CIVITAS

Sustainable and smart mobility for all

Neighbourhood and SUMP Mobility Solutions

Stories of success and results from CIVITAS Research and Innovation projects

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Abstract

This publication makes use of short stories – based on in-depth interviews with site managers – to demonstrate key results and best practices from (R)IA projects, achieved in ELEVATE's first two years. This publication covers CIVITAS projects spanning the sustainable neighbourhood planning cluster (SUNRISE, Cities4People, MUV, and METAMORPHOSIS) and the SUMP cluster (SUMPs-Up, SUITS, and PROSPERITY).

The backbone of this publication is two "feature articles". Each feature article focuses on a broad topic: the first on "innovation in neighbourhoods" and the second on "SUMPs". The two feature articles are themselves made up of a collection of short stories, which each illustrate the local context (neighbourhood, city, country) in which innovative measures have successfully been implemented.

Main Author

Stefano Borgato (TRT Trasporti e Territorio)

Editor

Adrienne Kotler (ICLEI Europe)

Contributors

Cosimo Chiffi, Vanessa Holve, Simone Bosetti, Silvia Maffii (TRT Trasporti e Territorio)

Reviewer

Teije Gorris (DTV Consultants)

About CIVITAS

CIVITAS is one of the flagship programmes helping the European Commission achieve its ambitious mobility and transport goals. Since its launch in 2002, CIVITAS has advanced research and innovation in sustainable urban mobility and enabled local authorities to develop, test and roll out measures via a range of projects.

Legal disclaimer

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Highlighting successes in neighbourhood & SUMP clusters

Since its founding in 2002, nearly 20 years ago, the CIVITAS Initiative has accumulated an unprecedented body of knowledge through its diversity of projects. Even in the past few years, a series of ongoing or recently completed CIVITAS Research & Innovation projects have catalysed a wealth of results, experiences, and know-how in cities and regions across Europe.

Through in-depth interviews with site managers on-the-ground in these cities and regions, the results of CIVITAS projects and their lasting impacts can be gleaned and synthesised. Furthermore, these sites' stories make clear the processes necessary to successfully implement sustainable urban mobility solutions, and to achieve truly impactful results.

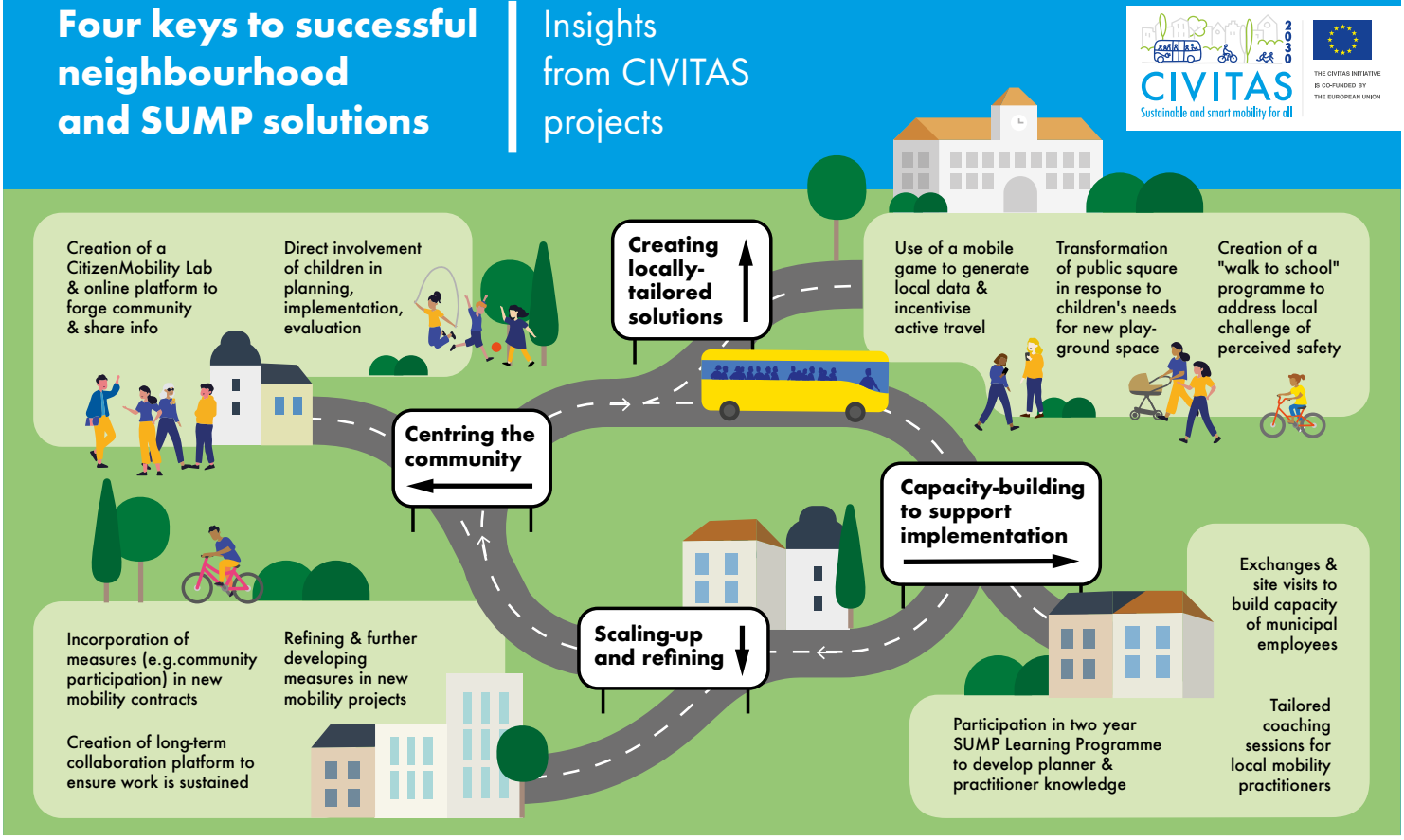
This publication highlights seven such impact stories. In this case, stories derive from projects working on "sustainable urban mobility plans (SUMPs)" and "neighbourhood projects".

Projects in both of these clusters share certain common learnings and themes. Namely, examining sites' stories on-the-ground illuminated that maximum impact could be derived when work: *centred the local community*, which led to the *creation of locally-tailored solutions*, followed by *capacity-building to support the implementation of these solutions*, before work was *scaled-up and refined*.

Future publications will synthesise and share key learnings derived from the stories of CIVITAS projects focused on other thematic clusters such as: mobility management; reducing the impacts and costs of urban freight; tackling urban road congestion; and public procurement.

Four keys to successful neighbourhood and SUMP solutions

Insights from CIVITAS projects



Based on successes from the following CIVITAS projects:

Citizen Lab & refining in new mobility projects: CITIES4PEOPLE

Mobile game: MUV

Direct involvement of children: METAMORPHOSIS

Walk to school programme & collaboration platform: SUNRISE

Participation in Learning Programme: CIVITAS SUMPS-UP

Tailored coaching sessions: CIVITAS PROSPERITY

Exchange visits & adapting new contracts: CIVITAS SUITS

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1 How co-created mobility innovations can reshape life in neighbourhoods

The context of "innovations in neighbourhoods" in CIVITAS projects

Neighbourhoods and cities face unique local mobility challenges. A key way to approach these is through applying participatory and co-creation processes to ensure that communities with intimate local knowledge shape processes and innovation outcomes.

Within the CIVITAS Initiative, there are several projects that are experimenting with new processes to create sustainable mobility solutions at the neighbourhood level, while also making neighbourhoods more liveable as a whole.

This feature article presents four successful examples of co-created, mobility-related innovations that have been able to reshape life in neighbourhoods. These explore and address topics such as sustainable mobility, neighbourhood approaches, and people-centred urbanisation.

The first short story describes an example from METAMORPHOSIS, a project that aims to transform neighbourhoods into more liveable and shared spaces. The project applies an innovative participatory approach, which includes the direct involvement of children as crucial players in each phase of the project – from planning to implementation, evaluation, and dissemination.

The second story zooms in on the SUNRISE project, whose innovative approach lies in its concrete involvement of citizens, stakeholders, and users throughout all phases of the policymaking process, from the early identification of problems to the implementation of solutions and their evaluation.

The third story is from Cities-4-People, which promotes a people-oriented transport and mobility approach, as a new way to deliver innovative, sustainable, and targeted solutions that address the needs of the public. This is a form of transport and mobility governance that takes the needs and wishes of the people into account with the goal of improving transportation systems and increasing urban sustainability.

The fourth and final story is based on work conducted by MUV: the Mobility Urban Values project. MUV inspired behavioural change in local communities through so-called "gamification" – in other words, changing citizens' habits through a mobile game that mixes digital and physical experiences. The project experimented with fostering sustainable mobility improvements – not through costly and rapidly ageing urban infrastructure, but rather by promoting a shift towards more sustainable and healthy mobility choices by engaging with local communities, businesses, policymakers, and open data enthusiasts use a mobile app.

SPOTLIGHT ON CIVITAS METAMORPHOSIS

1.1 A child-friendly neighbourhood in the making: the story of Grünau

When thinking about Zurich, Switzerland's largest city, we usually picture a global financial centre, the epicentre of banking, and one of the largest insurance markets in the world. However, Zurich, and its 12 districts are also vibrant and diverse, featuring different cultures, languages, and religions.

Welcome to Altstetten

The Altstetten neighbourhood, officially part of District 9, is one of the city's most varied and interesting ones. Once a small farming village and part of a municipality of its own, the area was incorporated into the City of Zurich in 1934. Due to its good transport connections, in the first half of the 20th century, the district was increasingly built-up with industrial facilities. More recently, since World War II, residential construction on its hillside has consistently been on the rise.

Altstetten is currently the largest and most populous neighbourhood in Zurich. It is characterised by numerous industrial and service enterprises and several big corporations in the low-lying areas, and broad residential areas on the hillside. Demographically, it has a high percentage of foreign nationals (35.4%) as well as a high proportion of social housing. Within the larger Altstetten neighbourhood, the area of Grünau is considered a "district within a district", as it is separated from the rest of Altstetten by railway tracks and the motorway.

Children shaping their future neighbourhood

Grünau worked with CIVITAS METAMORPHOSIS to transform the car-oriented neighbourhood into a child-friendly place with improved quality of life, which could act as a good example to be followed by other districts and cities. What was truly innovative about this work was the direct involvement of children as crucial players in each phase, from planning through to implementation, evaluation, and dissemination. Throughout these phases, children's perspectives, suggestions, and ideas were highly valued as essential contributions to create more children-friendly cities.

Within Grünau, the project concentrated its attention on the Bandli Building Cooperative. Children between 6 and 12 years-old were invited to analyse their neighbourhood in terms of its qualities and its weaknesses. In a one-day workshop, they catalogued places they like and do not like on a map, before coming up with a collection of ideas, mostly concerning the topics of safety, playgrounds, green areas, and cleanliness of public spaces.

In particular, the children identified the "old village square" as a place that could be improved. The administration took this indication seriously, and through a participatory approach and the intervention of specialists, transformed the square with a fresh design and several features to offer children a new playground space. The new area was opened in August 2020, and has since become the go-to place for gatherings, street festivals, and social meetings in the neighbourhood.

Another interesting measure was implemented during the school's mobility week. A neighbourhood parking spot was temporarily transformed into an outdoor café where the school's pupils served their guests soft drinks and snacks. Despite being a temporary measure, opening a public space to children rather than to cars proved to be impressive, with knock-on impacts. Helping children experience first-hand how much space cars take up helped effectively encourage them to think about what public space actually is, its potential, and showed that there may be better, more fun, and child-friendly ways to use this space.

Finally, as part of METAMORPHOSIS, a local mobility share point was established and managed by a group of volunteers. It includes one e-bike, one cargo bike, and a number of children's bikes that were made available for free to locals, who can reserve the shared bicycles in advance. Fundamental to its implementation and success was finding an easily accessible location, a group of passionate people that feel responsible for the bikes, and, of course, adequate financial resources. All in all, the measure proved to be a great opportunity to replace the use of cars within the neighbourhood and to incentivise the uptake of cycling among young people.

Children's rights to the city

These are just a few of the simple and effective measures METAMORPHOSIS has helped neighbourhoods implement to make their local areas more child-friendly. Creating a healthy and liveable neighbourhood environment for everyone, including children, should be among the top priorities for urban planners and city administrators. However, the rights of the city for vulnerable groups, like children, are very often underestimated and underprioritised, causing negative, and often disproportionate consequences for them. At the same time, children's views are rarely heard or considered in the planning and policy processes that affect cities' neighbourhoods' development. Without special attention to the opinions of children, it is too easy for their views to go unheard. Reversing this trend and making children an active part of neighbourhood design, initiatives, and development should be the starting point for building a better and more liveable future for generations to come.

Further reading

- Project website: https://www.metamorphosis-project.eu/index.html
- CIVITAS article on this intervention: https://civitas.eu/news/fact-sheets-show-how-metamorphosis-made-public-spaces-across-europe-child-friendly
- Book produced by the DIVERCITIES project: Dealing with urban diversity – the case of Zurich https://www.urbandivercities.eu/wp-content/uploads/2017/02/Divercities-City-Book-Zurich.pdf
- City's website: https://www.stadt-zuerich.ch/ted/de/index/taz/verkehr/mobilitaetsberatung/metamorphosis.html

Photo Credits

METAMORPHOSIS

Local Contributors

Roberto de Tommasi, Synergo CH – Zurich Site Manager for Metamorphosis

SPOTLIGHT ON CIVITAS SUNRISE

1.2 The social dilemma: how Jerusalem is turning residents' expectations and behaviours into real life mobility changes

Try to imagine the ideal environment in which to engage in community-led transformative mobility action at the neighbourhood level – one made up of a varied population with different cultural backgrounds and abilities, with all ages represented, wealthy and low-income families, those born in the neighbourhood and new migrants. Now picture the vast potential of engaging this group to work through the as of yet unsolved tension between planning for cars and for people. Then you may be picturing Bak'a, a neighbourhood in southern Jerusalem, which is one of the pilot areas of the CIVITAS SUNRISE project.

Context

In the late 19th century, families began to create a commercial centre in Bak'a. Today, the neighbourhood and Old City are connected by two markedly different paths: one along Hebron Road, with multiple lanes and a public transport corridor, and another path, which is a former railway track that has been transformed into HaMesila park, with a 7km walking and cycling path – the longest in Jerusalem.

The Greater Bak'a Community Council functions as "mini municipality", and neighbourhood activities such as communal committees, forums of pensioners and cultural events, are diverse and reflect the multi-cultural make-up of residents. In general, there is a common sense of commitment to sustainability principles that cuts across all social groups.

Despite this idyllic picture, Bak'a faces challenges with respect to mobility and accessibility. The number of private vehicles among residents is quite high; car ownership is seen as a status symbol even in neighbourhoods like Bak'a with its culture of sustainability. Parents in Bak'a continue to use private cars for neighbourhood school drop-off and pick-ups.

Furthermore, drivers from other parts of Jerusalem use Bak'a for long-term parking, transferring from there to public transport routes. This increases congestion at rush hours, and creates situations in which cars are parked irregularly, often occupying part of the sidewalks. Some streets have no sidewalks at all, and accessibility is lacking at certain road crossings.

Congestion, car occupancy, accessibility and safety concerns together create a self-reinforcing cycle that stops locals from seeing walking as a normal and easy practice. Rights of way for pedestrians, cyclists and drivers are not clear, and it is not common for kids to walk or play in the streets.

This neighbourhood has one more distinctive quality. Due to Bak'a's participatory heritage, residents have high expectations with respect to results. Residents have been involved in a number of consultations and participatory activities on how to transform the neighbourhood. Now they expect such processes to be followed by real action.

The solutions in sum

SUNRISE worked closely with the community council and the different municipal departments to solve physical challenges, such as fixing road crossings and sidewalk cracks, and establishing two small placemaking projects to improve the main walking paths. These small interventions were activators of change, with visible outputs that attract local interest.

Kids are the future

Acknowledging the importance of perceived safety, SUNRISE led a "Walking to school" programme, in which kids were both beneficiaries and architects of change.

Parents had expressed that they would be willing to have their older kids walk alone to school if certain areas were safer. The local police thereby agreed to provide police officers at four crosswalks during rush hour. Young residents then became ambassadors, walking to school and bringing other pupils and parents along, contributing to changing the local culture.

"Our greatest success is that residents today recognise walkability as their civic right", says Maya Tapiero from the local SUNRISE team.

The programme's impacts moved beyond the schools, with young ambassadors spreading the benefits of walking, leading to changes among public institutions, shop tenants and residents. Taking the time to pay attention to children's advice was the crucial success factor in Bak'a.

Redesigning public spaces

SUNRISE also worked to involve local people that were not previously part of the formulation of sustainability goals and activities in the neighbourhood. The goal was to build a truly representative community vision, and to translate this vision into a clear work plan with shared responsibilities among stakeholders.

The focus of action was the creation of a low-motorised "Green Path" to link residential areas, community institutions and businesses. This project was identified decades ago by the neighbourhood council and residents, but was never fully developed. That is where SUNRISE came in.

A firm was brought on to use new collaborative tools to design the Green Path in a way that prioritised pedestrians and cyclists, resonated with residents, and accurately translated their vision for the neighbourhood.

What resulted was more than a physical intervention. The Green Path features kiosks and cafes, outdoor libraries, picnic areas, outdoor cinemas and theatres, and playgrounds. A simple and effective circulation scheme works as traffic filter to keep the path safe.

Ensuring lasting impact

An important legacy of SUNRISE was the creation of a platform for residents to make careful, collective decisions, which allows them to show strong consensus. Furthermore, SUNRISE's work in Bak'a demonstrated that working closely with locals ensures the right conditions for mobility transformation.

Further reading

- Project website: https://civitas-sunrise.eu
- Article on the intervention: https://civitas-sunrise.eu/sunrise-improves-walking-conditions-in-the-baka-neighbourhood
- Architecture firm's project page: https://www.hqa.co.il/home/sunrise
- Neighbourhood's website: http://www.baka.org.il/English
- Media articles:
  - https://www.jpost.com/Travel/Around-Israel/All-Out-Adventure-Romantic-railway-route
  - https://www.timesofisrael.com/transformed-by-the-train-jerusalems-baka-neighbourhood/
  - https://www.timesofisrael.com/soho-jerusalem-huge-plan-puts-old-train-station-on-track-to-be-new-city-center/
  - https://www.timesofisrael.com/local-battle-continues-over-light-rail-in-jerusalems-german-colony/
  - https://jcpa.org/work-begins-on-new-jerusalem-light-rail-extension-to-serve-jews-and-arabs/

Photo Credits

SUNRISE

HQ Architects

Architects' rendering of the Green Path

SPOTLIGHT ON CITIES-4-PEOPLE

1.3 Smart mobility services in Trikala make a difference for citizens and tourists

Trikala (GR) is one of five cities that took part in pilot programmes as part of the Cities-4-People project, which is applying a people-oriented transport and mobility (POTM) approach.

Context

Today, Trikala has 81,000 inhabitants in its urban core, and a total population of 130,000, including the surrounding suburbs and villages. Due to this decentralisation, around 85,000 people commute daily to the city centre using private cars, biking and walking. Commercial activities in the historic city centre lead to traffic congestion, which is one of the main challenges in Trikala, especially in the area of "central square".

Most everyday activities (institutional, entertainment, commercial etc.) take place in that neighbourhood, while the proximity to the central bus station and local open-air market causes severe traffic, further aggravated by the lack of parking spaces and prevalent illegal parking in the neighbourhood.

In Trikala today, mobility largely depends on individual car use – there are more than 50,000 car owners currently registered in the municipality, using their cars to drive to the city centre on a daily basis. This has a negative impact on the environment, worsens traffic congestion and has a social impact: people who cannot afford or do not own a car cannot commute to the centre and therefore cannot access essential services.

Via Cities-4-People and SMARTA 2, another EU project dealing with rural transport, the Trikala team has worked to provide citizens with an alternative to the car when visiting the city centre.

Rolling out solutions

Cities-4-People supported the bottom-up development of solutions around Trikala's central square. Through co-creation activities, Cities-4-People introduced citizen engagement in Trikala and created an active mobility community, which itself decided what kinds of services it wished to see implemented.

These activities included first using voting methods to enable locals to indicate what mobility interventions they most wanted, and following these up with workshops and prototyping activities that empowered locals to whittle this list down to the most needed interventions. These processes and the community they forged are expected to live on long after the end of Cities-4-People. They helped form supportive communities and helped promote stakeholders' active engagement.

Workshops and prototyping activities also led to the creation of Trikala's Citizen Mobility Lab, which provides a physical space to share information and foster interaction among the members of the local community. It is an open and accessible space that enables members to meet, discuss, experiment,

test technologies, and propose new mobility projects, and is expected to continue well into the future. In addition, the Citizens Mobility Kit, an online digital platform, facilitates information sharing and engagement in innovation processes.

"Embrace the citizens. Don't just listen to their opinion: embrace them. Make them feel that the project is their own project," advises Odisseas Raptis, CEO of e-Trikala.

Making use of the Mobility Lab, citizens in the neighbourhood asked for better facilities for persons with reduced mobility, and a focus on mobility solutions that accommodate both citizens and tourists to make short visits to the city centre. Cities-4-People took these suggestions and ran with them, introducing new mobility solutions in the neighbourhood of the grand open market and central square.

More specifically, the project introduced smart storage lockers and a wheelchair scooter, both of which offer a service to local market shoppers, people relying on wheelchairs, and tourists.

Early results have shown that the storage lockers have positive spill-over effects on the use of shared mobility. These centrally-located storage lockers allow people to leave their heavy bags to pick up e-bikes, which are available at the same location.

The concept of smart lockers emerged from citizens' and tourists' wishes to visit the city for a couple of hours only. Trikala's central train station had no lockers until this pilot, while now 10 smart storage lockers have been built.

The second measure aimed to increase the accessibility of local mobility services for disabled citizens. The city centre has previously been less accessible for those who use wheelchairs, hindering their ability to freely enjoy a trip to the centre of town.

Trikala's team scrutinised the market and found a wheelchair scooter that could transform a regular wheelchair into an electric one. Understanding the importance of, and need for, such equipment, Cities-4-People accepted the proposal and financed the purchase of a wheelchair scooter. This has vastly improved accessibility, ease of travel to different areas in central Trikala, users' quality of life, and levels of independence. The current pilot offers limited service (one wheelchair scooter), which may be increased by the city purchasing more scooters in the near future.

Advancing progress into the future

Those two pilots have been integrated into the new SMARTA 2 project, which has developed a smart application that enables online reservations of the wheelchair scooter and of smart lockers. What's more, through the app, users can also reserve car sharing and carpooling services, and bicycles.

The Municipality is eager to continue supporting the operation of both services (wheelchair scooter and smart lockers) and to integrate them with other municipal mobility services. The acceptance by the local community and their continuous usage of the services also helps make the case for their continued development and provision.

Overall, the bottom-up approach that was applied created an active sustainable mobility community in the neighbourhood, which has already proven useful for scaling-up successful measures, as well as supporting new ones.

Further reading

- Project website: https://cities4people.eu/
- News on project website about this work: https://cities4people.eu/wp-content/uploads/2020/11/Angelidou_2020_IOP_Conf._Ser.__Earth_Environ._Sci._410_012059.pdf
- Report on Cities-4-People Deployment Toolkit & Replication Guide: https://cities4people.eu/wp-content/uploads/2019/10/D6_9_C4P_external.pdf
- Report on practical concepts from the project: https://cities4people.eu/wp-content/uploads/2019/12/D.3.4-Practical-concepts-for-the-Cities-4-People-pilot-areas_External-version-.pdf
- Mobility Kit: https://cities4people.eu/citizen-mobility-kit/
- News on project website about its legacy: https://cities4people.eu/2020/11/16/its-not-the-end-its-just-the-beginning/

Photo Credits

Cities-4-People

Local Contributors

Odisseas Raptis, CEO, e-trikala

George Gorgogetas, project manager, e-trikala

SPOTLIGHT ON MUV

1.4 Helsinki tests gamification for more sustainable mobility

Mobility Urban Values (MUV) is a particularly fun project aimed at changing mobility behaviour through gamification (i.e. games) and co-creation with residents. In parallel, the project has created tools for data collection, thus ensuring that games not only shift behaviours, but also support better local-level planning.

A number of cities have been involved in MUV – including Amsterdam (NL), Barcelona (ES), Fundao (PT), Ghent (BE), and Palermo (IT) – but let's focus on the pilot led by the City of Helsinki, in the neighbourhood of Jätkäsaari.

The local context

Each MUV city selected one neighbourhood to focus on in rolling out pilot measures. For its part, Helsinki selected Jätkäsaari, the city's main testbed for mobility solutions. This neighbourhood is located next to the city centre, in an area that used to be a hub for port logistics. Today, it also serves as a sea hub for passengers commuting to Tallinn (EE), and has become a residential neighbourhood.

Jätkäsaari suffers from congestion generated by the passenger port, which is effectively the busiest passenger port in Europe due to daily commuting between Helsinki and Tallinn. Fluctuating congestion linked to the arrival and departure of passenger ships is a particular challenge, and helps explain why the area is the focus of so many mobility projects and pilots.

Rolling-out solutions with Forum Virium

Forum Virium, a non-profit innovation company owned by the City of Helsinki, carried out the MUV pilot and promoted the related urban planning participation and interaction opportunities. The Helsinki pilot materialised for residents mainly in the form of the MUV game, a co-creation process, and workshops.

Forum Virium used gamification to explore the use of crowdsourced data for planning. In other words, by playing the MUV game, residents were generating locally-relevant mobility data to support tailored neighbourhood-level planning. Projects like this one have demonstrated that crowdsourced mobility information can add new dimensions to inform the work of traffic planners.

"You have planning on one side, and then you have citizens using all the results of the planning. You need people to give feedback back to the planners, and that becomes a loop. We asked, 'how can gamification enable and facilitate that?'," explains Sami Sahala of Forum Virium.

The MUV game and lessons learnt

One of the greatest challenges that cities face today is finding solutions to meet EU climate targets. Being one of the largest sources of emissions, traffic is naturally a major focus area for these efforts. New technology and regulations can help, but traffic emissions cannot be effectively reduced without also influencing residents, whose mobility choices have a major impact.

In that context, residents in Jätkäsaari have been invited to play a mobility game, and, by doing so, to produce data to support more effective traffic planning. Users of the MUV mobile game collect points when they use sustainable modes, like walking, cycling and public transportation. Users can also take part in challenges and training activities to gain additional points, and win real prizes.

The MUV mobile game helped gather information about people's everyday mobility choices, including data on the use of sustainable modes like cycling. New types of traffic data were generated, which proved to concretely help city planners to better understand residents' daily journeys, choices, and routes, and thus to better meet their needs.

The game also helped encourage residents to use sustainable modes. In fact, the game concretely increased Jätkäsaari residents' use of sustainable modes, and helped them to document their daily trips. It should be noted, however, that no follow-up studies are available to confirm whether or not these shifts have proven to be permanent.

The project also produced learnings about gamification itself. Marketing a new mobile service to the public has proven to be challenging: there is a lot of competition with so many mobility apps on the market, and the project had limited resources and duration to contend with. This meant that a critical mass of users of the game could not be achieved. But, much could still be learnt from the relatively smaller number of users.

One key learning was the importance of engaging and partnering with local, neighbourhood businesses. In Jätkäsaari, a local, public sauna-bar provided free sauna entry to clients who arrived by foot or by bike.

Zooming in on impacts

Since September 2018, for a period of about one year, the 5,000 people across MUV cities who actively used the MUV game recorded over 260,000km sustainably travelled, and logged an average 32% improvement of their carbon footprints!

In Jätkäsaari, the project also contributed to an array of other positive impacts. For one, MUV measured neighbourhood air quality, with help from engaged locals, at several measuring stations installed on residents' balconies. MUV also contributed to the development of Jätkäsaari as a test platform for new mobility solutions, while at the same time promoting a sense of community and local activity.

Indeed, MUV played a key role in establishing a Mobility Living Lab in Jätkäsaari. This helps illustrate the main, long-lasting impact of the pilot: co-creation with residents and local planners created a culture of participation and participatory activities that has continued in other projects ever since. MUV kicked-off this process and created a new way of collaborating with the residents, which was based entirely on local inputs. Projects following MUV have continued to work with the same pool of residents, building on MUV's legacy.

In conclusion, MUV's main benefits in Helsinki include the development of Jätkäsaari into a test platform for new mobility solutions and the emergence of a strengthened sense of community in the neighbourhood. Importantly, the project also actively supported a goal defined in the City of Helsinki's strategy of reducing the climate impact of transport and emissions harmful to residents' health.

This MUV pilot has been a small but successful experiment that has led to other projects in the neighbourhood, many of which are building on MUV success, also focusing on local mobility challenges and air quality.

Further readings

- Project website: https://www.muv2020.eu/
- About the MUV game: https://muvigator.muvgame.com/
- Forum Virium's webpage about the MUV project: https://forumvirium.fi/en/muv-more-sustainable-mobility-choices-with-gamification/
- Forum Virium video on the MUV project: https://www.youtube.com/watch?v=MskAScKDsIQ
- Neighbourhood's website: https://mobilitylab.hel.fi/

Photo Credits

MUV

Local Contributors

Janne Rinne, MUV project manager, Forum Virium

Jari Honkonen, MUV project manager, Forum Virium

Sami Sahala, smart mobility project manager, Forum Virium

NEIGHBOURHOOD PROJECTS

Conclusions and lessons learnt

The four short stories that make up this article provide clear examples of how CIVITAS projects are capable of triggering, through exemplary initiatives, the transition towards more sustainable urban mobility and planning at the neighbourhood level. In short, they demonstrate how co-created mobility innovations can reshape life in neighbourhoods.

These four good practices exemplify how co-creation and co-participation methods, as well as participatory processes and other collaborations between different administrations, residents and stakeholders, forge a more sustainable local system and promote innovative developments at the neighbourhood level.

In Zurich, the active involvement of children and the willingness of the local administrators to hear their suggestions, enabled the launch of a series of simple yet innovative measures, which contributed to the transformation of the neighbourhood into a more liveable, joyful, social, and healthy place for both children and adults.

Bak'a's story demonstrates that offering residents a platform where their voices can be heard, and which can encourage city officials to make more nuanced and collaborative decisions, can spark the uptake of important, and sometimes radical urban changes and improvements, even in particularly challenging areas.

The bottom-up procedure and the co-creation activities in Trikala set the basis for citizen engagement and the creation of a local active mobility community, which helped introduce and push through innovative mobility solutions. Now, the municipality is eager to support the scaling-up of these services, as well as to introduce new ones that further support local mobility needs.

Finally, in Helsinki, the launch of the gamification pilot not only helped city officials better understand citizens' needs, but it also led to closer collaboration between residents and planners across the board. Furthermore, the pilot contributed to helping the city meet its goal of reducing the climate impact of transport- and mobility-related emissions.

Each of these stories describe measures that have been proven to be successful in their neighbourhoods. However, each neighbourhood is unique, and thus solutions will not necessarily be universally applicable and successful across all neighbourhoods. Rather, the stories highlighted here clearly point to the need to base interventions on a thorough understanding of the local context, one which is led by and actively involves the local community, in order to reach the best potential solutions and to bring about positive benefits for all.

2 Supporting SUMP development through CIVITAS

Sustainable Urban Mobility Plans and CIVITAS projects

For several years, the need for more sustainable and integrated planning processes that address the complexity of urban mobility has been widely recognised. This is particularly necessary and complex, as people's willingness to adopt new modes of transport has been rapidly shifting, and, with that, the urban mobility climate and dialogues have been ever-changing. In response, new approaches to urban mobility planning have been rapidly emerging.

One such approach is the concept of Sustainable Urban Mobility Plans (SUMPs). The European Commission is working closely with Member States to ensure that the SUMP concept is adapted to the specific requirements and existing planning practices in each Member State, and is actively promoted at national level. Ultimately, Europe aims to have hundreds of cities who have successfully developed SUMPs.

Three recently concluded CIVITAS Initiative projects have directly supported reaching this goal: CIVITAS SUMPs-UP, CIVITAS SUITS, and CIVITAS PROSPERITY. In total, these projects brought together more than 80 actors working towards the common goal of supporting cities across Europe to develop and implement Sustainable Urban Mobility Plans.

By enhancing cooperation among the Member States, these SUMP projects have fostered an integrated approach to the implementation of more energy-efficient and sustainable urban mobility planning – an approach that would not be feasible if taken on by one country alone.

SUMPs-UP assisted planning authorities to overcome the barriers that prevent or make it difficult to implement SUMPs, through capacity building, tailored information, and support during development and implementation phases to equip authorities with the necessary knowledge and skills.

SUITS aimed to substantially increase the capacity of small- and medium-sized local authorities to develop and implement sustainable, inclusive, integrated, and accessible transport strategies and systems, with attention paid to policies, technologies, practices, procedures, tools, and measures.

Finally, PROSPERITY looked at 'closing the gap' between the needs and demands of the cities that should develop and implement SUMPs, and those of higher administrative institutions, whose support is required to prepare and support SUMP programmes. This was done through a unique, facilitated approach to involvement and activation.

The following short stories provide glimpse into the inspirational successes that emerged from these three projects, each of which had a real impact on helping to meet European SUMP goals.

SPOTLIGHT ON CIVITAS SUMPS-UP

2.1 SUMP uptake in the Porto Metropolitan Area

Context

The Porto Metropolitan Area (AMP) is the second largest urban area in Portugal and comprises 17 municipalities, including the City of Porto. Its core is heavily urbanised, with areas becoming progressively more rural as one travels away from that core. These differences can make defining common development and mobility policies challenging.

Central to AMP's public transport network is the Porto Metro, which connects its various areas. Despite public transport and walking accounting for modal shares of 10% and 18% respectively, private cars remain the dominant way of moving around AMP, representing a modal share of 69%. Their dominance, combined with significant commuter traffic from the suburbs, means congestion is an issue, particularly in the City of Porto.

As a regional planning authority, AMP plays a coordinating role for policy development and implementation. SUMP development has been crucial to provide a structured and systematic approach to coordinating transport development across AMP's 17 municipalities. This helps ensure that transport services provide inhabitants across all municipalities with access to employment, education, and public services, and has helped secure political buy-in for sustainable mobility measures.

This work benefited from AMP being selected to be part of a small SUMPs-Up "SUMP Learning Programme Leadership Group". Over two years (2017–2019), the regional authority joined a series of learning activities to equip planning authorities and mobility practitioners with skills and knowledge to develop and implement SUMPs.

History of SUMP development

AMP took its first steps in SUMP development in 2016, when it produced a SUMP Action Plan. Although this was not a full-fledged SUMP, it did mark the first step towards AMP having its first regional SUMP. The Action Plan ties into its ongoing work defining a metropolitan vision, and revising AMP's urban master plan – a regional SUMP should integrate with and complement both.

AMP's path towards its Action Plan began a few years earlier. In 2011, a national strategy was produced that looked at accessibility, transport and mobility, and their relations to land-use planning. In the same year, a "guide" was released to support the technical development of a SUMP. Then, in 2012, it become mandatory for municipalities with over 50,000 inhabitants to have a SUMP in place.

Despite EU funding being devoted for projects and measures included in SUMPs, many regional authorities had limited time, capacity and expertise in SUMP development, which is what led AMP to opt to first create an Action Plan, as opposed to a full-scale SUMP. For the same reasons, AMP and other metropolitan areas engaged external companies to help create their mobility planning documents. This prevented AMP from gaining its own SUMP development expertise and having full "ownership" of the Action Plan.

This lack of time, expertise and resources led the final Action Plan to be quite limited in scope. For example, there was no communication plan, there was only a small amount of public participation, and measures were neither prioritised nor packaged. Targets, indicators and an overall monitoring plan were also absent, and the document was not explicitly connected to a wider political programme.

On the other hand, the Action Plan successfully developed several important measures and a series of 15 strategic objectives. In total, over 250 municipal and nine metropolitan measures were set out. Nearly half of these focused on so-called "soft modes" (i.e. active mobility), as well as improved intermodality and enhanced public transport, including envisaging a Bus Rapid Transit (BRT) system and more light rail services.

With close to half of all originally planned measures already implemented, AMP regards the implementation phase as generally successful. Furthermore, four AMP municipalities had developed their own SUMPs by the end of 2019.

SUMPs-Up refines and bolsters the Action Plan

From August 2017 to November 2019, AMP formed part of the SUMPs-Up Learning Programme Leadership Group alongside seven other cities from Finland, France, Italy, Portugal, Romania, and the UK. As part of this Leadership Group, they had access to five SUMP Learning Programmes, which covered initiating, elaborating and implementing a locally-tailored and impactful SUMP.

AMP's Action Plan helped raise awareness of sustainable mobility planning and has boosted cooperation between AMP's 17 municipalities. Through the SUMP Learning Programme, AMP was able to build on this facet of the Action Plan's success, and implement new, participatory methods and Action Plan review processes to move towards a full-fledged SUMP.

All the municipalities approved of the proposed review processes, which engaged a multidisciplinary internal working group consisting of staff from AMP and all municipalities.

"As a metropolitan area, we are polycentric and heterogeneous, and need to reconcile objectives and expectations despite these differences. Applying the SUMP approach and creating transversal governance structures, such as our multidisciplinary and inter-municipality working group, is encouraging exchange and aligning mobility planning across the AMP. The SUMP Learning Programme taught us such participatory approaches and helped us take ownership of our SUMP process," reflects Carla Oliveira, Porto Metropolitan Area.

During periodic meetings, the group conducted a SWOT analysis (which identifies strengths, weaknesses, opportunities, and threats) of the Action Plan, developed a concept for strengthened public participation, and defined targets and indicators appropriate for each municipality. These relate to common strategic objectives, and an increased adherence to the SUMP approach, all of which is helping to align mobility planning at various governance levels across the region.

One result of this newly integrated, participatory approach was multimodal ticket integration. This integration had a huge and immediate impact. In April 2019, the intermodal ticket was extended to the entire metropolitan area, having previously only been valid in the central urban core. At the same time, a single monthly ticket was introduced that allows travellers to reach all AMP municipalities by bus, train and metro for a monthly price of €40. From its introduction in April 2019 until October 2019, there was an increase of 61,000 public transport 'customers'. Furthermore, when comparing the period from January to October 2018 (before multimodal ticket integration), with the same period of January to October 2019, AMP saw an increase of 315,000 public transport customers.

Looking ahead

Overall, the SUMP Action Plan review process concluded in 2020, with AMP expressing its aim to have its full-scale SUMP ready soon, which learns from and avoids the shortcomings experienced as part of the Action Plan process. AMP is also preparing a Mobility Strategy 2030, into which the SUMP will feed.

Future (SUMP) measures will be bundled in packages to maximise their impact. Connecting and creating bus, BRT and light rail transit corridors will be prioritised in the new SUMP, as will the provision of Demand Responsive Transport to serve more rural areas.

A clear monitoring plan and indicators linked to quantifiable and measurable targets will facilitate their and other measures' evaluation. When combined with better data collection, it will allow the SUMP's impact to be tracked in a more timely manner.

Citizen and stakeholder involvement and the dissemination of SUMP-related information will increase substantially. A permanent SUMP website is being developed, alongside several online tools to enable the collection of local feedback.

Following the definition of their visions and priorities, the 17 municipalities will select their own individual series of measures. These will then be packaged, and each will be assigned actions, responsibilities, and financing options. This will draw on the working group's activities.

Further readings

- Project website: https://sumps-up.eu/home/
- Project website information on the Learning Programme: https://sumps-up.eu/learning-activities-materials/slp-participants/
- AMP's webpage: http://portal.amp.pt/pt/2/temad/361#FOCO_2

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Area Metropolitana do Porto

SPOTLIGHT ON CIVITAS SUITS

2.2 The Palanga transformation

Sustainability is a way of thinking, which cannot change overnight.

That way of thinking must develop, and awareness has to evolve. This will, in turn, help ensure that mobility planning becomes more sustainable in the long-term. SUITS has helped smaller cities to build this awareness among communities, and to feel better understood in their challenges.

The developments in Palanga (LT) make it one of the most striking success stories of the project, regarding fostering sustainable thinking and SUMP development.

Local context

Palanga, a seaside resort town in western Lithuania and a port city on the shore of the Baltic Sea, has a population of slightly more than 15,000 people. However, during the summer, tourism increases the number of inhabitants to over 120,000 people! Furthermore, the most popular way to travel to Palanga is by private car.

Since 2016 in Lithuania, a ministerial decree has made it mandatory for all resort areas and all cities with more than 25,000 inhabitants to have local SUMPs. Furthermore, SUMPs are also a condition for accessing EU structural funds. It is thus perhaps no surprise that many cities in Lithuania have started to draft SUMPs (20 cities in total). However, since most of these cities do not have a dedicated transport planning department due to their small size, they generally hire urban planning consultants to design their plans.

Smart Continent, a Lithuanian consultancy, designed 7 out of the 20 SUMPs in the country, including Palanga's, which it began working on in May 2016. This work had thus already kicked off before Palanga was invited to join the SUITS project in December 2016. Palanga's first SUMP was then approved in early 2017, and is being implemented in an ongoing manner.

Palanga and SUITS

SUITS' objective was not to get this smaller city to start developing a SUMP immediately, but rather to strengthen their capacity to implement their SUMP, and to demonstrate how sustainability could be made more central to their mobility planning and to the implementation of concrete measures.

SUITS has helped them to visualise a path forward and to map out small steps that can be taken to achieve change. It has also increased the capacity of the municipality's employees, who have been involved in all planning processes thanks to the project. For example, Palanga's Head of Investments and its Chief Architect benefited from exchanges and site visits with other SUITS cities, such as Torino (IT) and West Midlands (UK).

Thanks to these capacity-building opportunities, local planners better understood how other European municipalities are organised and how they carry out consultation processes. This has contributed to changing the mindset of the city administration, and to encourage a shift away from top-down decision-making, towards meaningfully involving citizens in planning processes.

When these interventions were first rolled out, civil society was rather unresponsive to consultations. As a result, initial inputs from citizens to the 2017 Palanga SUMP were rather limited. However, this work has nonetheless marked a first step towards a new participatory culture, which contributed to a long-lasting change in mindsets.

In addition to a new citizen-focused approach, SUMP innovations brought in by SUITS have included, for instance, the implementation of universal design principles in the transport system (including in the sandy beach), and infrastructure modifications to improve and promote bicycle and pedestrian mobility.

Palanga after SUITS

Now that the SUMP is in its implementation phase and that SUITS has come to an end, Palanga is shifting its focus to monitoring and reporting results. Data on modal share or traffic flow is of particular concern. During the SUITS project, Smart Continent collected this data to assemble baseline measurements, including for CO_2 emissions, modal shares, shifts from cars to public transport, etc. Following the end of SUITS, there is no structure in place by the municipality for data collection to check improvements against these baselines, which has made it hard to report progress to the national government. This is an area of concern and of focus for the municipality.

SUITS' influence in Palanga has led the city to draft a general Urban Development Strategy 2030. Smart Continent was awarded a contract to lead on this task, which is being done with stronger citizen participation; in fact, Smart Continent welcomes that local interest in participating is growing. One of the targets of the strategy includes the full implementation of the SUMP by 2030.

Understanding the value of seizing this momentum, the municipality of Palanga is increasingly rolling out new efforts to include citizens and businesses into the planning process, which is seen locally as an indirect result of SUITS.

In sum, SUITS not only helped shape Palanga's SUMP and built capacity among Palanga officials to plan and monitor transport planning. It has also helped change mindsets among locals and municipality administration.

Further readings

- SUITS leaflet: https://www.suits-project.eu/wp-content/uploads/2017/09/SUITS_leaflet.pdf
- All SUMPs in Lithuania, including Palanga (in Lithuanian): DARNAUS JUDUMO MIESTE PLANAI | Susisiekimo ministerija (lrv.lt)
- SUITS Capacity Building Toolbox: https://cbt.suits-project.eu/
- SUITS Multiplier Workshop: https://www.suits-project.eu/news/watch-the-recording-deploying-suits-transferable-tools-for-sustainable-mobility/

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Local Contributors

Dr. Andrius Jarzemskis - Smart Continent LT - Palanga project manager

SPOTLIGHT ON CIVITAS PROSPERITY

2.3 Turning Varna into a sustainable mobility and tourism city

One hundred years ago, the Bulgarian city of Varna was declared a "seaside city resort" in an official Decree that set out a vision that: "Nature itself, with the beauty of the area, shows and dictates the direction of stable and beneficial development." Now, a century later, Varna is not only a thriving, seaside tourism city, but also a sustainable mobility city.

Local context

Following Varna's declared title as a "seaside city resort", the city experienced years of war and the progressive decline of its commercial seaport. Now, however, this resort identity has made the city one of the most famous European tourist destinations.

The official Decree signed by the local government at that time set out a vision that: "*Nature itself, with the beauty of the area, shows and dictates the direction of stable and beneficial development.*"

Varna is the second largest city in Bulgaria with a population of nearly 350,000 residents. Local policy makers have fully committed to sustainable mobility principles. City officials and policy makers are keen to create an attractive, fast and accessible public transport system, to deploy technological solutions for traffic management, and to further expand cycling infrastructure, all with the vision of improving quality of life for locals, and strengthening tourism.

In this context, Varna received support from CIVITAS PROSPERITY to develop its first SUMP.

Varna and PROSPERITY

Thanks to support provided during three coaching sessions with CIVITAS experts, Varna's local SUMP process has now been presented, discussed, analysed and taken up as part of the city's organisation and ongoing programme to improve transport infrastructure and sustainable mobility.

A number of measures previously planned within the Varna Integrated Urban Transport Project – a strategy funded by the European Bank for Reconstruction and Development – were being implemented when the city joined PROSPERITY, which led them to request that the project support them with coordination and analysis of ongoing activities to ensure their consistency and coherence. Furthermore, Varna felt they lacked knowledge to fully put the SUMP planning cycle into practice, and sought support to build-up a motivated working group to prepare upcoming SUMP phases.

As a first step, a Bulgarian version of the EU SUMP Guidelines was provided and used as a main source text.

During the preparatory activities and before each coaching session, a number of interviews were carried out by PROSPERITY coaches, which ensured a tailored approach to coaching, informed by the specific needs raised by the city and the public companies working on mobility and traffic management.

Next, coaches analysed Varna's vast sustainable mobility materials and resources, such as its planning processes, demographics of car ownership, public transport scheme, master plan, integrated plan for reconstruction and development with its traffic and road infrastructure plans, and cycling network. Information on prior stakeholder involvement was also collected and discussed with a newly established sustainable mobility working group. Further details on the real functioning of Varna's mobility system were also analysed "live" during coaches' technical site visits.

Varna's SUMP

The city already had a well-extended and newly built cycling network in addition to numerous walking and cycling paths along the Sea Garden, an iconic Varna landmark, which is the largest landscaped park in the Balkans and serves as a green and protected entry to the sea. Several on-street bike garages were also already installed. However, there remained relatively few cyclists on the streets.

The city also has a well-connected and well-used public transport network, including newly purchased trolleybuses, and plans for a new bus rapid transport system. Plus, the city has a good info-mobility system managed via a dedicated smartphone app.

With all of this sustainable infrastructure in place, the decision was made for Varna's SUMP to focus on so-called 'soft measures' that lead to behaviour change such that people make more use of sustainable mobility infrastructure and increase its modal share. This included, for example, making walking distances more evident, with clear signage and wide-reaching communication materials.

In addition, Varna has experienced distinct challenges, including sidewalks in bad conditions and often occupied by cars, as well as a new paid parking scheme that was not interlinked with other parking or park&ride options. New sustainable mobility options were not sufficiently highlighted in communication materials, and their advantages not always disseminated. The city also saw a need to work on creating an "active mobility culture".

PROSPERITY support

Following each PROSPERITY activity and coaching session, summaries and next steps were compiled as homework.

The coaching sessions helped Varna's SUMP team assess the impact of their long-term vision and strategic documents and plans. They learned how to prepare a baseline analysis and to develop a common vision with stakeholders. Challenges and opportunities were discussed and collaborative work was carried out on how to set objectives, targets and to articulate packages of measures. A number of actions emerged as fundamental for the implementation of, for example, the new parking strategy, particularly focusing on stakeholder involvement and communication.

Other measures and activities that will be part of an upcoming SUMP include: the reclamation of port authority areas and facilities; the construction of a bridge across the lake of Varna, the initiation of a second Sea Garden; and a new 40 km cycling route.

PROSPERITY provided the city with locally-specific guidance to help them govern the SUMP process. Varna is now ready to take this work forward, and to spread their achievement to other Bulgarian cities.

Further readings

- Project website: http://sump-network.eu/
- Varna's city page on project website: http://sump-network.eu/cities-countries/varna/#c1110
- Official Varna webpages
  - https://visit.varna.bg/en/index.html
  - https://varna.bg/en/2
  - https://www.varnatraffic.com/en

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Cosimo Chiffi

Visit Varna

SUMP PROJECTS

Conclusions and lessons learnt

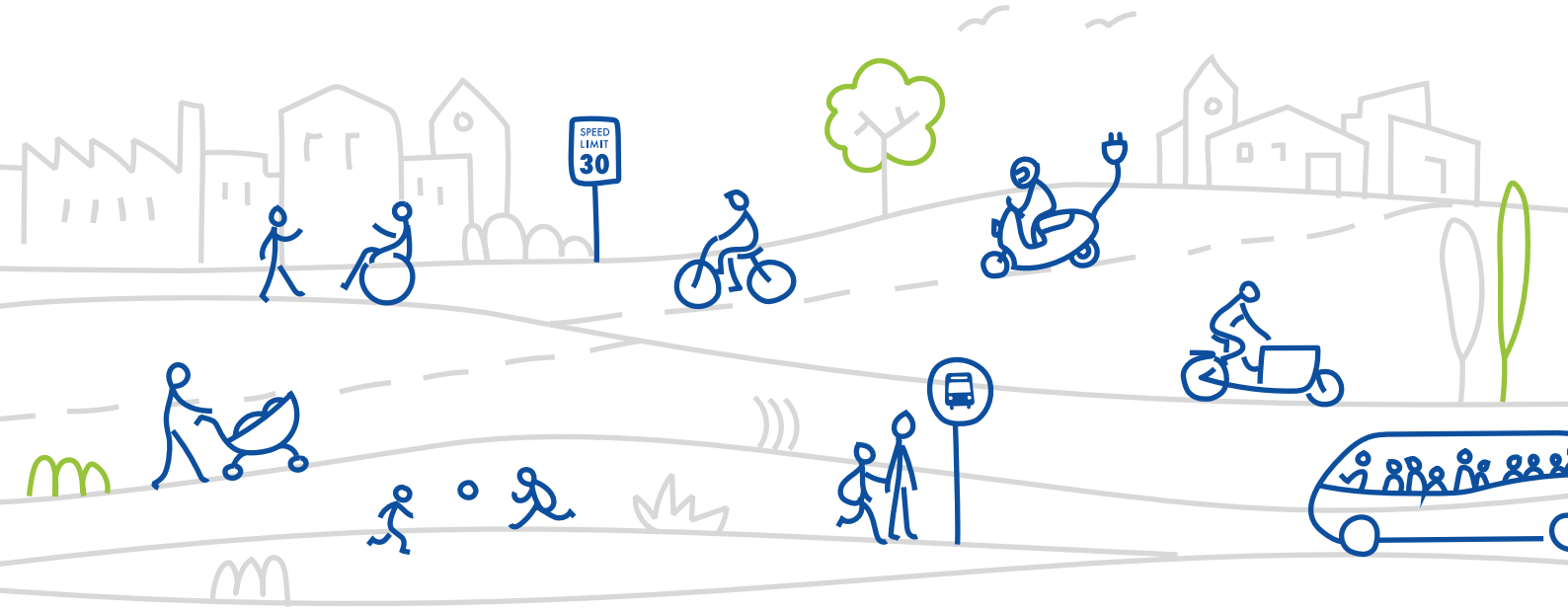
Achieving sustainable, energy-efficient and environmentally-friendly transport systems is one of Europe's key aims. Sustainable Urban Mobility Plans are a critical instrument, both to reach that goal, and to contribute to meeting the climate and energy targets set by EU leaders. However, cities frequently face major barriers when creating their own SUMP, including ensuring meaningful stakeholder participation and citizen involvement, institutional cooperation between sectors and disciplines, identification of measures, and monitoring of SUMP implementation, impacts and progress.

The three SUMP-related CIVITAS projects outlined above have actively supported cities across Europe to develop and implement SUMPs, through training, exchange of experiences, workshops, capacity building, and by addressing skills gaps in transport departments, sustainable implementation, and funding.

Porto Metropolitan Area's involvement in the SUMP Learning Programme, through which it was assisted with knowledge transfer, testing and assessment, and continuous user feedback collection – all informed by content about concepts, approaches, tools, and methodologies – has been key to helping the city in the phases between their development of a SUMP Action Plan, and its aim to complete a fully developed SUMP.

In Palanga, involvement in CIVITAS SUITS has significantly helped to change the mindset of citizens and of the municipal administration, especially with regard to the importance of citizen involvement in planning processes. A series of small steps were taken that eventually led the city to design its SUMP, improve capacity building, and set the groundwork for monitoring and evaluation of the process.

Finally, in Varna, CIVITAS coaching sessions helped local experts to learn more about how to effectively put the SUMP planning cycle into practice, as well as to convene a motivated working group ready to prepare the several upcoming phases of the SUMP, including impact assessment. The City of Varna now has a strong basis to properly manage the SUMP process, and to be an example for other Bulgarian cities looking to follow their lead.



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