Deliverbale D.T1.2.3

Report on strategies for PT in SUMP & collaborative development of new services

DELIVERABLE - BASIC INFORMATION

Project index number and acronym	**1.1.1.1. CE1100 LOW-CARB**
Lead partner	**PP1 - Leipzig Transport Company (LVB)**
Deliverable number and title	**1.1.1.2. T1.2.3 - Report on strategies for PT in SUMP & collaborative development of new services**
Responsible partner(s) (PP name and number)	**PP1- Leipziger Verkehrsbetriebe (LVB)** **PP2 - Mitteldeutscher Verkehrsverbund (MDV)** **PP3 - Stadt Leipzig (LEI)** **PP5 - Statuární měesto Brno (BRN)** **PP6 - Grad Koprivnica (KOP)** **PP7 - SVEUČILIŠTE SJEVER (UNIN)** **PP8 - Tramvie Elettriche Parmensi (TEP)** **PP9 - Gmina Skawina (SKA)** **PP11 - Szegedi Közlekedési Kft. (SZKT)** **PP12 - Zarzad Transportu Publicznegow Krakowie (ZTP)**
Project website	**www.interreg-central.eu/low-carb**
Delivery date	**30/11/2020**
Status	**Final**
Dissemination level	**Public**

DELIVERABLE – DOCUMENT HISTORY

Document history of revisions			
Date	Name	Action	Status
06.2020	Wolfgang Backhaus, Rupprecht Consult	Structure and brief content description	Template
09.2020	Wolfgang Backhaus, Rupprecht Consult	Collection of content linked to internal reviews	Draft
10.2020	All Project Partners	Internal quality review	Feedback to the draft
11.2020	Wolfram Buchta, Rupprecht Consult	Draft finalisation	Final draft
11.2020	Wolfgang Backhaus and Marlene Damerau, Rupprecht Consult	Quality review and finalisation	Final

INTRODUCTION

Why this strategic guide for Public Transport (PT) innovation planning?

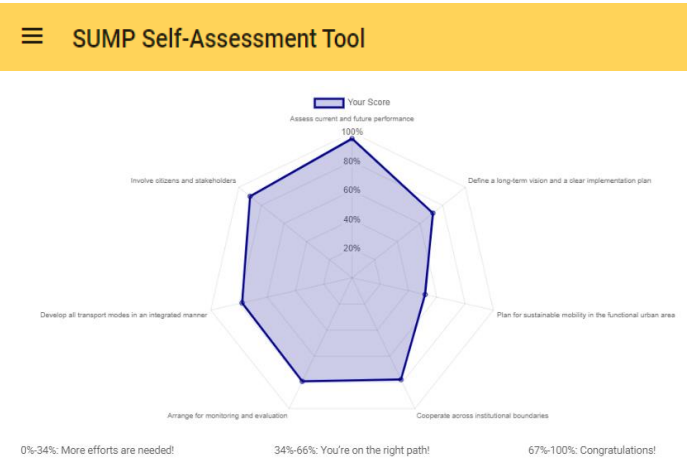
- CE countries still have high modal split share of PT as starting position to develop low-carbon/zero-emission mobility systems (e.g. Brno, CZ: SUMP is expecting 80% of sustainable transport use in 2050 with 56% for PT = >strategic goals are focused on improvement of the quality of the PT service).
- Potential to establish PT as a backbone for a low-carbon/zero-emission mobility system for Functional Urban Areas (FUAs); combined with new trends, e.g. sharing, MaaS.
- Need for stronger integration of PT into Sustainable Urban Mobility Planning (SUMP) concept; new governance/cooperation and financing models are needed (e.g. company-based mobility management).

STRUCTURE OF THE DOCUMENT

- Different activities of the LOW-CARB partners to strengthen public transport and to plan new public transport measures and services are prescribed in the following along the SUMP planning cycle steps to illustrate the planning process of public transport innovations - based on the SUMP approach.
- Planning of public transport along the SUMP cycle provides a framework that allows for innovative and high-quality public transport measures and services development.

STEP 1.1: EVALUATE CAPACITIES AND RESOURCES

Get an honest and clear picture of the strengths, weaknesses and opportunities of current planning practices with regard to developing a SUMP in your local/regional context (e.g. political, institutional and legal framework) and PT's role in this process.



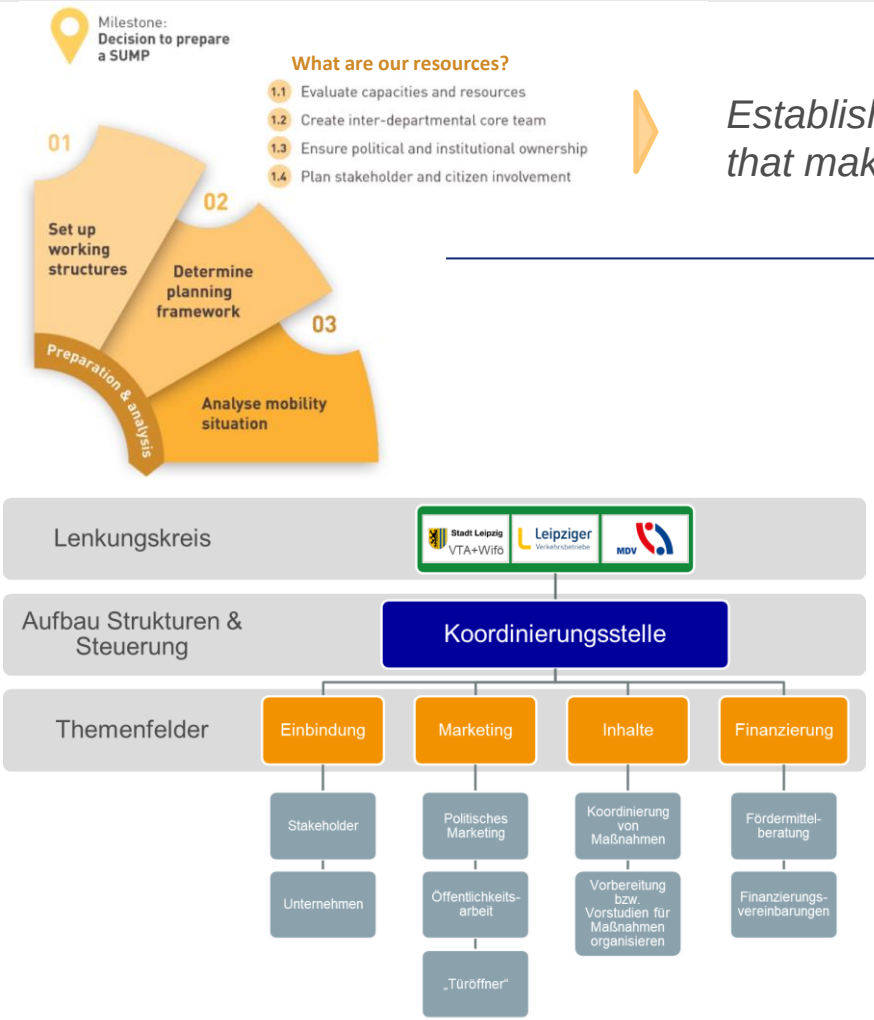
https://www.sump-assessment.eu/English/start

The SUMP Self-Assessment helps cities or functional urban areas (FUA) to **evaluate and improve mobility planning**. The results page show how well the planning activities fulfil the principles of a Sustainable Urban Mobility Plan (SUMP), enabling to identify the strengths and weaknesses of the approach. It will provide **tailored advice for further improvement**, good practice examples and links to guidance for the specific situation of the respective city or FUA. The SUMP Self-Assessment can be used to **both assess the quality of a specific strategic mobility plan, and to evaluate planning activities in general,** e.g. to assess what to improve when starting a SUMP process.

Checklist:

- ✓ Strengths, weaknesses and barriers with regard to developing a SUMP identified
- ✓ Self-assessment results summarised as starting point to optimise local planning processes.

STEP 1.2: CREATE INTER-DEPARTMENTAL CORE TEAM



Organigram of the coordination unit in Leipzig's FUA

Establish efficient working structures for a planning process that makes best use of available resources.

Example for organisational structure for development and implementation of the Master Plan Mobility for Leipzig's "Nordraum" (Northern area): Steering body and coordination office with staff from local (LVB & City of Leipzig/VTA) and regional (MDV) Public Transport authorities and companies as contact for the Northern Region companies and other stakeholders from politics and administration to advance the development and implementation of the master plan.

Checklist:

- ✓ Coordinator of the planning process determined
- ✓ Core team with all required skills set up that includes key authorities from the entire planning/functional urban area

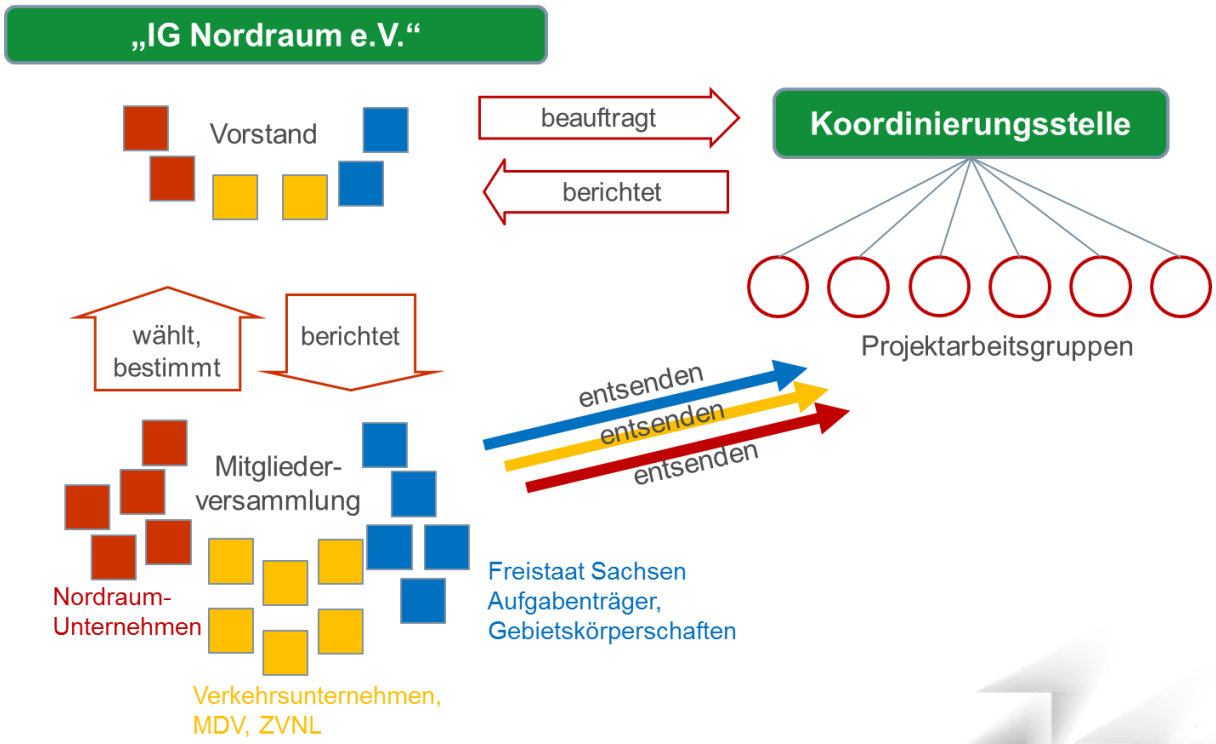
STEP 1.3: ENSURE POLITICAL AND INSTITUTIONAL OWNERSHIP

Create a sound basis for a durable cooperation between all stakeholder groups – incl. Public Transport stakeholders.

Example for governance and cooperation structure from Leipzig's Master Plan Mobility Process to ensure the political and institutional engagement, and by this commitment to the planning and implementation process.

Checklist:

- ✓ Basic stakeholder coordination approach developed
- ✓ Political support established



Interactions between the coordination unit and other institutions in Leipzig's FUA

STEP 1.4: PLAN STAKEHOLDER AND CITIZEN INVOLVEMENT

- *Ensure a well-structured involvement of all relevant stake-holders throughout key stages of the planning process.*
- *Encourage and enable citizens to get engaged and to join the debate, in particular in the early planning phases when processes are still open and flexible.*

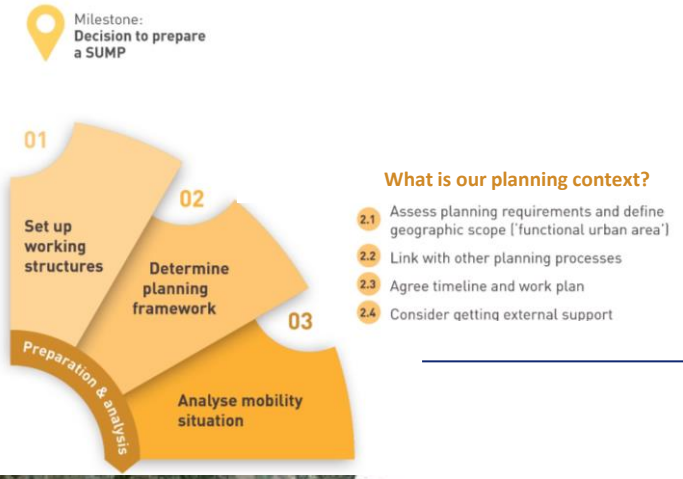
Image: Marie Schmerková, Ch4llenge Final Report Involvement in the SUMP development process for the City of Brno

Mobility is closely linked to the individual daily life of citizens. Therefore, there is great potential for the mobility sector – and in particular for the public transport authorities/ companies - to increase the understanding of the need for a mobility turnaround and the acceptance of measures to promote alternative forms of mobility, as well as a direct feedback with regard to existing PT services: e.g. gaps in the cycling and walking network or neighborhoods that are poorly connected to PT. As mobility systems for FUAs rely on a good interplay between sustainable mobility modes, e.g. rail and bus lines within the city area and their links to neighboring cities, several stakeholders need to be involved.

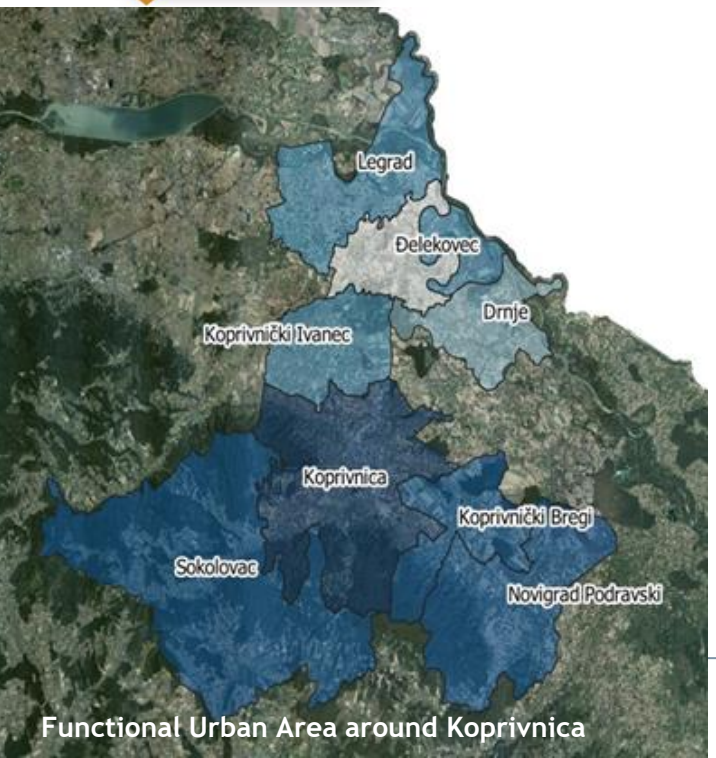
Checklist:

- ✓ Involvement and communication approach finalized
- ✓ Steering group with key stakeholders set up

STEP 2.1: ASSESS PLANNING REQUIREMENTS AND DEFINE GEOGRAPHIC SCOPE (FUA)



- *Involve key stakeholders & authorities within the envisaged planning area and strive for formal agreements on the geographic scope of planning activities.*
- *Take an open and transparent approach, securing the involvement of the authorities concerned.*



Functional Urban Area around Koprivnica

In Koprivnica (HR) a new joint **low-carbon PT service area** was established with neighbouring communities. By this, Koprivnica and the participating communities created a functional urban area (FUA) based on commuting patterns to Koprivninca and between those communities and planned a sustainable mobility system for this FUA – based on new public transport services (incl. sharing services) and cycling infrastructure.

Checklist:

- ✓ Geographic scopes defined (if possible, the FUA)
- ✓ Political agreement achieved on geographic scope, basic roles and responsibilities of authorities and politicians
- ✓ Key authorities from the planning area included in the core team and/or steering group.

STEP 2.2: LINK WITH OTHER PLANNING PROCESSES

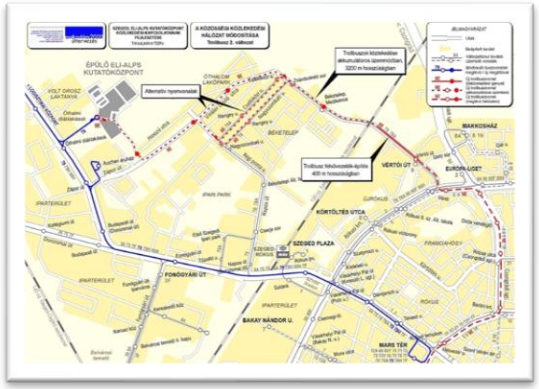
- *Define how Sustainable Urban Mobility Planning & other policies at the local and regional level can be integrated.*
- *Establish planning of mobility and transport as a shared policy domain.*

Checklist:

✓ Relevant policy linkages identified (synergies and conflicts)

Examples:

- As part of the development process of the new industrial centre ELI Science Park project in Szeged, the connection to PT was integrated into the spatial planning process.
- In Parma, the mobility planning process was linked to the Sustainable Energy Action plan (SEAP) of the city, as energy consumption and therefore the emissions of the transport sector have been considered and linked to the measure planning process.



New PT connections to ELI Science Park in Szeged (HU)

Sustainable Energy Action Plan (SEAP) for the city of Parma (IT)

STEP 2.3: AGREE TIMELINE AND WORK PLAN

Interreg CENTRAL EUROPE
European Union
European Regional Development Fund
LOW-CARB

Milestone:
Decision to prepare a SUMP

What is our planning context?

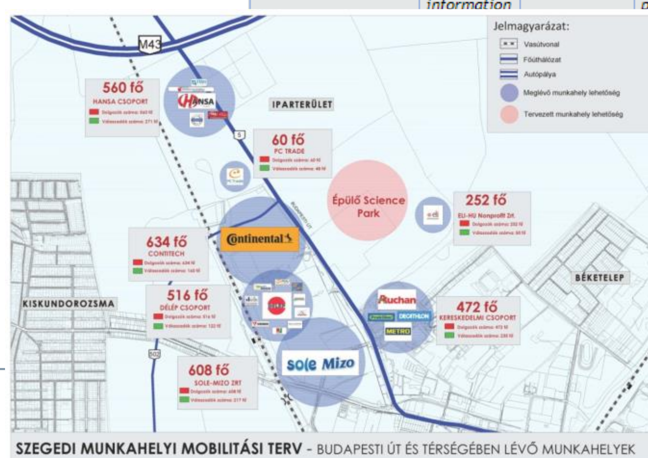
- 2.1 Assess planning requirements and define geographic scope ('functional urban area')
- 2.2 Link with other planning processes
- 2.3 Agree timeline and work plan
- 2.4 Consider getting external support

- *Develop a tailored planning process that fits the local context and coordinates activities well.*
- *Clarify and formalise the roles of all actors and their resource contributions.*

List of prioritised measures from the Szeged industrial area action plan (right).

There has been a clear work plan agreed between the PT provider SZKT (Szeged) and the target group / stakeholders, i.e. companies from the ELI Science Park and the sorrounding industrial zone for analysing mobility beahviour and the development of new mobility measures.

Measure	Description of measure	Responsibility	Activities within a measure	Implementation period	Resources needed	Cost	Stakeholder - involvement
Harmonize the schedule (package 2)	*Marked lanes and tracks along major urban streets*	*Municipality, State*	*Analysis of schedules (bus, tram, trolleybus - local and intercity)*	*Until 2023*	*Traffic and city planners*	*50.000.000 HUF*	*Transport company (Volánbusz)*
E-ticket (package 2)	*E-ticket system introduction*	*Municipality, State*	*Prepare for integration ticket system into an application*	*Until 2023*	*IT expert, transport expert*	*470.000.000 HUF*	*IT companies*
Data warehouse (package 2)	*Build a city-wide database with traffic information*	*Municipality, State*	*Collect accurate data, plan the data transfer, provide ...rdwares*	*Until 2030*	*Planners, developers*	*300.000.000 HUF*	*Construction companies*
			...alysis of ...blic ...nsport lines ...area ...eded, ...velop ...rastructure, ...ovide new ...lleybuses	*Until 2030*	*Expert on behaviour change, traffic planner*	*1.500.000.000 HUF*	*Construction companies*
			...alysis of ...blic ...nsport lines ...area ...eded	*Until 2023*	*Traffic and city planners*	*2.000.000 HUF/stop*	*Construction companies*
			...ovide ...vices, ...mmunicatio ...lan	*Until 2023*	*IT expert, transport expert, devices*	*5.000.000 HUF/stop*	*Development companies*
			...velop a ...ycle ...		*Traffic*	*[illegible]*	*Construction companies*



Map of the industrial area with the concerned stakeholders

Checklist:

- ✓ Timeline and work plan developed and (politically) approved

STEP 2.4: CONSIDER GETTING EXTERNAL SUPPORT

- *Balance skill requirements and build capacity within your own organisation and external professional support.*
- *Add value to the mobility planning process by cooperating with experts that contribute new approaches or fresh perspectives on key issues.*

External Support is critical for Public Transport companies, as there are multiple areas in which PT providers cannot supply all depths of competence needed. For the Mobility Masterplan in Leipzig the project partners consulted external experts for support in the assessment of the current mobility situation in the FUA and scenario development.

Cover of the Mobility Masterplan for Leipzig (GE)

- ✓ Checklist:
  Decision taken on which tasks to get external support for, if any.
- ✓ Services tendered and suitable contractor chosen who understands the chosen (SUMP/FUA) approach.

STEP 3.1: IDENTIFY INFORMATION SOURCES AND COOPERATE WITH DATA OWNERS

- *Identify data gaps and additional information needed for your mobility analysis.*
- Cooperate with external organisations to complete your dataset, ideally establishing long-term agreements to ensure good data supply also in the future.

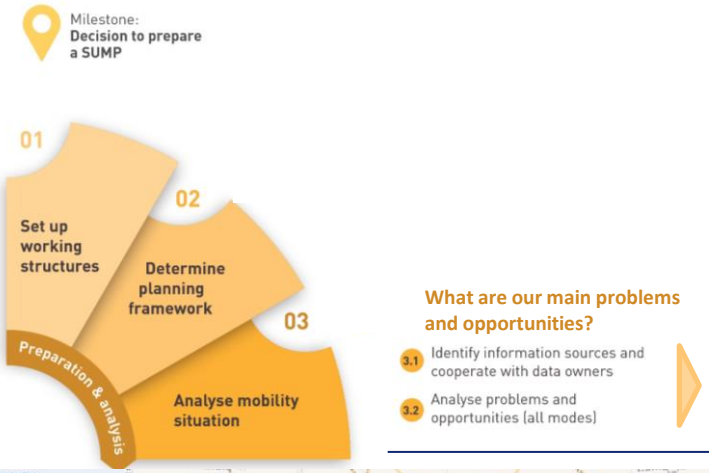
The public transport company in Szeged, SZKT, developed a Wi-Fi sensor passenger counting (on seventeen vehicles in the pilot area) methodology and algorithm, and tested its accurateness against other methodologies of big data analyses. The objective is to integrate the collected data into the municipal open data platform, and to use them for mobility planning at the city-level.

Checklist:

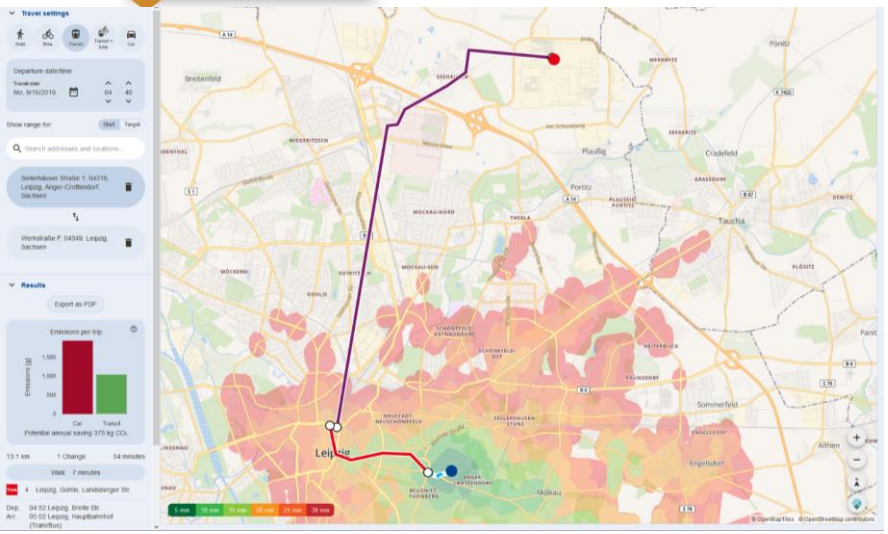
- ✓ Available data identified and quality checked
- ✓ Data gaps defined and additional data sources identified
- ✓ Data sharing with external owners of relevant data agreed

Wi-Fi sesnor based passenger counting system in Szeged (HU)

STEP 3.2: ANALYSE PROBLEMS AND OPPORTUNITIES (ALL MODES)



- *Provide a review of the current status of important mobility and transport developments in the entire functional urban area, based on data and relevant planning documents.*
- *Prepare a list of problems and opportunities that relate to mobility (e.g. accessibility to services, pollution, road safety, climate protection) and identify and prioritise key problems to be addressed by your mobility plan.*



REACHIE app screenshot of browser view
https://www.mdv.de/mdv/projekte/eu-projekt-low-carb/reachie/

The LOW-CARB output tool "REACHIE" was used to analyse the commuters' access to the northern periphery of Leipzig based on several modes. Opportunities and gaps could be visualised by showing the integrated transit network on a multimodal information platform via reachability heatmaps (based on isochrone calculations), and by determining the user's carbon footprint and potential annual kg CO2 savings across five modes of transport (PT, cycling, walking, car or transit & bike).

Checklist:

✓ Problems and opportunities with key stakeholders and citizens discussed and analysed.

STEP 4.1: DEVELOP SCENARIOS OF POTENTIAL FUTURES

What are our options for the future?

4.1 Develop scenarios of potential futures

4.2 Discuss scenarios with citizens and stakeholders

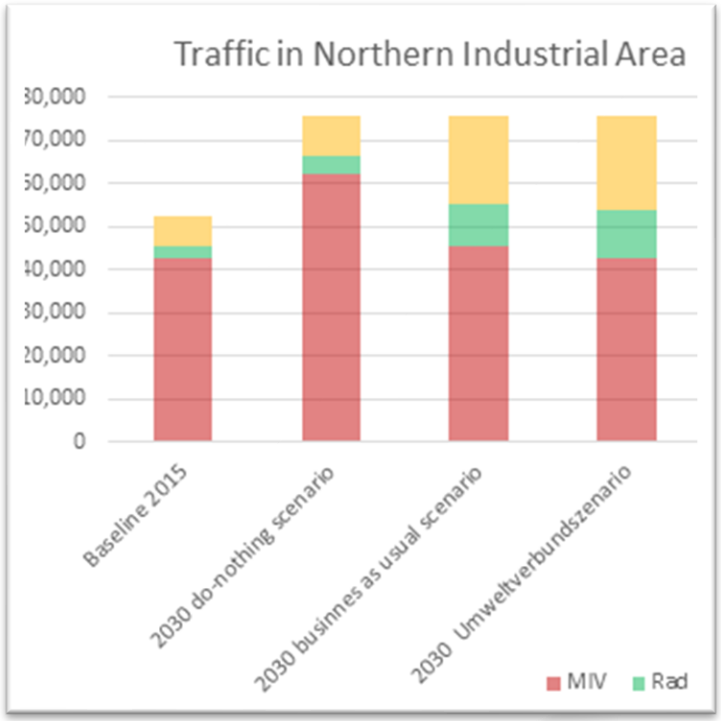
- *Understand the risks and opportunities related to current trends and possible changes of circumstances.*
- *Develop alternative scenarios that inform about the likely impacts of different strategic policy directions.*

Project partners from Leipzig – supported by external expertise - developed several scenarios for the development of the Modal Split until 2030 for the pilot area FUA „Nordraum“. The scenarios were:

- The Do-Nothing Scenario, that probably pushes motorised individual transport (MIT);
- The Business as Usual Scenario, where MIT would also increase until 2030;
- An Eco-Mobility Scenario, where PT (and cycling) share could be increased significantly compared to today‘s use.

Checklist:

- ✓ Different alternative scenarios described, including a business-as-usual scenario
- ✓ Appropriate techniques applied to support the scenario development and appraisal



Traffic scenarios based on actions taken in Leipzig‘s Northern Industrial Area

STEP 4.2: DISCUSS SCENARIOS WITH CITIZENS AND STAKEHOLDERS

What are our options for the future?

4.1 Develop scenarios of potential futures

4.2 Discuss scenarios with citizens and stakeholders

- *Use alternative scenarios as the basis for discussing general policy priorities &strategies for future development.*
- *Create broad ownership and acceptance of the process to select a common vision and objectives.*

The city of Leipzig developed and discussed six scenarios for different future options with stakeholders in an open process:

- Continuation of the current mobility strategy;
- Continuation of the current mobility strategy with constant fares;
- Sustainability scenario;
- Bicycle City scenario;
- Public transport priority scenario; and
- Community scenario.

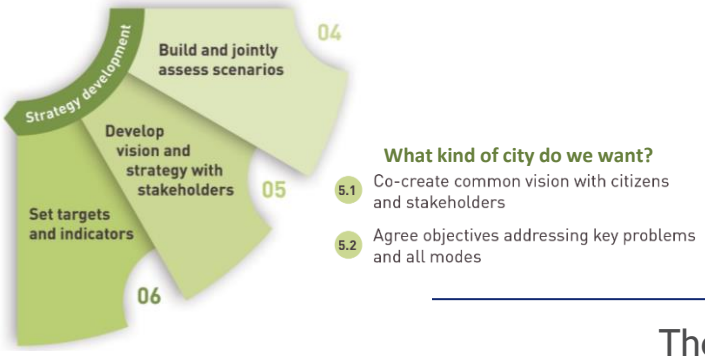
The evaluation resulted in the prioritisation of the bicycle-scenario, sustainability scenario and the PT scenario, which will be followed-up in an integrated approach.

Discussion of scenarios for the City of Leipzig

Checklist:

- ✓ The needs for change revealed in the business-as-usual scenario discussed with stakeholders and citizens
- ✓ Discussed with stakeholders and citizens which scenarios or elements of scenarios are desirable

STEP 5.1: CO-CREATE COMMON VISIONS WITH CITIZENS AND STAKEHOLDERS



- *Agree on a widely supported common vision that builds on the results of the scenario discussions - a long-term goal for mobility development serves as a guide for the planning process*

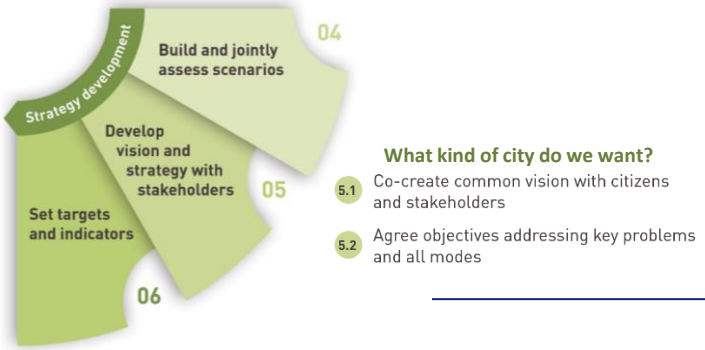
Strategic workshop „Brno Mobility 2050“ - Image: Marie Schmerková (Brno City Municipality)

The main stakeholders in the SUMP Action Plan development for Brno’s FUA were the public transport operator, and the regional coordinator of transport services. Actors cooperated in working groups on specific topics. A public participation strategy has launched a series of public consultations, expert workshops, and public events, organised by the municipality, to collect feedback on main findings of the strategy evaluation and to define the mobility vision at the FUA level. The vision was validated during the strategic workshop named “Brno Mobility 2050”, and afterwards approved by the City Council.

Checklist:

- ✓ First draft of vision developed and discussed with citizens and decision makers
- ✓ Stakeholder agreement on final draft of vision

STEP 5.2: AGREE OBJECTIVES ADRESSING KEY PROBLEMS AND ALL MODES



- *Formulate clear objectives and strategic priorities that specify the directions for improvement.*

In new vertical and horizontal governance & cooperation arrangements, the partners from the FUA in Leipzig defined joint objectives and measures for a more attractive, integrated low-carbon mobility system.

Mobility problems: The rapid development of the industrial area initiated a new flow of traffic with a dynamic perspective. A massive increase of employees is expected until year 2030. The private car is the main transportation mode in the area for employees and suppliers.

Above: Screenshot of Identified key problems for FUA / pilot area in Leipzig; Right: Priorisation of objectives with stakeholders from Action Plan „Nordraum“ development

Checklist:

- ✓ Draft objectives developed & discussed with key stakeholders
- ✓ Final set of objectives selected

STEP 6.1: IDENTIFY INDICATORS FOR ALL OBJECTIVES

- *Define a set of strategic indicators that allow for the monitoring of progress made towards the achievement of each of the objectives.*
- *Select easily measurable and understandable indicators by taking into account existing data sources (see Activity 3.1) and standard indicators.*

The SUMI project (sustainable urban mobility indicators) provides a comprehensive set of practical and reliable indicators that has been developed to support cities to perform a standardised evaluation of their mobility system and to measure improvements that result from new mobility practices or policies. The project partner FUA **Szeged** participated in SUMI.

Checklist:

- Quantitative and qualitative outcome indicators identified for all objectives in your FUA
- Set of strategic core indicators defined, including reporting format and measuring method

https://ec.europa.eu/transport/themes/urban/urban_mobility/sumi_en

The Indicator Set

The indicator set comprises the following indicators:

Core indicators

1. Affordability of public transport for the poorest group indicator
2. Accessibility of public transport for mobility-impaired groups indicator
3. Air pollutant emissions indicator
4. Noise hindrance indicator
5. Road deaths indicator
6. Access to mobility services indicator
7. Greenhouse gas emissions indicator
8. Congestion and delays indicator
9. Energy efficiency indicator
10. Opportunity for Active Mobility indicator
11. Multimodal integration indicator
12. Satisfaction with public transport indicator
13. Traffic safety active modes indicator

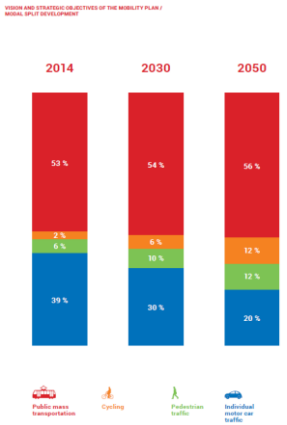
Non-core indicators

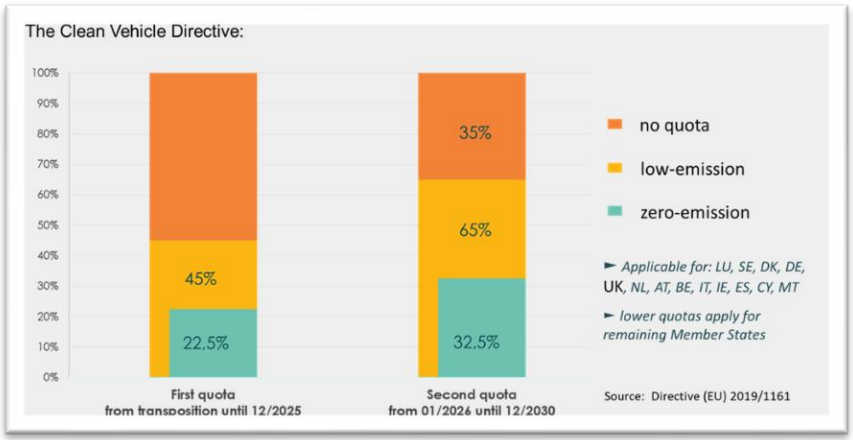
14. Quality of public spaces indicator
15. Urban functional diversity indicator
16. Commuting travel time indicator
17. Mobility space usage indicator
18. Security indicator

STEP 6.2: AGREE MEASURABLE TARGETS

- *Decide on a set of measurable targets for each of the agreed-upon strategic indicators (see Activity 6.1), covering all of your objectives.*
- *Make sure that the agreed-upon targets can assess the achievement of desired outcomes.*
- *Express feasible, but ambitious targets.*

Measurable targets - examples: For the Action Plan development process of Brno's SUMP, stakeholders agreed on a measurable change of in the cities' modal split towards sustainable modes of transport by 2030/2050 (public transportation, cycling and pedestrian traffic; see below). A more externally pushed target for PT stakeholders comes along with the new Clean Vehicle Directive of the European Commission incl. quotas for the procurement of zero-emission/clean buses between 2021-2025 and 2026-2030.





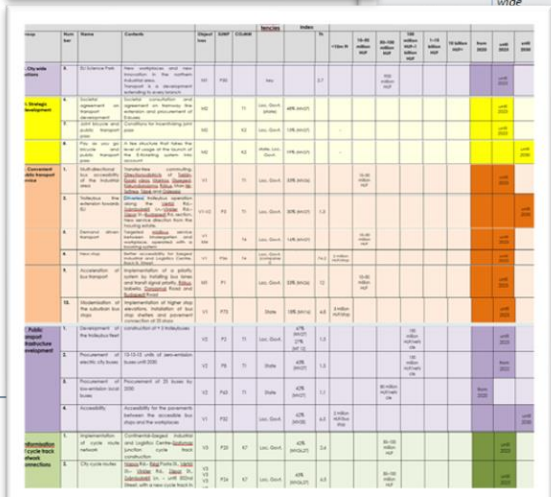
Checklist:

- ✓ Key stakeholders involved in target setting
- ✓ Suitable set of locally achievable targets developed

STEP 7.1: CREATE A LONG LIST OF MEASURES WITH STAKEHOLDERS

- *Identify a wide variety of measure options that would contribute to your vision, objectives and targets.*
- *Select the most promising measures for your local context.*
- *Ensure efficient use of available resources and avoid selection of financially unrealistic measures.*

The project partners in Szeged have developed a long list of measures for their Action Plan, incl. responsibilities, timeline, estimation of costs. These measures were discussed with stakeholders and target groups, i.e. from the FUA industrial zone around ELI Science Park.



Measure	Description of measure	Responsibility	Activities within a measure	Implementation period	Resources needed	Cost	Stakeholder - involvement
Harmonize the schedule (package 1)	Marked lanes and tracks along major urban streets	Municipality, State	Analysis of schedules (bus, tram, trolleybus - local and intercity)	Until 2023	Traffic and city planners	50.000.000 HUF	Transport company (Volánbusz)
E-ticket (package 2)	E-ticket system introduction	Municipality, State	Prepare for integration ticket system into an application	Until 2023	IT expert, transport expert	470.000.000 HUF	IT companies
	Build a city-wide	Municipality, State	Collect accurate data, plan the data transfer, provide hardwares	Until 2030	Planners, developers	300.000.000 HUF	Construction companies
		Municipality, State	Analysis of public transport lines in area needed, develop infrastructure, provide new trolleybuses	Until 2030	Expert on behaviour change, traffic planner	1.500.000.000 HUF	Construction companies
		Municipality	Analysis of public transport lines in area needed	Until 2023	Traffic and city planners	2.000.000 HUF/stop	Construction companies
		Municipality	Provide devices, communication plan	Until 2023	IT expert, transport expert, devices	5.000.000 HUF/stop	Development companies
		Municipality, State	Develop a bicycle network plan, plan and construct bicycle lanes	Until 2023	Traffic and city planners	50-100.000.000 HUF	Construction companies, bicycle associations
		Municipality, Companies	Plan at the same time with the bicycle network, cooperation with companies	Until 2023	Traffic expert, storages	<10.000.000 HUF	Bicycle associations, companies in the area

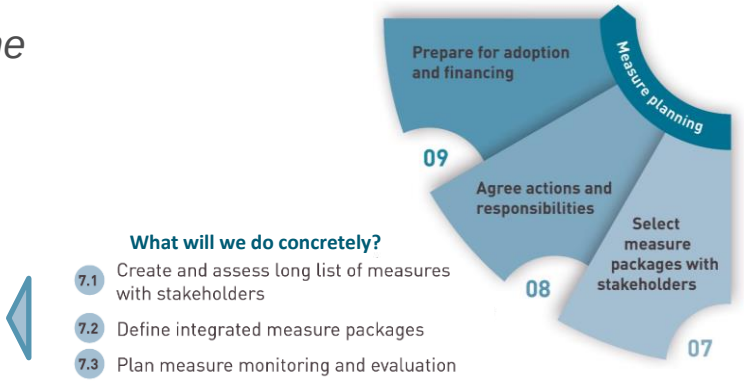
Checklist:

- ✓ Long list of potential measures created
- ✓ Suitable measures assessed with an eye to effectiveness (in terms of contribution to objectives), acceptability and value for money.

Right: Measure development and assessment in Szeged (HU)

STEP 7.2: DEFINE INTEGRATED MEASURE PACKAGES

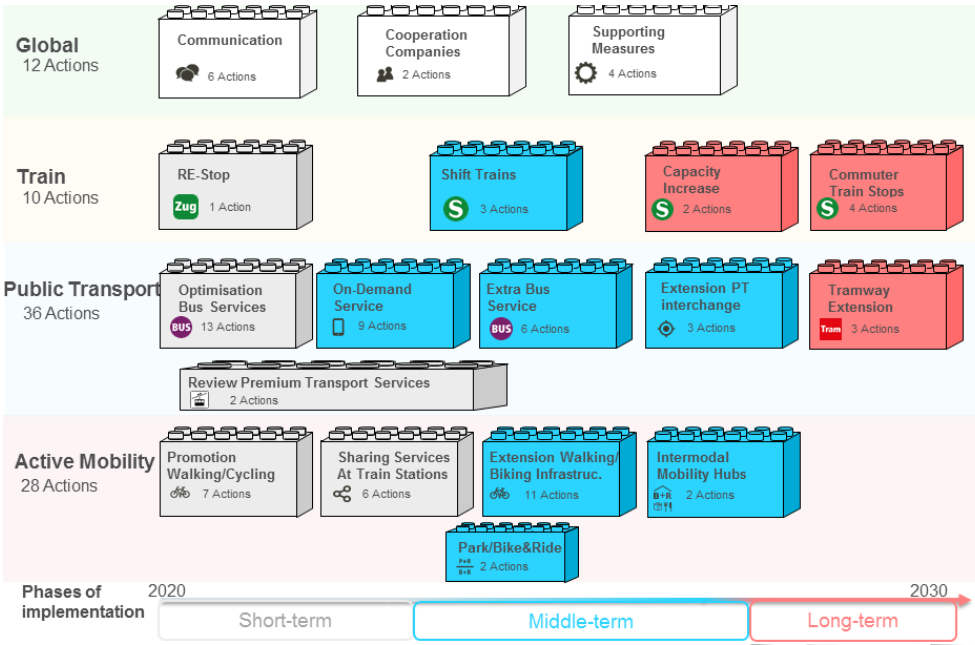
- *Use packaging of selected measures to help overcome barriers to implementing specific measures and to exploit synergies*
- *Ensure integration of transport modes (intermodality)*
- *Ensure ownership and high acceptance of your measure packages among decision makers, citizens and other stakeholders.*



The partners from Leipzig's FUA developed a set of 86 final agreed actions for the Action Plan. In a follow-up process these measures have been integrated into four packages of measures around different modes, levels etc.

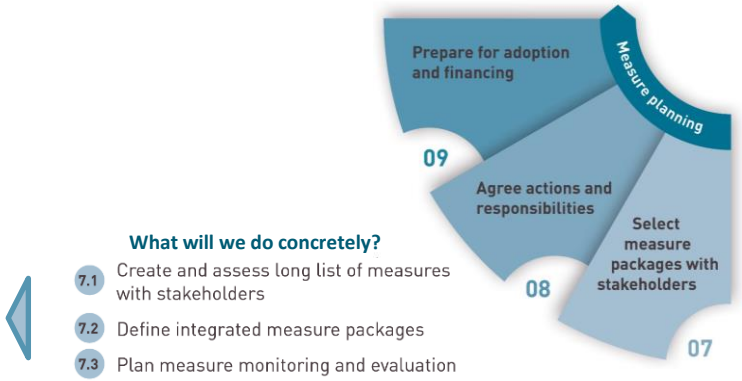
Checklist:

- ✓ Potential packages of measures identified that are expected to realise synergies and overcome implementation barriers
- ✓ Selected packages discussed and validated with stakeholders and the public



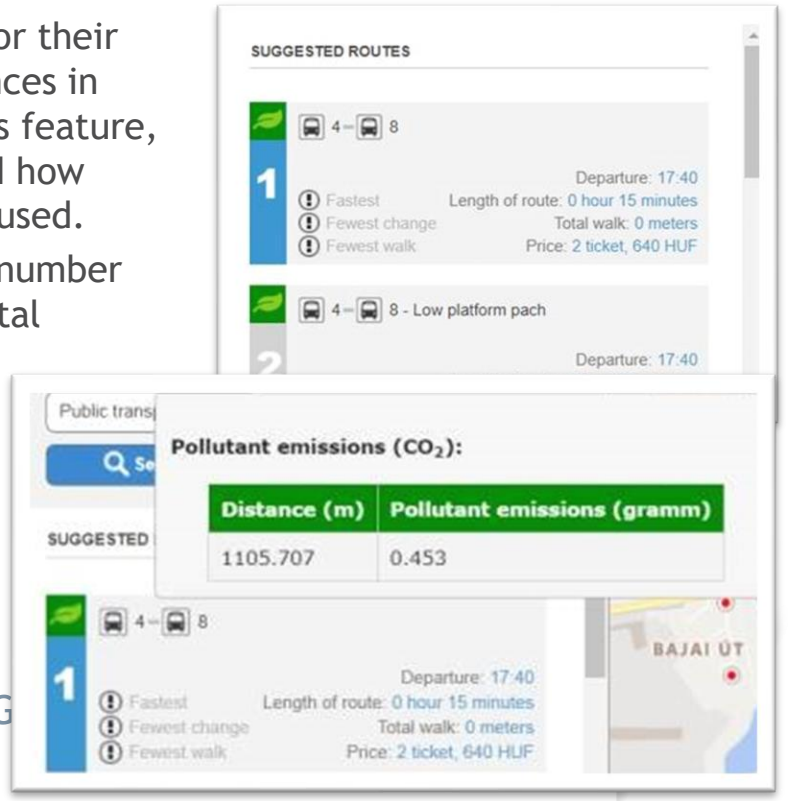
STEP 7.3: PLAN MEASURE MONITORING AND EVALUATION

- *Agree on suitable monitoring arrangements (including responsibilities and budget) to assess the status of measure implementation and target achievement, enabling timely and effective responses.*
- *Make monitoring and evaluation arrangements an integral part of the further process.*



LOW-CARB project partner SZKT (Szeged) developed feature for their journey planner website to raise awareness about the differences in CO2 emissions between different modes of transport. With this feature, one can now see how much CO2 the planned trip will emit and how much it would be if another mode of transportation would be used.

In combination with the monitoring of PT use by counting the number of passengers in vehicles through Wifi-devices, an environmental assessment (or evaluation) framework could be established.



Checklist:

- ✓ Monitoring and evaluation arrangements for all indicators (see step 6.1) developed
- ✓ Responsibilities and methodologies for monitoring and evaluation agreed on

STEP 8.1: DESCRIBE ALL ACTIONS

- *Define the measures of your mobility plan in detail and a present them in a structured and clearly arranged way.*
- *Identify links between actions and find the best order of implementation.*

The project partners from the FUA Leipzig have created a dedicated document to describe vision, objectives, context, process of development and all actions intended to be performed in the respective area. The document is called “Masterplan Mobilität für den Nordraum Leipzig”.

Checklist:

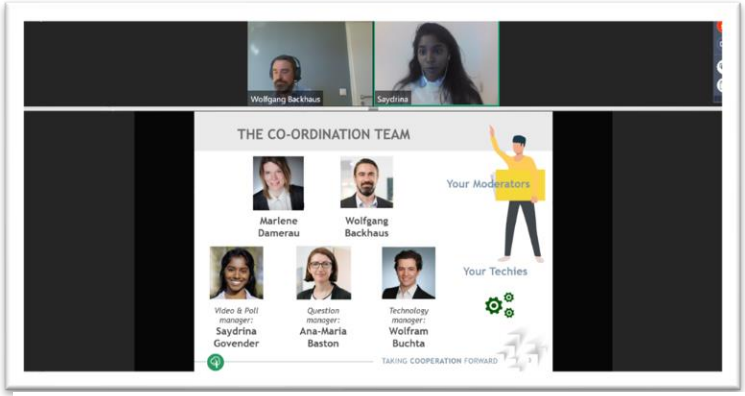
- ✓ All actions identified, defined, and described
- ✓ Relationships between actions identified
- ✓ Actions are presented in structured and “easy to digest” way to stakeholders and citizens

Right: Mobility Masterplan from FUA Leipzig

STEP 8.2: IDENTIFY FUNDING SOURCES AND ASSESS FINANCIAL CAPACITIES

- *Identify potential financing instruments and funding sources for all actions.*
- *Assess the financial viability of individual actions within measures to rule out non-viable actions and achieve cost-effective measure designs, while still considering how funding streams could reasonably evolve in the future.*

The LOW-CARB Exploitation Workshop aimed to increase the take-up and upscale of project outputs by connecting interested stakeholders with project partners and sources of financial resources (e.g. European Investment Bank) or experts for innovation procurement (e.g. ZENIT as German National Contact Point for Innovation Procurement) to enable an early contacting of financing and funding institutes with the defined Action Plans to ensure their sustainability and implementation.



Workshop in LOW CARB held to inform about different funding and financing sources for PT measures

Checklist:

- ✓ Meaningful forecasts prepared for expenses, revenues, cash flows and other financial items
- ✓ Financial analysis and assessment of possible funding sources carried out

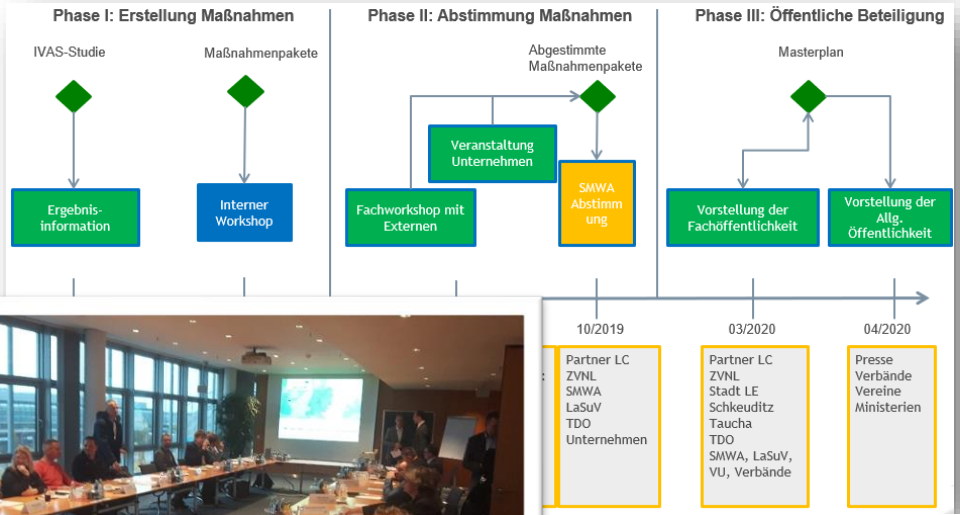
STEP 8.3: AGREE PRIORITIES, RESPONSIBILITIES AND TIMELINE

- *Assure that all actions are clearly prioritised and realistically deliverable.*
- *Secure efficient and effective allocation of resources (human, knowledge, time).*
- *Formalise the responsibility of all actors and the resource contributions with the respective partners.*

The Leipzig team had not only a clear plan in terms of responsibilities and timeline and agreed priorities for the Action Plan development, but also for the implementation period of actions clear timeframes from short-term (2021 -2023), middle-term (2024-2028), and long-term (2029 - 2030+) and responsibilities for their implementation.

Checklist:

- ✓ Responsible lead implementers for all actions identified
- ✓ Timeline and priorities agreed with stakeholders

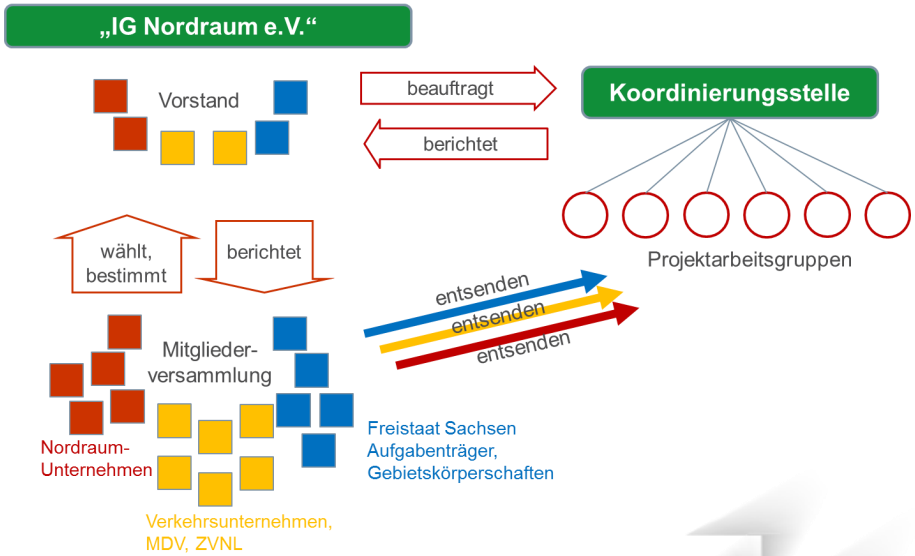


Above: Timeline of the Action Plan for Leipzig; Left: Priori-sation workshop with stake-holders in Leipzig

STEP 8.4: ENSURE WIDE POLITICAL AND PUBLIC SUPPORT

- *Ensure ownership and high acceptance of your planned actions among decision makers, citizens and other stakeholders.*
- *Provide transparency around planned actions.*
- *Facilitate adoption of the SUMP and effective implementation of actions later on.*

In Leipzig, political and public support was ensured through the involvement of many different parties in the Action Plan development phase, and stake-holders have been integrated into a new governance model (see structure on the right) for the FUA and a new organisation (IG Nordraum e.V.)will be established for the implementation phase. The planned activities have been promoted during events (e.g. the European Mobility Week) to the public.



Checklist:

- ✓ Political commitment and support ensured for implementation phase
- ✓ Public relations and involvement activities planned and carried out

STEP 9.1: DEVELOP FINANCIAL PLANS AND AGREE COST SHARING

- *Ensure the financial viability of actions.*
- *Identify opportunities for private sector involvement.*
- *Agree on the distribution of costs and revenues among all involved organisations.*

The partners from FUA Leipzig coordinated with other municipalities and regional institutions from the FUA cost-sharing arrangements for the implementation of new public transport services. In addition, they explored possibilities to receive funding for planned measures and applied for the call for proposals for PT model regions of the German Ministry for Transport and Digital Infrastructure. Finally, they discussed with the companies located in the "Nordraum" the potential of private sector investor involvement in investment and operations of new PT measures.

Checklist:

- ✓ Detailed financial plans prepared and agreed for actions requiring financing in the first phase of implementation
- ✓ Commitment obtained from relevant public entities to allocate sufficient budget to fill financing gaps acquired
- ✓ If required, initial application for funding for feasibility or other studies and investments completed

Above: Announcements for funding programme for PT model regions from German Ministry for Transport and Digital Infrastructure

STEP 9.2: FINALISE AND ASSURE QUALITY OF SUMP/ MOBILITY PLAN DOCUMENT

- *Ensure high quality of the SUMP/ mobility plan.*
- *Finalise the plan document so that it is ready for adoption by political bodies and release to the public.*

LOW-CARB – in cooperation with the Horizon 2020 project SUMPs-Up - updated and extended the SUMP Self Assessment Tool, which can be used to check the quality of the planning process to develop your final SUMP / Mobility Plan. The tool can be used at all stages of the planning cycle - both to evaluate and improve mobility planning at the beginning and during the process, and to assess the quality of the SUMP before it is finalised. The Self-Assessment consists of tailored sets of questions depending on your planning context and interests. After completing the questionnaire, the results page will show you how well your document fulfills the principles of a SUMP, enabling you to identify the strengths and weaknesses of your approach.

Checklist:

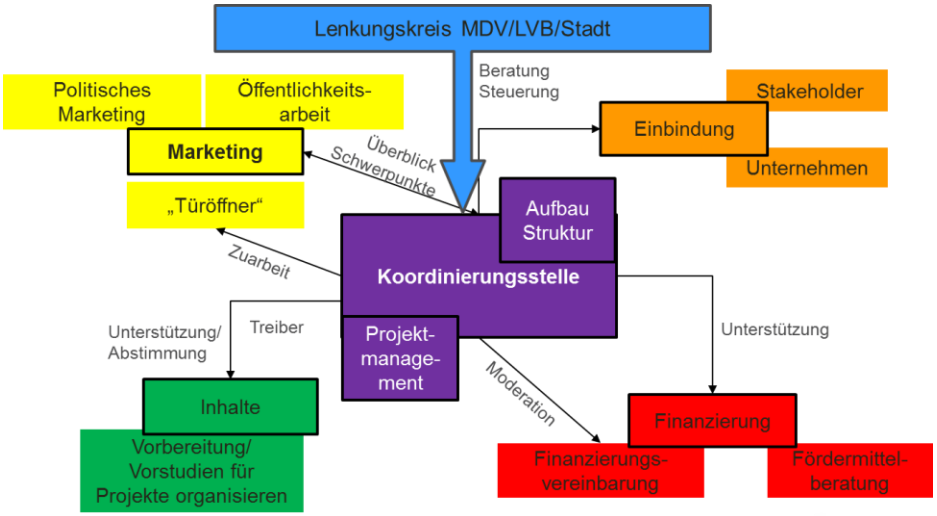
- ✓ Internal and stakeholder review completed
- ✓ Quality assessment completed
- ✓ Final amendments completed

Above: Eight principles for SUMP https://www.eltis.org/resources/videos/eight-sump-principles
Right: SUMP Self-Assessment Tool categories https://www.sump-assessment.eu/English/start

STEP 10.1: COORDINATE IMPLEMENTATION OF ACTIONS

- *Formalise the roles of actors involved in measure implementation.*
- *Ensure sound coordination among all parties involved.*
- *Facilitate an efficient and effective implementation process and sequence.*

The governance strategy for the implementation of the Master Plan "Nordraum" is structured around a central coordination office, staffed with personnel from the local (LVB) and regional (MDV) public transport companies/authorities and the City of Leipzig to prepare and an institutionalised co-operation of the public authorities and local authorities with the companies of the "Nordraum", through which the companies are actively involved in the implementation and participate financially in it.



Coordination and schematic overview of responsibilities for actions' implementation of Leipzig's Master Plan „Nordraum"

Checklist:

✓ Coordinator and implementation steps agreed for each action

STEP 10.2: PROCURE GOODS AND SERVICES

- *Ensure effective and timely procurement of all goods and services needed for the implementation of actions.*
- *Facilitate the diffusion and promotion of new sustainable technologies and services through innovation procurement approaches.*

https://www.eltis.org/sites/default/files/public_procurement_of_sump_v2.pdf
Below: Project Overview of the JIVE project
https://assured-project.eu/storage/files/jive-presentation-user-group-11062019-element-energy-jive-assured-ug-meeting.pdf

LOW-CARB partners requested guidance for procurement of innovative measures from their Action Plans. For example, the Topic Guide for public procurement leads through the different stages of a procurement process for SUMP measures in a stepwise approach. Another way of innovation procurement includes joint procurement, e.g. of high-cost measures like e-bus purchasing (JIVE project as a leading example for joint procurement).

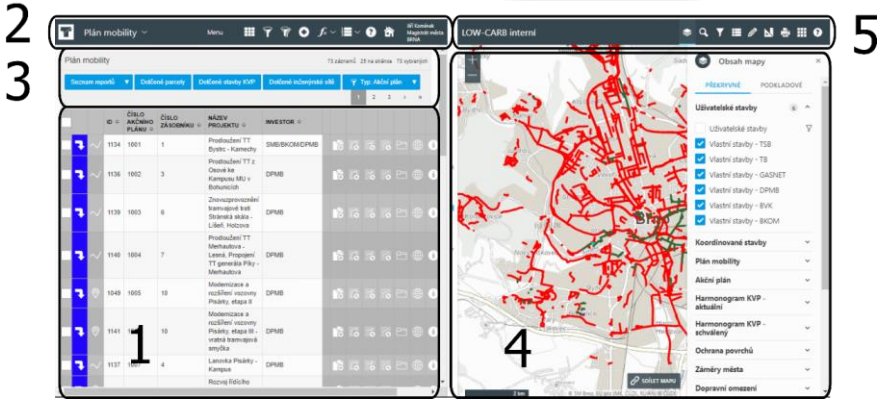
Checklist:

✓ Procurement needs clearly defined and agreed on, and tender specifications defined

STEP 11.1: MONITOR PROGRESS AND ADAPT

- *Identify problems, bottlenecks and other challenges for on-time implementation.*
- *Keep track of progress towards achieving the targets.*
- *Adapt and optimise the implementation process.*

The project partner City of Brno has developed a monitoring tool for their SUMP implementation. The tool is a spatial database (GIS) application for both experts and citizens. It contains information about all investments from the Action plan (budget, year of realization, etc.) - e.g. for PT measures - and allows detailed analysis of this data. Experts (mostly stakeholders) use the tool for managing the SUMP implementation.



Above: Screenshot from Monitoring Tool in Brno for SUMP implementation; Right: Discussion of monitoring results (Image: City of Brno)

Checklist:

- ✓ Status of implementation activities constantly monitored
- ✓ Necessary adjustments in implementation of measures identified
- ✓ Adjustments discussed and agreed with relevant actors

STEP 11.2: INFORM AND ENGAGE CITIZENS AND STAKEHOLDERS

- *Increase ownership of measures by involving citizens as much as possible in the monitoring and implementation.*
- *Ensure residents are aware of the implications of the changes that are coming to their city/region.*

LOW-CARB partner city Skawina, PL, introduced a new low-emission bus line (first PT bus line service) using two 12-metre hybrid diesel-electric buses, with the aim of providing school and work commuters with seamless connections to the regional PT network in the Kraków FUA. Skawina engaged very intensive with the passengers to provide feedback on this measure. The evaluation consisted of onboard passenger surveys as well as online surveys. The majority believed that the route and frequency were optimal and did not need to be changed.

Checklist:

- ✓ Citizens and stakeholders who are directly affected by measure implementation involved in implementation process
- ✓ General public informed about progress of measure implementation

New low-emission bus line in Skawina

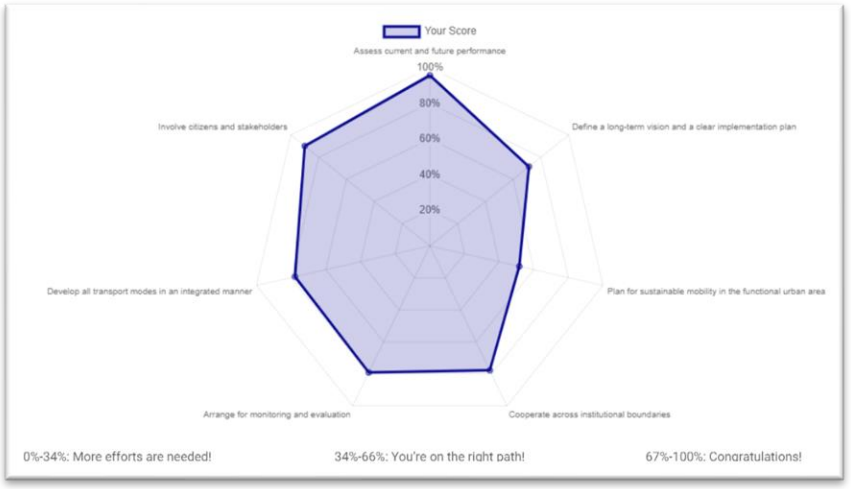
STEP 12.1: ANALYSE SUCCESSES & FAILURES

- *Evaluate the planning process and its implementation with regard to successes and failures*
- *Gather lessons learned for the next SUMP/ plan.*

The city of Brno already had an existing SUMP, when entering the LOW CARB project. They used the SUMP Self Assessment Tool to analyse successes and failures of their existing mobility planning measures, to update their SUMP Action Plan, to validate the compliance of the measures with the SUMP principles and to prepare new mobility projects in the city.

Checklist:

- ✓ Successes and failures of the SUMP/ mobility plan process evaluated
- ✓ Evaluation of measure implementation concluded
- ✓ Lessons learnt shared and communicated.



SUMP Self Assessment Tool results for the city of Brno

STEP 12.2: SHARE RESULTS AND LESSONS LEARNED

- *Find opportunities to share your lessons learnt with other cities in your country, region or language area (and beyond, if possible).*

LOW-CARB project partner TEP (Parma, IT) organised a National Trolleybus Day on 1st of April 2019, which provided an occasion to present their study results on multipurpose charging infrastructure and further electrification of the bus fleet to a wider audience, consisting of both professional transport experts and interested citizens.

Checklist:

- ✓ Lessons learnt documented and made available to others

Impressions of the National Trolleybus Day, 1st of April 2019 in Parma

STEP 12.3: CONSIDER NEW CHALLENGES AND SOLUTIONS

- ✓ *Get prepared for the next planning round.*
- ✓ *Reflect on experiences in the current planning cycle with a view to new challenges ahead.*

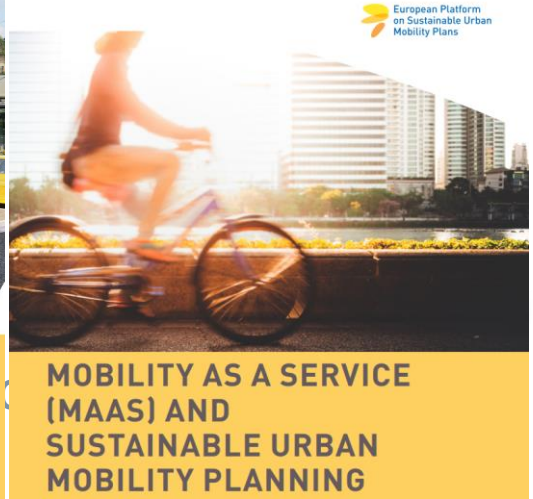
To learn more about new challenges and mobility solutions and approaches for mobility planning for new mobility trends in the SUMP context, ELTIS provides different topic guides with different foci, e.g. on ITS (Intelligent Transport Systems), sharing or MaaS (Mobility as a Service).

The documents provide profound knowledge, best practices and relevant resources in the implementation of different topic areas around SUMP/ mobility planning processes and provide guidance for specific contexts or focus on important policy fields.

Three different topic guides that provide specific planning aspects around SUMP
https://www.eltis.org/mobility-plans/topic-guides

Checklist:

- ✓ New challenges ahead for urban transport and mobility identified
- ✓ Lessons learnt from current planning cycle ready to be used for next integrated planning processes



PROJECT PARTNERS

Interreg CENTRAL EUROPE
LOW-CARB

Stadt Leipzig

MDV

Leipziger Verkehrsbetriebe

Zarząd Transportu Publicznego w Krakowie

Grad Koprivnica
Za život.

SZEGEDI KÖZLEKEDÉSI TÁRSASÁG

B R N O

tep SpA

Skawina
Miasto i Gmina

RUPPRECHT CONSULT
Forschung & Beratung GmbH

CONTACT US

DISCOVER MORE ABOUT
LOW-CARB

Visit our website:
www.interreg-central.eu/LOW-CARB

Contact Us

+49 341 492 2012

Project managers:

Carsten Schuldt
c.schuldt@L.de

Marlene Damerau
m.damerau@rupprecht-consult.eu

www.linkedin.com/company/lowcarbonplanning

www.facebook.com/lowcarbplanning

@lowcarbplanning

TAKING COOPERATION FORWARD