure of the Slovenska Street, which is the main street that crosses the city in the north-south direction, for all motorised vehicles. The newly acquired public area was then only accessible by public transport, cycling and walking. In the context of this intervention, the area of 6,540 m² was transformed into a new public space for the people of the city, including new urban furnishings and green space.

About four months later, at the end of January 2014, the city carried out an evaluation survey about the impacts of the new traffic regulation. Residents, building and space owners, experts, and the general public were involved in the survey. An exhibition space with an information point offered an open platform for public discussion on the final design of the street. The temporary closure of Slovenska Street was generally received very positively by the public. The redesigned street offered space for diverse social interaction and liveliness and brought "life" back to the streets, where there was only traffic before. The alteration enabled a characterful space design that encourages walking and cycling and integrates public bus transportation, taxi service and delivery traffic. Cyclists and pedestrians were among the most satisfied users. Based on the positive results, the City of Ljubljana redesigned

Slovenska Street and made its closure a permanent measure in September 2015.

Lessons learnt

As Slovenska Street was an important traffic junction, with a daily frequency of 60,000 cars, the group of car drivers were against the measure. However, after the closure of the street, the CO₂ level dropped by 70% in the area, thereby offering a solid argument to convince the opposing groups. Also, a survey taken in 2017 showed that 94% of the respondents even wanted to expand the measure by removing buses and leaving the street just for pedestrians and cyclists.

Costs and know-how

The cost of the refurbishment of Slovenska Street was approximately 3.5M€.

For details see:

<https://www.ljubljana.si/assets/Uploads/Ljubljana.For-you.-2007-2017.pdf.pdf>

Author: Matic Sopotnik, City of Ljubljana, collected by EURO CITIES



Image: © City of Ljubljana

Activity 11.2: Inform and engage citizens and stakeholders

Bologna, Italy: Novel and interactive engagement formats to involve citizens

Context

- Seventh most populous city in Italy, with over 370,000 inhabitants in the urban centre and almost one million in the agglomeration.
- Adopted on November 2018, the SUMP of Bologna is the first SUMP in Italy at a metropolitan level and one of the few in Europe dealing with a whole territory.

Description of activities

Based on a multilevel approach, citizen engagement was the key asset in developing a SUMP for Bologna. In the framework of a “Sustainable Mobility Forum”, various stakeholders were invited to participate in the process, starting with working on objectives and going on to working on strategies, policies and actions. Overall, 55 different municipalities and their citizens participated in public SUMP presentation meetings; the six neighbourhoods of Bologna were engaged in workshops and dedicated info-points.

Together with SUMP development, the “PUMS Bologna Metropolitana Project” aimed at the involvement of all actors and citizens by engaging them through participatory, informative and communicative activities (co-implementation), such as online surveys, e-newsletters and a dedicated website. Moreover, the project included creative and publicly-accessible events to involve people and create interest in the topic. Choosing a non-technical but inclusive, citizen-oriented and innovative approach to deliver an overall vision on sustainable mobility, all activities were aimed at being original and interactive. From the story-show, “Nature without cars”, a live music performance in the railway stations, to a game-workshop for children, Bologna has developed communication formats for everyone. Additionally, a short version of the SUMP of Bologna was published. The same kind of activities will consequently be carried out during the implementation and monitoring phase.

Lessons learnt

Opting for multilevel and interactive information-engagement events for both stakeholders and citizens is proving to be successful, and better conveys the message of SUMPs in different directions. Examples like Bologna’s SUMP are highly replicable and easy to implement, both from a budget and organisation level. However, they need very strong political commitment and financial support.

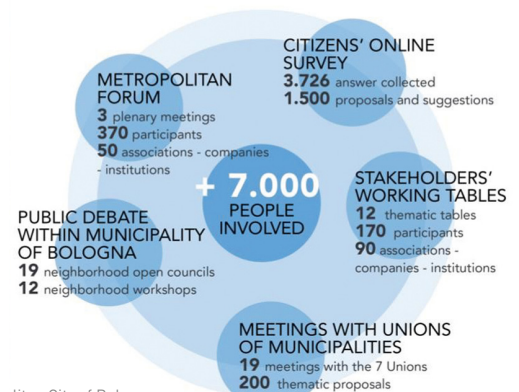
Costs and know-how

The costs of communication and participation events and activities are expected to be around 150,000€. During the development of Bologna’s SUMP, both consultants and internal staff were part of the team that was strictly involved in all steps concerning the communication process. Their role to achieve this goal has been strategic in two different ways: the internal staff was crucial because of their knowledge of citizens and the territory; and the consultants because of their technical and professional expertise in communication.

For details see:

<http://pumsbologna.it/>

Author: Catia Chiusaroli, Metropolitan City of Bologna, collected by Polis



Images: © Metropolitan City of Bologna

Activity 12.1: Analyse successes and failures

Métropole de Nantes, France: Comprehensive evaluation of previous SUMP before starting plan development**Context**

- The Métropole de Nantes is home to more than 630,000 inhabitants and includes 24 municipalities.
- The new SUMP (adopted in 2018) was implemented over the whole metropolitan region. This is the third SUMP of Nantes since 2000.

Description of activities

The Métropole de Nantes has evaluated the successes and failures of the previous plan (2010-2015) to improve the new SUMP. For this evaluation, the metropolitan region has carried out surveys to understand how the mobility behaviour has changed and how the population experienced and observed the different mobility measures implemented since 2010. This, for instance, included a large quantitative survey addressed to more than 20,000 people and a qualitative survey addressed to over 1,000 people living and/or working in the metropolitan area. Additionally, an expert and stakeholder group conducted a qualitative analysis and drew conclusions and recommendations for the next SUMP development process.

The new SUMP document contains a summary of the evaluation results, including, for example:

- demographic changes;
- environmental impacts of transport;
- development of different mobility modes;
- accessibility of transport;
- geographical mobility differences;
- communication activities; and
- major investments.

The conclusions of the evaluation process are reflected in the objectives and priorities of the new SUMP. For example, the analysis of the impacts showed that individual car use in the city centre decreased, while it slightly increased outside the city centre area. Therefore, the new plan focuses and adapts its objectives to the various needs of different geographical areas.

Lessons learnt

The evaluation of a SUMP process and the current mobility situation is necessary to adapt the new plan to the situation and understand the activities that must be further developed, modified or abandoned. The involvement of external stakeholders and the consultation of the population are crucial to collect feedback based on user experience and to adapt actions to people's concerns. This necessary involvement of the population and stakeholders also allows for the raising of awareness among them, especially on issues wider than individual mobility, such as the environment and climate change, and for the reconciling of daily mobility needs and the preservation of the environment.

Costs and know-how

The evaluation of a SUMP requires a substantial amount of time: it started with a quantitative survey in 2014-2015, followed by the work of the expert and stakeholder group in 2015 (eight months), a qualitative survey in 2016 (three months), and a phase of consultation (on the new SUMP) before the adoption of the SUMP by the end of 2018. The management of the external consulting group cost a total of 17,000€. The realisation of the large population survey cost approximately 1.3M€ (with almost 800,000€ coming from Nantes Métropole's own budget). The survey about the citizen perception of the measures of the former SUMP cost 50,000€.

For details see:

<http://bit.ly/2Y2t1wW> (pp.11-19; available in French)

Author: Lamia Rouleau-Tiraoui, Métropole de Nantes, collected by Polis



Image: © Christine Blanchard

Activity 12.2: Share results and lessons learnt

Ginosa (Italy), Rivas-Vaciamadrid (Spain), Kilkis (Greece): Exchanging knowledge in a European learning programme for cities**Context**

The cities Ginosa (Italy), Rivas-Vaciamadrid (Spain) and Kilkis (Greece) are all small- to medium-sized cities and can be considered starter cities for SUMP development. Ginosa is currently developing its first SUMP, Rivas-Vaciamadrid presented its first SUMP in 2010, reviewed it in 2016 and is now in the implementation phase, and Kilkis is also working on the implementation of the first SUMP.

Description of activities

Throughout the duration of the SUMP_s-Up SUMP Learning Programme 3 (SLP3), the City Council of Rivas-Vaciamadrid was working on the implementation of several measures that were included within the Action Plan that was developed following the SUMP review. The rating of the different measures has helped to identify which ones should be given a high priority. Measures with higher priority included those related to public transport and cycling, such as those regarding the accessibility of bus stops or the extension and improvement of public bike sharing. One of the measures fully implemented during the last six months was the reorganisation of public transport (bus). The implementation of this measure serves as a useful example of how the technical staff followed the steps proposed during the SUMP Learning Programme for choosing measures, prioritising them, and providing detailed descriptions in order to achieve a successful implementation.

For Ginosa, the SLP3 was a chance to take best practice used elsewhere and to adapt it to the city's own needs. Whilst working on its first SUMP, Ginosa benefited from the SLP3 in learning how to promote cooperation with

other cities, develop a common vision for mobility, as well as set goals and strategic objectives. Based on the SLP3 training and knowledge exchange, Ginosa is now implementing several measures that are focussing on accessibility, security and public space requalification, cycling infrastructure, and parking management.

With the support provided by the SLP3, the internal SUMP working group of Kilkis was able to provide an appropriate implementation methodology, including measures, participation, and evaluation methods. An especially valuable activity for Kilkis was the exchange of experience and knowledge about citizen participation and engagement with similar cities in terms of SUMP knowledge, size and demographics. Another specific know-how resulting from Kilkis' participation in SLP3 was an understanding for how to group and rank different measures according to the city's long-term strategy, which, in Kilkis' case, involved pedestrian safety and walking infrastructure.

Lessons learnt

Capturing lessons learnt and sharing the knowledge with involved stakeholders while developing a SUMP is an essential part of making sure that future projects or measures to be implemented will go well. The above three cities, which shared their experiences within the SUMP Learning Programme, are proof of the benefits that a good exchange and peer-review process can yield.

Authors: Jorge Romea Rodriguez, Rivas Vaciamadrid; Loredana D. Modugno, Ginosa Municipality; Eleftheria Spanou, Kilkis Municipality; Collected by ICLEI



Image: SLP3 workshop in Bucharest © Ana Dragutescu

Activity 12.3: Consider new challenges and solutions

Greater Manchester, UK: Continually updated online evidence base**Context**

- Greater Manchester is a city region of 2,8 million inhabitants and is made up of ten districts.
- Its first SUMP is the “Greater Manchester Transport Strategy 2040” and is currently in the implementation phase, which started in 2017.

Description of activities

The Métropole de Nantes has evaluated the successes The Greater Manchester Transport Strategy 2040 and the new Greater Manchester Delivery Plan (2020-2025) are supported by a comprehensive evidence base that is structured around six societal trends and issues that drive transport demand in Greater Manchester:

- economy and employment;
- society and community;
- urban development;
- environment and resources; and
- technology and innovation.

The evidence base is being continually updated and provided online, including the latest available data (see here), in order to identify next challenges and highlight future opportunities for modal shifts, and thus adapt the implementation and development of the transport strategy accordingly. Since the evidence base is the first point of call for making informed decisions, it is important to regularly update it. In this way, the evidence and its analysis aim to ensure that the intentions and aspirations featured within the SUMP are grounded in trends and data that are locally and time relevant.

Lessons learnt

The evaluation of a SUMP process and the current Firstly, it is important for a city to have enough resources to ensure the lasting significance of the evidence gathered, through a process of forward planning to deliver regular, systematic updates of the data/information. Permanently updating the evidence base enhances the cross-checking of information that comes from multiple sources. It also depicts the existing situation, and, in this way, increases the reliability of the SUMP and promotes the development of reliable scenarios. Moreover, continuous updating helps policy makers to understand what information is already known and identify gaps that need to be filled;

also, new trends can be foreseen and new future implications can be anticipated. As a prerequisite of this understanding, the maintenance of a detailed record of the gathered information is essential in order to easily facilitate the planned updates to the evidence base.

Costs and know-how

Data collection, analysis and elaboration is particularly resource-intensive and requires a significant amount of effort in the mobility planning process. Data needs to be readily available and of a non-commercially sensitive nature. Since no single dataset provides the required level of insight, different datasets can be combined (census, consumer classification, travel surveys, segmentation studies, etc.). In-house interviews are held with 2000 Greater Manchester households every year to collect transport and travel information.

For details see:

<https://tfgm.com/2040>

Author: Ben Brisbourne, Traffic for Greater Manchester Authority, collected by EUROCIITIES



Image: © Stephen Crave



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