# UPPER

Unleashing the Poter
Public Transport in E

D5.4 Behaviour-change oriented mechanisms to promote the use of PT

WP5 Technology and strategies to trigger the behavioural change in citizens in favour of PT

CIVITAS
Sustainable and smart mobility for all

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Author(s)	Organisation
Juan F. Giménez	IBV
Amparo López	IBV
Carol Soriano	IBV

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**Dissemination Level:

PU: Public;
CO: Confidential, only for members of the consortium (including the Commission Services);
EU-RES: Classified Information - restraint UE;
EU-CON: Classified Information - confidential UE;
EU-SEC: Classified Information - secret UE

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Abstract

This report presents the activities performed within the T5.4 of the UPPER project, focused on fostering a mobility behavioural change, in favour of Public Transport (PT), in order to increase the uptake of PT. The UPPER mobility measures focused on behavioural change, by means of promoting democratic governance and implementing communication campaigns are IDF_01, MAN_01, MAN_02, LIS_03, LIS_08, LEU_06 and BUD_02. The activities performed include a collection of reference projects and guidebooks that define steps to be followed to implement, at an urban level, initiatives that facilitate a behavioural change in the resident's mobility habits. The collection also includes real-life projects implemented by cities and institutions, and their main outcomes. The activities performed to support the UPPER cities in their mobility measures development, through a monitoring process guided by the task leaders is also described. Correspondingly, the results generated in the workshops with the cities, UPPER horizontal partners, and in general all the UPPER partners involved in the task, are also described. Mainly two workshops can be distinguished: a first one focused on sharing experiences and good practices among cities involved in WP5, and a second one aimed to produce points of attention to be considered by the cities' teams when developing their measures. The report also presents the status of the measures' development at the release time of the document, presented in the measure development template. Finally, some general conclusions aimed to support other cities when implementing mobility measures related to behavioural change, are presented.

Keywords

Behavioural change, communication campaign, democratic governance, mobility measures, points of attention, measure monitoring template, horizontal partners, workshop.

1.Introduction

1.1.   Scope of the Document

This document reports the activities performed within the T5.4 of the UPPER project, focused on fostering a mobility behavioural change, in favour of Public Transport (PT). The Behavioural change is a complex concept covering different aspects, as its main objective is to facilitate a mindset change among citizens, that provokes a progressive abandonment of a mobility culture based on private transport mode, towards a mobility culture based on mobility as a service (MaaS), shared mobility and PT. In the context of the UPPER project, aiming to increase the uptake of PT, and in order to facilitate a behavioural change, at least four action lines need to be addressed:

- Information to raise awareness on the environmental impact of individual mobility behaviour, and on the alternatives to the use of a private transport mode.

- To incentivise the use of PT.

- To improve PT offer and quality, converting this resource in a real mobility alternative for citizens.

- To develop tools increasing citizens' control on their mobility options, which includes the development of channels to foster their participation in transport's decision making (participative governance).

This task has focused on the UPPER mobility measures aimed at promoting behavioural change by informing citizens and facilitating participative governance. The mobility measures related to improving the PT offer have been linked to task T3.4 (Multimodal hubs), T3.5 (BRT % Traffic light priority), and T4.4 (MaaS). Within the WP5, mobility measures linked to incentivisation were allocated to T5.2, and measures linked to the improvement of the PT quality to T5.3.

1.2.   Intended audience

The intended audience of this document is all those professionals involved in PT improvement, including mobility managers in municipalities, public companies and private companies, transport technicians and transport regulators. The document presents the measures related to the behavioural change defined and developed within UPPER by different European cities, which can be used as case studies by mobility professionals from other cities.

In addition, the collection of reference documents, guides and mobility initiatives implemented in EU cities for promoting behavioural change in favour of PT, are also a recommended read for professionals aimed at improving sustainable mobility in their cities.

1.3.   Structure of the document

The document is structured in six sections. The first one, which is the present one, is the introduction section. The second section of the document presents the methodology followed to perform the different activities comprised by task 5.4. The third section presents the results of the subtask related to generating a collection of reference projects and initiatives, to support cities in the development of their mobility measures within UPPER project.

The fourth section of the document presents the results generated in the workshops participated by the cities, the horizontal partners, and in general all the partners involved in the task. Two workshops are described: a first one focused on sharing experiences and good practices among cities involved in T5.4 (and WP5 in general), and a second one aimed to produce *points of attention* to be considered by the cities' teams when developing their

measures. The second workshop's preparation included the appraisal of cities' mobility measures (definition of points of attention), by the UPPER horizontal partners, also reported within this section.

The following section (fifth) is focused on describing the process followed by the cities in the mobility measures development. This section reports the steps and actions taken towards the measures' development, and the results generated along the monitoring process performed jointly by mobility measures' contact person and the task team.

The last section of the report comprehends a collection of conclusions related to the main activities performed in this task.

1.4.   Measures included under Task 5.4

As stated in subsection 1.1, this task has focused on mobility measures aimed to promote *participative governance*, and campaigns to foster a behavioural change by promoting the use of PT. Therefore, the mobility measures linked to Task 5.4 are:

- Democratic governance:
    - IDF_01: Participative governance framework for the update of the regional SUMP.
    - MAN_01: (To) Establish participative governance and dialog formats to address the citizens with a focus on the (special) needs of user groups.
    - LIS_03: To improve the mobility planning.
- Campaigns:
    - MAN_02: Campaigning for sustainable forms of transport, such as PT, walking and cycling. Establishing a PT culture with PT as a green, safe, inclusive, and social space.
    - LIS_08: To implement campaigns and partnership initiatives.
    - LEU_06: To launch communication campaigns and digital tools to increase the uptake of PT.
    - BUD_021: To promote more sustainable choice of transport for students based on their modal split patterns.

2. Methodology

2.1.   Supporting resources: A systematic review

The review to identify reference results to foster behavioural change in favour of PT was aimed at generating a collection of projects and implemented initiatives, useful for the cities carrying out mobility measures linked to T5.4,

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[1] This measure was redefined in M19, and was reallocated from T4.4 (WP4) to T5.4 (WP5). The measure is included in this report, although no results from workshops have been reported for it, as at the time these workshops were performed the measure was linked to WP4.

as references to support the definition, design and development of their measures. The term employed for the review was *behavioural change*, and two partners participated: EITUM and IBV.

EITUM led the review focused on *implemented initiatives* in European cities, aimed at behavioural change. This initiatives' collection comprehended different features like name of the intervention and description, target groups, city and country or type of action, among others.

In addition, IBV led a review of reference projects and guidebooks containing guidelines to implement measures aimed at behavioural change. The review not only included the identification of the documents, but also the preparation of a summary presenting the main highlights and applicable results for the mobility measures development in UPPER.

2.2.   The Measures Support Leaders Group

As mentioned above, WPs 3,4 and 5 share common goals; to develop the UPPER tools and to make sure that all the necessary steps have been taken in order to get the 84 measures ready for implementation, in the framework of WP6. Having identified from the very beginning his common goal, the participating horizontal partners (WP and Task leaders) decided from the very beginning to join forces. More specifically, aiming to ensure that all partners involved in the development of the measures, including cities and horizontal partners, are aware of their responsibilities and the corresponding timeline, they decided to formulate a group, entitled "Measures Support Leaders Group" (MSLG) which was created at the beginning of the duration of these Tasks, in M8.

CERTH being the leader of WP4, under which most of the measures are prepared, was appointed leader of the MSLG. The group consisted of the leaders of the tasks under which the measures are developed (T3.4, T3.5, T4.2, T4.3, T4.4, T4.5, T5.2, T5.3, T5.4), while meetings were held in a monthly basis. Table 1 presents the UPPER partners forming the MSLG.

Table 1: Members of the Measures Support Leaders Group.

Task	Leader
T3.4 "Re-design the urban mobility space to promote the use of PT"	ETRA
T3.5 "Definition of new operational and policy-based measures and solutions regarding zonal and network-based UVAR and parking"	POLIS
T4.2 "New services for users and PT operators based on the existing mobility data collection and sharing"	IFPEN
T4.3 "Improved PT efficiency addressing specific needs and situations such as expected an unexpected events"	FACTUAL
T4.4 "Improved information and added-value services enhancing multimodality"	CERTH
T4.5 "Improved comfort, convenience, safety and attractiveness of transit services"	UITP
T5.2 "Incentivize PT offer and active modes in the living labs"	FACTUAL
T5.3 "Innovative strategies and solutions to improve public perception of PT"	FIT
T5.4 "Behaviour-change oriented mechanisms to promote the use of PT"	IBV

The aim of the group may be summarized as follows:

- To meet the goals foreseen in the Grant Agreement, in relation to the aforementioned Tasks;

- To provide meaningful support to the cities' representatives during the development of their measures;

- To ensure that all task leaders provide the same level of support to the cities developing measures under their task;

- For the cities to acquire a clear understanding of the steps needed to develop their measures and the support they will receive from task leaders (and other horizontal partners involved in the task);

- To monitor the progress of the measures' preparation process and timely identify any challenges/delays.

To achieve all these, a template entitled Monitoring Template was created and used in order to monitor the progress of all measures' development. The first draft was created by the group's leader but was then circulated among all members to review it. Once it was finalized, each member of the MSLG had to fill it in for all the measures under their Task. The aim of the template is to briefly present each measure and its expected outcomes (extensive measures' descriptions are included in D2.2) and to identify all steps needed to develop the measures. For each step a responsible partner is assigned as well as specific deadline. In addition, each step should be accompanied by a monitoring indicator; this indicator is not related to the evaluation process but it refers to the main output of the step so that the step is considered completed. The fields to be defined for each step in the Monitoring template are shown in Figure 1.

Steps to ready-to-demo measure

Steps	Description	Involved partners/exte rnals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	Define the step e.g., Definition of the area and the use cases	Define the partners responsible for this step	Email of the responsible person (Partner's name)	Choose from Data/Infrastructure/Le gal/Safety/Social/ Technical/Software	Define the data when the step should be completed	Define what the output of the step will be e.g., Description of area and use cases	Include any clarifications etc.
2							
3							
4							
5							
LAUNCH OF THE DEMO (please fill in the date)							

Figure 1: Table of steps to be defined by Project partners in the Monitoring template.

Once the task leaders had filled the templates in, the templates were sent to the corresponding cities to review and finalize them. One monitoring template was created per measure. These templates were then utilized by each task leader to track the progress of the defined steps for the measures under their task. This was done through the following procedure: prior to each monthly MSLG meeting, each task leader contacted the partners responsible for the measures' development to ask about the progress of each measure under their Task. A short but concrete presentation was then created and presented during the meeting in order to report the progress and any challenges or delays (if applicable).

The template of the monitoring template, along with the completed templates for the 7 measures prepared under Task 5.4 can be found in ANNEX 5, ANNEX 6, ANNEX 7, ANNEX 8, ANNEX 9, ANNEX 10 and ANNEX 11.

2.3.   Measures support workshop series

2.3.1. High-level approach

To support the cities along the development stage of the mobility measures, to facilitate the information exchange among the cities and to take benefit of the know-how and knowledge of the horizontal partners of the UPPER's consortium, it was proposed to organise participated workshops in both formats, in-person and online.

The first workshop, an in-person workshop organised during the second GA meeting, was aimed in sharing learnt lessons and experiences among pilot sites. The second one, in a virtual format, was aimed in reviewing the mobility measures, arising points of attention related to the measures that could support cities' teams in the final steps of the development process.

2.3.2. Workshop 1: Barriers, challenges and good practices in the measures' preparation process

The Rome GA assembly, performed in month M13 (January 2024) of the UPPER project, was seen as an opportunity to share experiences among cities, on how the development process of mobility measures was progressing. The deliverable D2.2, released on month M7 (July 2023) included a review of all the measures descriptions, tackled by a refinement process of measures' description. By performing this refinement process, it was revealed how some measures development was matured and very advanced, while others were still concepts, lacking tangible proposals.

It was clear that some cities could benefit from the lessons learnt of others (those with fully developed measures), and the consortium partners agreed on the idea of organising a workshop during the Rome GA, to exchange experiences among cities when developing their mobility measures. This workshop was Workshop 1, conceived as a forum where cities to present some measures (highly developed vs less developed), followed by questions and an open discussion among participants (cities and other UPPER partners).

2.3.3. Workshop 2: Points of attention for maximizing measures' impact

The process defined to support and to accompany cities in the development of mobility measures resulted in a monitoring process guided by the leaders of those tasks including mobility measures (i.e. T3.4, T3.5, T4.2, T4.3, T4.4, T4.5, T5.2, T5.3, T5.4). In this monitoring process, the cities had the support of task leaders, but the knowledge and know-how of UPPER's horizontal partners[2] participating in the tasks was missing. In order to correct this situation, and to benefit from the mobility knowledge of and associations, including those representing users, cities, PTA[3]s and PTO[4]s, the consortium proposed to organize an assessment process of the mobility measures, and a workshop to discuss the results generated by the assessment.

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[2] Horizontal partners of the UPPER project are those partners representing the main actor of the urban mobility, including transport operators, transport authorities, cities and citizens (end users).

[3] Public Transport Authority.

[4] Public Transport Operator.

The assessment was organized by collecting *points of attention* linked to the measures, basically issues to be considered by cities' teams when developing their mobility measures. These *points of attention* were organized around topics (categories) relevant to the development process, some of them generic, like *stakeholder involvement*, some of them specific for mobility, like *Mobility as a Right*. The collected *points of attention* were analysed, and discussed in a participated workshop with cities and horizontal partners.

3. Supporting resources: Reference tools and guides

3.1. Reference projects and guidebooks related to behavioural change

In this section, the main documents and reference projects identified regarding the behavioural change are presented. The original documents are accessible online following the references included in Section 7, however a summary of the main results that are directly applicable by the development teams of the cities implementing mobility measures, or including clear action lines, are presented in the following subsections.

In order to facilitate the identification of relevant results for the reader, Table 2 presents a brief summary of the documents, guides and reference projects comprehended in this section, with a short description of the main results included in the selected reports.

Table 2: Highlights of the main contents included in the documents presented in this section.

DOCUMENTS & GUIDES	Contents	Brief description
1.-Promoting mobility behaviour change. Practical guidance for inspiring more walking, cycling and public transport and minimising car use [2] (section 3.1.1).	THE MaxSumo APPROACH [1]	A method developed to frame behaviour change actions, and assess the effects of the *Mobility Management* (MM) plan.
	A FRAMEWORK FOR PLANNING BEHAVIOUR CHANGE	A 7 steps framework defined to deliver a behaviour change project.
	MONITORING THE BEHAVIOUR CHANGE FRAMEWORK	A list of the main benefits of robust monitoring of the behaviour change framework.
	TARGET GROUPS DEFINITION	A questionnaire to support identification of target groups and their propensity to change.
	DEFINE THE MOBILITY SERVICES PROVIDED AND MOBILITY OPTIONS OFFERED	Measures' categories most frequently related to Mobility interventions.
	IDENTIFYING BARRIERS THAT NEED TO BE ADDRESSED TO SUPPORT BEHAVIOUR CHANGE	A list of common barriers and sub barriers that need to be addressed to support behaviour change.
2.- Social nudging: shifts in behaviour (section 3.1.2).		The social nudging framework defines strategies to encourage the adoption of the desired behaviour in the short and medium term, through participatory mechanisms.
3.- CIVITAS Initiative. Behavioural change & mobility management: Influencing and changing attitudes		CIVITAS vision of the behavioural change's topic: this concept promotes sustainable mobility and

and travel behaviour through soft measures [12] (section3.1.3)		reduces single occupancy car use by challenging and changing travellers' attitudes and behaviour.
4.- From mobility patterns to behavioural change: leveraging travel behaviour and personality profiles to nudge for sustainable transportation (section 3.1.4).		Persuasive technologies refer to the application of psychological principles of persuasion (such as credibility, trust and reciprocity) to interactive media, with the aim to change users' attitudes and behaviours.
5- Planning for attractive Public Transport [20] (section 3.1.5).	.15 KEY MESSAGES ON PLANNING FOR MORE ATTRACTIVE PUBLIC TRANSPORT IN YOUR CITY	A 15 key points' list to increase public transport attractiveness.
	WHAT MAKES PUBLIC TRANSPORT	Public transport attractiveness relies on a set of factors that are directly related to public transport provision (internal factors) and a set of factors that are not directly related (external factors).
REFERENCE PROJECTS		
63.1.6.- MUV project. CRITERIA FOR APPROPRIATE INDICATORS AND TARGETS [27] (section 3.1.6).		A study on indicators to assess mobility initiatives.
7.- SWITCH PROJECT: TARGETING HIGH PROPENSITY SEGMENTS AT LIFE CHANGE MOMENTS [28]		The Switch Travel project aimed to reduce car use for short journeys in favour of walking and cycling by: targeting life changing moments; providing customized information; focusing on personal and public health benefits and using apps to engage and inform.
8.- MOMA BIZ PROJECT: DEVELOPING A CHECKLIST OF BEHAVIOUR CHANGE OPTIONS FOR BUSINESSES [29] (section 3.1.8).		Moma Biz project developed a checklist to score an overall sustainable mobility rating using answers to a series of positive statements.

3.1.1. Promoting mobility behaviour change. Practical guidance for inspiring more walking, cycling and public transport and minimising car use [2]

Along the following sub-sections, the main topics that are addressed in the guidance for promoting behavioural change, included in the bibliography ([2]) are briefly introduced. An interested reader is referred to this guidance for getting more information.

3.1.1.1. THE MaxSumo APPROACH [1]

The MaxSumo approach. This was developed by a consortium of experts and has been used by many countries and cities to help frame their behaviour change actions by explaining individuals' readiness to change travel mode by categorising them in one of four stages (Figure 2).
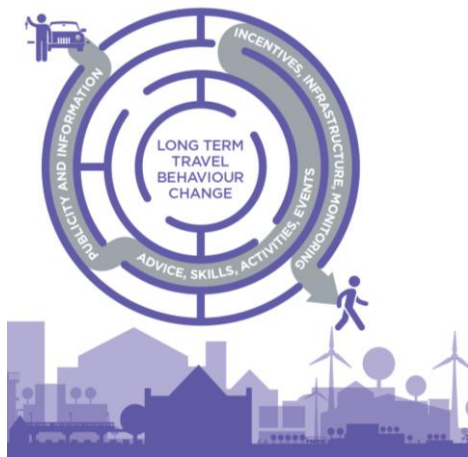
Figure 2: Stages for the behavioural change.

The evaluation strategy of MaxSUMO is based on the idea of measuring effects at different levels (see the following figure). The *gap* between the MM (Mobility Management) project and the expected effects is often large. MaxSUMO divides this gap into smaller steps, or assessment levels (Figure 3). Targets, indicators, and results can be specified at each of these levels, so that each level can be monitored and evaluated separately. This makes it possible to measure effects at an early stage in a project.
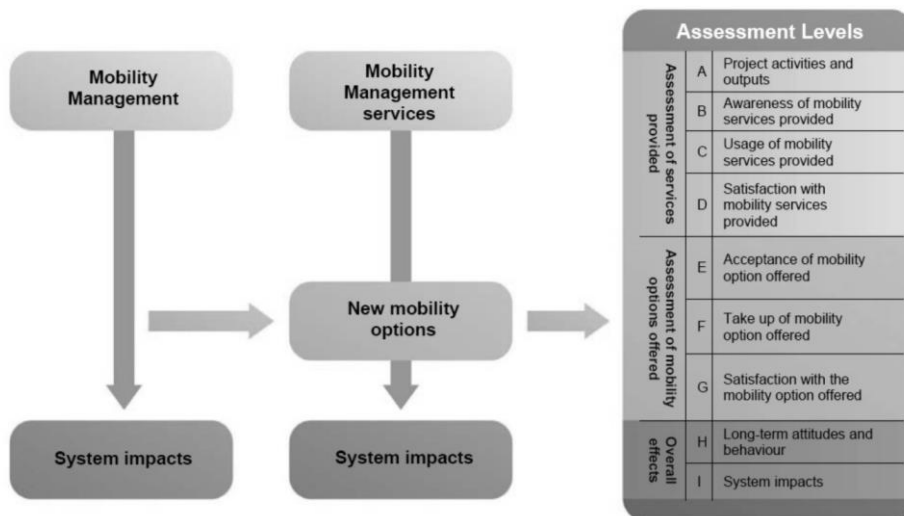
Figure 3: Assessment levels for the Mobility Projects.

The different MaxSUMO assessment levels are divided into four main categories:

1. Intervention framework conditions (although not symbolized in the previous figure) refer to external factors and person-related factors.

2. Services provided refer to the different activities of the MM project in order to achieve changes in travel behaviour (e.g., information meetings, distributing brochures and posters).

3. Mobility options offered through the services provided refer to the new travel behavior the MM project aims to encourage.

4. Overall effects, finally, refers to the main outcomes of the MM project in terms of (i) new attitudes and behaviour (e.g., decrease in car use), and (ii) more general system impacts due to these new attitudes and behaviour (e.g., CO_2 emissions saved by this decrease in car use).

3.1.1.2. A FRAMEWORK FOR PLANNING BEHAVIOUR CHANGE

Going beyond the MaxSUMO approach, informed by the experiences of cities across Europe, a practical framework for delivering a behaviour change project follows 7 distinct steps (Figure 4):

STEP 1:	DEFINE SCOPE, OVERALL GOALS AND TARGETS OF PROJECT
STEP 2:	COLLECT BASELINE DATA
STEP 3:	DEFINE THE TARGET GROUPS
STEP 4:	DEFINE THE MOBILITY SERVICES PROVIDED AND MOBILITY OPTIONS OFFERED
STEP 5:	SET TARGETS AND DEFINE INDICATORS FOR ASSESSMENT
STEP 6:	MONITOR THE CHOSEN ASSESSMENT LEVELS
STEP 7:	EVALUATE THE PROJECT AND EXPLAIN OBSERVED CHANGES

Figure 4: Steps to develop a behavioural change project.

3.1.1.3. MONITORING THE BEHAVIOUR CHANGE FRAMEWORK

The main benefits of robust monitoring of the behaviour change framework are:

1. IMPROVED PROJECT MANAGEMENT AND TRACKING ACHIEVEMENTS OF OBJECTIVES. Projects benefit in efficiency if monitoring and evaluation is done both in initial planning and throughout the implementation stages, and as a permanent process to help in steering the project and reaching real results.

2. EVALUATION HELPS IN THE LEARNING PROCESS. Monitoring and evaluation provide a chance to compare results with similar projects that have also been evaluated.

3. ENHANCE KNOWLEDGE ABOUT CAUSE AND EFFECT RELATIONSHIPS. Better measurement, documentation, monitoring and evaluation can provide better insight into the impact on behaviour change.

4. PROVIDE DATA TO HELP FUTURE DECISIONS AND INVESTMENTS. Measuring the cost-effectiveness of measures implemented is an explicit goal for decision makers and funders, and evaluation helps establish these costs and benefits.

3.1.1.4. TARGET GROUPS DEFINITION

In order to optimise resource allocation, only a few target groups/segments should be chosen to inform the design of the incentives, initiatives and messages of a campaign. A questionnaire can be used to help cluster users into relatively homogenous groups (in terms of their attitudes towards car use, walking, cycling, public transport, electric vehicles or wider issues such as climate change and health etc.) so that bespoke campaigns can then be devised.

Several European cities worked collaboratively to write a set of 'golden questions' that can be used in questionnaires or online surveys to help any organisations to conduct behaviour change baseline data (Figure 5). These 'golden

questions' represent the smallest number of survey questions required to identify the defining and distinguishable characteristics of car owners and non-car-owners. Each golden question uses a point scale of one to five, with one being 'strongly disagree/very unlikely' and five being 'strongly agree/very likely'.

Q1. Have you driven a car or van in the past 12 months?

Yes / No

Q2. For most journeys, I would rather use the car than any other form of transport
Q3. I like to drive just for the fun of it
Q4. I am not interested in reducing my car use
Q5. Driving gives me a way to express myself

Strongly disagree; disagree; neither/nor disagree; agree, agree; strongly agree

Q6. How likely are you to drive in the next 12 months?

Very unlikely; quite unlikely; neither/nor likely; fairly likely; very likely

Q7. I am not the kind of person who rides a bicycle
Q8. I feel I should cycle more to keep fit
Q9. I find cycling stressful
Q10. Cycling can be the quickest way to travel around
Q11. I like travelling by bicycle
Q12. I am not the kind of person who likes to walk a lot

Q13. I feel I should walk more to keep fit
Q14. I like travelling by walking
Q15. I am not the kind of person to use the bus
Q16. In general, I would rather cycle than use the bus
Q17. I feel a moral obligation to reduce carbon emissions
Q18. People should be allowed to use their cars as much as they like

Strongly disagree; disagree; neither/nor disagree; agree, agree; strongly agree

Figure 5: Golden questions to define a baseline data for behavioural change projects.

The SEGMENT project developed a questionnaire to help identify target groups and their propensity to change:

- Which of the following statements best describes how you feel about your current level of car use for daily trips and whether you have any plans to try to reduce some or all of these car trips? Please choose which statement fits best to your current situation and tick only one box:

  - As I do not own / have access to a car, reducing my level of car use is not currently an issue for me.

  - As I am aware of the many problems associated with car use, I already try to use non-car modes as much as possible. I will maintain or even reduce my already low level of car use in the next few months.

  - At the moment I use the car for most of my trips, but it is my aim to reduce my current level of car use. I already know which trips I will replace and which alternative transport mode I will use, but as yet have not actually put this into practice.

  - At the moment I do use the car for most of my trips. I am currently thinking about changing some or all of these trips to non-car modes, but at the moment I am unsure how I can replace these car trips, or when I should do so.

  - At the moment I do use the car for most of my trips. I would like to reduce my current level of car use, but feel at the moment it would be impossible for me to do so.

  - At the moment I use the car for most of my trips. I am happy with my current level of car use and see no reason why I should reduce it.

In response to the questionnaire the SEGMENT project generated **eight main attitudinal segments** identified as being **useful for the design of mobility management campaigns**. Many cities have found these segments, based on results from over 10,000 comprehensive attitudinal surveys containing over 100 questions, to be very helpful to categorise their population.

- DEVOTED DRIVERS:

  - Characteristics: Would rather use the car and have no intention of reducing car use; think successful people use the car; not the kind of person to use the bus or to cycle; see no benefit to cycling and think walking is too slow; are not motivated by fitness and have a very low moral obligation to the environment.

  - European demographic data: Highest percentage of men of all the segments and high level of full-time employment

  - Transport availability and travel behaviour: Highest percentage of households with three or more cars available to them; have on average the longest walk to the nearest public transport; highest percentage of frequency of car use (5 to 7 days per week); highest proportion reporting never having used public transport in the last 12 months

  - Intention: Devoted drivers showed the least intention to change their travel behaviour, with the highest percentage of 'strongly disagrees' across a range of questions

- IMAGE IMPROVERS:

  - Characteristics: Like to drive and see the car as a way of expressing themselves; do not want to drive restricted and do not want to cut down car use; not the kind of people to use the bus; think cycling can be a form of self-expression and a good way to keep fit; would like to walk for fitness, but are worried about the time it takes; have neutral or moderate environmental attitudes; are motivated by fitness – especially cycling

  - European demographic data: Highest proportion of 25-34-year-olds and high proportion of employed or self-employed individuals

  - Transport availability and travel behaviour: Highest proportion of people owning two cars; least likely to be a member of a car club; highest proportion to have one bicycle available for their child; highest proportion reported never having used the tram/metro in the last 12 months; highest proportion of people reporting to have used a bicycle less than once a month over the last 12 months

  - Intention: Moderate intention to cycle, walk and reduce car use; low intention to use public transport

- MALCONTENTED MOTORISTS

  - Characteristics: Do not like driving and find it stressful; want to reduce driving but still prefer the car; would rather use the bus than cycle, but see problems with using the bus; do not identify as cyclists, and see no benefit to cycling other than fitness; walk, but do not see any advantage to walking except for fitness; have a small level of environmental consciousness

  - European demographic data: Around two thirds of this cohort are aged between 25 and 44 years old have a moderately strong intention to reduce car use, but not to increase use of public transport; highest proportion of women car drivers

  - Transport availability and travel behaviour: High proportion reported having used a car five to seven days a week over the last six months; most likely to use tram or metro two to four times per week

  - Intention: Most people within this group are unclear or unsure (neither agree nor disagree) about making any lifestyle change in their individual car use

- ACTIVE ASPIRERS:

  - Characteristics: Feel guilty using their car on short journeys, so would like to cut down on car use; agree that using the bus can be quicker, but are not bus users and see lots of problems with using the bus; see themselves as cyclists and believe that cycling is quick and provides freedom and fitness; regard walking as healthy, do walk, and would like to walk more for fitness; have a high moral obligation to the environment; believe reducing their own car use will make a difference and intend to reduce car use

  - European demographic data: highest proportion of 45-54-year-olds; 85% are 25-54; twice as many women as men in the segment; many have undertaken further education; many in full and part-time employment

  - Transport availability and travel behaviour: Highest proportion of households owning only one car; highest proportion of car club members; highest proportion of three bicycles per household

  - Intention: Most likely to agree about the need to reduce car use for environmental, health and social reasons; over 40% unclear about making any lifestyle change in car use

- PRACTICAL TRAVELLERS

  - Characteristics: Use the car only for getting from point A to point B and when necessary; think that cars reduce our quality of life; would much rather cycle than use the bus as it is much quicker; identify as cyclists but do not as a form of self-expression; see walking as moderately healthy and will walk when it seems more practical than cycling; are not motivated by climate change; see local pollution and congestion as issues; believe they are already fit

  - European demographic data: Over 80% between 25 and 44; highest proportion still in further or continuing education at the age of 20; highest proportion of part-time workers

  - Transport availability and travel behaviour: Highest proportion with three or more bicycles; highest proportion with a five-minute or less walk time to public transport; highest proportion using a bicycle to get to and from work/school

  - Intention: Least likely to have a plan to reduce car use; if no constraints, highest proportion would wish their child to travel to school by bicycle; most likely to say they would rather cycle than use the bus

- CAR CONTEMPLATORS

  - Characteristics: See cars as status symbols, and support unrestricted car use; want to increase car travel; would rather use the bus than cycle, but see problems with the bus and find it stressful; are neutral about cycling; might want to walk a bit more for fitness; have a neutral or moderate attitude towards the environment; not motivated by fitness but believe walking is healthy; intend to use other transport modes but are most likely to say they will start driving

  - European demographic data: Youngest segment with highest proportion under 24 years old and highest proportion of students; more likely to be women; highest proportion unemployed/ seeking work

  - Transport availability and travel behaviour: Highest proportion without a driving licence; highest proportion citing bicycle use as their main mode of transport

  - Intention: Most likely to say they would like to travel more by car; cost, availability of a car and not having a licence the main barriers; over 50% expect to become car drivers in the next 12 months

- PUBLIC TRANSPORT DEPENDENTS

- Characteristics: Do not like driving and want less congestion; believe that more roads are needed to relieve congestion; would like to travel more by car; use public transport, but think it slow; believe bus is better than cycling, and walking often better; see no benefits to cycling as stressful; walk and would like to walk more for fitness; are not motivated by the environment

- European demographic data: Over 80% are women; highest proportion 55+ and highest proportion retired; least likely further education; most likely to have a disability that affects travel options

- Transport availability and travel behaviour: Least likely to have a bicycle or to ride one; most likely to think that travelling by car is expensive

- Intention: Most likely to think they should walk more to keep fit; least likely to start driving, as 'owning a car is too much hassle'

- CAR-FREE CHOOSERS

  - Characteristics: Do not like driving and think cars lead to unhealthy lifestyles; believe car use should be reduced; like bus but would rather cycle; see cycling as beneficial as a self-expression; see walking as healthy and would like to walk more for fitness; have high moral obligation to the environment, and believe reducing their own car use will make a difference; are keen to walk and cycle.

  - European demographic data: Over 70% women; one of the youngest groups with 75% <34; high proportion of fulltime students at college or university.

  - Transport availability and travel behaviour: 75% do not hold a driving licence; highest numbers with a bicycle; high levels of bus, bicycle and walking with the highest response rate for having walked five to seven days a week.

  - Intention: Strongly agree that over the next six months they intend to make sure that they (or their child) cycles to work/school more often than is currently happening; very likely to have had a plan to reduce car use before they moved to their current home.

3.1.1.5. DEFINE THE MOBILITY SERVICES PROVIDED AND MOBILITY OPTIONS OFFERED

Mobility interventions often consist of a range of measures. These measures can be categorised according to those presented in Table 3.

Table 3: Measures to perform a mobility intervention.

MEASURE	DESCRIPTION	EXAMPLES
Information	information and advice before and during a trip to influence mode choice	Advertising, leaflets, maps and timetables
Promotion	targeted encouragement to entice more walking, cycling and public transport	Personalised travel assistance, advertising campaigns, incentive and reward programmes (e.g. bike repairs, bike kits and breakfast at work)
Organisation	improvements to the efficiency of walking, cycling and public transport	Carpool schemes, area-wide car sharing, shuttle services (if PT not present), cycle hire services, public transport ticket refunds.

Training	integration of walking, cycling and public transport skills	cycle training and eco-driving
Site-based	investments in new services and infrastructure	New footpaths, crossings, bike paths, bike storage, showers and lockers, company bikes, bus stops, bus shuttles and work buses.
Substitute travel	Reorganisation of working practices	Changing opening times, flexible working hours, compressed weeks, teleworking.
Supportive	Indirect activities that improve the effectiveness of direct measures	Parking management, (pricing, rationing, limiting, cash-out) tax changes to make travel benefits more or less attractive, planning permission requirements

3.1.1.6. IDENTIFYING BARRIERS THAT NEED TO BE ADDRESSED TO SUPPORT BEHAVIOUR CHANGE

The ASTUTE project evaluation identified common barriers and sub barriers that needed to be addressed to support behaviour change. It is a useful list, and can be interpreted more positively as an evaluation framework of measures:

- SAFETY AND SECURITY CONCERNS: Unsafe routes for cycling/walking, Lack of definite regulations on cycling, Fear of theft or criminal damage to bicycles.

- INADEQUATE INFORMATION: Lack of information on how to reach destination safely, Lack of information about walking/cycling routes, Lack of convenient signage on walking/cycling routes.

- INEFFECTIVENESS OF PROMOTIONAL CAMPAIGNS: Lack of information about walking and cycling facilities, Lack of skills to promote walking and cycling amongst businesses and citizens, Insufficient communication between city departments and citizens, Purchasing and keeping political support behind project.

- INADEQUATE URBAN ENVIRONMENT AND DESIGN: Lack of penetrability of city areas to walking and cycling, Low level of importance of pedestrian use in the city centres, Unattractiveness and poor quality of urban environment for walking and cycling

- CLIMATIC AND TOPOGRAPHICAL BARRIERS: Lack of infrastructure and support, Lack of integrating existing networks, Ineligible or lack of cycle parking facilities in the city reduces the modal share, Inadequate public transportation accessibility, Lack of cycle tracks, Lack of facilities for cyclists (loaning, storage and repair facilities), Lack of maintenance of the infrastructure.

- POOR PUBLIC PERCEPTION AND LACK OF AWARENESS: Lack of public interest, Public approach of walking/cycling, Low attractiveness of bicycle for longer journeys (e.g. commuters), Cultural barriers against cycling.

- ACCESSIBILITY AND HEALTH: Low level of environmental and health awareness among citizens, Lack of competence/power of citizens/organizations to enforce their interests, Exclusion of people with reduced mobility/minority groups/older persons/residents living in areas difficult to access, Low fitness levels among citizens.

- LACK OF PUBLIC SECTOR SUPPORT: Transport policy prioritizing private car/public transport, Lack of co-ordination between city departments and NGOs responsible for walking and cycling, Lack of appreciation of the value of marketing campaigns, Lack of integrated planning of cycling and walking/pedestrian traffic, Purchasing and keeping political support behind project.

- LACK OF PRIVATE SECTOR SUPPORT: Lack of financial incentives to develop a travel plan for employees/school, Lack of skills to implement actions for sustainable transport, Insensitivity of companies towards employee transport preferences, Inadequate resources and knowledge by employers to implement travel plan, Inadequate facilities for walking/cycling in the workplaces (cycle parks, changing rooms, showers), Inadequate incentives by employers to encourage walking/cycling to the workplace.

- CONGESTION AND AIR POLLUTION: Unbalanced level of utilization on public transport vehicles, Level of car traffic and air pollution, Reduced accessibility for businesses due to congestion.

- LACK OF EDUCATION AND TRAINING: Lack of cycling and bicycle maintenance skills, Children with inadequate road safety skills.

3.1.2. Social nudging: shifts in behaviour

The social nudging framework define strategies to encourage the adoption of the desired behaviour in the short and medium term, through participatory mechanisms based on the active participation of citizens leading to legitimizing nudges, triggering a change in values, attitudes and by consequence behaviours in the long term [3].

Transportation is an area where changing behaviour has been in focus for many years. Despite the long history of transport policy and proliferation of various systemic approaches to addressing problems of access, congestion and environmental pollution, e.g. total mobility management or Integrated Transport Policy, there are few specific studies that evaluate the effectiveness of individual behaviour change strategies in private mobility [4], [5], [6]. On the other hand, total mobility management programmes have been evaluated and typically show between 5% and 15% reduction in car use both in the short and long term [7], [8].

Nudging should be part of a broader policy package combining several instruments. It should be based on a careful analysis of the **kind of behaviours one wants to change** and, on the factors, influencing them. Moreover, the success of a nudge, like any other instrument, will depend on the context and on the type of behaviour targeted. Nudge comprises **four types of tools**: **1)** simplification and **framing of information**, **2)** changes to the **physical environment**, **3)** changes to the **default policy**, and **4)** the use of **social norms** [9].

Resources, however, are limited. Even though *nudging* is effective and even efficient in many cases, it requires a great deal of **tailored and customised attention**. Hence, *nudging* appears to be most feasible as an integrating and cross-cutting design element. Moreover, information and training of users and staff could make use of the ideas of simplified information, framing and social comparison feedback from the nudge paradigm [9].

A critical limitation in the use of nudge in travel behaviour is the lack of studies that can discern the effectiveness of specific mobility management instruments. The UK Department for Transport [10] posits that limitations in the use of nudges to facilitate changes in travel behaviour are due to a great variety of factors influencing behaviour. The same person may react differently to the same influencing factor depending on the role the person assumes at a given moment ([10]). Indeed, there is compelling evidence on the great heterogeneity of people's responses to behaviour change policy tools in transport. Therefore, more research is needed on the diversity of decisions with regard to travel choice making and concerning people response to different policy measures. When applying nudging, **policy makers and transport planners may rely on traditional segmentations of people according to their socio-demographic and attitudinal parameters** (e.g. attitudes towards sustainable transport modes), or they could also solicit research on identifying segments of people that are most likely to change their behaviour if targeted by policy measures developed based on insights of behavioural science.

As people react differently to the same factor but in different contexts. Some researchers warn about the limitations to directly transfer findings on the application of behavioural sciences to transport from other domains since the context of choice making in transport might be different from choice making in other environments [11].

An important consideration for nudges is their acceptance by the public. This depends, among other issues, on whether the targeted behaviours are controversial or not. Here social norms and values play a role. For example, policy tools that are designed to change the way information is presented to the users by simplification, improving the salience of certain features or increasing the level of convenience are less controversial. This is because they help people avoid clearly identifiable mistakes they are prone to making because they do not understand complex information or do not pay attention to issues of lower relevance. Other tools, such as defaults, might be more controversial to apply. In general, nudges are seen as less controversial behaviour change tools as they follow the logic of the free market and do not restrict people's choice. On the other hand, nudges can be perceived as manipulative. Thus, an open societal discussion is needed on acceptable ways of designing choice architecture so that it would change behaviour for the individuals' and the common good [9].

Social nudging is aimed to define specific actions, adapted to different users' profiles. The development of the nudges should be done collaboratively with the agents involved, mainly with the citizenship, to guarantee the acceptance of the strategies. By doing this, we intend to generate social awareness on the diverse components of measures that intend to promote the use of PT.

3.1.3. CIVITAS Initiative. Behavioural change & mobility management: Influencing and changing attitudes and travel behaviour through soft measures [12]

Building infrastructure for sustainable urban mobility is pointless if nobody uses it - that is where mobility management comes in. This concept promotes sustainable mobility and reduces single occupancy car use by challenging and changing travellers' attitudes and behaviour.

Mobility management focuses on soft measures, such as awareness raising and marketing campaigns, mobility info points, and school and company travel plans. Technological advancements are also seeing gamification play a larger role.

Such soft measures enhance the effectiveness of hard measures, like new tram lines, bike lanes, or charging infrastructure. Compared to hard measures, mobility management measures do not necessarily require large financial investments and may have a high cost-benefit ratio in a short time frame.

3.1.4. From mobility patterns to behavioural change: leveraging travel behaviour and personality profiles to nudge for sustainable transportation [13]

Transport is the sector with the highest increase of greenhouse gas emissions in recent decades, and nearly one-third of global CO_2 emissions come from the transportation of people. In addition, transport systems have significant impacts on the environment, accounting for between 20% and 25% of world energy consumption and carbon-dioxide emissions and road transport is a major contributor to local air pollution and smog.

Persuasive technologies [14] refer to the application of psychological principles of persuasion (such as credibility, trust and reciprocity) to interactive media, with the aim to change users' attitudes and behaviours. They deliberately attempt to infuse a cognitive and/or an emotional change in the mental state of a user to transform the user's current cognitive state into another planned state [15].

A typical application based on persuasive technologies focuses on properly structuring the available route options to reach a destination, and present persuasive messages that **urge users to follow routes that are sustainable**. This type of applications rely on sets of *multimodal* routes, i.e. **routes that involve combinations of transportation**

modes (e.g. using a combination of a personal car and public transportation or using car and bike sharing services to reach a destination).

Users are persuaded to select more environmentally friendly routes with tailored interventions on the basis of their characteristics, contextual, routing, mobility patterns and other relevant information. For this purpose, it was designed and implemented an approach that was integrated in a route planning mobile application developed as part of the OPTIMUM project. The conceptual architecture of this approach is presented in Figure 6.
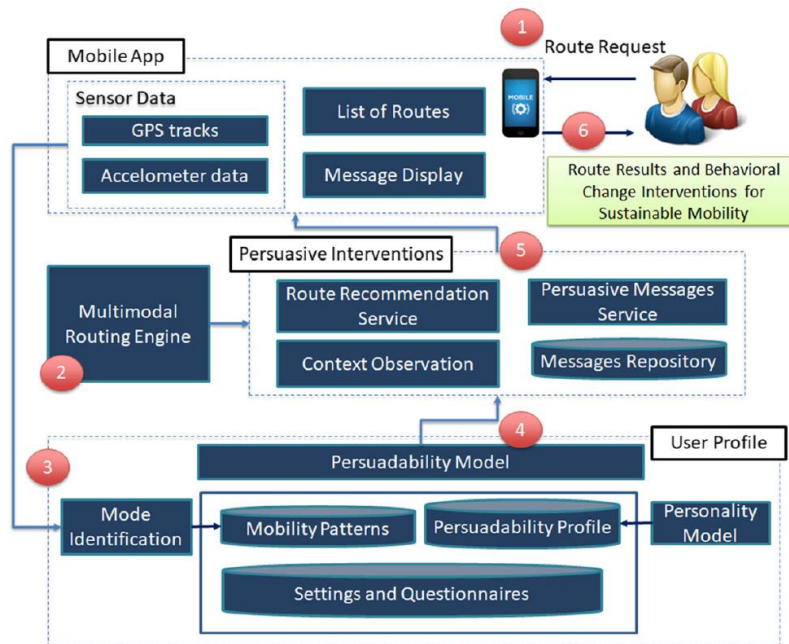
Figure 6: Concept design of an application designed under principles of persuasive technologies.

This **personalized behavioural change support approach relies on two** complementary **services** that structure the route results (i.e. the route recommendation service) and attach persuasive messages to these results (i.e. the persuasive messages service). **The route recommendation service** receives as input a list of alternative routes for travelling from origin A to destination B. The list is generated by a routing engine and contains an extended set of unimodal and multimodal options for reaching the destination. **The persuasive messages service** specifically addresses different users and tailors the persuasive messages to the individual, with the aim to maximize the impact of the persuasive attempts. The service selects from a set of persuasive messages corresponding to different persuasive strategies, the message that each individual user is more susceptible to, by also considering the current user, trip and environmental context.

To measure the impact of persuasive technologies, researchers use metrics such as qualitative questionnaires that identify the acceptance of the technologies, the attitude change with respect to environmentally friendly transport modes and the perceived persuasive effects. A recent review of persuasive applications for sustainable mobility [16] reports that out of nine applications reviewed only three attempt to evaluate the effectiveness of behavioural change interventions. For the three applications (namely QT, Peacox and SuperHub) the main findings concern changes in attitude change and intention to change to environmentally friendly transport modes.

3.1.5. Planning for attractive Public Transport [20]

This Topic Guide ([20]) highlights the ways in which cities can make public transport more attractive through SUMPs to trigger behavioural change in favour of public transport. The document also aims to increase the use of public transport in line with the priorities of the new *EU Urban Mobility Framework* [21] and the *European Green Deal* [22].

3.1.5.1. 15 KEY MESSAGES ON PLANNING FOR MORE ATTRACTIVE PUBLIC TRANSPORT IN YOUR CITY

1. **Assess your current situation**, understand the needs of users and potential users, but also monitor and measure the success of policies and improvements – modal shares, accessibility indices, user satisfaction, etc. Anticipate the need for specific indicators and requirements on SUMPs for the TEN-T urban nodes.

2. **Apply a whole-city approach to public transport** planning through urban development oriented to public transport and active mobility, and by integrating public transport physical planning, fares and operations.

3. **Widen the scope of your SUMP** by taking into account linkages with surrounding peri-urban and rural areas and embrace the needs of citizens living in more rural areas, e.g. commuters. To do so, better integrate public transport and land use planning, and develop complementary solutions to public transport such as multimodality hubs with park and ride facilities, shared mobility and on-demand mobility, including demand responsive public transport and MaaS.

4. **Enable better governance of public transport** with the creation of a single regulatory authority covering the full functional area, including peripheral areas, and coordinate with the regional authorities. Apply cross-sectoral governance by cooperating with other sectors (health, education, etc.).

5. **Provide good quality mobility options** characterised by frequent, reliable and integrated services, also focusing on speed, affordability and value for money.

6. **Adapt public transport infrastructure**, fleets and services to ensure better accessibility, focusing on vulnerable groups in a wider sense.

7. **Improve travel experiences** and tailor public transport services to meet individual users' needs, rather than mass transport. For example, in the post-pandemic era, passengers would like more flexible fares to match their current less-frequent commutes, that often do not justify a monthly subscription.

8. **Design your SUMP** with public transport **as the backbone of urban development** and your sustainable mobility system. In addition to moving towards cleaner fleets, decarbonising your public transport system should be viewed in the context of the "avoid-shift-improve" principle to successfully transform the transport system: avoiding unnecessary traffic, shifting to the most sustainable modes of transport (i.e. public transport, walking and cycling), and improving each mode of transport.

9. **Align your SUMP** priorities for public transport **with** those of **other local and regional plans**, including SECAPs (Sustainable Energy and Climate Action Plans), to ensure the same vision is put in place and pursued consistently.

10. **Safety and security come first** as an unspoken priority or condition sine qua non to travel. Maintain a high safety culture to protect the general public, children and vulnerable users and attract new groups of people to public transport.

11. **Review the amount of road space** disproportionately allocated to private cars and increase the amount of road infrastructure dedicated to segregated priority lanes for public transport. Road space reallocation should also consider active and shared mobility infrastructure: dedicated public transport infrastructure should be

designed in relation to the infrastructure for cycling, walking and shared mobility services, to optimise a modal shift towards more sustainable modes of transport.

12. **Make more and better use of new technologies**, such as smartphone applications, to make public transport services more attractive and easier to use, thus supporting a behavioural change of travellers. It is important to ensure that this is not an obstacle for other groups of users, those with low digital literacy or access to IT tools. New technologies allow for integrated and multimodal information and ticketing, while at the same time improving data collection.

13. **Take advantage of the pandemic** and move towards greater resilience, which will ultimately contribute to reducing public transport costs. Anticipate events like pandemics, e.g. by designing more contingency plans.

14. **Ensure the financing of your public transport system**, even in times of pandemics, by integrating public transport into long-term transport and urban development strategies. The creation of new stations and connections also generates many investment opportunities, for instance for land value capture, where improved public transport facilitates development potential.

15. **Give your public transport an attractive identity**. For a more positive experience and image of public transport, the emphasis should be put on the experience – both in and around stations and on public transport vehicles, e.g. the ability to relax, sleep, work, shop, etc. while travelling.

3.1.5.2. WHAT MAKES PUBLIC TRANSPORT ATTRACTIVE?

Public transport attractiveness can be understood through modal shares or ridership and how much people use it and are satisfied by it. It **relies on a set of factors** that are directly related to public transport provision (hereafter called *internal factors*) and a set of factors that are not directly related (hereafter *external factors*). That is why SUMP is so important for public transport attractiveness since it can act on both the internal and external factors.

Internal factors may include:

- **Service quality**: Increasing service supply including coverage (in terms of network but also amplitude i.e. early & late services), on-time performance (improved reliability leads to increased ridership), reliability of service, ease of use, comfort, (multimodal) travel information and ticketing, frequency of service, has traditionally increased ridership.

  Focusing on inclusiveness and accessibility will also attract more users, including Persons with Reduced Mobility (PRMs) and persons with a disability in particular, and vulnerable groups such as children and young people; older people; migrants and ethnic minorities (not understanding the language); low income and unemployed people; people living in rural and deprived areas; persons with no or little IT skills and persons with no access to internet.

- **Redesign of the bus network and urban rail**: increasing ridership, largely through increased travel speeds and increases in service.

- **Prioritising public transport in the form of Bus Rapid Transit** (BRT) or light rail (with features such as dedicated right-of-way, priority at crossroads and a higher commercial speed) can greatly increase ridership.

- **Fare increases**: will modestly decrease public transport ridership if the service remains unchanged. Price elasticity shows that riders are generally more respondent to transport quality than price changes. However,

integrated or seasonal (e.g. monthly, annual) tickets can increase ridership through the development of a loyal customer base.

Targeted fare discounts as a means of marketing or introducing mobility services to potential clients/passengers, e.g. students, can increase ridership.

It seems that more flexible fare policies are needed to meet new (tele)working practices, e.g. discounts for frequent but irregular public transport use that go beyond the traditional monthly pass and ensure that commuters, who have many options and make fewer trips choose public transport as often as possible.

Free public transport is increasingly being considered and generates a lot of media attention. Cities such as Tallinn, Dunkerque, Hasselt, but also countries such as Luxembourg, have implemented long term free public transport schemes, and their overall results have been much debated. While free transport access in order to stimulate riders may have short-term benefits, permanent schemes have not demonstrated clear benefits for the sector or sustainable results [26].

- **Awareness-raising**: informing and educating people about the public transport offer, and better marketing and promotion e.g. through campaigns, can significantly increase ridership.

- **Connectivity for people living far** from a public transport station or hub: safe park-and-ride facilities as well as bike-parking places, bike-sharing points at public transport stations, but also shared mobility solutions, taxis and walking infrastructure, provide integrated solutions for the entire journey.

External factors may include:

- **Demographic trends**: with the ageing and retirement of baby boomers, commuters' ridership is decreasing.

- **Car ownership**: it seems that car ownership rather than income is a determining factor (including 'company cars') which blurs people's appreciation of the real cost of transport.

3.1.6. MUV project. CRITERIA FOR APPROPRIATE INDICATORS AND TARGETS [27]

The MUV Project promotes that a good indicator to assess the impact of an intervention should be:

- politically relevant: it should address an important policy question or issue, but not necessarily politically driven, since answering only to a particular political agenda may give a very partial picture of a situation under examination;

- robust: in this respect, an indicator has to be related to global and lasting characteristics of the system, to avoid too much sensitivity to accidental fluctuations;

- connected with priorities and significant issues;

- coherent: an indicator should be connected/connectable with other indicators;

- feasible: the data to construct an indicator should be readily available and affordable to collect;

- accessible to a large audience;

- valid, reliable, accurate, which implies a high quality data sources. The evaluators should be sensible and practical in applying these criteria.

No indicator will satisfy all criteria equally well. Ultimately, the choice of indicators is determined through a holistic assessment of validity and practicality.

3.1.7. SWITCH PROJECT: TARGETING HIGH PROPENSITY SEGMENTS AT LIFE CHANGE MOMENTS [28]

The Switch Travel project aimed to reduce car use for short journeys in favour of walking and cycling by: targeting life changing moments; providing customized information that responds to people's specific circumstances and needs; focusing on personal and public health benefits; and using apps to engage and inform. The target was set to reduce car use by 10% and increase walking and cycling by 50%.

25% participants already walked and cycled as main modes of transport; 22% of car users saw no reason to reduce their car use and so the project targeted the 42% of the car users that wished to reduce their car use.

This value underlines the high proportion of people in the population that have some inclination to reduce car dependency and take-up healthier mobility habits.

48% of those who wanted to reduce car use felt it impossible to do so (1 in 5 of all campaign participants). The remainder were split between two sub-groups that wanted to reduce car use 'but did not know how' or' had not done anything about it'. Clearly these two latter groups were those most likely to be influenced by the campaign. They comprised 14% of all campaign participants.

3.1.8. MOMA BIZ PROJECT: DEVELOPING A CHECKLIST OF BEHAVIOUR CHANGE OPTIONS FOR BUSINESSES [29]

Moma Biz project developed a checklist set of indicators that businesses could benchmark themselves against in order to score an overall sustainable mobility rating using answers to a series of positive statements. As well as providing a benchmark for change (before and after the project) the list of statements can be helpful as a summary of potential mobility services and options that could be packaged and delivered to have an effective impact:

- CYCLING:
    - We could be reached by an employee or a visitor with a bicycle - less than 10 km from home.
    - We have a clear strategy and facilities for preventing bike theft.
    - We provide changing rooms, showers and lockers for employees who use bicycles for home-work trips and for work-related trips.
    - We provide bikes for the employees/visitors to use.
    - We provide a pool of bikes to the employee for work and non-work trips.
    - We promote cycling for work related trips.
    - We offer a Bike & Ride service and the corresponding facilities.
    - We have an internal bike network with safe bike lanes, bike ramps, bike racks, etc. and offer services for cyclists such as bicycle maintenance.
    - We are aware of the current cycling infrastructure in the surrounding area and collaborate with the local authorities in order to improve them and make them safer.
- WALKING:
    - We can be reached by an employee or a visitor on foot - less than 3 km from home.
    - We provide on-site lockers and showers for employees who walk to work.
    - We provide safe infrastructure for pedestrians, road signs, pedestrian routes, etc.

- We have erected signs indicating the accessible areas.

- We have infrastructure for people with reduced mobility ensuring easy access.

- PUBLIC TRANSPORT:

  - We are well connected to the nearby residential areas by public transport.

  - We provide up-to-date information on the existing public transport service to its employees, i.e. timetable, route maps, etc.

  - We co-finance public transport tickets (bus, train, tram, metro, etc) for employees.

  - Bus stops are close to us, with shelters, seating, selling of bus tickets etc.

  - We have a clear idea of the transport needs of our employees and promote public transport policies that help meet these needs.

  - The area is safe for pedestrians using public transport.

  - We facilitate a shuttle bus service for the employees.

- CAR POOLING/ CAR SHARING:

  - We offer standard vanpooling

  - We provide employees with a service for carpooling in the forms of an online platform, a notice board, an employee matching service etc.

  - We guarantee a parking space for car-poolers.

  - We provide incentives for those who carpool – financial and non-financial.

  - We offer a carsharing service.

  - We provide incentives for people who use carsharing - financial and non-financial.

  - We are well connected by public transport, bike etc. to the nearest carsharing location (when the carsharing service is not located onsite).

- PRIVATE CARS:

  - We can be reached by car.

  - We have a scheme for decreasing the number of business trips carried out (i.e. teleconferences, software, paper-based scheme, orally arranged scheme).

  - We promote a more efficient use of cars for work-related trips.

  - We have an internal pool of vehicles made available to people for non-work related trips (individual or collective).

  - We offer a Park & Ride service.

  - We apply a parking fee scheme within our premises.

  - We pay attention to the area made available for parking purposes within its environs and implement a parking management scheme.

  - We have allocated car-free areas inside our grounds.

  - We prioritise certain types of means of transport, e.g. walking, cycling, public transport users and car-poolers.

- We apply access restriction measures based on the emissions of the incoming vehicles.

- We own energy efficient cars, or cars on alternative fuels, or electricity.

- We have a policy for the use of alternative fuels; or offer incentives to those who use vehicles run on alternative fuels.

- We offer eco-driving style training or give incentives to drivers who apply it.

- We use Intelligent Transport Systems for our fleet of vehicles; or have integrated it with the private vehicles.

- We have established a route planning service or are in possession of such software.

- We offer a service/software that provides information on real time traffic and the possible solution to traffic jams.

- FINANCIAL INCENTIVES:

  - We offer financial incentives to employees who are using sustainable modes of transport.

  - We offer a "guaranteed ride back home" service for employees using sustainable modes of transport in the event of the mode of transport not being available.

  - We provide personal trip advice for optimisation of the home-work trip.

  - We support flexible working hours and/or the possibility to work from home.

  - We have established and run a Mobility Centre/Office for people to use

  - We have a vision for the continual development and potential expansion and integrate sustainable transport networks within our mobility policy.

  - We offer the facilities for an e-shopping service.

  - People have access to a wide range of services on site, i.e. shops, gyms, bank, post office, childcare, etc.

3.2. Implemented initiatives in EU cities to promote behavioural change in favour of PT

To support the development of city measures withing the project scope, an analysis of behaviour-change mechanisms aimed at promoting the use of public transport has been conducted.

The objectives of this analysis are to:

- Identify and categorise different behaviour-change mechanisms

- Analyse the effectiveness of these mechanisms in increasing public transport usage

The analysis covers a range of mechanisms, including marketing campaigns, incentives, and citizen engagement activities implemented across various cities and countries. These initiatives are designed to encourage the use of public transport through strategic behaviour-change methods.

The data for this analysis was collected through extensive desktop research and the integration of expert knowledge in the consortium. Information was compiled from various campaigns and initiatives, as detailed in the matrix provided below.

The matrix, presented in ANNEX 1, includes 30 behaviour-change mechanisms from 15 different countries, which are categorised into four main groups (i.e. type of action):

- Marketing and communication campaigns

- Monetary incentives

- Non-monetary incentives

- Citizen engagement/co-creation activities

The matrix also categorises the mechanisms by target groups, communication channels used, impact assessment (where available), year of implementation, and city/country where it was implemented. For each mechanism, a brief description of the action has been included, identifying the organisation responsible for it, and the communication strategy used to implement the action.

These mechanisms focused on fostering active mobility, multimodal transport, and increase the use of public transport. The target groups identified in these initiatives include citizens, elderly people, students, women, families with children, low-income individuals, and employees.

The matrix also details the results of the mechanisms identified, highlighting their impact and effectiveness and including links to the visuals used whenever available.

As some good examples to be used as best practices, the "Bicification" project, implemented in 2022 across Braga (Portugal), Istanbul (Turkey), and Tallinn (Estonia), used monetary incentives to promote active mobility. The project utilised the antifraud system patented by Pin Bike to certify, monitor, and reward urban bike rides by comparing data from hardware sensors and software applications. Local authorities provided economic incentives for cyclists to spend in local shops, while collecting valuable data on cycling patterns to inform city policies and investments. The campaign educated people on the health benefits of cycling, motivated those interested in trying it, and provided immediate feedback through tangible rewards. In Braga, 400 users cycled 227,274 kilometres, saving 35.7 tons of CO_2 emissions; in Tallinn, 387 users covered 370,792 kilometres, saving 38.2 tons of CO_2 emissions; and in Istanbul, 422 users cycled 237,927 kilometres, saving 60.4 tons of CO_2 emissions.

Another good example is the "Bring a Friend" campaign launched by Horários do Funchal in 2016 in Funchal, Portugal. This initiative was part of the CIVITAS DESTINATIONS project to promote public transport in Madeira. The campaign encouraged existing public transport users to bring a friend to purchase a monthly pass by offering them a discount on their own pass. The aim was to boost public transport usage through attractive service offerings and smart marketing techniques. The campaign successfully led 55 current customers to persuade 55 non-customers to start using public transport. The economic assessment revealed that revenues exceeded the overall costs of the campaign, with more than half of the new users continuing to use public transport four months after the campaign ended. The success of the campaign was attributed to its emotional and persuasive messaging, effectively designed to elicit positive attitudes and behaviours towards public transport.

Another example to be developed further is the "Cambiamos CO2 por flores" campaign, which took place in 2009 in Barcelona and its metropolitan area, Spain. This interactive online communication action aimed to encourage the use of public transport as a way to reduce CO_2 emissions. Organised by Transports Metropolitans de Barcelona (TMB), it invited users to calculate the amount of CO_2 saved by using public transport instead of private vehicles, then create and plant a virtual flower in a symbolic garden. The campaign combined advanced technologies to offer an engaging experience, updating participants on the collective CO_2 savings and providing information on the impact of climate change in Barcelona. However, it would have been beneficial to have some specific impact numbers and to see a continuation or follow-up to assess the long-term effectiveness and engagement of the campaign.

4.Measures support workshop series

4.1. Workshop 1: Good practices exchange among cities in the measures' preparation process

The workshop held on 30 January 2024, brought together representatives from three cities with mobility measures linked to WP5, to discuss their strategies for promoting public transport and sustainable modes of transport. Each city shared their measures implemented in UPPER and approaches to incentivisation and public campaigns, highlighting their successes, challenges, and ongoing efforts.

As previously stated, this workshop was performed during the Rome General Assembly, at the end of the first meeting's day. The workshop, aimed to facilitate discussion and ideas' exchange among the cities, was moderated by EITUM. The structure of the workshop consisted of a short presentation of the mobility measures linked to the workshop thematic (Incentivisation & Campaigns) by three cities (MANNHEIM, ILE DE FRANCE and LEUVEN), followed by an open discussion after each short presentation in which all the attendees participated. The moderator presented the speakers, and also managed the intervention of the attendees during the discussion.

The mobility measures presented by cities were MAN_02, IDF_07, and LEU_06. While IDF_07 is linked to the task T5.2, the other two measures (MAN_02 and LEU_06) are linked to task T5.4, so in this section we will focus on the results related to them.

4.1.1. Results

MAN_02

This mobility measure was presented by Annika Müller, project manager at rnv[5]. The measure was selected as a mature initiative, considering that a communication campaign linked to it had been launched in August '23, and the assessment of the impact generated by the campaign was ongoing (Figure 7).

Figure 7: Measure outputs and Project phases of the communication campaign launched by RNV.

Mannheim implemented a comprehensive campaign to encourage sustainable modes of transport, particularly focusing on walking and cycling. The city launched a mobility page dedicated to climate protection, which serves as

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[5] https://www.rnv-online.de/english/

a central hub for all information related to the campaign. This landing page is actively tracked to measure user engagement and effectiveness.

The campaign's development is overseen in collaboration with national bodies, ensuring rigorous supervision and evaluation. Mannheim utilised various platforms to spread their message, including podcasts and tram campaigns, involving people promoting the new platform in tram stations, emphasising green energy and sustainability.

One of the key elements of Mannheim's strategy is honesty in communication, ensuring they do not promise more than they can deliver. This approach has fostered trust and credibility among the public. The campaign has successfully reached a wide audience, although it continues to collect feedback to refine its efforts further. In this sense, it can be added that impact measuring is very important, although it is difficult to collect the data to generate a KPI related to impact.

Another challenge for sustainability campaigns is generating contents to communicate efficiently about complicated concepts like CO_2 *neutral*.

The workshop's audience agreed about the importance of measuring impacts, and the need for identification of KPIs in order to register changes before and after the campaign launching.

IDF (Versailles Grand Parc)

Île-de-France, focusing on the Versailles Grand Parc area, has taken a legislative approach to encourage sustainable commuting. A 2019 law mandates companies to discuss sustainability with their employees and propose sustainable commuting plans. One significant measure introduced is the "forfait de mobilité durable," a tax-free amount allocated to employees to support sustainable commuting options.

To facilitate this, a minimum viable product (MVP) of a Mobility as a Service (MaaS) application was developed. This app, in collaboration with Visa, includes a virtual card that allows employees to access multiple sustainable transport modes. The initiative is currently being tested with local businesses.

The city collaborates with local development agencies to engage enterprises and ensure the willingness of employees to adopt the forfait. Efforts are ongoing to integrate various mobility providers and multimodal options into the application. Communication toolkits are used to nudge employees towards using the app, ensuring widespread adoption and usage.

LEU_06

The measure was presented by Ester Dewil, from LEUVEN municipality.

Leuven focused on providing financial incentives to promote public transport, particularly targeting specific groups like children and university students. Collaborating with the University of Leuven, the city made public transport more affordable for students.

Leuven conducted an extensive analysis of all financial incentives and is now implementing a mobility budget to be used alongside a multimodal transport application. However, the city faces challenges in ensuring inclusivity, particularly for individuals without digital skills. Suggestions from public feedback included developing non-digital solutions like MOBIB cards, mobility cards that don't need an application to be used and, involving organisations for the elderly to educate them about available transport options.

The measure was in the first stages of development, so Leuven was interested in collecting good practices and successful experiences from other cities.

The representative from Rome provided additional insights, noting that Rome mandates companies with more than 300 employees to designate a Mobility Manager. These managers meet three times in a year with local authorities to discuss and implement incentivisation measures. Rome also emphasised the multiplier effect for better communication without heavy investment in advertising.

Another idea raised by participants focused on the role of younger people, mentoring the other members in their families. Young people are ready to adopt new mobility habits, and to change own habits is always difficult, so perhaps campaigns and incentives should focus on young people.

4.1.2. Conclusions

The workshop highlighted the diverse approaches cities are taking to promote sustainable transport. Mannheim's focus on honesty and comprehensive campaigning, Île-de-France's legislative measures and technological solutions, and Leuven's financial incentives and inclusivity efforts demonstrate a range of strategies that can be adapted and implemented based on local needs and contexts. The shared insights and experiences provide valuable lessons for other cities aiming to enhance the uptake of public transport and sustainable modes of transport.

4.2. Workshop 2: Measures' appraisal by horizontal partners, to support cities in the measures' preparation process

The goal of this workshop was to support cities in their tasks of developing UPPER measures, by challenging and improving their initial measure description (as presented in *UPPER Deliverable 2.2 Annex* [30]).

The process for this workshop was structured around several steps that were common across all the UPPER work packages and tasks where measures have been developed:

- Horizontal partners were asked to critically review the measures proposed by the cities. Not all the partners reviewed all the measures, and the reviewers were decided according to their expertise, or previous work.

- For reference, the horizontal partners, involved in T5.2, T5.3, T5.4, are: UITP, EMTA, RC, ICLEI, EIT UM, EPF, ECF, IFP. In addition, FAC, FIT and IBV, as task leaders, were also involved in the workshop preparation.

- The cities involved in the mobility measures linked to WP5 are BUD, IDF, HAN, LEU, LIS, MAN, OSL, TES. These cities, and also the partners being part of their clusters, have been involved in the workshop deployment.

- In their critical review of the measures, horizontal partners had to take into account the various documents already produced in UPPER, including but not limited to the user personas and experience notebooks of D2.1 [31], the SWOT analysis included in D2.2 [30], or the supporting policy frameworks and policy requirements in D2.4 [32].

- Based on the critical review of the measures to be developed within each Work Package, the horizontal partners had to commonly agree on a limited number of *Points of attention*, areas they consider the cities and measures should be focusing more on, and should be addressed moving into the implementation phase.

- The goal of these *Points of attention* was to extract common challenges that are shared in the design/development of several measures within the same work package, rather than a checklist per measure.

- An online workshop (proposed duration 2h) was organized per WP – so 3 in total – where the horizontal partners presented the *Points of attention* they had identified, together with potential recommendations or examples of how these could be addressed. Representatives from the UPPER partners responsible for the development and subsequent implementation of the measures actively participated in the workshop.

- The workshop of WP 5 was organized by ICLEI, with the direct support of the WP5 task leaders, i.e. FAC, FIT and IBV.

- Cities had the opportunity to see in advance the points of attention referring to the measures they were developing and to respond to and actively engage with the horizontal partners. Following a plenary introduction of the points of attention, two breakout sessions were organised in parallel for WP5, thus fostering engagement and a lively exchange between the participants.

- The online workshops were recorded.

4.2.1. Categories for the measure appraisal

The *Points of attention* are defined as topics related to measure development that cities are not taking into consideration or that are not properly addressed (according to horizontal partners' criteria). With the aim of defining a common approach for measures appraisal, a set of categories has been defined, which are:

1. Mobility as a Right: Universal accessibility leaving no one behind, overcoming any type of barriers (economic, physical, cultural, technological, geographical, or related to the process, among others).

2. Seamless multimodality/inter-modality: soft transitions, physical space, ticketing, and information.

3. Tailored communication for increased acceptance and buy-in: Communication adapted to different target groups.

4. Active stakeholder engagement during measure development: to define clearly how the stakeholders contribute to the measure implementation.

5. Data management and privacy: GDPR compliance.

6. Environmental impacts: CO_2 emissions, Energy use, and Air quality.

7. Social impacts: public and user health and wellbeing, coexistence-living peacefully, security/safety (with special attention to women and elderly people).

8. Target groups mainly impacted: to identify the target group/s that are mainly impacted by the measure.

9. Other.

It was assumed that these eight categories were covering all the topics addresses by the mobility measures linked to WP5, and all the issues related to measure should be related to them. Nevertheless, an additional category was considered (*Other*), in order to include singular topics.

4.2.2. Evaluators' assignment

This subsection presents the horizontal partners selected to appraise the different mobility measures, based on their competencies and the involvement in the different tasks. This evaluators' assignment was made to ensure that the workshop's team was going to produce a minimum number of *Points of attention* per measure, as it was mandatory for these selected partners to appraise the measure. Nevertheless, the appraisal process was open for all the horizontal partners and task's leaders involved in WP5.

Table 4: Selected partners to generate Points of attention for WP5's measures.

T5.2 Incentivise PT offer and active modes in the living labs		
City	Measure description	Appraised by
ROM_09	Incentive packages to support multimodality in Rome	ECF, EPF, IFP
IDF_07	To incentivise the use of Public Transport for commuters in the Île-de-France region using mobility credits	ECF, EPF, IFP, UITP
LEU_05	Mobility for all by optimising the use of financial incentives to increase the share of Public Transport users in Leuven	ECF, IFP, EPF, EMTA
TES_10	Incentivise the use of Public Transport in combination with active modes in Thessaloniki	ECF, EPF, IFP, UITP
OSL_04	Reduce dependency on car ownership in Oslo	ECF, EPF, IFP
T5.3 Innovative strategies and solutions to improve public perception of PT		
IDF_08	Improve public perception of PT	ECF, EPF, IFP, ICLEI, EMTA
LIS_10	To improve the quality and the efficiency of the bus service	ECF, EPF, IFP, ICLEI, EMTA
BUD_03	To understand dependencies between the level of service and passenger satisfaction	ECF, EPF, IFP, ICLEI, EMTA
T5.4. Behaviour-change oriented mechanisms to promote the use of PT		
IDF_01	Participative governance framework for the update of the regional SUMP	RC, IFP, UITP, ECF, EPF
MAN_01	Establish participative governance and dialog formats to address the citizens with a focus on the (special) needs of user groups	ICLEI, UITP, IBV, EPF, IFP
LIS_03	To improve the mobility planning	EMTA, EPF, RC, ECF, IFP
MAN_02	Campaigning for sustainable forms of transport, such as PT, walking and cycling. Establishing a PT culture with PT as a green, safe, inclusive, and social space	EPF, ECF, IFP, UITP, EITUM
LIS_08	To implement campaigns and partnership initiatives	EMTA, ICLEI, FAC, EPF
LEU_06	To launch communication campaigns and digital tools to increase the uptake of PT	UITP, EITUM, FAC, EPF

4.2.3. Template for appraisal

A template to appraise the measures listed in Table 4 was defined. The template consisted of a table in *Excel* format, with the following fields:

- *Measure ID*: The list of measures linked to WP5 (Table 4) could be selected from an unfold menu.

- *Appraised by*: The list of horizontal partners involved in the measures' appraisal (UITP, FAC, EMTA, RC, ICLEI, EITUM, IBV, EPF, ECF, IFP, FIT), could be selected from dropdown list.

- *Point of attention category*: The list of categories defined for the appraisal (section 4.2.1) could be selected from a dropdown list.

- *Evaluation result*: In this column the entity performing the evaluation had to explain the issues or the aspects (point of attention) to be considered when developing the mobility measure.

- *Solution you can present/further reading or documents presenting this*: This column was included in order to the evaluator could provide references or implemented solutions related to the appraisal.

Measure ID	Appraised by	"Point of attention" category - please select one from the list below	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this

Measure	Apprised by	"Point of attention" category
ROM_09	UITP	Mobility as a right: Universal accessibility leaving no one behind.
IDF_07	FAC	Seamless multimodality/intermodality
OSL_04	EMTA	Tailored communication for increased acceptance and buy-in
LEU_05	RC	Active stakeholder engagement during measure development
TES_10	ICLEI	Data management and privacy
IDF_08	EITUM	Environmental impacts (CO2 emissions, energy use, and air quality).
LIS_10	IBV	Social impacts (health&wellbeing, coexistence, security/safety)
BUD_03	EPF	Target groups mainly impacted
IDF_01	ECF	Other
MAN_01	IFP	
LIS_03	FIT	
MAN_02		
LIS_08		
LEU_06		

Figure 8: Template prepared to collect Mobility Measures points of attention.

Figure 8 presents how the filled in template looks for the third mobility measure of Budapest (BUD_03). The complete collection of points of attention is presented in ANNEX 2.

WP5 appraisal of measures: distribution per categories
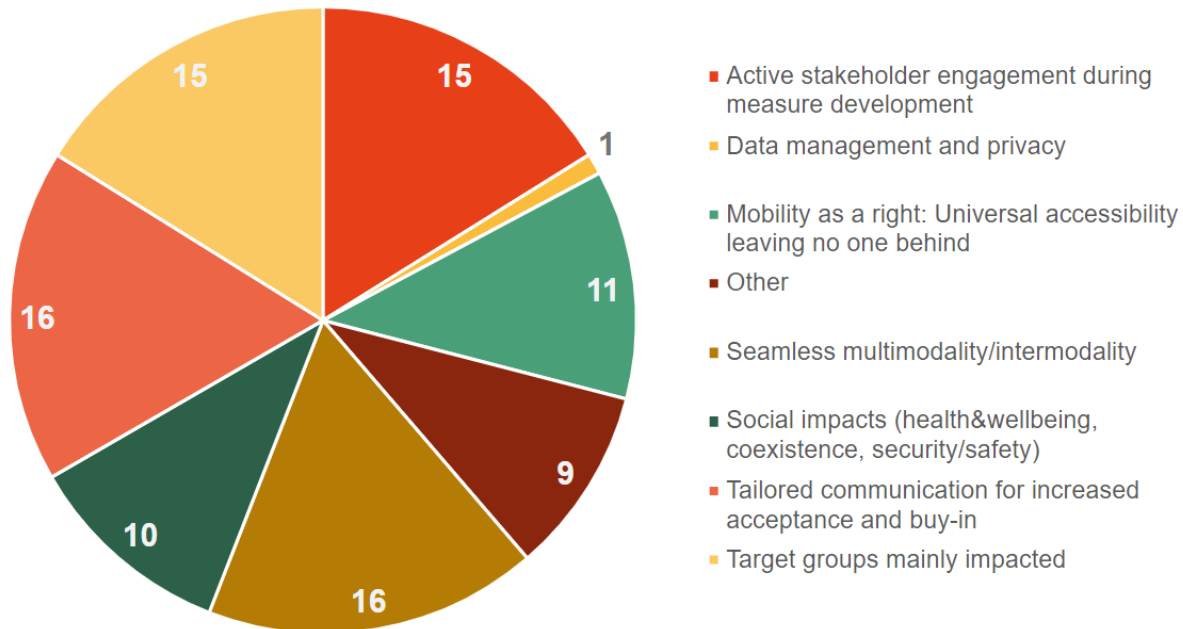
Figure 9: The number of appraisals for each defined category.

A total number of 93 points of attention were collected (a mean value of 6 appraisals per mobility measure). Figure 9 presents the distribution of appraisals per category. A first group of categories comprehending around 15 measures can be identified. These categories are *Multimodality*, *Tailored communication*, *Target groups* and *Stakeholder engagement*.

A second group of points of attention, comprehending between 9 and 11 entries can be identified for *MaaR* (Mobility as a right), *Social impacts* and *Other*. The Data management only collected one entry for WP5's mobility measures.

4.2.4. Format of the workshop

The workshop concept was conceived so as to facilitate an open discussion between horizontal partners and the cities involved in WP5 measures, on the points of attention appraised. With this aim in mind, we defined a workshop in two stages: a plenary session aimed to sensitize the participants on measures and points of attention, and a second stage where participants were divided in two groups, in order to facilitate discussion guaranteeing the attendance of the cities (in case only one representative per city could attend to workshop. Prior to the workshop, and in order to sensitize the cities having mobility measures in WP5 in the appraisal process performed by the horizontal partners, the collection of *Points of attention* presented in ANNEX 2, and the analysis per category presented in ANNEX 3, were shared.

The two stages session was organized as follows:

- **First part (plenary Introduction) (35 minutes):**
  1. Welcome and Introduction (5 minutes). ICLEI.

     Brief overview of the workshop objectives, agenda, and guidelines for participation.
  2. Preview of City Measure Frameworks (18 minutes) Cities: BUD, IDF, LEU, LIS, MAN, OSL, ROM, TES.

     Representatives from UPPER cities presented their measure frameworks in one or two slides (with a

picture), highlighting 1 or 2 learning points (2 minutes each). Cities were given the opportunity to share their perspectives and goals for measure development. 1 measure per city, 8 measures (focus on the most problematic ones, one picture of the measures).

3. Presentation of Common Points of Attention (10 minutes). UITP

4. Horizontal partners presented common points of attention identified across measures within WP5. Emphasis on general weak points applicable to multiple measures (and strong ones to focus on). Plenary

5. Recap and Transition to Breakout Sessions (2 minutes).

- **Second part (breakout sessions) (40 minutes):**

Breakout Sessions: Interactive Workshops with Cities. Participants were divided into breakout groups, each focusing on addressing specific points of attention identified in the measures. Horizontal partners facilitated discussions and provided insights on potential solutions or recommendations. City representatives engaged with horizontal partners to discuss and to refine their proposed measures. Opportunities for collaborative problem-solving, idea generation, and feedback exchange.

1. Breakout session A: ROM, IDF, TES, OSL, 6 measures. Led by IBV (FAC support).

   - ROM_09: Incentive Multimodality
   - IDF:
     - IDF_07: Incentive commuter region IDF
     - IDF_08: Improve perception of PT
     - IDF_01: Participative update of SUMP
   - TES_10: Incentive PT & Active modes
   - OSL_04: Reduce dependency on car ownership

2. Breakout session B: MAN, LEU, LIS, BU, 8 measures. Led by FIT.

   - MAN:
     - MAN_01: Participative on special needs
     - MAN_02: Campaigns on sustainable transport
   - LEU:
     - LEU_06: Campaign to increase uptake of PT
     - LEU_05: Mobility for all
   - LIS:
     - LIS_03: To improve the mobility planning
     - LIS_08: To implement campaigns
     - LIS_10: Quality of bus service
     - BUD_03: Service level & Satisfaction
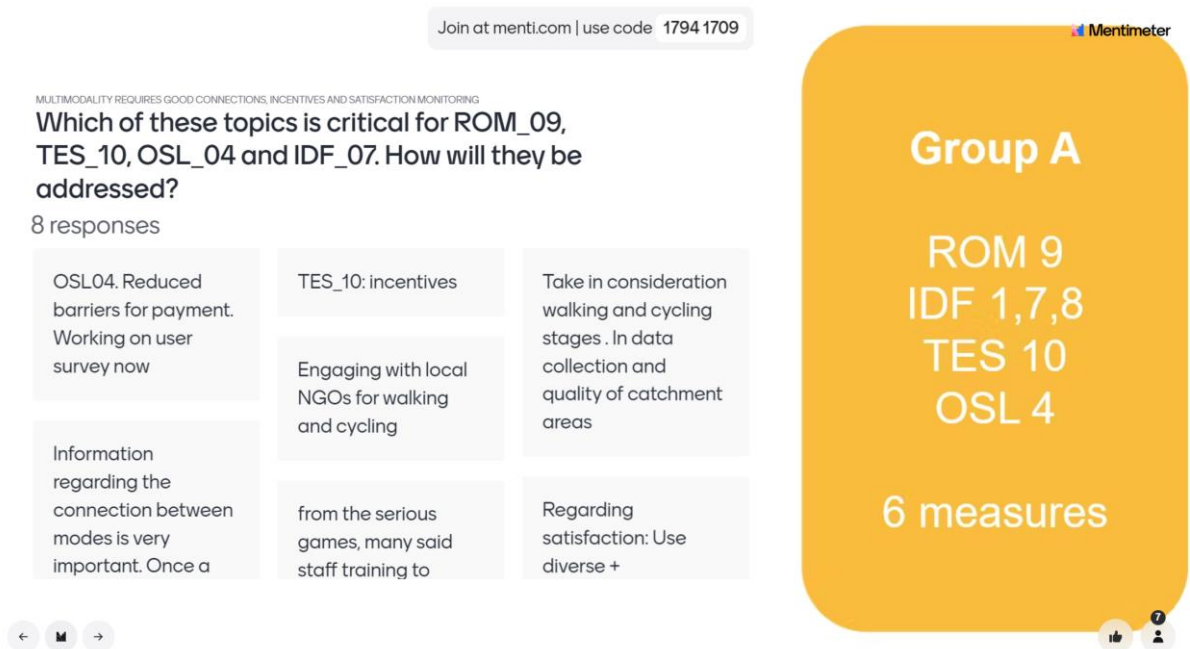
Figure 10: Comments of the questions focused on Multimodality, in the breaking session A.

Format of the breakout rooms:

The discussion took place supported by the Mentimeter platform[6]. Based on the open-ended format of the Mentimeter platform, the breakout sessions moderators (IBV, FAC and FIT) proposed questions related to the *Points of attention*. These questions were included in a slide of the Mentimeter platform, and the horizontal partners and the cities could contribute with comments, generic or linked to concrete mobility measures (Figure 10).

Guiding questions:

- Group A:
  - **Multimodality** requires good connections, incentives for different transport modes (not only PT but also shared and active modes) and satisfaction monitoring. Which of these topics is critical for ROM_09, TES_10, OSL_04 and IDF_07. How will they be addressed?
  - PT has different **social impacts**, such as health&wellbeing and inclusiveness. In which of these aspects will focus the multimodal, the perception and the behavioural measures? How will these topics be addressed?
  - PT **stakeholders** are also the citizens. How are they being involved in the measure development and implementation? What alternative channels do we have to online surveys?
  - MaaR: Multimodality and sustainable mobility involve active mobility, including walking. How to **include** persons with functional diversity (musculoskeletal, deaf, blind, …) and elderly people? And how to overcome cost-barriers?
  - **Tailored communication** requires information on users groups expectations and needs. What communication formats will be developed to reach different users groups for planning, for real-time

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[6] https://www.mentimeter.com

information, for service information, …? What formats combination should be employed (video, audio, text, infographic, …)?

- Similarly, **targeted incentivisation** (both to individuals, but also situation-dependent: e.g. time of the day, day of the week, means of transport...) can increase the behavioural change effects and provide a better use of resources, are there any plans in this sense?

- Are private cars users the only mobility users involved in the behavioural change? What other groups of users should be involved? How can these **users' groups** facilitate a behavioural change?

- Which are the main features characterizing **micro-mobility**? How the **environmental impact** relates to measures promoting multi-modality, PT perception, and behavioural change?

- The use of monetary incentives often raises equity concerns, since some users might be left behind, how will your measure address this?

- Group B:

  - Are the 6 **target groups** identified in UPPER: young people, elderly people, women, adults with children, functional diversity people, low-income people enough representative for your measure? How to encourage these target groups to participate?

  - Are local associations and local shops included among the **stakeholders** of the measure?

  - Which kind of channels will be used to design **tailored communication**? There will be a combination of non-digital communication, traditional marketing, social media, and other communication channels?

  - **MaaR**: How to address the need of some users that cannot or don't want to access digital platforms for tickets or information?

  - Can the **environmental impact** be used to enhance behavioural change, and cultural one of the measures? How could this be carried out effectively?

  - Are micro-mobility and soft mobility modes adequately promoted in the measure considering their significant **social impact**?

  - How much compliance with **GDPR privacy regulations** and all the new AI acts can present obstacles to the implementation of measures?

    - ❖ How to promote soft mobility (walking and cycling) in **multimodal hubs** and in ticketing?

ANNEX 4 presents the main results obtained in the workshop for both groups of the breakout sessions.

4.2.5. Recommendations per measure

In this section, the list of the points of attention identified in the workshop of the WP5 are presented.

4.2.5.1. Democratic Governance

4.2.5.1.1.   IDF_01: Participative governance framework

Table 5 presents the *Points of attention* appraised by the horizontal partners for the mobility measure IDF_01. The categories considered to assess this measure are:

- Stakeholder engagement (2)

- Social impact

- MaaR

- Multimodality (2)

Table 5: Points of attention appraised for mobility measure IDF_01

Appraised by	"Point of attention" category	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
ECF	Active stakeholder engagement during measure development	Make sure to include civil society organisations (including cyclists, pedestrians and passenger associations) in the SUMP update process	
IFP		Include walking organisations in the engagement	Include 60 million de pieton and Rue d´Avenir
EPF	Social impacts (health&wellbeing, coexistence, security/safety)	You may consider bringing in user/citizen representatives from local organisations, so that their perspectives are also taken into account. The citizens' perspective is important in ensuring sustainable urban mobility planning	E.g. contact organisations representing passengers, cyclists, and pedestrians, but also organisations representing different target groups like the elderly, children, people with a disability, etc.
UITP	Mobility as a right: Universal accessibility leaving no one behind.	The evaluation of the effects of the measure have also well been looked at and identified, specifically taking into consideration the qualitative and fluidity aspect measures are supposed to bring.	"Introduction of new mobility services by local authorities, which will complement the existing transportation options and increase the attractiveness of the area": as well as a strong alternative in case of disruption of public transport
UITP		Clear objectives set as well as a series of measures.	Implement a MaaS: how does this articulate with existing MaaS provided by the authority and operators?
UITP	Seamless multimodality/intermodality	The network of stakeholders involved has been well designed. Question: what about connecting with neighbouring groups of communes? What about connecting to the main traffic generators in the territory? What about connecting to new mobility service provider as well (SWOT analysis)?	"Development of new cycling infrastructures, such as bike lanes, bike parking, bike sharing, etc., to encourage more people to use bicycles as a sustainable and healthy

		mode of transport, and": should we consider these infrastructures be made fit for the purpose of other new mobility services and modes (including parking space).

This mobility measure, as was initially defined at the time the workshop was performed, is related to involving local stakeholders in the definition of a SUMP for a region. Accordingly, the recommendations of the horizontal partners are mainly focused on the following aspects

- To include citizenship representatives in the group of people to assess the SUMP. Among these representatives, the active mobility community is very important, as they are very committed to the sustainable mobility.

- To guarantee the inclusiveness of the new mobility solutions to be implemented, users' groups with special needs (functional diversity) should also be included in the SUMP assessment.

- The assessment to be performed by citizens should focus on specific aspects and concrete measures.

4.2.5.1.2. MAN_01: (To) Establish participative governance and dialog formats

Table 6 presents the *Points of attention* appraised by the horizontal partners for the mobility measure MAN_01. The categories considered to assess this measure are:

- Target groups (7)

- Stakeholder engagement (2)

- Social impact

- Tailored communication

- Data management

Table 6: Points of attention appraised for mobility measure MAN_01

Appraised by	"Point of attention" category	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
EPF	Target groups mainly impacted	Important to involve a range of user groups. You may also consider making participation fun, to incentivize and increase participation in the data collection activities	Gamification can help attract participation in the data collection activities
IBV		In UPPER user research, we have identified six relevant target groups: young people, elderly people, women, adult with children, functional diversity people, low-income	UPPER Deliverable D2.2

		people. How are you going to identify the relevant target groups in your city?	
IBV		How are you going to encourage the participation of these relevant target groups?	
ICLEI		Particular attention should be paid to the identification of target groups and use-cases. Understanding the unique mobility needs of these groups will be key in designing effective dialogue formats and advisory services tailored to their requirements.	Possibility to explore existing mobility advisory services in similar contexts or case studies of successful implementations.
UITP		Process of implementation; what about targeting specific and large traffic generator?	
UITP		Aims: promoting multimodal behaviour? Supporting behaviours that are sustainable	
IFP		Include persons with disabilities, teenagers, non-German speakers, and so on.	Engage with local active association
UITP	Active stakeholder engagement during measure development	Measure output: "Data collection through different dialogue" + important to know the advantages and limits of these data + what about qualitative data collection looking at perception, habits and leviers to change them? + what about engaging directly through apps to ask on people's experience (direct collection of experience to inform the PTO and PTA in real time on remarks from users, using big data to analyse?)	
UITP	Social impacts (health&wellbeing, coexistence, security/safety)	Other data: could space planning, urban planning, urban projects, as well as the socio-demographics of the territory be used?	Resilience strategies: "use political support" ... it is key to ensure long lasting political support and interest for these soft measures
UITP	Tailored communication for increased acceptance and buy-in	Target group: what about considering car drivers who could potentially become PT users as well (promote modal shift)?	
UITP	Data management and privacy	Should there be an evaluation dimension to adjust and adapt the policy and avoid it is abandoned?	

This mobility measure is aimed at facilitating participative governance and implementation of communication channels with the citizenship, to launch a mobility advisory service. Accordingly, the recommendations of the horizontal partners are mainly focused on the following aspects:

- To identify the relevant users' groups in the city, in order to involve them in all the initiatives launched to improve the sustainable mobility. A good identification of the mobility needs of local users' groups is critical to define services useful for the citizenship.

- To involve PTOs and PTA in the measure development, by providing detailed information, and if possible, datasets.

- To include in the discussion with citizenship and stakeholders the impact of the new measures on urban planning.

- Car drivers are a relevant users' group to progress in a behavioural change in mobility, so they should be included in the community participating in assessing mobility measures within the city.

- Mobility policies should be evaluated, in order to avoid they become obsolete and low relevant.

4.2.5.1.3.   LIS_03: To improve the mobility planning

Table 7 presents the *Points of attention* appraised by the horizontal partners for the mobility measure LIS_03. The categories considered to assess this measure are:

- Target groups (2)

- Multimodality

- Stakeholder engagement

- Tailored communication

- Other (2)

Table 7: Points of attention appraised for mobility measure LIS_03

Appraised by	"Point of attention" category	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
EPF RC	Target groups mainly impacted	Regarding the mobility pattern study, it's important to use a qualitative approach and speak with users and non-users (especially from different groups). This will help to understand their wishes, any barriers they face while traveling, and what can be implemented to suit their diverse needs. In the description you mentioned you plan to carry out and in-depth study of bus network and passenger needs. Have you undertaken or are you considering passengers directly, and specifically women and elderly people in order to identify their particular needs, perception of the service, and room for improvement?	

IFP	Seamless multimodality/intermodality	Include walking and cycling comfort, safety and security in the catchment area (at least 300 meters from bus stops and 700 m from larger interfaces)	Walkability tools, GIS information on width of sidewalks and bike paths.
IFP	Active stakeholder engagement during measure development	Include local associations in the engagement	Engage with Estrada Viva, ACA-M, APSI
RC	Tailored communication for increased acceptance and buy-in	In the list of stakeholders required for the implementation, it seems it is missing to list the main objectors to a more ambitious SUMP? Have you identified these actors? How are you planning to come around them or to mitigate backlash from them?	
RC		What are your previous SUMP's main strengths and shortcomings that you aim to address with this new version? To what extent have you systematically monitored SUMP measures and goals from that would inform actions in the future?	
RC	Other	In the measure description, you mentioned the ambition of becoming a climate-neutral city and that the previous/current SUMP is not ambitious enough to achieve that goal? Do you have an idea of what would be the "smart" to be achieved in terms of mobility for Lisbon to become or aim for climate neutrality?	

This mobility measure comprehends diverse sub-measures, aimed at improving SUMP at local and metropolitan level, and implementing interventions to increase safety in PT. Citizenship and mobility stakeholders are involved in the development of this mobility measure. Accordingly, the recommendations of the horizontal partners are mainly focused on the following aspects:

- To identify the relevant users' groups in the city, in order to involve them in all the initiatives launched to improve sustainable mobility. A good identification of the mobility needs of local users' groups is critical to define services useful for the citizenship.

- To include walking as a mobility resource for multimodality, adapting the infrastructures of other transport modes to this.

- To include local association in the participative process to assess the new mobility plans.

- Car drivers are a relevant users' group to progress in a behavioural change in mobility, so they should be included in the community participating in assessing mobility measures within the city. This group could be reluctant to sustainable mobility interventions, so including them could be relevant.

- The mission cities' objective should be present in all the assessment process for the new mobility plans.

4.2.5.2. Campaigns

4.2.5.2.1.   MAN_02: Campaigning for sustainable forms of transport

Table 8 presents the *Points of attention* appraised by the horizontal partners for the mobility measure MAN_02. The categories considered to assess this measure are:

- Tailored communication (2)
- Multimodality
- Other
- Mobility as a Right

Table 8: Points of attention appraised for mobility measure MAN_02

Appraised by	"Point of attention" category	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
EITUM		It would be great to have some insights on how the communication campaign was designed. In low-budget communication campaigns, social media plays a significant role. Instagram, one of today's most-used platforms, is an adequate channel to announce new lines and discounts, reaching more people, especially young individuals. For more traditional means, door-to-door leaflets or leaflets distributed at schools, city halls, and museums are also useful.	
EPF	Tailored communication for increased acceptance and buy-in	Consider also non-digital and fun ways to inform people about the sustainability of PT and active modes	Consider non-digital and 'fun' campaigns. EPF member Bus Users UK also has a really nice example called "Catch the bus month" to get people to use the bus more and learn about its benefits. https://bususers.org/ctbm-partner-pack/ https://www.epf.eu/wp/catch-the-bus-month-2023-celebrating-the-benefits-of-bus-travel/
EITUM	Seamless multimodality/intermodality	Other active modes other than PT also need to be actively promoted	An example of a project aimed at promoting active mobility through gamification and a reward system, in collaboration with local

			businesses: https://marketplace.eiturbanmobility.eu/best-practices/braga-accelerating-the-modal-shift-through-gamification-and-rewards
EPF	Other	The measure title mentions active modes, but they are not mentioned in the description	
IFP	Mobility as a right: Universal accessibility leaving no one behind.	Include active mobility (walking and cycling) in the Climate campaigning	

This mobility measure is aimed at designing and launching a communication campaign to promote PT as a sustainable transport mode, green, safe and inclusive. Accordingly, the recommendations of the horizontal partners are mainly focused on the following aspects:

- To consider social media as a platform to launch low-cost communication campaigns. In addition, other traditional resources like leaflets could be very useful to reach other users' groups.

- To include walking or cycling (active modes) as a mobility resource for multimodality.

- Active mobility combined with other transport modes (multimodality), to boost the sustainable features of the public transport.

4.2.5.2.2.   LIS_08: To implement campaigns and partnership initiatives

Table 9 presents the *Points of attention* appraised by the horizontal partners for the mobility measure LIS_08. The categories considered to assess this measure are:

- Social impact (3)

- Stakeholder engagement

- Mobility as a Right

- Multimodality

Table 9: Points of attention appraised for mobility measure LIS_08

Appraised by	"Point of attention" category	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
EPF	Social impacts (health&wellbeing, coexistence, security/safety)	The objectives of the measure mention active modes, but there is nothing mentioned in the description about it. It will therefore be interesting to also showcase the benefits of active	

		modes, e.g., on health. Similarly, you can gather people's perceptions of walking and cycling, e.g., related to the city infrastructure	
EPF		Both environmental and social impacts will be interesting to highlight in this campaign. For example, PT can provide access to social opportunities, which is especially relevant for people who are socially isolated	UITP has a nice infographic about some of the benefits of PT: https://cms.uitp.org/wp-content/uploads/2022/01/Public-Transport-Benefits-Mobility-for-YEU-Benefits-for-all.pdf
FAC		It's important to integrate active modes like walking and cycling into the marketing campaign, emphasizing their health benefits and assessing perceptions related to city infrastructure for these modes and highlight both environmental and social impacts of public transport services, particularly how they can improve access to social opportunities for isolated individuals.	
EPF	Active stakeholder engagement during measure development	The measure's title mentions partnership initiatives, but this seems to be lacking in the description. What types of partnerships do you plan to implement?	
ICLEI	Mobility as a right: Universal accessibility leaving no one behind.	They should ensure that the marketing campaign and service redesign efforts prioritize safety and security aspects, especially during night time operations, to alleviate potential concerns among citizens and enhance their confidence in using public transport,	
IFP	Seamless multimodality/intermodality	Walking as a stage of a Public Transport Trip is in average half the time of the whole trip (origin to destination). Important to access the quality of the walking stages.	Include walking and cycling in the marketing campaign

This mobility measure is aimed at designing and launching a communication campaign to promote the use of PT among private car drivers. Accordingly, the recommendations of the horizontal partners are mainly focused on the following aspects:

- To consider the benefits of active mobility modes for individual health, and also for the environment (pollution reduction). Moreover, the use of PT services could improve access to social opportunities to those that are isolated.

- The involvement of the stakeholder in the communication campaigns should be detailed.

- Safety and security aspects are very relevant for an inclusive PT. Mobility as a Right involve inclusiveness.

- Walking and cycling can foster multimodality, considering these activities as stages of PT trips.

4.2.5.2.3. LEU_06: To launch communication campaigns and digital tools

Table 10 presents the *Points of attention* appraised by the horizontal partners for the mobility measure LEU_06. The categories considered to assess this measure are:

- Target groups (2)

- Tailored communication (2)

- Multimodality

Table 10: Points of attention appraised for mobility measure LEU_06

Appraised by	"Point of attention" category	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
EITUM	Target groups mainly impacted	It would be great to share some insights of the two-pages published in a magazine. What was the objective of the two-pages? How was it created? Any public authority is signing the article? How would you identify target groups of people with negative perception on PT using this method? What is the analysed indicator here: number of magazines sold? Do you have information of the regular readers of the magazine where the two-pages was placed?	How about also doing a focus group of local residents eager to give their opinion on PT? The focus group should gather the most frequent users of PT but also include the ones that normally don't use it because of negative perception.
FAC		Make sure to address different groups with different strategies, drawing from LEU_05, to create a comprehensive nudging strategy.	
EITUM	Tailored communication for increased acceptance and buy-in	Nudging applications can be a useful resource to foster the uptake of park & rides. The municipality can collaborate with some companies who can offer rewards for the employees who use the nudging application and thus make use of park & rides.	
EPF		Important to consider that different groups receive their information in different ways. So traditional marketing will be important for this	

IFP	Seamless multimodality/intermodality	Walking as a stage of a Public Transport Trip is in average half the time of the whole trip (origin to destination). Important acknowledge the importance of the walking stages.	Include walking and cycling in communication strategy plan and communication campaigns.

This mobility measure is aimed at designing and launching a communication campaign to promote the use of PT, and increase its uptake. Accordingly, the recommendations of the horizontal partners are mainly focused on the following aspects:

- To identify the relevant users' groups in the city, in order to address them in the communication campaign. A good identification of the mobility needs of local users' groups is critical to define services useful for the citizenship.

- Nudging applications could be a relevant resource to address different users' groups in communications campaigns.

- Walking and cycling can foster multimodality, considering these activities as stages of PT trips.

4.2.6. High-level recommendations

The high-level recommendations are derived from workshop results, and are presented in ANNEX 4. All the measures included in T5.4 belonged to cities included in group B (Figure 10), except IDF_01. But as this measure was redefined after workshop completion (see section 4.2.5.1.1), this section will present only results generated in the group B of the workshop, where Manheim (MAN_01, MAN_02), Lisbon (LIS_03, LIS_08) and Leuven (LEU_06) were represented.

As presented in section 4.2.4, the guiding questions of the workshop for the breakout sessions were generated considering the categories selected by the horizontal partners to produce the mobility measures' Points of attention. Consequently, the high-level recommendations produced for the mobility measures development are arranged around these categories. These high-level recommendations per categories are:

- **Target groups** and participation: The identified target groups in UPPER's user research [31] —young people, elderly individuals, women, adults with children, persons with reduced mobility (PRM), and low-income populations—were considered within the measures. However, additional groups such as LGBT individuals, nonbinary persons, ethnic minorities, migrants, night-time workers, rural residents, potential users, and childless employees; which are crucial for comprehensive representation, were missing. Tailored communication strategies integrating digital platforms, traditional marketing, social media, and other channels were recommended to encourage their participation.

- **Stakeholder engagement**: Local associations and shops were confirmed as integral stakeholders, to be engaged through their larger associations and lobby groups. Each city emphasized tailored participation strategies; for instance, Lisbon (LIS_03) involved associations in communication campaigns and stakeholder inclusion in major events.

- **Tailored communication**: Cities should ensure versatile communication strategies encompassing non-digital communication, traditional marketing, social media, and other channels. Examples include Leuven's (LEU_06) integration of digital and non-digital approaches, and Lisbon's (LIS_08) multi-channel engagement campaigns.

- **MaaR** and accessibility: To address accessibility concerns among users unable or unwilling to access digital platforms, cities should ensure availability of traditional formats like bus stop displays and call centres alongside digital options. Mannheim, for instance, consistently offer non-digital ticketing alternatives such as offices and machines.

- **Environmental impact** and behaviour change: Environmental impact can be used as an argument to promote behavioural change. Efforts to do so varied among UPPER cities. While Lisbon acknowledged environmental messaging's impact, Leuven highlighted health incentives as effective for promoting modal shifts, reflecting diverse approaches to behaviour change.

- Promotion of Mobility Modes and **Social impact**: The promotion of micro-mobility and soft mobility modes was underscored for their significant social impacts. Leuven's efforts included financial incentives for bikes and bus passes, emphasizing the importance of PT quality implementation for sustainability.

- Regulatory Challenges and **Data management**: Compliance with GDPR privacy regulations and new AI acts posed potential obstacles. Cities, as exemplified by Leuven, emphasized the necessity of clear consent practices to ensure data protection while benefiting from AI technologies.

- Soft Mobility in **Multimodal** Hubs: Cities need to focus on enhancing accessibility and visibility of walking and cycling options near public transport hubs. Lisbon emphasized universal accessibility in interface design and integration of public transport with bike-sharing to provide comprehensive mobility solutions.

5.Measures preparation process

5.1.   Demo site ILE DE FRANCE

5.1.1. Measure IDF_01: Participative governance framework for the update of the regional SUMP

5.1.1.1. Description of the measure and main outcomes expected

In Ile-de-France Region, the SUMP is regional. Each territory is due legally to convert it into local SUMPs and Versailles Grand Parc (VGP) territory has yet to do it. In this context, with the strong interest of VGP, it is proposed to carry out a detailed study to shape the implementation of a local SUMP in VGP to accompany a better development of urban transport at a local scale.

The objective of this pre-study is to make an initial diagnostic of technical framing elements that make up a local SUMP and to propose some examples of action (1 or 2 for each theme) to be carried out. It is a question of making a diagnostic of the situation and visualizing how, based on Île-de-France's SUMP, the territory of Versailles Grand Parc can carry out all or part of the actions at the local scale with the aim of strengthening the attractiveness of active modes and public transport.

ANNEX 5 presents the measure monitoring template for this mobility measure.

5.1.1.2. Preparation of the measure

The first step of this measure is focused on consolidating a table of content with Versailles Grand Parc. Although it may seem trivial, it is crucial to fine tune this step with the territory as it will become the very base of our work further on. The whole measure is based on adapting the regional SUMP voted in March 2024 at a local scale and there's where this first step becomes important. Global subjects and logics do not necessarily correspond to local needs. Therefore, and with the help of VGP, the analysis must be carefully adapted to better take into consideration local needs and priorities.

The second step would be to perform the analysis, thematic by thematic to cover all the subjects required to implement a successful and, more importantly, a useful local SUMP. It will cover all mobility subjects that are relevant to VGP's territory and propose idea of actions that can be taken on the territory to stimulate a positive change in the practices of mobility.

The third step will consist of a first delivery of the analysis to VGP's technicians. The objective will be to make the final adjustments to the global work we've made to finally get to the fourth and final step.

This final step is about presenting the analysis to elected officials at all scales of VGP territory: communes (18) and the Communauté d'Agglomération de Versailles Grand Parc. The objective will be to convince these officials that one or more of the presented projects is relevant to get involved in it, whether it is at a communal level, a multi-communal level or at the whole agglomeration scale.

5.1.1.3. Challenges & Mitigations

For IDF_01, some challenges were encountered, notably based on Île-de-France administrative system. The first idea was to create a platform to allow different instances of public actors to get in touch and to be more efficient in the redaction of the SUMP, to better consider in the regional SUMP the local needs. However, this could not proceed as planned, because of delays in the launch of the new SUMP and because of the unresponsiveness of some of these instances of public actors.

Taking this into consideration, it was understood that it would be difficult in this situation to be able to deliver this platform and was proposed to study the possibility of a local SUMP at VGP scale.

Here, there are also some challenges, which will be met at the end of the measure. Transports and mobility are political battle ground, and the SUMP is based on the idea of taking concrete actions. If no public actors take interest in the subject, outcomes or actions we propose, the SUMP will stay at the idea stage.

5.1.1.4. Next steps towards implementation

The first activity related to consolidate a table of content with Versailles Grand Parc, is to carefully adapt an analysis which takes into consideration local needs priorities, more accurately. To achieve this aim, the active collaboration of VGP is mandatory.

This analysis must be performed thematic by thematic, in order to cover all the topics and subjects required to implement a successful local SUMP.

Once the analysis is concluded, it must be distributed to VGP's technicians, in order it can be assessed. Following the technical assessment, the analysis must be presented to the elected officials at all scales of VGP territory (communes (18) and the Communauté d'Agglomération de Versailles Grand Parc), in order the support from the public administration is fully assured.

5.2.   Demo site MANNHEIM

5.2.1. Measure MAN_01: (To) Establish participative governance and dialog formats to address the citizens with a focus on the (special) needs of user groups

5.2.1.1. Description of the measure and main outcomes expected

This measure will deliver several key outputs aimed at enhancing public transportation services and supporting the transition to sustainable modes of transport. Firstly, data on the mobility needs of relevant target groups and use-cases will be collected through a dialogue format involving at least 100 participants.

Furthermore, a concept for a modular and location-independent mobility advisory service will be developed. This advisory service should provide tailored information and support, making it easier for users to transition from individual car use to public transportation and other sustainable modes of transport. The service will offer relevant details on available mobility services, optimal ticketing options, and additional resources, all customized to meet the needs of specific target groups.

Within this process, relevant information materials will be produced in both digital and printed formats. These materials will be designed to provide clear and accessible information about the mobility advisory services and the various transportation options available. They will serve as an essential resource for users seeking to make informed decisions about their travel choices.

This measure also includes the piloting of the modular and location-independent mobility advisory service (s.a.). This pilot phase will test the effectiveness of the advisory service in real-world settings, allowing for adjustments and improvements based on user feedback and observed outcomes. The pilot aims to demonstrate the feasibility and benefits of the advisory service, paving the way for broader implementation.

ANNEX 6 presents the measure monitoring template for this mobility measure.

5.2.1.2. Preparation of the measure

The project began with inputs from user research and behavioural change best practices regarding the use of private cars and public transportation that have successfully been finalized. Additionally, data collection through dialogue formats on mobility needs, involving over 100 people, has been executed and finalized, providing a foundation of insights and information.

The next steps planned for measure development involve several key activities to ensure the successful implementation of the mobility advisory service. Initially, inputs are collected from user research and behavioural change best practices concerning the use of private cars and public transportation. This foundational step aims to gather valuable insights during the planning process.

The concept design for a modular and location-independent mobility advisory service is the next stage in the measure development plan. This design outlines how the service can be tailored to various user needs and operational settings.

Next, communication materials have to be designed to effectively convey information about the advisory service and the transportation options available. These materials are essential for promoting the service and ensuring that users can easily access and understand the provided information.

Finally, the mobility advisory service has to be piloted to test its real-world application and gather feedback for further refinement. This pilot phase is going to identify any necessary adjustments and demonstrate the service's benefits, setting the stage for broader implementation.

Further, the U-GOV platform have been tested within this measure to ensure its functionality and effectiveness.

As stated in the measure monitoring template (ANNEX 6), the planning has accumulated delays, and steps 4, 5 and 6 of the measure will be executed within WP6.

5.2.1.3. Challenges & Mitigations

While the data collection and innovative dialogue formats were not affected by unforeseen challenges, the sub-measure regarding the mobile mobility advisory service experienced some throwbacks. Due to a lack of resources, the measure preparation together with the relevant department takes longer than expected. Furthermore, the first option as platform for the mobile mobility advisory service, using an electric cargo bike, had to be dropped after getting to know details, practical challenges as well as cost of this solution. Those insights were gathered at a meeting with another PT operator that already utilizes such a solution and shared experiences and challenges. Currently an alternative platform is being considered.

5.2.1.4. Next steps towards implementation

Moving forward, the next steps include testing the U-GOV platform to ensure its functionality and effectiveness in supporting the advisory service. rnv is still awaiting additional input on this tool.

Following this, the concept design for a modular and location-independent mobility advisory service will be developed. This design will outline how the service can be tailored to various user needs and operational settings.

Next, communication materials will be designed to effectively convey information about the advisory service and the transportation options available.

Finally, the mobility advisory service will enter a pilot phase to test its real-world application and gather feedback for further refinement. This phase will help identify any necessary adjustments and demonstrate the service's benefits, preparing for broader implementation.

5.2.2. Measure MAN_02: Campaigning for sustainable forms of transport, such as PT, walking and cycling. Establishing a PT culture with PT as a green, safe, inclusive, and social space

5.2.2.1. Description of the measure and main outcomes expected

Until now, rnv faced constraints with its communications, as it was primarily focusing on product-related announcements rather than a comprehensive campaign promoting sustainable mobility. This approach lacked a unified effort to portray public transit as environmentally friendly, safe, and inclusive. The new communication campaign aims to fill these gaps by focusing on three main areas:

Firstly, it will launch a climate campaigning effort to establish a positive culture around public transit as a sustainable choice. This includes promoting its environmental benefits and its role in reducing carbon footprints.

Secondly, marketing efforts should emphasize how public transport can enhance connectivity, particularly in peri-urban areas, addressing the "last mile" challenge to complete journeys effectively.

Thirdly, the campaign should target specific groups to improve community perceptions of public transportation, aiming for inclusivity and safety. Additionally, specific measures include creating and updating a landing page to showcase rnv's contributions to climate protection. Moreover, the initiative will develop, supervise, and evaluate a sustainability campaign featuring events like "Earth Hour" or The National Garden Shows (BUGA 23).

ANNEX 7 presents the measure monitoring template for this mobility measure.

5.2.2.2. Preparation of the measure

The project began with finalizing and approving user research findings, providing a clear understanding of PT's strengths. Following this, comprehensive research was finalized and evaluated, enabling the identification of best practices and successful project benchmarks. Concepts for the communication campaign and landing page were developed and subsequently approved, ensuring alignment with the project goals.

Upon finalizing and approving the design of the campaign, including messages, channels and planning, the campaign was launched, and the project moved into the phase of collecting feedback on the campaign's performance. This data collection phase is for assessing the effectiveness of the campaign and making informed adjustments. The team is recording and evaluating the number of views generated across the landing page and social media channels, providing insights into the campaign's reach and engagement levels.

5.2.2.3. Challenges & Mitigations

The implementation process involving user research, concept development, design approval, feedback collection, view measurement, and campaign launch did present challenges. These include ensuring stakeholder alignment throughout the project, managing resources effectively, integrating diverse feedback cohesively and selecting appropriate metrics for evaluation.

5.2.2.4. Next steps towards implementation

The monitoring and evaluating of the relevant data are still ongoing.

5.3. Demo site LISBON

5.3.1. Measure LIS_03: To improve the mobility planning

5.3.1.1. Description of the measure and main outcomes expected

This measure focuses on the strategic planning/review of the Mobility in Lisbon to promote the use of PT, through the following actions:

Sub-Task 1: Adjustments to the metropolitan SUMP (TML[7]).

A new generation SUMP is currently being developed (from dec 2023 to August 2025), with territorial scope on Lisbon metropolitan area and timeframe set to 2030. A deeply participated Plan is expected as main outcome, accompanied by a SUMP digital tool and a Strategic Environmental Assessment.

Sub-Task 2: Adjustments to the municipal SUMP (CML[8]).

The development of the SUMP is based on a number of studies and data analyses, which support the city's planning to achieve the city's mobility goals and to strengthen the multi-modal mobility.

Sub-Task 3: New municipal road safety plan (CML).

The approval of the municipal road safety plan and the subsequent deployment of its action plan and the specific measures.

Sub-Task 4: Bus offer service evaluation and adjustments (TML).

To improve quality and reduce environmental and climate impacts, the metropolitan Bus offer service of Carris Metropolitana is continuously being evaluated by TML, the metropolitan transport authority, along with the 4 bus operators. This evaluation is done on a monthly basis, rather than early as initially defined.

Sub-Task 5: Studies for CARRIS network redesign (CARRIS[9]).

Focus groups engaging different user profiles will be conducted in parallel to the assessment of the current network to detect critical issues in the network coverage and highlight potential avenues for improvement. The findings will then be used to inform the Network Redesign process.

ANNEX 8 presents the measure monitoring template for this mobility measure.

5.3.1.2. Preparation of the measure

Sub-Task 1: Development of the new Lisbon metropolitan area SUMP (TML)

In the scope of the UPPER proposal, TML defined that it would evaluate the current Lisbon metropolitan Sustainable Urban Mobility Plan (SUMP), dated from 2016, in order to implement adjustments that would allow the SUMP to become up to date and reflect the current mobility situation in the Lisbon metropolitan territory.

Nevertheless, during the preparation phase, TML decided to develop a new generation SUMP, following the EC guidelines, a Plan that could better diagnose the status of the transport sector, define a new strategic vision, propose a new set of measures and implement them.

Therefore, TML developed the structure of a new generation SUMP to be developed with Lisbon metropolitan area as territorial scope and 2030 as it's timeframe.

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[7] Transporte e Mobiliidade Lisboa

[8] Camara Municipal Lisboa

[9] Public Transport Operator

During 2023, TML designed the terms of reference of the new Plan, now designated PMMUS (Plano Metropolitano de Mobilidade Urbana Sustentável) and launched a tender to get external expertise to help with the development of the Plan.

The tender was awarded, and PMMUS started to be developed in December 2023. The Plan is currently in the end of Phase I – Framework and Diagnosis. Phase II - Strategic vision, Phase III - Programme of measures and Phase IV – Implementation, monitoring and evaluation will follow. The Plan is intended to be ready by August 2025.

To develop a SUMP like PMMUS, with a metropolitan scale comprising 18 municipalities, is an exercise of high complexity and technical density. PMMUS aims to identify the mobility and accessibility needs and problems of the population of the metropolitan area, to establish a vision for a mobility ecosystem of the future in its territory, to define a set of strategic guidelines on the development of this mobility, and identify a program of measures and actions that allow the community to get closer to the established vision.
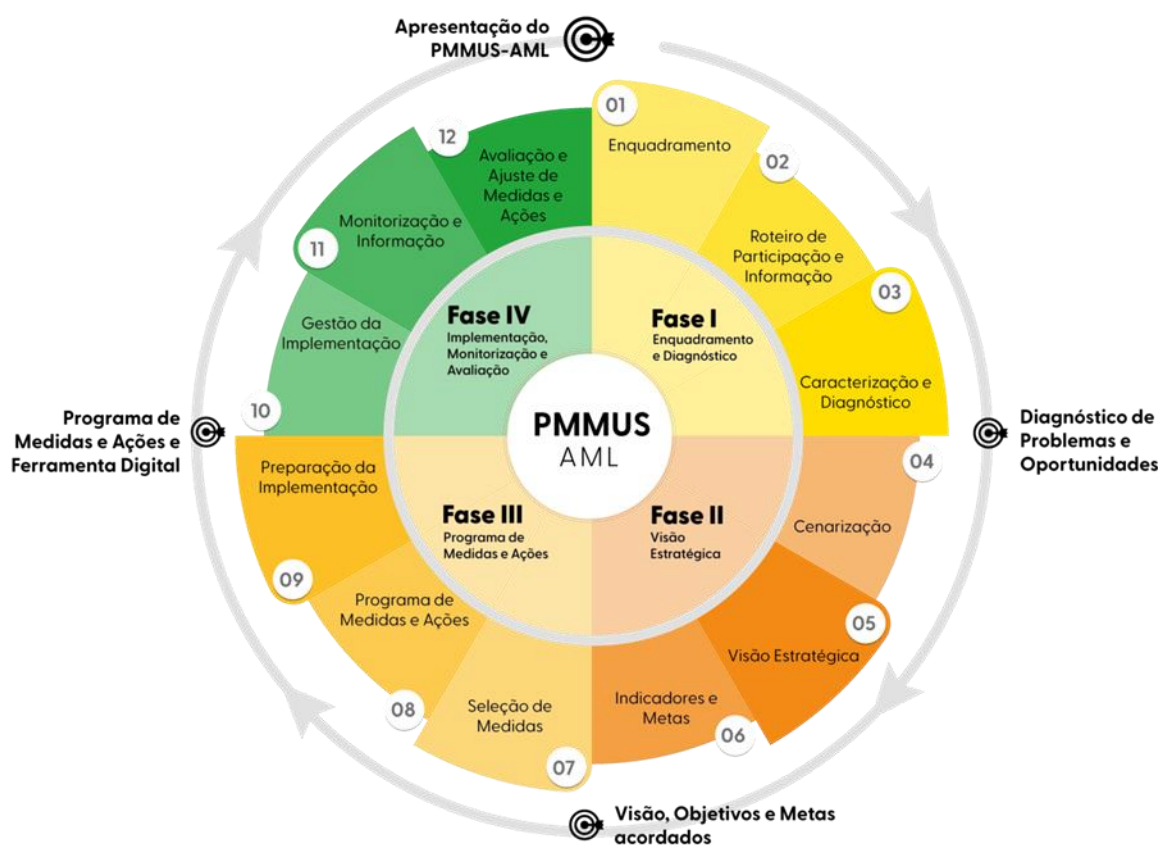
Figure 11: Methodology followed to develop the SUMP.

PMMUS follows a methodology defined by the European Commission in the "Guidelines for Developing and Implementing a Sustainable Urban Mobility Plan", and also inspired by the "Guide for the Preparation of Mobility and Transport Plans", published by the Portuguese Mobility and Transport Institute. The methodology is structured in 4 phases and consists of 12 coherent and sequential steps (Figure 11), each with a strong degree of dependence on the previous ones.

PMMUS design will be highly participatory process, with a high number of public participation moments planned, in different formats, that follow the different phases of the Plan.

Given that the development of a strategic instrument such as a mobility plan, although not binding, will necessarily lead to the approval of a program of measures, it is important to maximize the positive impacts and mitigate the negative ones, which is why TML decided that PMMUS would be subject to a Strategic Environmental Assessment (SEA), taking place in parallel to the SUMP (Figure 12).
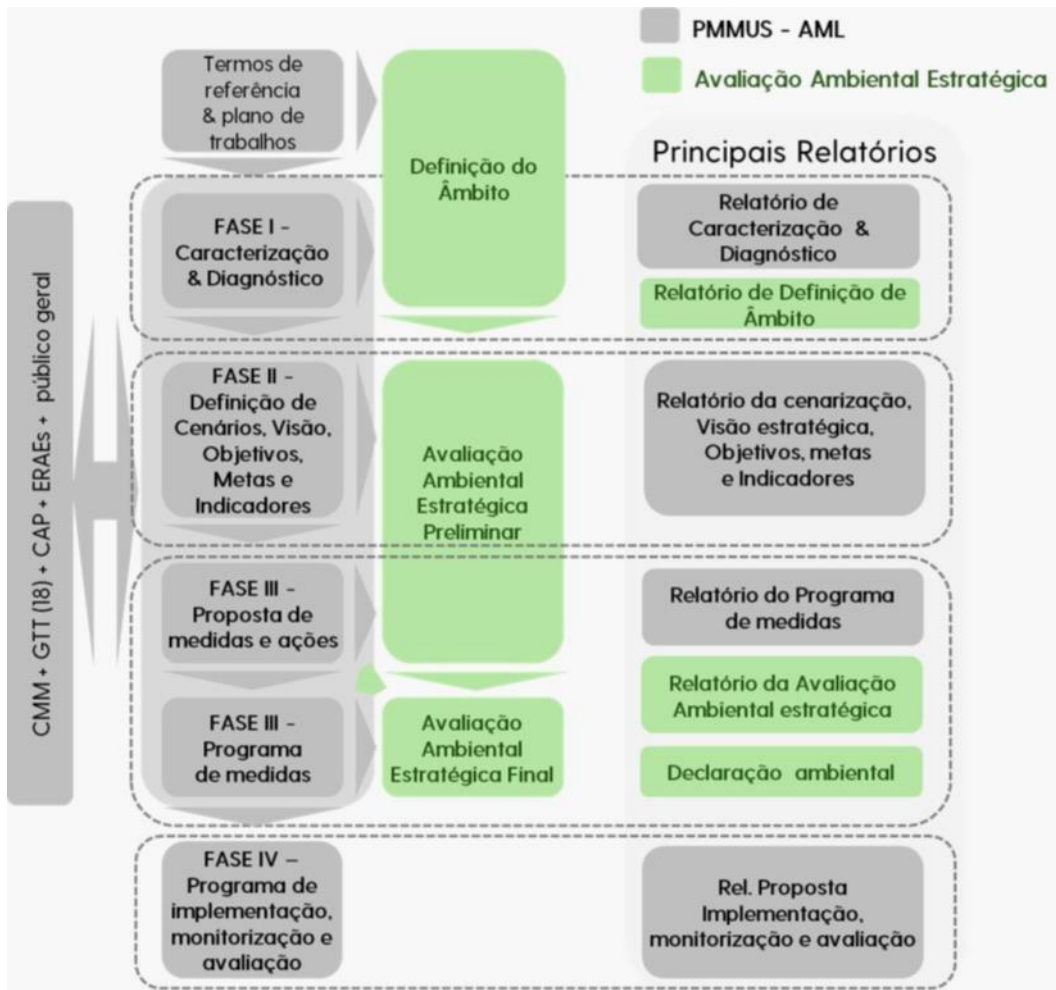
Figure 12: Integration of the SUMMP and the SEA.

The development of the PMMUS and the SEA follow a governance model that includes technical teams from TML, the regional political body AML, the 18 municipalities, a consultant company, a mobility advisory board and an environment advisory board. The PMMUS, as a highly participatory process, promotes debate and incorporates suggestions from institutional and business partners and the general public (Figure 13).

In this way, PMMUS is intended to provide Lisbon metropolitan management institutions, all of its municipalities and the country itself, with a planning instrument that, combined with territorial planning policies and the analysis of the investment and operation life cycles, can guarantee real improvements in mobility. These changes will leverage the climate compromises assumed by Lisbon in the scope of the 100 climate-neutral and smart cities by 2030 Mission designed by the EC, as well as the Paris Agreement, the Global Covenant of Mayors for Climate & Energy and other related compromises, whistle allowing for the achievement of the EC goals established in the Green Deal and in the Sustainable and Smart Mobility Strategy.
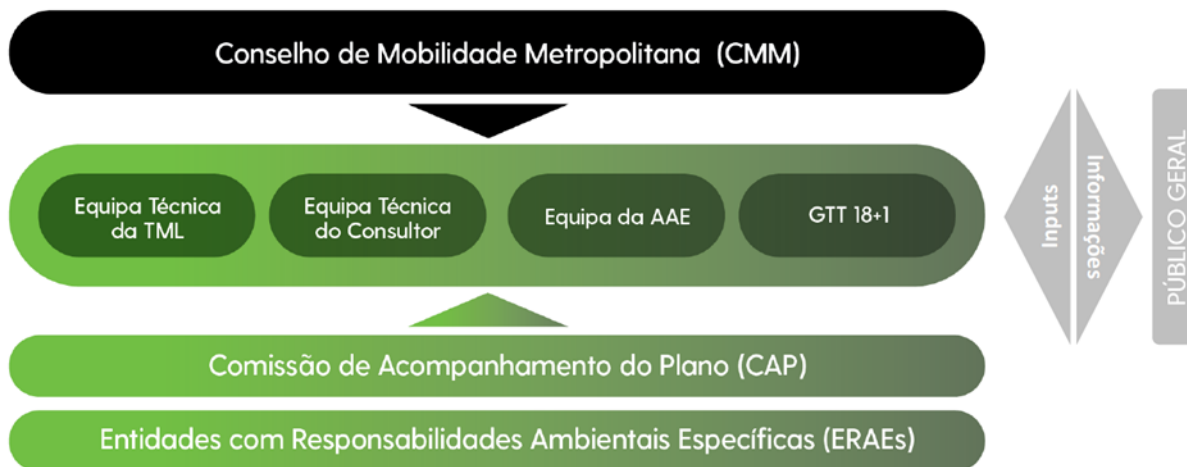
Figure 13: Participatory framework and governance model.

Sub-Task 2: Development of the new Lisbon municipality SUMP (CML)

Lisbon city prepared the design of the terms of reference of the new SUMP. These terms of reference comprised an extensive analysis work and benchmarking through other European cities.

The international public tender to get external expertise to help with the development of the Plan was launched. All the administrative work and evaluation of the tender has been conducted. Currently, we are in the final stage of the administrative process to sign the contract.

Sub-Task 3: Development of the Municipal Road Safety Plan (CML)

The first Report submission of the Municipal Road Safety Plan was accomplished by December'23, integrating the conclusions by the executive commission and other stakeholders. After completing this phase (step 1) the working group decided to include the "Safe System" and "Vision Zero 2030" approach in the plan. With this update, we will have a more innovative and complete document. After this revision, a first draft of Municipal Road Safety Plan will be produced.

Sub-Task 4: Adjustments to the TML PT offer (TML)

TML, as the Lisbon metropolitan transport authority, manages the 7 year contracts that define the rules under which 4 public transport operators run the intermunicipal bus offer along the 18 metropolitan municipalities, as well as the bus offer within 15 of those municipalities, all under the brand of Carris Metropolitana.

TML undertakes the evaluation of this service and can propose adjustments to improve quality and reduce environmental and climate impacts.

In the scope of UPPER, TML intended to adjust the metropolitan Bus offer service of Carris Metropolitana on a yearly base. But the evaluation of the services showed the need for closer exchange with the 4 operators. In fact, the service is being evaluated on a daily basis, with operational improvements and adjustments being suggested and consequently implemented by bus operators on a monthly basis, rather than yearly as initially defined.

TML uses dedicated software to perform this evaluation and adjustments, namely VIA REMIX and PTV VISUM and Go.

The process designed includes the following main steps:

1. Analysis of network dysfunctions based on user complaints, theoretical versus real journey times, line searches, territory and demographic analysis (new hubs, increase in population, etc.), overlapping

routes, assessment of the adequacy of timetables for schools, other modes of transport and major employment hubs, secure access to stops, reinforcement of events, prolonged deviations in time…

2. Preparation of proposals for service improvement together with municipalities

3. Assessment of the operability of proposals along with the operator

4. Amendment and delivery of the service features, as an Offering Plan

5. Reception, on the platform, of operators comments, in the shape of an Operation Plan

6. Comparison of the Operation Plan with the Offering Plan delivered

7. Detection and request for correction of possible errors and receipt of the corrected Operation Plan

8. Preparation of ticket allocation files

9. Preparation of communication to the public about the changes to be implemented from the date of entry of the new Operation Plan (new routes, new timetables, event reinforcements, information on stops and social networks, etc.)

<u>Sub-Task 5: Studies for CARRIS network redesign (CARRIS)</u>

Successful creation of an interdisciplinary working group at CARRIS, to define the study's scope. The study was designed to be a qualitative assessment that will help inform on the perceptions of users about the service offer, to map current strengths and weaknesses, and to highlight opportunities for improvement. The study will target more general aspects of the user experience, such as:

- The most valued features of the service

- What would drive people to use the CARRIS services more frequently

- How could CARRIS improve the current offer

- Which barriers hinder a more frequent use of the CARRIS services

Moreover, more technical aspects will be addressed, to focus on the elements directly related to the public transport offer, namely:

- The preference between more frequent services *versus* a wider coverage with more likelihood of direct connections (i.e., fewer transfers)

- The preference between faster services *versus* door-to-door services

- The easiness of understanding the CARRIS network and its connection to other transport modes

- How users typically plan their journey, and how the bus/tram services are considered in this planning process

The analysis of the User Profiles developed in UPPER (D2.1 – User groups' mobility needs, motivations and patterns) served as a basis for the selection of user groups that will be targeted within the study. While the created user profiles are quite representative of the differing needs of people with special mobility needs, it was decided that the CARRIS' study should also strive to elicit the perceptions of:

- Commuter without small children or special mobility concerns (who compose the critical mass of CARRIS' demand) and workers with hybrid WFH schedules

- Non-users, i.e. users who mainly prefer private transportation or other modes on their daily trips

The tender for the study was launched and finalized with the selection of a consultant and methodology for the study. The proposed approach was the following:

1. Socio-demographic characterisation of current mobility patterns and identification of trends, with the aim of contextualising the results that will be obtained at the various stages of the project and identifying some of the shortcomings of the current offer

2. Consultation of current and potential customers to identify the main difficulties (pain points) associated with the use of CARRIS services and the strengths and other factors that motivate their use. This process will be conducted in 3 stages:

   a. Identifying the perceptions of current clients through focus groups and customer journey mapping techniques

   b. Identifying the perceptions of non-users and former clients through focus group sessions

   c. Identifying the perceptions of clients and ex-clients through employees, by organizing focus groups and in-depth interviews with drivers and public service staff, to elicit their own perspectives on the user experience and confirm the pain points identified by clients

3. Analysis and main results, systematising the main results of the cross-analysis of the variables studied in the first two components and CARRIS' Customer Satisfaction Surveys and Customer Complaints

The launch of the study is pending the contract signing.

5.3.1.3. Challenges & Mitigations

Sub-Task 1: Development of the new Lisbon metropolitan area SUMP (TML)

No challenges were identified in the preparation phase, the measure preparation went according to the plan.

Nevertheless, during the SUMP development there is currently a 5 week delay in the closing of Phase I. As a matter of fact, the retrieval of data, information and documentation for the characterization tasks took longer than expected, due to difficulties in scheduling the large array of bilateral meetings that were needed to guarantee clarifications in the data and information provided by the 18 municipalities and stakeholders of several themes (taxis, new mobility services, logistics, electric mobility...).

The team is now considering strategies to recover the delay in Phase III.

Sub-Task 2: Development of the new Lisbon municipality SUMP (CML)

The political executive of the municipality had some last-minute questions regarding the execution deadline of the SUMP. The signing of the contract involves quite a few bureaucratic and administrative steps that depends directly on the political agenda. To surpass these issues a proximity follow-up process was put in place.

Sub-Task 3: Development of the Municipal Road Safety Plan (CML)

A number of new variables (legislation, new plans, new management etc.) arose during the plan preparation period, increasing the complexity of the document. The change in the output (final document submission postponing) is a result of this new context. This decision is an assurance for a better quality and inclusive document.

Sub-Task 4: Adjustments to the TML PT offer (TML)

The initial idea was to implement a revision to bus service offer on a yearly basis, but the process has been so interactive with the users and the operators, so many improvements and adjustments have been identified, that the revision is almost continuous, and the adjustment proposals are submitted by TML to the 4 operators in a monthly basis.

Sub-Task 5: Studies for CARRIS network redesign (CARRIS)

No relevant challenges were identified, the measure preparation went according to plan.

5.3.1.4. Next steps towards implementation

Sub-Task 1: Development of the new Lisbon metropolitan area SUMP (TML).

The SUMP follows the EC proposed methodology that encompasses 4 phases.

Phase I – Framework and Diagnosis is almost finished, as Step 3 should be concluded in September 2024

Phase I – Framework and Diagnosis

Step 1 – Defining the Framework

Step 2 – Definition of Participation and Information

Step 3 – Characterization and Diagnosis

Upon the completion of Step 3, Phase II - Strategic vision, Phase III - Programme of measures and Phase IV - Implementation, monitoring and evaluation, will follow.

Phase II – Development of the Strategic Vision

Step 4 – Scenario Generation

Step 5 – Development of the Strategic Vision

Step 6 – Goal Setting

Phase III – Definition of the Measures Program

Step 7 – Proposal of Measures and Actions

Step 8 – Setting the Program of Measures

Step 9 – Preparing the Implementation

Phase IV – Implementation, Monitoring and Evaluation

Step 10 – Management of the Implementation of Measures and Actions

Step 11 – Monitoring and Information

Step 12 – Assessment and Adjustment of Measures and Actions

The Plan should be concluded before the end of 2025.

Sub-Task 2: Development of the new Lisbon municipality SUMP (CML).

Signing of the contract is the next step. Conduct all work necessary for the SUMP.

Sub-Task 3: Development of the Municipal Road Safety Plan (CML).

Carry on the work of Municipal Road Safety Plan. In order to finalise the Municipal Road Safety Plan, the following stages will follow:

- Technical decision by the Consultive Council.

- Public consultation and subsequent Ponderation Report.

- Submission of the final document to be approved by the City Council.

- Submission of the final document to be approved by the Municipal Assembly.

Sub-Task 4: Adjustments to the TML PT offer (TML).

Implementation will follow in the same manner, no changes are anticipated.

Sub-Task 5: Studies for CARRIS network redesign (CARRIS).

The study is to be launched in September 2024. The ensuing results will then be shared with the Network Redesign working group, and will also be employed to further develop measures LIS_08 and LIS_10.

5.3.2. Measure LIS_08: To implement campaigns and partnership initiatives

5.3.2.1. Description of the measure and main outcomes expected

This measure aims to develop and to implement marketing campaigns to showcase the benefits of PT services and comprises two main actions:

Carris' marketing campaign: This submeasure focuses on the assessment and implementation of campaigning strategies to foster the use of PT, with particular emphasis on private transport users. The outcomes of this measure shall be the analysis of the existing needs and perception of current and potential users, as well as the selection of feasible strategies to nudge the wider adoption of sustainable modes, which will culminate in the development of campaigns that highlight the benefits of using PT.

TML's mobile app marketing campaign: This submeasure was designed to promote the mobile application developed under the measure LIS_07, and encourage the use of public transport, thereby reducing urban emissions, through a comprehensive marketing campaign. This campaign is structured in phases to align with the app's development and the integration of new services. The marketing initiative aims to familiarize the public with the app through an evolving narrative, inviting users to participate in its growth. Its main expected outcomes include:

- production of a multi-phase engaging campaign

- effectively introduce the navegante® app to the public

- engage users to use the MaaS app navegante™

- achieve significant uptake of the MaaS app navegante™

- demonstrate the app's potential to enhance urban mobility and public transport accessibility in the Lisbon metropolitan area

ANNEX 9 presents the updated measure monitoring template for this mobility measure.

5.3.2.2. Preparation of the measure

Carris' marketing campaign: The analysis of user-profiles and best practices to promote behavioural change, collected and developed within UPPER. Study on user and non-user needs and perceptions to be conducted within the framework of LIS_03.

Figure 14: Design thinking session advertising piece used in social media.

CARRIS launched its first social media campaign launched on 05/06/2024, to commemorate the World Environment Day.

TML's mobile app marketing campaign: To actively engage with the community and involve them in the product's development, TML organized a brainstorming session utilizing the Design Thinking method (Figure 14). This session aimed to gather fresh feedback on the application and envision new stages of its evolution.

Figure 15: Campaign teaser: preparing for product launch.

The campaign was designed following the results of the Design Thinking session and was launched in April 2024 with a teaser featuring a pregnant woman, symbolizing the impending launch of the navegante® product. This phase included a call-to-action for users to test the app and provide feedback, thereby engaging them directly in the development process (Figure 15).

Figure 16: Campaign image for the 1st phase: product launch.

Key objectives of this initial phase included:

- Conducting real-world tests to ensure product quality.

- Bringing the navegante® brand closer to the public.

- Building trust and involvement in the app's development, making users feel like integral contributors.

- Collecting user feedback to refine and align the app with user expectations.

Following the testing phase, the first major campaign for the navegante® app was launched, featuring a small child and conveying the message that "Carrying the pass is now almost a joke." This phase emphasized the app's convenience and ease of use (Figure 16).

Primary goals of this phase included:

- Enabling remote access to mobility services via the app.

- Reducing queues at service points.

- Strengthening the navegante® brand's presence and connection with users.

Figure 17: Flyer for brand activation campaign promoting free pass draw for app users.

The campaign was executed through various channels including out-of-home advertising, radio, ATMs, press, social media, app stores, operator websites, municipalities websites, customer service centres, bus screens, and municipal facilities. Communication materials comprised graphic images, videos, and radio spots. Additionally, brand activation events were held at six key transport hubs, supported by promotional teams, and an advertising competition was launched to encourage app usage (Figure 17).

A significant feature introduced in the campaign's first phase was a dedicated service for young students, allowing those up to 19 years old to access the pass for free with a single top-up via the app. This initiative was supported by a new campaign image and parallel communication efforts (Figure 18).

It is worth noting that Phase 0 involved 991 beta testers who provided valuable feedback on the app. Phase 1 ran during May and June 2024, achieving notable success. In May 2024, 7,000 users utilized the navegante® app, and by June 2024, this number increased to 20,000 users.

Figure 18: Campaign image focused on the free activation for users under 23 years old.

5.3.2.3. Challenges & Mitigations

Carris' marketing campaign: Given the overlap between the studies in LIS_03 and LIS_08, in what concerns the assessment of user and non-user perceptions, it was decided to conduct a multi-purpose study. Therefore, the development of the more ambitious campaigns in LIS_08 was postponed allowing making use of the abovementioned study's outcomes. In this context, these campaigns are expected to be launched in 2025.

TML's mobile app marketing campaign: Some difficulties were faced regarding the timing of the campaign launch due to delays in the app development itself.

5.3.2.4. Next steps towards implementation

Carris' marketing campaign: Following the results of the LIS_03 study, a novel study will be launched to assess the best target for different user groups, as well as car users. This will then allow for the design of more ambitious campaigns to be launched throughout 2025.

A variation of the current marketing campaign targeting different audience segments is expected to be implemented by next September. Also, new campaigns to promote the upcoming phases of the app are expected to be launched according to its evolution.

5.4. Demo site LEUVEN

5.4.1. Measure LEU_06: To launch communication campaigns and digital tools to increase the uptake of PT

5.4.1.1. Description of the measure and main outcomes expected

This measure aims to increase the uptake of public transport and the use of park&rides specifically by implementing communication/nudging campaigns, aimed at specific groups. Strategies for realizing behavioural change, including nudging and gamification, will be identified and assessed in a participatory process. Social media campaigns and influencer marketing, ambassador programmes and more traditional marketing will be implemented to improve the perception of public transport. The measure in particular aims to identify and deploy strategies to improve the perception of city centre routes.

This measure will deliver:

- Communication strategy plan
- Communication campaigns

ANNEX 10 presents the updated measure monitoring template for this mobility measure.

5.4.1.2. Preparation of the measure

1. Communication first phase of new and improved bus network from 1/1/2025

2. Analysis of the perception of the PT

3. To define objectives of the campaign, possible target users, possible communication actions from M2, 3+4, 5 and other projects/ initiatives and possible communications channels

4. To review best practices and successful projects

The Communication campaign of the first phase of the new and improved bus network was held in December 2023. Data for the analysis of the perception of the PT was collected by conducting street surveys. The possible objectives of the campaign, possible target users and possible communications actions from Measure 2 and 5 have been already defined. These topics will be further completed after the analysis of the data from the street surveys.

Following the measure development planning, a list of ideas and best practices for the communication campaign have been collected, and a new communication campaign for the new bus service is in its final preparation phase. In addition, another communication campaign with the bus operator to promote free bus tickets in combination with the park& rides for events in Leuven during the summer holidays of 2024 have been also prepared.

5.4.1.3. Challenges & Mitigations

For the analysis of the perception of the PT we requested data from satisfaction surveys from our bus operator. The operator itself did not want to share its data, but we will receive some data from the Flemish Mobility Department and we had to conduct our own surveys. This caused a delay. We decided to organise street surveys with job students,

but this was only possible during the summer holidays. As a result, we cannot do the analysis of the perception of the PT until August.

As stated in the measure monitoring template (ANNEX 10), the planning has accumulated delays, and steps from 5 to 9 of the measure will be executed within WP6.

5.4.1.4. Next steps towards implementation

The next step to be performed within this mobility measure is the design of communication campaign to promote the new and improved bus network. The design of the campaign will be followed by the launch of the campaign in social media. After concluding the launch of this campaign, the concept design of the following communication campaign, aimed at promoting the use of the public transport and the behavioural change, will be tackled. The design of all the components of the communication campaign (messages, channels, planning, …) will be the next step, as a previous stage to the final launch of the campaign in social media.

5.5. Demo site BUDAPEST

5.5.1. Measure BUD_02: To promote more sustainable choice of transport for students based on their modal split patterns

5.5.1.1. Description of the measure and main outcomes expected

In Budapest, there are 400 elementary schools with 100 thousand+ students and 200 high schools with 50 thousand+ students (from grades 1 to 12). While the modal split of the city of Budapest has a 47% of PT share, the modal split of students getting to school shows significantly less PT share: only 28%. With BUD_02 measure PT operator BKK aims to understand the patterns in the mode choices of students: based on specific parameters of the schools (e.g. geographical, demographical differences, coverage of PT in the area), and investigating other special aspects that may influence them. Based on the results and learnings from the ongoing school-zone programme10 in Budapest, BKK will set up a methodology to collect data from schools (different locations and different age groups) to establish a modal split study, in order to see what are the specific age groups (the ones that seem to be critical when young people are shaping their own opinion about transportation). Results of the measure will be used to upscale the methodology of school modal split data collection, and to provide valuable new inputs to the school-zone programme that is to help schools to plan specific physical changes (e.g. increasing safety, walkability, cyclability with self-explanatory streetscape) to promote liveable and healthy movement near the schools.

ANNEX 11 presents the measure monitoring template for this mobility measure.

5.5.1.2. Preparation of the measure

<u>Case description</u>

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[10] https://bkk.hu/fejlesztesek/kiemelt-fejlesztesek/sulizona/

The school-zone programme in Budapest was launched in 2023 by BKK together with the district municipalities and MOME's Innovation Centre with the aim of creating a safer environment for the most vulnerable road users, improving the safety and sense of security of children who are already travelling independently, and reducing traffic accidents around schools. The first step is to minimize the morning and afternoon congestion around the schools and the conflicts arising from parking for longer or shorter periods of time, as well as to reduce the speed of the vehicles passing by the school entrances for the sake of the children's safety. The goal of a school-zone is to create a self-explanatory streetscape that makes it clear to everyone driving around the school that they have arrived in an area where they must behave with special attention. In the longer term, the aim is that by reducing the dangers of traffic in the vicinity of schools, to make as many children happy as possible to go to school on foot or by bicycle, either alone or with their parents - and that no one comes by car just because they do not consider other modes of transportation to be safe enough.

While the modal split of the city of Budapest has a 47% of PT share, the modal split of students getting to school shows significantly less PT share: only 25%, based on a recent study[11] involving 36 schools and 14072 students. Even if there is an affordable and accessible PT option nearby, parents still predominantly bring their children to school by private car, causing traffic jams and pollution in the early morning hours near the school. However, it is also known from this study that the students would have their own *preferred* mode of transport, which significantly differs from the *actual* mode of transport they use. 30% of them would prefer active modes (walking and cycling) instead of motorized modes.

In the schools participating already in the school-zone programme, preliminary and follow-up surveys have been conducted involving the parents. The results for one of the schools are shown on below, in Figure 19.

From these numbers it can be also observed that there is a significant change between the lower grades compared to the upper grades' choice of mode, as children become more independent.

A lot of very useful information was revealed already from the school-zone programme. Since the programme primarily focuses on achieving better safety for movements, BKK would like to get to know and understand the habits of going to school even more thoroughly, which helps to take these aspects into account when developing the city's transport and the public transport network.

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[11] https://www.instagram.com/uton_az_iskolaba/

1 to 4 grades

Mode	Percentage
Multiple modes	0%
Private car + walking	9%
Private car + PT	5%
Private car	27%
PT + scooter	0%
PT + walking	9%
Public transport (PT)	5%
Scooter	0%
Cycling	2%
Walking	40%

5 to 8 grades

Mode	Percentage
Multiple modes	0%
Private car + walking	2%
Private car + PT	5%
Private car	12%
PT + scooter	2%
PT + walking	22%
Public transport (PT)	0%
Scooter	0%
Cycling	0%
Walking	56%
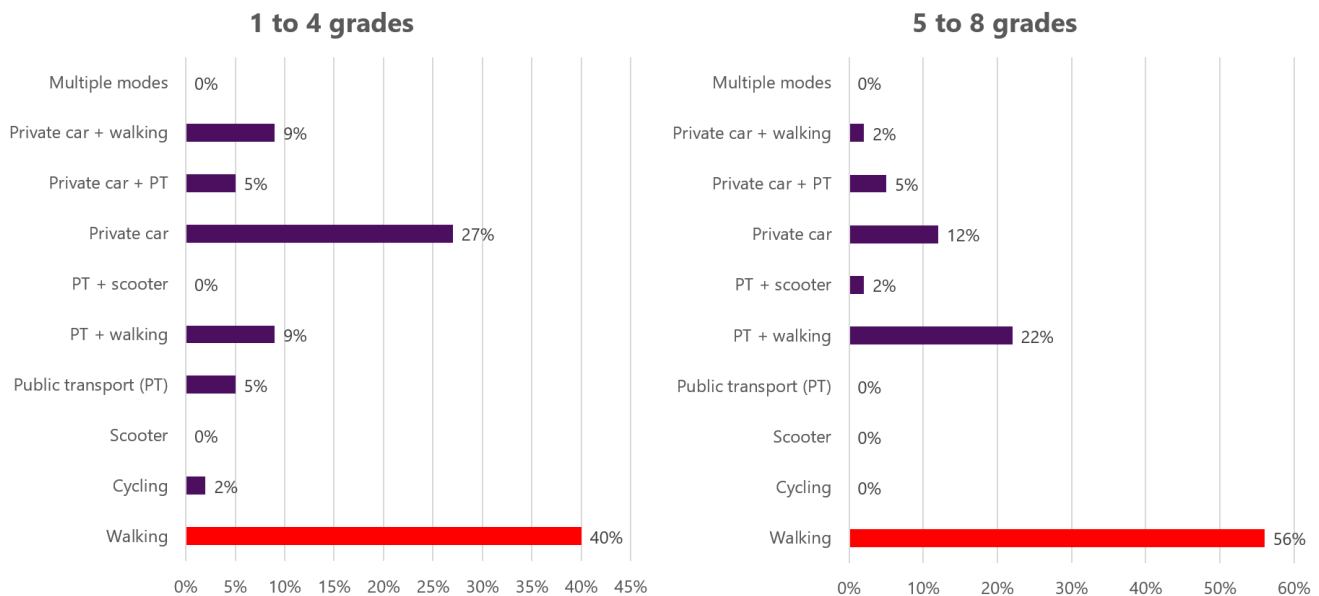
Figure 19: Answers of the parents on the question: 'What modes of transport does your child most often use to get to school (in good weather)?'

In addition, as BKK is engaged in behaviour shaping for a more liveable city, promoting the use of sustainable modes of transport, including public transport and also active modes, BKK already occasionally visits schools and gives lectures for lower and upper grade students as well, and welcomes high school students to learn more about the work of the transport manager of the city. These school visits were originally started by volunteers from BKK, and recognizing the possible impact that systematic approach could give to these initiatives indicated that more data and deeper assessment of the travel habits of students is needed in order to pass on the most useful knowledge and perspective with the best timing for different age groups.

Choosing the target schools

Based on these previous learnings and data, within the scope of BUD_02 measure BKK will build a pilot for an in-depth modal split study targeting schools, selected by different aspects.

By narrowing down the list of schools to be targeted the main goal is to make the selected couple of schools as diverse as possible (Figure 20), but regarding their type of characteristics, these few schools should be representative enough for the majority of schools in the capital. BKK will select 7 schools and also 7 backup schools (in case contacting or cooperation with school management would run into challenges).

Main aspects to select schools:

- from a zone (defined in the macroscopic transport model for Budapest) where PT ratio modal split is low, and from a zone where PT ratio is high. (May happen, that a given area has a good PT ratio, and despite that, the modal split of students does not correlate with it.)
- from different districts of Budapest (not necessarily when different districts have similar characteristics)
- from areas with different urbanization structure
- from downtown and also from suburb areas
- with different type and size of catchment area

- with shorter and longer walking distance from nearest PT stops (also taking into consideration the 'competitiveness' of stops (how quickly the city centre can be reached from there, and what is the frequency of the vehicle departures from the stop, etc.)

- with different reputation categories (also to include at least one from the city's TOP 10 elite school list)
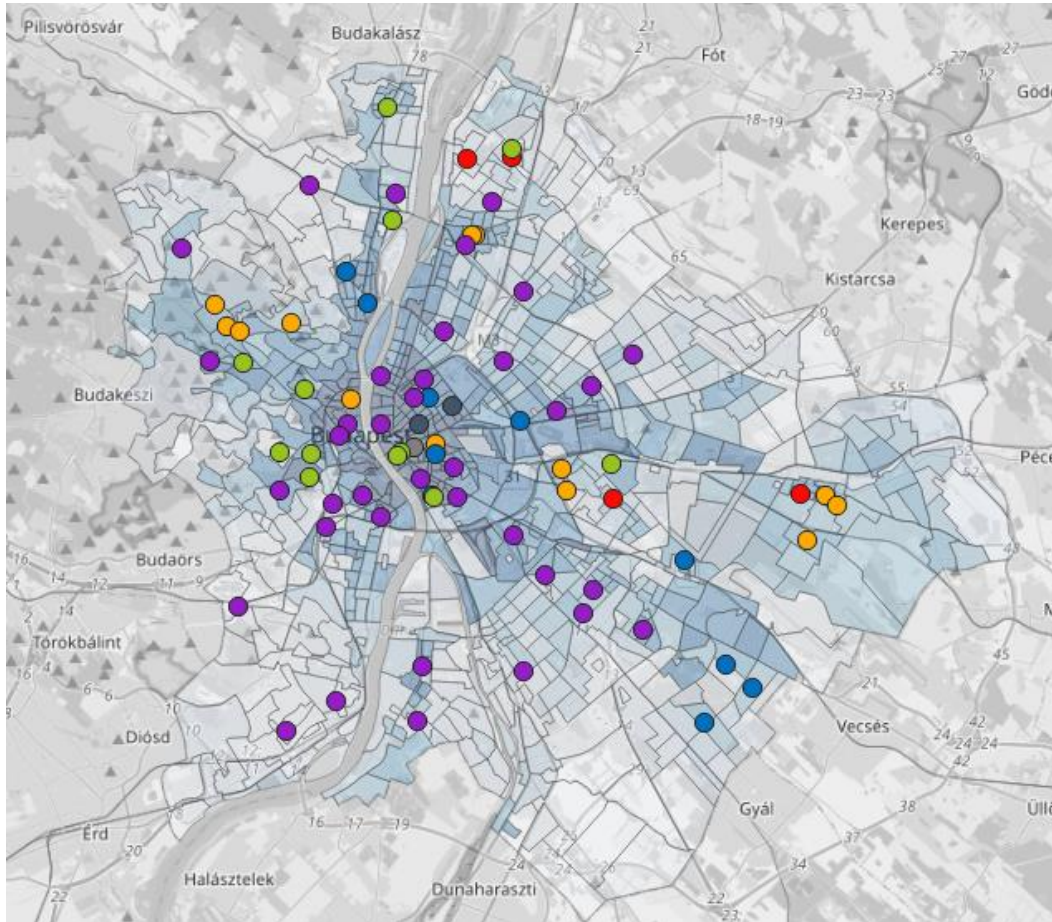
Figure 20: Map of Budapest showing different type of schools (to be filtered) with different colours, and zones layer with different intensity of blue colour – lighter blue means lower PT ratio modal split in the zone while darker blue means higher PT ratio in the zone.

5.5.1.3. Challenges & Mitigations

The content of the measure has been changed from the originally planned. The scopes of BUD_02, 04 and 05 measures were originally based and linked to a planned Budapest MaaS software development, namely the integration of shared mobility services into the BudapestGO application. This software development (including other functional developments) was subject to a public procurement procedure. According to the original schedule (that was set up in the beginning of 2023) the public procurement was planned to conclude, and developments to start in 2023 July. The procedure however was delaying, and additionally prolonged by an unforeseen legal issue (one of the applicants filed an appeal in October 2023 against the decision of the procurement board – and the procedure only reached final conclusion in 2024 January). The delays generated a risk of not being able to implement these three BUD measures before the anticipated deadline set forth by the UPPER consortium. This made the BKK team start considering mitigation actions for not delaying any further these measures – or modify their content to be independent from the shared mobility integration.

However, a consequential update of the timeline of BudapestGO related software development functions was needed, as only part of the planned upgrades could be completed in 2024, and the others had to be moved to 2025. Therefore, additional aspects were investigated to narrow down the priority list for 2024. In 2024 February, a survey was carried out by BKK among BudapestGO app users, and from the results it was clear that the priority of shared mobility integration seems less valuable than it was expected from the aspect of customer satisfaction. Out of the 3417 respondents only 10% of them indicated that the e-scooter integration would be useful to enhance BudapestGO. The BKK management responsible for the strategic development plan of BudapestGO decided to give this function development a lower priority, however, the shared mobility integration will still happen, at a later time. In order to provide more valuable and relatable contents for the BUD measures, that would have a more significant impact on the customer experience, BKK UPPER team had to take the results of this survey also into consideration. Considering these, BUD_02 changed and moved from WP4-T4.4 to WP5-T5.4.

No major challenges occurred in the beginning of the definition of the new scope of this measure and while selection aspects and selecting the schools to be targeted by the modal split assessment.

5.5.1.4. Next steps towards implementation

7 target schools and 7 backup schools have been selected (with similar type of characteristics). During July 2024 the definition of the modal split assessment and study will be developed by BKK and the communication of the assessment and the school's management involvement will be planned and timeline of the assessment will be defined. Collection of data should start during the beginning of next school season (September 2024).

6.Conclusion

This document reports the activities performed within the task T5.4 of the UPPER project to develop mobility measures aimed to promote a behavioural change in citizens' mobility habits.

In the context of this specific UPPER task, these measures are concentrated on two topics: *Democratic governance* and *Communication campaigns*. Implementing *Democratic governance* facilitates to progress towards a more attractive PT, involving citizens in the decision-making process of mobility in their cities.

Communication campaigns are critical to inform the citizenship about new mobility services, but also to reach private car drivers about the impact of their mobility habits, and how they can contribute to have a sustainable transport system in their city.

Considering the appraisal process of the mobility measures, performed within WP5, we can identify the most relevant topics in importance order, when defining mobility measures focused on *Democratic governance* and *Communication campaigns*. These topics are:

- Democratic governance:
  1. Target groups: This category is the one collecting the maximum number of Points of attention (9), and arises as the most relevant topic for participative governance. This shows how important is to define mobility interventions addressing real needs of citizens, and who are the users' groups having these needs. Adapting the mobility services to real needs is a robust strategy for being inclusive in PT. Moreover, communication must be addressed to users' groups that are interested in the provided information, or we need to impact.

2. Regarding users' groups, LGBT individuals, nonbinary persons, ethnic minorities, migrants, night-time workers, rural residents, potential users, childless employees, young, elderly, women, low-income people, adults with children, and functional-diversity people have been identified.

3. Stakeholder engagement: This topic was the second one in number of entries (5), and appears as the second topic in relevance order. Obviously, if we are talking about participative governance, we have to consider all the involved actors. Citizens are critical actors, but the stakeholders of urban mobility are also required to have the professional point of view in urban transport interventions. Therefore, PTOs and PTAs must be included in our community for the collaborative governance.

4. Multimodality, Social impact, Tailored Communication, MaaR and Data Management are topics to be considered, in participative governance. Multimodal-transport arises as a critical resource to foster sustainable mobility and a behavioural change in citizens' mobility habits. This topic seems to be more related to the concept of behavioural change, than to democratic governance itself.

5. The implementation of measures on participative governance are closely related to social impacts, as citizenship involvement in the urban mobility decision making process will facilitate a more inclusive public transport, as unfavoured collectives will have the chance to present their demands. The increase of inclusiveness in PT will naturally facilitate a higher social cohesion.

6. Tailored Communication is always a relevant topic when addressing the needs of selected users' groups, and is closely linked to Stakeholders engagement. Mobility as a Right is a guiding concept for urban mobility, that participative governance should foster. Regarding Data management, the General Data Protection Regulation (GDPR) establishes a framework that must be accomplished, but this topic is always relevant when considering citizenship participation.

7. As a final topic, the democratic governance channels should facilitate the discussion to tackle the big challenges faced by cities, like Mission 2030 cities.

- Communication campaigns:

    1. *Tailored communication*: This category is the one collecting the maximum number of Points of attention (4), and arises as the most relevant topic for communication campaigns. This fact reflects the need to select the contents to communicate according to users' groups we intend to reach. If we are thinking in communication campaigns, it is obvious that adapting communication to the target group we are addressing, is crucial.

    2. Moreover, if we are considering the topic of behavioural change, the private car drivers are going to be a very relevant users' group, as we need to convince them to start considering another mobility options more sustainable than private car. And to achieve this objective, the communication content must be customised to this users' group.

    3. Multimodality and Social impact. These two topics are the second ones in the collection of points of attention for communication campaigns.

4. Multimodality refers to the importance for citizens to gain awareness about PT and active modes, as a real alternative for urban mobility. If we consider walking as a mobility mode, we also have to consider the time taken by this active mode, when estimating the duration of a city trip. And, obviously, this must be included in the communication of multimodal urban mobility.

5. Social impact refers to the chance to communicate the impacts that active modes have for health and for environment. Walking and cycling can not only reduce pollutants at a city level, but could also contribute to improving the health of citizens through the increase of their physical activity.

6. MaaR, Target groups, and Stakeholder engagement, are topics to be considered, in communication campaigns.

7. MaaR (Mobility as a Right), is a cornerstone of urban mobility policies, if cities intend to be inclusive on their urban transport system. This concept has to be included in cities' communication campaigns to raise citizenship awareness about the policy of leaving no one behind.

8. Target groups refers to the need of adapting communication content to users' groups features, and this topic is closely linked to Tailored communication.

9. Stakeholder engagement is always relevant to maximise the impact of any intervention. Representatives or associations of users' groups, PTOs and PTAs being involved in communication campaigns could be a very relevant asset for any initiative's success.

Finally, it is interesting to highlight the Mobility Manager role existing in Italian middle sized and big companies, as a facilitator within companies to support the generation of communities of users to participate in both, Democratic governance, and the Communication campaigns. This professional could arise as a link between the private sector and the public administration, which is in charge of promoting the public transport, facilitating the collaborative governance and the behavioural change in citizenship's mobility habits.

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ANNEX 1: Behaviour-change oriented mechanisms.

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
1	Marketing/communication campaigns	"Grow with PT"	2019	Thessaloniki, Greece	A public transport promotion campaign was held in 2013 by the Thessaloniki Public Transport Authority (ThePTA), based on the UITP (International Union of Public Transport) campaign of PTx2=2015 (doubling the PT market share by 2025) and 'GROW with Public Transport'. UITP launched the 'All together for public transport growth' movement. and invited its members in 92 countries around the world (inc. ThePTA) to unite during European Mobility Week (16-22 September) to display the 'Grow with Public	Thessaloniki Public Transport Authority	Active Mobility	Citizens	Posters, leaflets and panels. Video clips on TV and social media. Stands at city centre and PT interchange points Social and cultural events	The campaign raised awareness amongst political decision makers and citizens alike of the social, economic and environmental benefits that public transport brings. With better public transport in qualitative and quantitative terms, cities can cut traffic congestion, increase road safety, foster social inclusion, reduce pollution and be a motor for sustainable economic growth.	N/A	https://www.	Awareness Campaign to promote public transport usage: 'GROW with PT' | Interreg Europe - Sharing solutions for better policy
2	Marketing/communication campaigns	"Cambiamos CO2 por flores"	2009	Barcelona and metropolitan area, Spain	"Cambiamos CO2 por flores" is an interactive online communication action to encourage the use of public transport as a way to reduce carbon dioxide (CO2) emissions generated by the combustion of organic fuels and that cause the greenhouse effect. The campaign is carried out in collaboration with ZeroCO2, an initiative for the preservation of the climate promoted jointly by the NGOs Accionatura and Ecology and Development.	Transports Metropolitans de Barcelona (TMB)	Public Transport	Citizens	Main platform in website, social media, street marketing.	The campaing invites users to calculate the amount of CO2 that is not emitted into the atmosphere when they choose not to use private transport to make a certain journey, and then they are asked to create their own flower and plant it in a virtual garden, as a symbolic contribution to environmental protection. On the website, and through the most advanced technologies, TMB invites users to live an experience in which interaction, sound, movement and colors are combined in order to get them involved in a	N/A	Flores para disminuir la contaminación, Medios | Control Publicidad	TMB lanza la campaña interactiva 'Cambiamos CO2 por flores' que invita a crear un jardín virtual | Nexotrans
3	Marketing/communication campaigns	AD PERSONAM direct marketing programme	2010	7 pilot cities: Modena, Lancaster, Besaçon, Baia Mare, Heraklion, Funchal and Albacete	A Direct Marketing Programme for Public Transport consists of an innovative awareness-raising campaign for travellers based on personal communication directed at the citizens involved. Using traditional advertising tools, it aims to establish an individual relationship with each citizen and provides personalised answers to his/her mobility needs.	Transport agencies in the seven pilot cities	Public Transport	Citizens	7 comprehensive advertising campaigns 363,372 questionnaires delivered)10,117 questionnaires returned) Promotional week Local media and	Step 1 Develop a targeted advertising campaign Step 2 Inform citizens and collect information Step 3 Defi ne specifi c target criteria and select the citizens to be engaged Step 4 Design individual tailor-made travel plans to be sent to the participating citizens Step 5 Launch a promotional week Step 6 Analyse citizens' feedback on Local Public Transport and their motivation as whether or not to use it	FINAL RESULTS: 838 new Public Transport users Albacete: 252 Baia Mare: 105 Besançon: 134 Funchal: 60 Heraklion: 40 Lancaster and Morecambe: 45	https://civitas	https://www.eltis.org/sites/default/files/trainingmaterials/hop_on_guide_en.pdf"
4	Citizen engagement/co-creation activity	"Bring a friend" campaign	2016	Funchal, Portugal	Horários do Funchal created the campaign "Bring a friend" to enocurage more people to use PT in Madeira	rários do Func	Public Transport	Citizens	Flyers and digital channels such as Facebook and the company own website	In the frame of measure 7.2 CIVITAS DESTINATIONS «Attractive Public Transport», which main target is to encourage more people to use public transport in Madeira, promoting an attractive service and using smart marketing techniques, Horários do Funchal developed the campaign to boost the use of PT. The campaign strategy was to promote among HF current costumers the measure that they will have a discount in their transport pass if they bring a friend to use the monthly pass.	A total of 55 costumers of HF were effective in seducing 55 non-costumers to purchase a monthly pass and therefore start taking the bus to commute. After assessing how effective the campaign was to attract new clients, it was time to evaluate the extent to which the new clients were retained in	N/A		https://civitas.eu/resources/project-newsletters-d114-destinations
5	Citizen engagement/co-creation activity	"HF Test-Drive "	022-202	Funchal, Portugal	The campaign aims to promote the use of public transport to those who usually never travel by bus. Instead of driving, the customer is driven by us, in comfort and safety. The advantages of this are that the person can enjoy the landscape of Funchal, have time to read, study, use mobile phone, and save time trying to park. This is an unprecedented public urban transport service initiative, which aims to encourage new customers, by allowing them to	rários do Func	Public Transport	Citizens	The campaign, 'HF Test-Drive', was advertised in various media outlets, such as television (RTP / M), Playce NOS EMPRESAS (cable TV system recording platform), as well as HF advertising	The process to engage with this campaign was to visit a HF Store (, and purchase a 5-euro GIRO card which will be credited with unlimited free travel for seven consecutive days. if the costumer wish to purchase a monthly pass, the five euros already spent were deducted from the initial month's payment. The only exceptions to this were people who already were eligible for free travel passes including Social Pension Pass 0, Social Pass Child, Old Combatant Pass, and Student Social Pass with any type of	Expecttaion: 650 people with this initiative and to win the loyalty of 200 new public transport users	https://www.dnoticias.pt/2022/10/12/331639-test-drive-da-hf-pretende-incentivar-ao-uso-de-transportes-	https://madeira-weekly.com/2022/10/12/horarios-do-funchal-new-initiative/

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
6	Marketing/communication campaigns	Individualised mobility marketing	2013	Ljubljana, Slovenia	Ljubljana is aware that public acceptance of transport policy is of crucial importance if policies are to be successful. The city therefore wanted to enhance the level of public inclusion and participation in the policy process. For this purpose special individualised mobility marketing activities have been introduced.	ELAN project: (Ljubljana (Slovenia), Ghent (Belgium), Zagreb (Croatia), Brno (Czech Republic) and Porto (Portugal)	Public Transport	Citizens	Individualised mobility marketing campaign that included more than 2600 people	Public opinion surveys, brochure "Mobile Ljubljana sent to households in the city and by the mobility shops called MOB-i-LNICA that functioned as info-points for quality mobility and have been established in the Tourist information centres in order to offer information on sustainable mobility in Ljubljana.	The main result of the measure was to inform and motivate people to think about their daily journeys in order to switch to a more sustainable mode of transport. Main tools used in this process were the individual mobility marketing approach through the campaign, the operation of mobility shops and distribution of the Mobile Ljubljana brochure.	N/A	Individualised mobility marketing | CIVITAS
7	Citizen engagement/co-creation activity	Commuter travel plans	2013	Aalborg, Denmark	Commuter traffic is a main contributor to congestion in Aalborg, which leads to high levels of pollution and compromises safety. Aalborg is developing company travel plans to encourage commuters to use more sustainable means of transport.	ARCHIMEDES project: Aalborg (Denmark), Brighton & Hove (UK), San Sebastian (Spain), Iasi (Romania), Monza (Italy), and Usti-nad-Laben (Czech Republic)	Public Transport	Citizens	online survey.	The city conducted an online survey to record commuters' preferred means of transport and their willingness to shift modes or use car pooling. The results highlighted areas for improvement to facilitate walking, cycling and the use of public transport. Based on this survey, the city developed travel plans and information materials for companies. The municipality collaborates with companies to help analyse travel behaviour and propose relevant initiatives.	Based on survey, the city developed travel plans and information materials for companies. The campaign and the tool provided to enhance carpooling at Siemens Windpower has had a positive effect at the administrative level. The modal share of car pooling increased in a 13%. A 13% increase in modal share of cycling trips by employees of Alfa Laval, after trials with electric bicycles and provision of new bike sheds and showers for cyclists. A 7% increase in public transport use among employees of the Municipality Department of Health and Sustainable Development company SBU. Average increase in the modal share for bikes at	N/A	Commuter travel plans (Aalborg) | CIVITAS

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
8	Citizen engagement /co-creation activity	Encouraging sustainable school trips	2013	Gdansk, Poland	In Gdansk, more and more parents bring their children to school by car, which significantly contributes to congestion, pollution and safety risks during peak times. To address this situation, the city decided to run an educational programme to encourage school children and their parents to opt for more sustainable modes.	Project MIMOSA: Bologna (Italy), Funchal (Portugal), Gdansk (Poland), Tallinn (Estonia), and Utrecht (Netherlands).	Public Transport	Students	Educational tools, com	Issue of an interactive computer program on DVD "Cyclist's Handbook" (1000 copies) An education campaign "Return Home Safely" together with the daily local newspaper „Polska The Times - Dziennik Bałtycki Safety action "Children safe on road" including article promoting the idea of Walking Bus in the most popular newspaper " Polska The Times - Dziennik Bałtycki" Issue of a special educational brochure „Child Safe on Road" (40000 items) attached to the newspaper as the attractive guide for children and parents Art competitions "Wise Transport - Better Life" and "Transportation of the future", „Stop Vandalism" organized in 2010, 2011 and 2012 (about 400 children took part in those art competitions) A number of workshops for children promoting sustainable mobility Workshop on safety in public transport for school children in the bus depot Preparation of lessons outline for traffic education lessons.	The reduction of school-home trips by cars was over 20% decrease of children driven to school and about 12% decrease of children driven from school five times a week. More than 95% parents who took part in WB considered this a good idea and were satisfied with their children's participation. The increase of teachers ready to support Walking Buses initiative was +3% Finally the idea was promoted at the end of school year 2012 by „Walking to School" competition for primary school pupils. The children were given pedometers as a reward	N/A	Encouraging sustainable school trips | CIVITAS
9	Citizen engagement /co-creation activity	Mobility management: making public transport more popular	2013	Tallin, Estonia	The measure aimed at supporting the change of modal share towards active modes of transportation. Guidelines for marketing sustainable transport were developed and numerous promotional activities were carried out during the course of the project	Project MIMOSA: Bologna (Italy), Funchal (Portugal), Gdansk (Poland), Tallinn (Estonia), and Utrecht (Netherlands).	Public Transport	Citizens	Implementing campaigns and activities , carrying out campaign satisfaction surveys before, during and after implementation of the measure activities. Events with focus on children.	26 promotional activities / events (schools, work places, individuals). Activities were supported by media coverage. Important target group was children	High awareness on the measure activities - The measure activities had high level of awareness among citizens of Tallinn – 25%; • Very high acceptance on the measure activities - The measure activities had very high level of acceptance among citizens of Tallinn – 78%; • The overall acceptance on fostering active transportation was dropped – The acceptance has dropped by 6%, from 94% to 88% but remained very high. The measure had only partial influence on the result. • The modal share of personal car was dropped – the share of personal car use was decreased by 1,5%, from 31,8% to 30,5%. The	N/A	Mobility management: making public transport more popular | CIVITAS

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
10	Citizen engagement /co-creation activity	Travel planning for schools and work places	2011	Norwich, UK	Within the project, a set of measures was implemented with the aim of developing intelligent, sustainable and inter-modal urban transport systems allowing citizens to live an active life without using a car.	Project SMILE: Malmo (Sweden) and Norwich (UK), with three follower sites, Tallinn (Estonia), Suceava (Romania) and Potenza (Italy)	Active Mobility	Citizens	Gas-powered buses were introduced. Eco-driving training was provided	Promotion of bio-fuels, clean vehicles and intelligent door	involved 27 partners, who	N/A	Travel planning for schools and work places	CIVITAS
11	Marketing/communication campaigns	Business travel planning	2011	La Rochelle, France	A business travel plan provides employees with integrated mobility solutions, including home-to-work travel, work trips, deliveries and site visits.	Project SUCCESS: La Rochelle (France), Preston (UK) and Ploiesti (Romania).	Public Transport	Citizens	New energy-efficient ve	Create locations where citizens are able to enjoy a high-quality environment and travel easily and safely; to build local partnerships for tackling sustainable mobility issues; to develop efficient management systems; and to adopt new approaches to urban transport.	Demonstrate that alterna	N/A	Business travel planning (La Rochelle)	CIVITAS
12	Citizen engagement /co-creation activity	Company mobility planning	2011	Lille, France	By drawing up mobility plans, companies can help their employees to opt for sustainable modes of transport rather than private cars for their work-related trips.	Project TRENDSETTER: Graz (Austria), Lille (France), Pecs (Hungary), Prague (Czech Republic) and Stockholm (Sweden)	Public Transport	Employees	Mobility plans created	Internal study evaluated the travel habits of employees and potential change in travel habits. On the basis of the mobility plan, four electric scooters and 23 bicycles were in use for the home to work journey, a car-sharing scheme was established for commuting, lunch break trips, and trips to external meetings or work-related social events.	Employees subsidise the purchase of public transport season tickets (to an amount of EUR 6,500): 123 subscriptions to the urban public transport network operated by Transpole; 113 subscriptions to the network of the national rail operator (SNCF) and regional train operator (TER); and 8 subscriptions to the Transpole network + TER (so-called Ticket Plus).	N/A	Company mobility planning	CIVITAS
13	Citizen engagement /co-creation activity	Raising awareness to change mobility behaviour	2011	Touluse, France	Improving the attractiveness of public transport and marketing it as a sustainable mobility option were seen as ways to change citizen's mobility behaviour.	Project MOBILIS: Toulouse (France), Debrecen (Hungary), Ljubljana (Slovenia), Venice (Italy) and Odense (Denmark)	Public Transport	Citizens	Marketing activities, promoting the benefits of public transport and complementary services	The campaign was developed in the following stages: definition of the strategic direction and the detailed action plan (September-October 2007); establishment of a users panel (1,000 people) in conjunction with another CIVITAS measure (October-November 2007); three global communication campaigns focusing on a specific topic such as the promotion of the new contactless card (2008); three meetings with the panel focusing on tarifs, information and advertising strategies, partnership with other public transport operators and back office services (2008); and synthesis of the individualised marketing report (October 2008).	The transport public operator has acquired a better knowledge of users' needs and expectations regarding tariffs, information and services. The panel enquiry also provided feedback regarding public transport image, passenger satisfaction levels and the effects of promotion campaigns.	N/A	Raising awareness to change mobility behaviour	CIVITAS

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
14	Citizen engagement /co-creation activity	Setting up a mobility agency and customised services	2011	Touluse, France	As lack of accurate, accessible information is a major barrier to public transport use, the creation of a mobility agency can be an effective way to increase passenger numbers.	Project MOBILIS: Toulouse (France), Debrecen (Hungary), Ljubljana (Slovenia), Venice (Italy) and Odense (Denmark)	Public Transport	Citizens	Developing a website a	offer final users easily accessible mobility information and advice about existing public transport solutions in order to increase their use at conurbation level; integrate other mobility services (car pooling, transport on demand, bicycle rental) in order to promote modal solutions other than car use; and promote new mobility behaviour at individual and collective level (in relation to a commuter plan, for instance).	The evaluation of the first mobility agency showed that: the information service answered to a real need among the public (around 200 visits per month plus 800 visits per month to the website); bicycle rentals increased by 80 percent between 2007 and 2008; ticket sales are a useful but non-essential activity of the mobility agency; 30 percent of interviewed people who were then drivers stated that they were willing to change their mode of transportation, the main obstacles being total journey duration and infrequent public transport services; and over 80 percent of	N/A	Setting up a mobility agency and customised services	CIVITAS
15	Incentives (monetary)	Bicification	2022	3 cities: Braga (Portugal), Istanbul (Turkiye) and Tallinn (Estonia)	The project adopted the antifraud system patented by Pin Bike to certify, monitor, and reward urban bike rides. The system is based on the comparison of two sources of data collection, both from hardware (Pin Bike sensor) and software (Pin Bike App) devices. Local authorities rewarded urban cyclists with economic incentives to be spent in local shops, while benefitting from valuable and trustable data collected in the Pin Bike Dashboard, a web portal informing smart cities' data-driven policies and investments with traffic, usage and infrastructure insights from the project.	Pin Bike Braga (Portugal) Istanbul Tallinn KTH CERTH	Active Mobility	Citizens	Website Mobile App Digital promotion Promotion in adhered shops	Bicification project highlighted the approach of using behavioural nudges to encourage higher ridership levels among potential day-to-day cyclists. The campaign aimed to educate people about the health benefits of cycling, motivate those who were interested in trying to ride, and provide immediate feedback on making the desired choice through tangible rewards. The campaign employed a 'choice architect' to design social media content and used behavioural nudges without significantly altering citizens' economic incentives.	Braga: Total user: 400 Total distance: 227,274 km CO2 emission saved: 35.7 tons Tallinn: Total user: 387 Total distance: 370,792 km CO2 emission saved: 38.2 tons Istanbul:	Video	Braga, Istanbul, Tallinn: Accelerating the modal shift through gamification and rewards	EITUM Marketplace

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
22	Marketing/communication campaigns	Clic.cat	2021	Girona, Spain	How a digital DRT platform mobilised former transport deserts.	NEMI Teisa 1920 Ajuntament de la Vall d'en Bas Generalitat de...	Public Transp	Citizens		An informative video was created	3628 passengers used the on-demand bus line during the first nine months of the service peaking at a daily number of passengers of	Video (in cat	Girona: How a digital DRT platform mobilised former transport deserts | EITUM Marketplace
23	Marketing/communication campaigns	Mobility Behavioural Change Potential Index	2022	Gotland Region, Sweden	Encourage people to adopt more sustainable and climate-friendly travel habits by reducing car commuting. 642 regional employees based in Visby were offered the opportunity to participate in the project. Using the Smart Travel Habits platform (Resvana) was sought to develop and test a model called the Behavioural Change Potential Index (BPI) to facilitate and optimise the opportunity for individuals to create more sustainable and climate-friendly travel habits in their everyday lives.	Nudgd Region Gotland GotlandsHem Swedish Energy Agency	Multimodal Transport	Citizens	Platform called "Resvana" was used to encourage employees to use more sustainable ways of transport	N/A	The evaluation of the project showed a 14% reduction in car commuting (initial goals was to reach 10%). More than 30% of users indicated that the service contributed to their choice of transportation in their daily lives In total, those who used the service reduced their annual CO2 emissions	N/A	Digital nudging leads to reduced car commuting
24	Citizen engagement /co-	TandEM Women in Cycling	2023	Budapest, Hungary	Fueling female cyclists with confidence. Developed by EIT Urban Mobility and BYCS, the TandEM programme provides online and in-person training	EIT Urban Mobility BYCS	Active Mobility	Women	In-person cycling work	The programme has had a promising start. Its first edition in 2022 equipped 10 participants to teach and empower women to cycle in 9 different cities. After a	10 participants in 2022 12 new participants in 2023	Pictures	The TandEM programme: fueling female cyclists with confidence | EIT
25	Marketing/communication campaigns	Cykla med Pelle-App (Cycling with Pelle)	2023	Uppsala, Sweden	To promote bicycle mobility, to support sustainability issues and to show users the sights of individual city districts by solving different tasks and challenges in a fun way.	SimpliCITY	Active Mobility	Citizens	Dedicated website/platform App with a friendly user experience	SimpliCITY used motivational approaches, nudging approaches and gamification approaches in the context of promoting a CO2-friendly, sustainable lifestyle in the city by increasing the active mobility, cycling behaviour and the use of often unknown local services (such as offers of waste services, resident services,...) which will be scientifically tested and evaluated	Increase the length of the everyday bike travels from 2,2 km to 2,7 km per person More than a third of the travels within the city are done by bike	Pictures	Cycling with Pelle – App | SimpliCITY
26	Marketing/communication campaigns	STARS	2016	UK	To promote the use of sustainable modes of transport to school, to foster a positive attitude towards active travel in children, and at the same time encourage parents and families to reconsider how they travel.	Mobility Behaviour Change	Multimodal Transport	Students	Website	A website was set up where students could track their cycle trips and compete with their classmates, as well as against other schools in their city and across Europe.	In total 188 primary schools were recruited across the project lifetime In total 84 schools set up Youth Travel Ambassador Schemes More than 51,000 students have been	N/A	STARS - Sustainable Travel Recognition and Accreditation for Schools
27	Marketing/communication campaigns	ProntoBus	2017	Emilia Romagna Region, Italy	On-demand bus service which aims to integrate urban and extra-urban public transport services with the neighbouring villages and rural areas in the Province of Modena.	RUMOBIL European Project SMARTA	Public Transp	Elderly People	Website Street advertising	On the 19th September 2017, the press conference for the launch of the RUMOBIL project was held in Castelfranco Emilia and starting from the same date the software system started to work completely. Starting from the date of the press conference, the advertising activity of the	Increase of 17.3% of passengers Prontobus service has been used by 12926 travellers, with 1853	Pictures	SMARTA - Smart Rural Transpor Areas - Emilia Romagna
28	Marketing/communication campaigns	Free and significantly discounted multi-trip passes and tickets	2022	Spain	A set of subsidies provided by the Spanish government to citizens in utilising regular, urban, and interurban transportation services.	Government of Spain - Department of Transportation, Mobility,	Public Transport	Citizens	Press releases Promotional video	A campaign was designed to communicate the reduction of prices during 1 January 2022 and 31 December 2022. The campaign "Muévete por mucho menos" (Travel with less in English) was distributed across national press and posted on social media.	N/A	Video	Free public transport tickets to travel around Spain

#	Type of Action	Name of action	Year	City /country	Description	Organisation	Focus	Target Groups	Channels	Communication strategy	Impact	Visuals	External links
29	Incentives (monetary)	T-Jove	2023	Barcelona and metropolitan area, Spain	Starting March 15, the T-jove public transport ticket in Barcelona undergoes significant changes. Previously limited to those under 25, it now extends its validity to people under 30 years old. It's price will be €40 applying a 50% discount to the normal price (€80).	TMB	Public Transport	Students	Social media Press releases in diffierent regional press Campaign at the metro stations	This change was announced through social media posts, press releases in some regional media (like La Vanguardia), and through a video campaign in metro wagons.	The month of January 2023 closed with 8,241,987 T-jove validations, of which 2,095,879 were already done with the T-mobilitat system (1,711,550 T-jove and another 384,329 with T-jove FM/FN). The other remaining 6,146,108 were made with a magnetic system (75%).	N/A	Reduction of public transport ticket price for young people
30	Marketing/communication campaigns	Implementation of "personalised" PT marketing campaign	2011	Greece	The Municipality of Langadas in Greece found itself facing a challenge – how to encourage its residents to embrace public transportation.	Aristotle University of Thessaloniki OASTh (PT Operator)	Public Transp	Citizens	Used written information, in-person discussions, practical training, and guided tours. Database from the local water company used for targeted outreach.	Conducted a personalised PT marketing campaign Overcame negative perceptions and poor awareness of PT services "Face-to-face" information campaign targeted to citizens Addressed behavioural barriers in peri-urban and rural areas	Increased PT use (modal split) through targeted marketing 81% response rate in the campaign 6.67% increase in public transport use Participants felt better informed about local PT options (76.2%) 70.4 tonnes/year reduction in CO_2 emissions due to reduced car trips	N/A	SMARTA - Smart Rural Transpor Areas - Lamgadas, Greece

ANNEX 2: List of Points of attention.

Measure ID	Appraised by	"Point of attention" category - please select one from the list below	Evaluation result: Point of attention/Comment	Solution you can present/further reading or documents presenting this
BUD_03	ECF	Seamless multimodality/intermodality	Besides PT users and car users, also include active modes users in the survey to find out more about their experiences and motivations (also when combining active modes with PT)	
IDF_01	ECF	Active stakeholder engagement during measure development	Make sure to include civil society organisations (including cyclists, pedestrians and passenger associations) in the SUMP update process	
IDF_07	ECF	Tailored communication for increased acceptance and buy-in	The success of the measure will depend a lot on the user-friendliness of the app (also for employees who are not digital enthusiasts) and the communication around it	
IDF_07	ECF	Seamless multimodality/intermodality	In the description, the definitions of "micromobility", "active mobility", "sustainable mobility" are sometimes not very clearly distinguished from each other.	
IDF_07	ECF	Mobility as a right: Universal accessibility leaving no one behind.	It would be interesting to know more about the exact pricing of the scheme/the mobility options - how to make a business case that incentives use of sustainable modes vs. car through cheap enough trips, while at the same time providing enough revenues for operators?	
IDF_08	ECF	Seamless multimodality/intermodality	In the survey, also include questions on satisfaction with intermodal solutions (e.g. bike parking at PT stops/stations)	
LEU_05	ECF	Seamless multimodality/intermodality	The description exclusively mentions incentives for PT, but in order to enlarge this to a complete MaaS, incentives for other modes (active mobility, micromobility, car sharing...) should also be included.	

LIS_10	ECF	Seamless multimodality/intermodality	In the survey, focus not only on satisfaction with the PT service itself, but on the whole experience including walking/cycling to the bus stop.	
ROM_09	ECF	Seamless multimodality/intermodality	The description of the incentives only addresses PT - to support multimodality, there should probably also be specific incentives for cycling/walking (as single modes of transport or in combination with PT).	km-based incentives for walking/cycling to work; also gamification through app (e.g. Bike2Work scheme)
TES_10	ECF	Social impacts (health&wellbeing, coexistence, security/safety)	Measure requirements: Wearing a helmet should not be a requirement for cycling, but an individual choice. It is more important to make sure that there is enough safe cycling infrastructure, segregated from car traffic.	
TES_10	ECF	Tailored communication for increased acceptance and buy-in	From the measure descriptions, it is not really clear what the actual incentive for active mobility is - you can use your PT ticket as a voucher for shops, are these e.g. bicycle shops?	
	ECF	Seamless multimodality/intermodality	OSL_04: Evaluate the possibility to also add incentives for users of private bicycles (sufficient secure bike parking spaces in housing developments; subscriptions to secure bike parking in the city centre)	
	ECF	Active stakeholder engagement during measure development	LIS_03: Make sure to include civil society organisations (including cyclists, pedestrians and passenger associations) in the SUMP update process	
	ECF	Seamless multimodality/intermodality	MAN_02: Increased uptake of active mobility is mentioned as an objective, but not in the implementation of the communication campaign. The campaign should also emphasise the combination of PT and active modes like walking and cycling.	

LEU_06	EITUM	Target groups mainly impacted	It would be great to share some insights of the two-pager published in a magazine. What was the objective of the two-pager? How was it created? Any public authority is signing the article? How would you identify target groups of people with negative perception on PT using this method? What is the analysed indicator here: number of magazines sold? Do you have information of the regular readers of the magazine where the two-pager was placed?	How about also doing a focus group of local residents eager to give their opinion on PT? The focus group should gather the most frequent users of PT but also include the ones that normally don't use it because of negative perception.
LEU_06	EITUM	Tailored communication for increased acceptance and buy-in	Nudging applications can be a useful resource to foster the uptake of park & rides. The municipality can collaborate with some companies who can offer rewards for the employees who use the nudging application and thus make use of park & rides.	
MAN_02	EITUM	Tailored communication for increased acceptance and buy-in	It would be great to have some insights on how the communication campaign was designed. In low-budget communication campaigns, social media plays a significant role. Instagram, one of today's most-used platforms, is an adequate channel to announce new lines and discounts, reaching more people, especially young individuals. For more traditional means, door-to-door leaflets or leaflets distributed at schools, city halls, and museums are also useful.	
MAN_02	EITUM	Seamless multimodality/intermodality	Other active modes other than PT also need to be actively promoted	An example of a project aimed at promoting active mobility through gamification and a reward system, in collaboration with local businesses: https://marketplace.eiturbanmobility.eu/best-practices/braga-accelerating-the-modal-shift-through-gamification-and-rewards
BUD_03	EMTA	Active stakeholder engagement during measure development	Requires a dialogue with the non-put users to dive deeper into their thinking.	

BUD_03	EMTA	Active stakeholder engagement during measure development	How to prevent socially desired answers?	
BUD_03	EMTA	Active stakeholder engagement during measure development	What if non-pt users have their valid reason to not use pt? To what extent do you want to "solve" everything? When is it considered "valid enough" to not use pt? Are their criteria for this?	
IDF_08	EMTA	Active stakeholder engagement during measure development	Conducting surveys online may exclude people with limited digital literacy or access to the internet.	
IDF_08	EMTA	Active stakeholder engagement during measure development	People need to feel their input contributed to the outcome to keep them engaged. A risk of low participation can arise if the results during the process or after are not communicated transparently, which can lead to low participation and lack of trust in future surveys (for instance when you try to compare before and after).	
LEU_05	EMTA	Target groups mainly impacted	Will there be sustained political will to make tickets more expansive for some users?	
LEU_05	EMTA	Target groups mainly impacted	Will there be a large enough user-base to refine incentives ? How to attract and retain app users	
LIS_10	EMTA	Tailored communication for increased acceptance and buy-in	Actions related to digital tickets à resistance from traditional ticketing system?	
LIS_10	EMTA	Tailored communication for increased acceptance and buy-in	How are users going to adopt new digital tickets? How to achieve seamless integration ?	
BUD_03	EPF	Tailored communication for increased acceptance and buy-in	How will the surveys be conducted? Keep in mind that multiple channels should be used for recruiting participants and conducting the surveys, so that a diverse range of groups (including non-users) can be engaged with. People get their information in different ways, so it's important to meet them where they are	Consider non-digital channels for the surveys, so that people can participate who either don't have access to digital tools or who do not have the skills. Paper surveys, interviews, and in-person support to take the survey can be useful

IDF_01	EPF	Social impacts (health&wellbeing, coexistence, security/safety)	You may consider bringing in user/citizen representatives from local organisations, so that their perspectives are also taken into account. The citizens' perspective is important in ensuring sustainable urban mobility planning	E.g. contact organisations representing passengers, cyclists, and pedestrians, but also organisations representing different target groups like the elderly, children, people with a disability, etc.
IDF_07	EPF	Target groups mainly impacted	Consider also involving the (car-using) employees themselves, to understand why they currently travel to and from work by car. This will help to develop incentives that create an impact	
IDF_08	EPF	Social impacts (health&wellbeing, coexistence, security/safety)	description mainly focuses on measuring perception of PT QoS and some aspects which are crucial are missing	factors which can be included: inclusivity and accessibility; environmental sustainability; technology integration etc that are often times forgotten but can further enhance the quality of PT services and meet the diverse needs and expectations of users.
IDF_08	EPF	Tailored communication for increased acceptance and buy-in	How will the surveys be conducted? Keep in mind that multiple channels should be used for recruiting participants and conducting the surveys, so that a diverse range of groups can be engaged with. Also consider conducting surveys with non-users to understand why they aren't using the services	Consider non-digital channels for the surveys, so that people can participate who either don't have access to digital tools or who do not have the skills. Paper surveys, interviews, and in-person support to take the survey can be useful
LEU_05	EPF	Mobility as a right: Universal accessibility leaving no one behind.	Important to remember that not all people are able to access or use digital services, and that people have app fatigue and do not want to download new apps all the time. So a MaaS app alone will not help with making the incentives more visible. There need to be non-digital alternatives too, that cater to the needs of diverse groups of people. This is also something to consider when recruiting and interacting with the target groups - that a mix of channels is needed	

LEU_05	EPF	Active stakeholder engagement during measure development	Similar to TES_10, it might be interesting to work with local shops to provide people with incentives who use the park & ride. The shops can promote the campaign on their channels, and a person who uses the park&ride can for example get a coffee if they bring along their park&ride ticket to a local coffee shop	
LEU_06	EPF	Tailored communication for increased acceptance and buy-in	Important to consider that different groups receive their information in different ways. So traditional marketing will be important for this	
LIS_03	EPF	Target groups mainly impacted	Regarding the mobility pattern study, it's important to use a qualitative approach and speak with users and non-users (especially from different groups). This will help to understand their wishes, any barriers they face while traveling, and what can be implemented to suit their diverse needs.	
LIS_08	EPF	Social impacts (health&wellbeing, coexistence, security/safety)	The objectives of the measure mention active modes, but there is nothing mentioned in the description about it. It will therefore be interesting to also showcase the benefits of active modes, e.g., on health. Similarly, you can gather people's perceptions of walking and cycling, e.g., related to the city infrastructure	
LIS_08	EPF	Social impacts (health&wellbeing, coexistence, security/safety)	Both environmental and social impacts will be interesting to highlight in this campaign. For example, PT can provide access to social opportunities, which is especially relevant for people who are socially isolated	UITP has a nice infographic about some of the benefits of PT: https://cms.uitp.org/wp/wp-content/uploads/2022/01/Public-Transport-Benefits-Mobility-for-YEU-Benefits-for-all.pdf
LIS_08	EPF	Active stakeholder engagement during measure development	The measure's title mentions partnership initiatives, but this seems to be lacking in the description. What types of partnerships do you plan to implement?	

LIS_10	EPF	Tailored communication for increased acceptance and buy-in	What is meant by certification schemes in Lis_10_01? Also, keep in mind that multiple channels should be used for recruiting participants and conducting the preference surveys, so that a diverse range of groups can be engaged with. People get their information in different ways, so it's important to meet them where they are. Do you already have an idea of the new groups you'd like to attract?	Consider non-digital channels for the surveys, so that people can participate who either don't have access to digital tools or who do not have the skills. Paper surveys, interviews, and in-person support to take the survey can be useful
LIS_10	EPF	Mobility as a right: Universal accessibility leaving no one behind.	Please consider that not everyone has or is able to use digital tools to buy tickets	consider non-digital alternatives for the new ticket for the large events, as many people do not have the digital skills or access to digital tools. this way, you can reach a broader audience
MAN_01	EPF	Target groups mainly impacted	Important to involve a range of user groups. You may also consider making participation fun, to incentivize and increase participation in the data collection activities	Gamification can help attract participation in the data collection activities
MAN_02	EPF	Other	The measure title mentions active modes, but they are not mentioned in the description	
MAN_02	EPF	Tailored communication for increased acceptance and buy-in	Consider also non-digital and fun ways to inform people about the sustainability of PT and active modes	Consider non-digital and 'fun' campaigns. EPF member Bus Users UK also has a really nice example called "Catch the bus month" to get people to use the bus more and learn about its benefits. https://bususers.org/ctbm -partner-pack/ https://www.epf.eu/wp/cat ch-the-bus-month-2023-celebrating-the-benefits-of-bus-travel/

OSL_04	EPF	Active stakeholder engagement during measure development	The new combined mobility products have to be an attractive alternative (e.g., affordable, comfortable, get them where they need to go and when they want to go) for people to use them. This is key if you want to get people out of the car and into shared modes. Another aspect is to communicate clearly about the services and explain their benefits	Aside from the housing organisations, you can engage with different user groups to understand what would incentivize them to reduce their car use and use an alternative mobility option. This will also help to understand the types of needs they have
ROM_09	EPF	Target groups mainly impacted	This measure seems to have 2 parts (campaigning and incentives), but it mostly focuses on the campaigning part. What types of incentives are planned? Keep in mind that the communication/promotional campaigns should be tailored per group and context too	People receive their information in different ways, so it's important to meet them where they are and use a mix of digital and non-digital methods for campaigning
TES_10	EPF	Social impacts (health&wellbeing, coexistence, security/safety)	It would be good to clarify how the incentives will work for the active modes. For example, a person walking or riding their own bike will not have a ticket that they can exchange in a shop	
TES_10	EPF	Tailored communication for increased acceptance and buy-in	How will the preference survey be conducted? Keep in mind that multiple channels should be used for recruiting participants and conducting the survey, so that a diverse range of groups can be engaged with to understand their preferences. Their preferences will be different, perhaps also depending on the mode	Consider non-digital channels for the surveys, so that people can participate who either don't have access to digital tools or who do not have the skills. Paper surveys, interviews, and in-person support to take the survey can be useful
LEU_06	FAC	Target groups mainly impacted	Make sure to address different groups with different strategies, drawing from LEU_05, to create a comprehensive nudging strategy.	

LIS_08	FAC	Social impacts (health&wellbeing, coexistence, security/safety)	It's important to integrate active modes like walking and cycling into the marketing campaign, emphasizing their health benefits and assessing perceptions related to city infrastructure for these modes and highlight both environmental and social impacts of public transport services, particularly how they can improve access to social opportunities for isolated individuals.	
	FAC	Social impacts (health&wellbeing, coexistence, security/safety)	Prioritize safety and security aspects in both the marketing campaign and service redesign efforts, especially during nighttime operations, to address citizen concerns and build confidence in public transport usage. Given the significant role of walking in public transport trips, it's crucial to evaluate the quality and safety of walking stages to enhance overall trip experiences and accessibility.	
MAN_01	IBV	Target groups mainly impacted	In UPPER user research, we have identified six relevant target groups: young people, elderly people, women, adult with children, functional diversity people, low income people. How are you going to identify the relevant target groups in your city?	UPPER Deliverable D2.2
MAN_01	IBV	Target groups mainly impacted	How are you going to encourage the participation of these relevant target groups?	
OSL_04	IBV	Target groups mainly impacted	According to the results of user research, low income people, young people and families with children are the main users of active and shared mobility. From these groups, the one who uses private car frequently is families with children, as they do not have other alternatives. How are you going to address the specific needs of this group?	
BUD_03	ICLEI	Tailored communication for increased acceptance and buy-in	About the surveys: it is important to tailor survey questions to capture qualitative insights into the concerns, preferences, and barriers faced by different user groups. This will facilitate a deeper understanding of their mobility patterns and motivations.	Additionally, incorporating diverse communication channels and formats, such as online surveys, focus groups, and in-person interviews, will ensure inclusivity and

				accessibility, thereby improving acceptance and buy-in from all stakeholders.
IDF_08	ICLEI	Social impacts (health&wellbeing, coexistence, security/safety)	While focusing on improving public perception of public transport through communication is a positive step, it's essential to broaden the approach. Prioritizing inclusivity, accessibility and technology integration are crucial for creating a comprehensive and user-centric PT system. Ensuring PT services cater to diverse needs, promoting sustainable modes of transportation, and integrating technology solutions will enhance efficiency and user experience.	Introducing user-friendly technology like real-time passenger information systems and mobile ticketing can enhance efficiency and convenience.
LIS_08	ICLEI	Mobility as a right: Universal accessibility leaving no one behind.	They should ensure that the marketing campaign and service redesign efforts prioritize safety and security aspects, especially during nighttime operations, to alleviate potential concerns among citizens and enhance their confidence in using public transport,	
LIS_10	ICLEI	Active stakeholder engagement during measure development	Important to focus on the active involvement of stakeholders, particularly passengers and PT operators, throughout the process to guarantee that their perspectives are adequately considered in the evaluation and improvement of bus services.	
LIS_10	ICLEI	Mobility as a right: Universal accessibility leaving no one behind.	The measure should prioritize the development of digital ticketing solutions that are user-friendly and accessible to a diverse range of passengers, considering factors such as ease of use, affordability, and inclusivity.	
MAN_01	ICLEI	Target groups mainly impacted	Particular attention should be paid to the identification of target groups and use-cases. Understanding the unique mobility needs of these groups will be key in designing effective dialogue formats and advisory services tailored to their requirements.	Possibility to explore existing mobility advisory services in similar contexts or case studies of successful implementations.
BUD_03	IFP	Seamless multimodality/intermodality	Walking is the main mode to get to PT hubs and the one that usually needs more support first mile/last mile journeys and combined transport modes	Include walking stages part of the PT trip chain - on the assessment and surveys

IDF_01	IFP	Active stakeholder engagement during measure development	Include walking organisations in the engagement	Include 60 million de pieton and Rue d´Avenir
IDF_07	IFP	Seamless multimodality/intermodality	It seems that walking is absent of the mobility credit program	Include walking - easy to detect while using MaaS
IDF_07	IFP	Other	The concept of micro-mobility should be refined and clear	There are several definitions of micro-mobility. Very different from active mobility. Maybe the emphasis of the Mobility Credits should be on Active mobility and not on micro-mobility.
IDF_08	IFP	Mobility as a right: Universal accessibility leaving no one behind.	QoS should include catchment area?	Walking as a stage of a Public Transport Trip is in average half the time of the whole trip (origin to destination). Important to access the quality of the walking stages.
LEU_05	IFP	Mobility as a right: Universal accessibility leaving no one behind.	Any financial incentives for walking and cycling to the PT hub?	
LEU_06	IFP	Seamless multimodality/intermodality	Walking as a stage of a Public Transport Trip is in average half the time of the whole trip (origin to destination). Important acknowledge the importance of the walking stages.	Include walking a cycling in communication strategy plan and communication campaigns.
LIS_03	IFP	Seamless multimodality/intermodality	Include walking and cycling comfort, safety and security in the catchment area (at least 300 meters from bus stops and 700 m from larger interfaces)	Walkability tools, GIS information on width of sidewalks and bike paths.
LIS_03	IFP	Active stakeholder engagement during measure development	Include local associations in the engagement	Engage with Estrada Viva, ACA-M, APSI
LIS_08	IFP	Seamless multimodality/intermodality	Walking as a stage of a Public Transport Trip is in average half the time of the whole trip (origin to destination). Important to access the quality of the walking stages.	Include walking and cycling in the marketing campaign
LIS_10	IFP	Mobility as a right: Universal accessibility leaving no one behind.	Walking stages are an important element to the QoS of PT	Passenger Satisfaction Surveys should include the walking stages and

				quality of the transport hub
MAN_01	IFP	Active stakeholder engagement during measure development	Include persons with disabilities, teenagers, non-German speakers, and so on...	Engage with local active association Fuss-
MAN_02	IFP	Mobility as a right: Universal accessibility leaving no one behind.	Include active mobility (walking and cycling) in the Climate campaigning	
ROM_09	IFP	Mobility as a right: Universal accessibility leaving no one behind.	In the list of topics for stimulating the network of the local mobility managers active in institutions, companies, schools, in promoting sustainable mobility behaviours walking is missing.	Walking as a stage of a Public Transport Trip is in average half the time of the whole trip (origin to destination). Important to stimulating walking as a single mode in a trip or as a stage part of a trip.
TES_10	IFP	Other	The concept of micro-mobility should be refined and clear	There are several definitions of micro-mobility. Very different from active mobility. Maybe the emphasis of the incentives should be on Active mobility and not on micro-mobility.
IDF_00	RC	Tailored communication for increased acceptance and buy-in	What kind of "innovative" formats have you in mind to bring in more views and make usually unrepresented voices heard? Would this enhanced communication be solely applied for evaluation and development of the new SUMP?	
LIS_03	RC	Other	What are your previous SUMP's main strengths and shortcomings that you aim to address with this new version? To what extent have you systematically monitored SUMP measures and goals from that would inform actions in the future?	
LIS_03	RC	Tailored communication for increased acceptance and buy-in	In the list of stakeholders required for the implementation, it seems it is missing to list the main objectors to a more ambitious SUMP. Have you identified these actors? How are you planning to come around them or to mitigate backlash from them?	

LIS_03	RC	Target groups mainly impacted	In the description you mentioned you plan to carry out and in-depth study of bus network and passenger needs. Have you undertaken or are you considering passengers directly, and specifically women and elderly people in order to identify their particular needs, perception of the service, and room for improvement?	
LIS_03	RC	Other	In the measure description, you mentioned the ambition of becoming a climate-neutral city and that the previous/current SUMP is not ambitious enough to achieve that goal? Do you have an idea of what would be the "smart" to be achieved in terms of mobility for Lison to become or aim for climate neutrality?	
IDF_01	UITP		Measures template:	
IDF_01	UITP	Seamless multimodality/intermodality	Clear objectives set as well as a series of measures.	Implement a MaaS: how doe this articulate with existing MaaS provided by the authority and operators?
IDF_01	UITP	Mobility as a right: Universal accessibility leaving no one behind.	The evaluation of the effects of the measure have also well been looked at and identified, specifically taking into consideration the qualitative and fluidity aspect measures are supposed to bring.	"Introduction of new mobility services by local authorities, which will complement the existing transportation options and increase the attractiveness of the area": as well as a strong alternative in case of disruption of public transport
IDF_01	UITP	Seamless multimodality/intermodality	The network of stakeholders involved has been well designed. Question: what about connecting with neighbouring groups of communes? What about connecting to the main traffic generators in the territory? What about connecting to new mobility service provider as well (SWOT analysis)?	"Development of new cycling infrastructures, such as bike lanes, bike parking, bike sharing, etc., to encourage more people to use bicycles as a sustainable and healthy mode of transport, and": should we consider these infrastructures be made fit for the purpose of other new mobility services and

modes (including parking space)…

MAN_01	UITP		Measure requirements:	SWOT :
MAN_01	UITP	Social impacts (health&wellbeing, coexistence, security/safety)	Other data: could space planning, urban planning, urban projects, as well as the socio-demographics of the territory be used?	Resilience strategies : "use political support"... it is key to ensure long lasting political support and interest for these soft measures...
MAN_01	UITP		Measure description:	
MAN_01	UITP	Target groups mainly impacted	Aims: promoting multimodal behaviour? Supporting behaviours that are sustainable	
MAN_01	UITP	Active stakeholder engagement during measure development	Measure output: "Data collection through different dialogue" + important to know the advantages and limits of these data + what about qualitative data collection looking at perception, habits and leviers to change them? + what about engaging directly through apps to ask on people's experience (direct collection of experience to inform the PTO and PTA in real time on remarks from users, using big data to analyse?)	
MAN_01	UITP	Target groups mainly impacted	Process of implementation; what about targeting specific and large traffic generator?	
MAN_01	UITP	Tailored communication for increased acceptance and buy-in	Target group : what about considering car drivers who could potentially become PT users as well(promote modal shift)?	
MAN_01	UITP		Monitoring templates:	
MAN_01	UITP	Data management and privacy	Should there be an evaluation dimension to adjust and adapt the policy and avoid it is abandoned?	

ANNEX 3: Analysis of Points of attention

WP5 workshop analysis

WP5 appraisal of measures: distribution per categories

Group A

ROM 9
IDF 1,7,8
TES 10
OSL 4

6 measures

Group B

MAN 1,2
LEU 5,6
LIS 3,8,10
BUD 3

8 measures

- Active stakeholder engagement during measure development
- Data management and privacy
- Mobility as a right: Universal accessibility leaving no one behind
- Other
- Seamless multimodality/intermodality
- Social impacts (health&wellbeing, coexistence, security/safety)
- Tailored communication for increased acceptance and buy-in
- Target groups mainly impacted
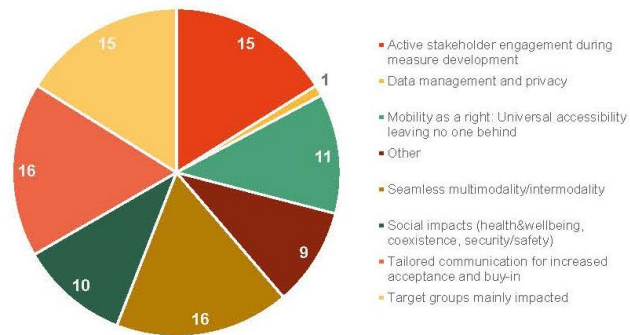
Group A

Seamless multimodality… — 6
Social impacts… — 5
Active stakeholder engagem… — 4
Mobility as a right: Universal… — 4
Tailored communication for… — 4
Other — 4
Target groups mainly impacted — 3
Data management and privacy — 1
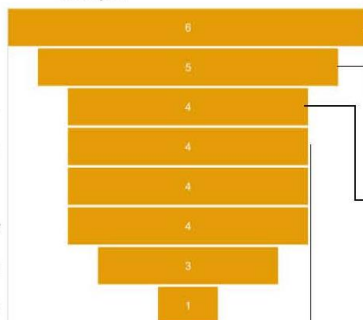
- **Seamless muldimodality/ intermodality**
- Connecting neighbouring areas / territories
- Absence of walking
- Incentives only address PT
- Survey – need to address satisfaction regarding intermodal solutions

- **Social impacts (health & wellbeing, coexistence, security/safety)**
- Clarify how the incentives will work for the active modes
- Including citizens' perspective and local organisations
- Prioritizing inclusivity, accessibility and technology integration

- **Active stakeholder engagement during measure development**
- Including civil society organisations (cyclists, pedestrians, and passenger associations)
- Risk of low participation can arise if the results during the process or after are not communicated transparently
- Online surveys may exclude people with limited digital literacy or access to the internet

- **Mobility as a right: Universal accessibility leaving no one behind**
- Stimulating the network of the local mobility managers active to promote sustainable mobility behaviours >> walking is missing.
- More information on pricing of the scheme/the mobility options - how to make a business case that incentives use of sustainable modes vs. car
- QoS should include catchment area

Group A

Seamless multimodality… 6
Social impacts… 5
Active stakeholder engagem… 4
Mobility as a right: Universal… 4
Tailored communication for… 4
Other 4
Target groups mainly impacted 3
Data management and privacy 1

- **Tailored communication for increased acceptance and buy-in**
- Conducting the preference survey >> keep in mind the use of multiple channels, a diverse range of groups can be engaged, consider conducting surveys with non-users
- User-friendliness of the app and communication about it
- What is the actual incentive for active mobility

- **Target groups mainly impacted**
- Involving the (car-using) employees themselves, to understand why they currently travel to and from work by car
- Focus on the campaigning part. What types of incentives are planned?
- Addressing specific needs of 'families with children', using private car frequently as they do not have other alternatives

- **Other**
- The concept of micro-mobility should be refined and clear
- Environment category
- Privacy cytegory

4

Group B

Target groups mainly impacted 10
Active stakeholder engagem… 9
Tailored communication for… 9
Mobility as a right: Universal… 7
Other 5
Social impacts… 3
Data management and privacy 1
Seamless multimodality…

- **Target groups mainly impacted**
- Identifying the relevant target groups in your city
- Encouraging the participation of the relevant target groups, involve a range of user groups
- Qualitative approach and speak with users and non-users (especially from different groups)
- Understanding unique mobility needs
- Incentives, and how to attract and retain app users

- **Active stakeholder engagement during measure development**
- Data collection through different dialogue" - the advantages and limits of these data. Suggestions of qualitative data collection looking at perception, habits, and leviers, plus engaging directly through apps
- Partnership initiatives seem to be lacking in the description
- It might be interesting to work with local shops to provide people with incentives who use the park & ride
- Active involvement of stakeholders, particularly passengers and PT operators, local associations, including persons with disabilities, teenagers
- Reasons for non-PT users do not use it

5

Group B

Target groups mainly impacted — 10
Active stakeholder engagem… — 9
Tailored communication for… — 9
Mobility as a right: Universal… — 7
Other — 5
Social impacts… — 3
Data management and privacy — 1
Seamless multimodality…

- **Tailored communication for increased acceptance and buy-in**
- Multiple channels should be used for recruiting participants and conducting the surveys, so that a diverse range of groups (including non-users) can be engaged with
- Tailor survey questions to capture qualitative insights into the concerns, preferences, and barriers faced by different user groups
- Actions related to the adoption of new digital tickets
- Design of the communication campaign
- Nudging applications can be a useful resource to foster the uptake of park & rides

- **Mobility as a right: Universal accessibility leaving no one behind**
- Access / use of digital services and the need to include non-digital alternatives
- Digital ticketing >> consider factors such as ease of use, affordability, and inclusivity
- Marketing campaign and service redesign efforts prioritize safety and security aspects
- Including active mobility (walking and cycling) in Climate campaigning
- Financial incentives for walking and cycling to the PT hub

- **Social impacts (health & wellbeing, coexistence, security/safety)**
- Highlighting both environmental and social impacts in the campaign
- Measure mentions active modes, but lacks the description of it
- Taking into account space and urban planning, as well as the socio-demographics of the territory

6

Group B

Target groups mainly impacted — 10
Active stakeholder engagem… — 9
Tailored communication for… — 9
Mobility as a right: Universal… — 7
Other — 5
Social impacts… — 3
Data management and privacy — 1
Seamless multimodality…

- **Other**
- Measure title mentions active modes, but they are not mentioned in the description
- Environment (no description)

- **Data management and privacy**
- Should there be an evaluation dimension to adjust and adapt the policy and avoid it is abandoned?

- **Seamless Muldimodality/ Intermodality**
- (no descriptions)

7

ANNEX 4: Workshop's results for group A and B

WP5 Workshop: Upraisal of measures by UPPER's horizontal partners. Group_A

UPPER Project

MULTIMODALITY REQUIRES GOOD CONNECTIONS, INCENTIVES AND SATISFACTION MONITORING

Which of these topics is critical for ROM_09, TES_10, OSL_04 and IDF_07. How will they be addressed?

OSL04. Reduced barriers for payment. Working on user survey now	TES_10: incentives	Take in consideration walking and cycling stages . In data collection and quality of catchment areas	Information regarding the connection between modes is very important. Once a multimodal trip is started it should be booked for the entire chain
Engaging with local NGOs for walking and cycling	Regarding satisfaction: Use diverse + representative user group with different needs; monitor yearly	Make sure that incentives are really encouraging multimodality, ideally not only one mode	from the serious games, many said staff training to support people with different disabilities (at stations, bus drivers, etc.)

UPPER

PT HAS DIFFERENT SOCIAL IMPACTS: HEALTH&WELLBEING AND INCLUSIVENESS

In which of these aspects will focus the multimodal, the perception and the behavioural measures? How will these topics be addressed?

TES_10: health&well-being improvement by incentivizing not only PT, but also active modes and multimodal trips

Providing multimodal trips has the opportunity of improving the image of PT, as providing freedom to all users

To fully leverage the health benefits of active mobility, safe and convenient infrastructure is needed

OSL04 Improved car sharing offer will provide more freedom of movement for people who cannot afford a car

Make focus groups with active mode users even non-users of PT

measures co-created with citizens should be shown as such, many times people are reluctant to contribute because they don't see the benefit

focus groups with different user categories

**TES 10
OSL 4**

6 measures

Mentimeter

PT STAKEHOLDERS ARE ALSO THE CITIZENS

How are they being involved in the measure development and implementation? What alternative channels do we have to online surveys?

Focus groups, observational research; low-level could be diary of daily journeys

Make sure to involve local cyclist and pedestrian associations in areas relevant to them and get their feedback early in the process

Face-to-face interviews are always possible. To do it right, anticipate the need for a cover letter posted in advance, signed by the PTA, and the need for rigorous address sampling

Online surveys are not ideal to engage certain demographics. Focus groups or citizen assembly...with random participation

show which measures or interventions are co-created with citizend

TES_10: citizens will be the end-users of the app and they will be directly involved . Also, through the app except of incentivizng users, we will receive actual trip data (alternative to surveys)

Often language barriers are overlooked (especially for marginalised groups); make sure that involvement corresponds to language needs of the involved

OSL04: We aim to introduce a discounted mobility subscription payed through the monthly appartment costs. Hopefully this will reduce payment barriers for PT.

Mentimeter

MULTIMODALITY AND SUSTAINABILILITY INVOLVE ACTIVE MOBILITY AND WALKING

How to include persons with functional diversity (musculoskeletal, deaf, blind, ...) and elderly people? How to overcome cost barriers?

Heavy incentivisation for less independent people, perhaps also involcing privately operated modes (ride-hailing, etc.)

an option is always to build redundancy in the network...make sure there is not a single interchange where all possible transfers are done, but there are multiple nodes

Inlusion comes at a price: e.g. picking deaf/blind/wheelchair users up at their home/their desired location to maximise inclusion. Pay attention to the language/framing used

Create the ombudsman/ombudswo man for people with special needs

Mentimeter

TES 10
OSL 4

6 measures

THE USE OF MONETARY INCENTIVES

This topic often raises equity concerns, since some users might be left behind, how will your measure address this?

equity problems are raised because you're essentially giving money to someone who can afford a car, but you want to convince them not to use it..do they really need additional money?

Skip monetary incentives, but focus on affordable/free tickets for disadvantaged groups

Mentimeter

Group A

ROM 9
IDF 1,7,8
TES 10
OSL 4

6 measures

TAILORED COMMUNICATION REQUIRES INFO ON USERS EXPECTATIONS AND NEEDS

What communication will be developed for planning, for real-time information, ...? What formats should be used (video, audio, text, infographic, ...)?

Mentimeter

Depending on target group. Elderly: traditional media (TV, newspaper, etc.). Younger demographic: Social media (TikTok). Disabled people: Leverage associations (deaf/wheelchair/...) to spread news

OSL04 we will be using the elected boards of the housing cooperatives to communicate the service to their residents. They have already established comm channel through a dedicated app

focus should be more on providing consistent information from multiple sources. See for example the ROM_09 measure with mobility managers>same message as ATAC PT operator

Group A

Targeted formats per user grops

TES 10
OSL 4

6 measures

TARGETED INCENTIVISATION CAN INCREASE BEHAVIOURAL CHANGE & BETTER RESOURCES' USE

Are there any plans for targeted incentivisation? Can you briefly describe some of them?

Mentimeter

Targeted incentivisation sounds really interested. How can we overcome issues related with GDPR for identifying specific target groups?

TES_10. The app is planned for incentivizing multimodal trips ,trips with active modes and of course the use of pt. User groups are not directly targeted but younger people

Younger people is most probably to be interested

Micromobility could also be used as an alternative service to PT in rush hours

TES 10
OSL 4

6 measures

ARE PRIVATE CARS USERS THE ONLY ONES INVOLVED IN THE BEHAVIOURAL CHANGE?

What other groups of users should be involved? How can these users' groups facilitate a behavioural change?

It depends on the issues that each city faces

Promote remote working for example could be another strategy

definition: single (few) users on vehicles they do not own themselves, but which they operate independently

Mentimeter

Group A

ROM 9
IDF 1,7,8
TES 10
OSL 4

6 measures

OTHER

Which are the features characterizing micro-mobility? How the environmental impact relates to multi-modality, PT perception, and behavioural measures?

Don't confuse micro mobility and active mobility

Mentimeter

Group A

ROM 9
IDF 1,7,8
TES 10
OSL 4

6 measures

WP5 Workshop: Upraisal of measures by UPPER's horizontal partners. Group_B

UPPER Project

UNDERSTANDING MOBILITY NEEDS IS THE KEY TO DESIGN AN EFFECTIVE DIALOGUE FORMAT

Are the 6 target groups identified in UPPER representative for MAN_01&LIS_03&LEU_05&LEU_06? Is someone missing? How to encourage groups participation?

Lx is in the room!	Leuven is present	Target Groups are okay. Maybe we are missing LGBTIQ+ or non binary	Ethnic minorities, LGBTQ+
We kind of feel that an employed person with 25-50 without children is not represented	People who rely on public transportation for nighttime work could be an interesting focus (safety, security, schedule, etc.)	Target groups are representative. But, felt the need to also consider "non-users" and "typical commuter"	

Group B

LIS 6,8,10

BUD 3

8 measures

WITHIN THE STAKEHOLDERS TO INVOLVE THERE ARE LOCAL ASSOCIATIONS AND LOCAL SHOPS

Are local associations and local shops included among the stakeholders of the measure?

Mainly via their own larger associations and lobby groups

BUD_03 Non appicable, we would like to survey the PT users and non-users and the misssing PT links in the selected suburban districts of Budapest.

Leu- We use local associations to get input for the measure ans get in touch with the target group

In LIS_03 (SUMP) yes, there is a large participation process including associations and shop assocíassion representatives!In LIS_10 (PT tickets for large events) some stakholders were included...

LIS_08: communications campaigns are still under definition, but most like will involve multiple channels

In LIS_03 (SUMP), LIS_08 (campaigns) and LIS_10 (PT tickets for large scale events) we use mostly digital channels!

General ideas: Include wayfinding at stations/stops with info about bike stations/walking destinations. Consider bike station/PT connections when planning new stops/bike share stations.

Mentimeter

Group B

LIS 3,8,10
BUD 3

8 measures

WHICH KIND OF CHANNELS WILL BE USED TO DESIGN TAILORED COMMUNICATION?

There will be a combination of non-digital communication, traditional marketing, social media, and other communication channels?

We see that we rather have to directly adress people that do not use PT. That's difficult via digital channels as they will ignore PT-Ads etc

Leu 6 - we still have to work out the communication strategy, but it will problably be a combination of digital and non digital to reach different target groups

BUD_03: The survey will be carried out by a subcontractor with only personal, in-home interviews, in order to it will be representative by residence, gender and age for the selected 5 districts.

LIS_08: communication campaigns are still under definition, but will most likely involve multiple channels

In LIS_03 (SUMP), LIS_08 (campaigns) and LIS_10 (pt ticj«kets for large scale evenyts) from TML, we just use digital channels

Mentimeter

Group B

LIS 3,8,10
BUD 3

8 measures

ACCESSIBILITY, JOINTLY TO AFFORDABILITY&INCLUSIVITY ARE MAIN TOPICS WITHIN MAAR

How to address the need of some users that cannot or don't want to access digital platforms for tickets or information?

Maintain a minimum level of information in more traditional formts (e.g. bus stops). Offer more traditional communication methods (e.g. call centre, shops)

Leu 5- we will probably provide a non-digital alternative and assistance from (mobility) coaches

Tickets: in Lisbon we use contactless tickets!Information: we have it on interfaces, but increasing strongly the digital side of info!

MAN: As part of public services of general interest we always still offer non digital ways as ticket offices / machines and Timetable posters

To my knowladge, environment is key in communicatioon, but not so much as a decisive factor for people to decide on the travel behaviour!

Mentimeter

Group B

LIS 3,8,10
BUD 3

8 measures

ENVIRONMENTAL IMPACT

Can the environmental impact be used to enhance behavioral change&cultural change in any of the measures? How could this be carried out effectively?

Lis - Guess the answer to the first question is yes, but the second is much more difficult. Some segments of the population are very reactive to this topic.

To my knowladge, environment works well in communication, but is not key when chosing travel options!

Leu 6- apparently health reasons are more effective as an incentive for modal shift

Mentimeter

Group B

MAN 1,2
LEU 5,6
LIS 3,8,10
BUD 3

8 measures

PT CAN PROVIDE ACCESS TO SOCIAL OPPORTUNITIES & MICROMOBILITY HAS SOCIAL IMPACT

Are micro-mobility and soft mobility modes adequately promoted in the measure considering their significant social impact?

Leu 5 - we try to develop a financial incentive for bicycles as an alternative for a cheap or free buspas

we need to take care in this issue! some options are not as sustainable as they could be! private bike: top! some shared bikes: good! some freefloat solutions have significant environment impact!

nevertheless, the solution is great, speccially if in combination with PT!

Mentimeter

Group B

MAN 1,2
LEU 5,6
LIS 3,8,10
BUD 3

8 measures

DATA MANAGEMENT

How much compliance with GDPR privacy regulations and all the new AI acts can present obstacles to the implementation of measures?

AI acts are very very important! AI can be a boost but has to be very closely regulated! For now, we do not see obstacles in AI. In GDPR some, but mostly necessary...

Leu 5- it is a big obstacle in the automation of the allocation of incentives

Mentimeter

Group B

MAN 1,2
LEU 5,6
LIS 3,8,10
BUD 3

8 measures

UPPER

How to promote soft mobility (walking and cycling) in multimodal hubs and in ticketing?

Establish Hubs and make options visible close to PT stops

LIS_03 (SUMP) - promote universal accessible in interfaces

correction: LIS_03 (SUMP) - promote universal accessibility in interfaces

(in another LIS measure) we integrated the PT ticketing with the bike-sharing system. But this concept could also be applied to bike-parks (for people who bring their own bikes)

Create dedicated paths for walking and cycling to and from hubs, Ensure easy access to hubs by foot or bike, with ample parking; Integrate walking and cycling seamlessly with public transit

Mentimeter

Group B

LIS 3,8,10
BUD 3

8 measures

ANNEX 5: Measure Monitoring Template IDF_01

Monitoring template for Measure IDF_01 "Declination and adaptation of a Regional SUMP at a local scale and to local needs"

Objectives of the measure

- Develop a frame for a future local SUMP
- Develop ideas based on the regional SUMP recommendations to be adapted at VGP scale, or even at a communal scale to be carried out by local actors.
- The overall idea is to improve the mobility and transport system by tailoring, at a local scale, SUMP's recommendations for VGP

Description of the measure

In Ile-de-France Region, the SUMP is regional, and each territory is due to decline it into local SUMPs and VGP has yet to do it. In this context we propose to realize a detailed study to shape the implementation of a local SUMP in VGP to accompany a better development of urban transport at a local scale.

The objective of this pre-study is to make an initial diagnostic of technical framing elements that make up a local SUMP and to propose some examples of action (1 or 2 for each theme) to be carried out. It is a question of making a diagnostic of the situation and visualizing how, with the help of Île-de-France's SUMP, the territory of Versailles Grand Parc can carry out all or part of the actions at the local scale with the aim of strengthening the attractiveness of active modes and public transport.

Measure outputs:

The measure will be fulfilled if we provide VGP with a functional diagnostic and guidances on how to decline the SUMP at VGP's scale, and more precisely if we provide tailored examples of actions to be carried out specifically on VGP's territory.

- Delivery of a pre-study (format to be confirmed)
- Interest showed by local actors on one or more of the actions presented

Related UPPER tools:

This measure will not be actively supported by any IT tool of the UPPER toolkit.

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	Presentation of a table of content and approbation by VGP	IPR VGP		Technical	September 2024	Furniture of a functional and precise **table of content**	This step exceeds the deadline of WP5, and will be performed within WP6
2	Carrying of the pre-study	IPR VGP		Technical	2024 – first semester of 2026	**Deliverable** (format to be determined)	This step exceeds the deadline of WP5, and will be performed within WP6
3	Delivery of the results	IPR VGP		Technical and communication	first semester of 2026 - Mid 2026	Presentation to VGP – **PPT deliverable**	This step exceeds the deadline of WP5, and will be performed within WP6
4	Presentation to elected officials interested by one or more measures	IPR VGP		Technical and communication	first semester of 2026 - Mid 2026	Presentation carried out to elected officials – **PPT deliverable**	This step exceeds the deadline of WP5, and will be performed within WP6

ANNEX 6: Measure Monitoring Template MAN_01

Monitoring template for Measure MAN_01 "Establish participative governance and dialogue formats to address the citizens with a focus on the (special) needs of user groups"

Objectives of the measure

- To improve existing formats and establish new ones to collect insights into mobility needs
- To develop an individual mobility advisory service to promote modal shift
- Promoting the use of PT and active modes
- Strengthening citizen participation and their identification with PT

Description of the measure

This measure proposes different formats of data collection such as surveys, dialogue formats as well as on-site service counters at events, will be designed and carried out. Based on those insights, rnv wants to develop a modular information package, to provide comprehensive but use-case specific information and service. The overall ambition is to develop a mobility advisory service, that supports the modal shift by easing transition from individual motor car traffic to sustainable modes of transport. This mobility advisory service aims at providing relevant information on the availability of mobility services, optimal ticketing product as well as additional services and information, focussing on the specific situation of the target group or use-case.

The specific use-cases shall be identified in a first phase of this measure. At this point e.g., mobility advisory services during events could be one focus area (how to get there and get back home, focus on occasional users also from the wider region). Another potential focus area could be the use-case of commuters (employer subsidized Job Tickets, daily commute, alternatives in case of service disruptions, combination of PT with bike sharing).

Measure outputs:

This measure will deliver:

- Data collection through different dialogue formats on mobility needs of relevant target groups/ use-cases with the involvement of at least 100 people
- Concept for a modular and location-independent mobility advisory service
- Production of relevant information materials (digital/ print)
- Piloting of modular and location-independent mobility advisory service

Related UPPER tools:

This measure will be actively supported by one IT tool from the UPPER toolkit:

- **U-GOV:** Testing the U-GOV platform to improve user communication, generate feedback on activities and actively involved citizens and stakeholders in the design of the modular and location-independent mobility advisory service.

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	To collect inputs from user research and behavioural change best practices, regarding the use of private car and PT.	MAN, IBV		data/infrastructure/legal/safety/social/technical/ Technical	01/02/2024	Inputs from user research finalized.	Research finalized
2	To support MAN in study definition to collect data from relevant target groups / use cases.	MAN, IBV		Data/ Technical	14/06/2024	Data collection from relevant target groups executed and finalized.	Survey will be held in April and May. Data collection through a dialogue format on mobility needs involving over 100 people has been completed. The data still needs to be summarised
3	Testing of U-GOV platform.	MAN, IBV		Data/Technical	01/08/2024	Input for U-Gov platform generated.	Open to test the U-GOV tool (3 people) - Conversation with Juan Gimenez
4	Concept design of modular and location independent mobility advisory service.	MAN, IBV		Technical	01/10/2024	Concept design of mobility advisory service is finalized and evaluated. feedback of campaign finalized. Recording (data collection) of number of views generated (landing page, social media) finalized.	This step exceeds the deadline of WP5, and will be performed within WP6..
6	Campaign launch	MAN, IBV		Technical	August 2024	Campaign & landing page is launched	Campaign & landing page is already launched. Further actions and input might happen in 2025. These additional actions will be performed within WP6.
			LAUNCH OF THE DEMO				

ANNEX 7: Measure Monitoring Template MAN_02

Monitoring template for Measure MAN_02 "Campaigning for sustainable forms of transport, such as PT, walking and cycling. Establishing a PT culture with PT as a green, safe, inclusive, and social space"

Objectives of the measure

- To improve public perception of PT.
- Raising awareness on climate-friendly mobility.
- Raising awareness on available/ new/ upgraded PT-services.
- Raising awareness on further (active) mobility options and its combination with PT.
- Promoting the use of PT and active modes.
- Establishing a mobility culture on PT and raising the identification of citizens with PT.

Description of the measure

This communication campaign has the following main focuses:

1) *Climate campaigning* for PT related sustainable mobility to establish a positive culture of public transit focused on PT as an environmental, safe, and inclusive services.
2) Ensure citizens know how their PT can be used to complete their journeys through marketing efforts for services which improve connectivity in *suburban areas to support PT in "the last mile".*
3) Continue to *positively influence community perceptions* of public transportation, also with a *focus on specific target groups*.

Climate change and sustainable passenger transportation will become even more important in the future. Resources are becoming scarcer, and international climate targets are tightening. Active support for PT through suitable advertising measures and campaigns are essential here. Amongst other activities, rnv will launch a climate-friendly mobility campaign, to strengthen local PT-culture.

Measure outputs:

This measure will deliver:

- Concept, design and content update for a landing page on which the rnv presents its contribution to climate protection.
- Development, supervision and evaluation of a sustainability campaign which includes various relevant events and topics (e.g., earth hour or BUGA 23, national garden show).

Related UPPER tools:

The implementation of this measure will not be actively supported by IT tools from the UPPER toolkit.

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	To review user research to identify strengths of PT.	MAN, IBV		Technical	January 2024	User research finalized and approved.	Presentation of the mobility measure in a workshop, during Rome GA.
2	To review best practices and successful projects.	MAN, IBV		Technical	February 2024	Research finalized and evaluated.	
3	Concept design of the communication campaign. Concept design of the landing page.	MAN, IBV		Technical	March 2024	Concepts finalized and approved.	
4	Design of the communication campaign (messages, channels, planning, …).	MAN, IBV		Technical	July 2024	Design finalized and approved.	
5	Tools to measure the impact.	MAN, IBV		Data	August 2024	Recording (data collection) of feedback of campaign finalized. Recording (data collection) of number of views generated (landing page, social media) finalized.	Data Recording is ongoing
6	Campaign launch	MAN, IBV		Technical	August 2024	Campaign & landing page is launched	Campaign & landing page is already launched. Further actions and input might happen in 2025. These additional actions will be performed within WP6.
			LAUNCH OF THE DEMO				

ANNEX 8: Measure Monitoring Template LIS_03

Monitoring template for Measure LIS_03 "To improve the mobility planning"

Objectives of the measure

- To improve planning towards achieving city mobility goals, Vision Zero, and amplifying multimodal mobility.
- To study mobility patterns and propose corrective measures accordingly.
- To uptake actions to align Lisbon to be one of 100 Climate-Neutral and Smart Cities by 2030.

Description of the measure

Lisbon city and TML are currently launching their public tenders **to develop a 3rd generation of the metropolitan and municipal SUMP**, one that we expect **to relate directly to the UPPER measures**, since they overlap in time (Lisbon's expectation is to have a closed document by the end of 2023 and TML by 2024).

In addition, multiple studies will be conducted to complement the measures defined in the SUMPs: The city of Lisbon shall work on the development of a Municipal Road Safety Plan that will include car speed restriction measures; TML will review and adjust its PT offer to meet customer needs; likewise, CARRIS will also conduct studies to review its network.

Measure outputs:

This measure will deliver:

- UPPER related measures integrated in the SUMP, with a definition of monitoring indicators.
- A study comparing and assessing to what extent the city is on track to achieve vision zero and public transport and climate-neutrality targets.
- An in-depth study of the CARRIS' network and passenger needs, to detect critical issues in the network coverage and highlight potential avenues for improvement.
- At least, yearly adjustments in the bus offer plans, to improve quality and reduce environmental and climate impacts.

Related UPPER tools:

The implementation of this measure will be actively supported by several IT tools from the UPPER toolkit:

- **U-NEED:** This tool may help integrate data from different transport modes, detect inefficiencies and define strategies to optimise it.

- **U-SIM.plan:** This tool is expected to help simulate the options generated with U-NEED, and model multimodal transport and new active modes, and several other functionalities, like air and noise pollution assessment, that are useful to address SUMP adjustments.

- **U-SUMP:** This tool will help monitor and visualize results of SUMP related UPPER measures.

- **U-GOV:** This tool shall facilitate the development of participatory actions involving the citizens.

Steps to ready-to-demo measure

Steps	Description	Involved partners / externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
Sub-Task : New municipal road safety plan (CML)						
1	Municipal Road Safety Plan accomplishment	CML		Technical/social	December 31st, 2023	Report submission	
2	Inclusion of the "Safe System" and "Vision Zero 2030" approach in the plan	CML External stakeholders		Legal/social/technical	May 31st, 2024	Update document	
3	1º Draft Municipal Road Safety Plan	CML		Legal/ political	August 30st, 2024	Draft document submission	
LAUNCH OF THE DEMO Out 31st, 2024						

Steps	Description	Involved partners / externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
Sub-Task : Adjustments to the municipal SUMP (CML)						
1	Design Terms of Reference of SUMP and revise them Develop Tender process Lauch tender	CML		Technical/legal/ political	March 31st, 2023	Terms of Reference closed Tender lauched	
2	Evaluate proposals	CML		T Technical/legal/ political	September 30th, 2023		
3	Award tender Contract external support	CML + Consultant company		Technical/legal/ political	July 31st, 2024	Contract signature	
LAUNCH OF THE DEMO May **2024**						

Steps	Description	Involved partners / externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
Sub-Task : Adjustments to the metropolitan SUMP (TML)						
1	Design Terms of Reference of SUMP and revise them	TML + Jaspers		Technical/legal	June 30st, 2023	Terms of Reference closed	
2	Develop Tender process	TML		Technical	July 31st, 2023	Tender processe closed	
3	Lauch tender	TML		Technical/social/ political	July 30st, 2023	Tender lauched	
4	Evaluate proposals and award tender	TML		Technical/social/ political	November 31st, 2023	Award given	
5	Contract external support	TML + Consultant company		Technical	December 10st, 2023	Consultancy company contract signed	
LAUNCH OF THE DEMO December 21st, 2023						

	Sub-Task : Bus offer service evaluation and adjustments (TML)						
1	Revision of the metropolitan bus offer plan	TML + municipalities + bus operators		Technical	March 31st, 2024	GTFS files with offer plan 1st version produced	
2	Adjustment of the metropolitan bus offer plan	TML + bus operators		Technical	April 30st, 2024	GTFS files with operational plan submitted to operators	
3	Revision and adjustment of the metropolitan bus offer plan	Bus operators		Technical	June 31st, 2024	GTFS files with offer plan revision produced	
4	Adjustment of the metropolitan bus offer plan	TML + bus operators		Technical	August 31st, 2024	GTFS files with operational plan submited by operators to TML	
	LAUNCH OF THE DEMO August 31st, 2024						

	Sub-Task : Studies for CARRIS network redesign (CARRIS)						
1	Create an interdisciplinary working group within CARRIS	CARRIS		Technical	January 31st, 2024	Selection of the team members within CARRIS	Completed.
2	Tenders for network analysis study: Preliminary study on user and non-user needs.	CARRIS		Tender/legal	June 30th, 2024	Public tender launched/External consultant selected.	20/06/2024: Consultant selected. Pending contract.
3	Launch the study	CARRIS, external consultant		Technical	July 1st, 2024	Start of the network study.	
	LAUNCH OF THE DEMO (No onsite demo. Potential use of U-GOV in later stages the network revision process, to get feedback on possible network design alternatives)						

ANNEX 9: Measure Monitoring Template LIS_08

Monitoring template for Measure LIS_08 "To implement campaigns and partnership initiatives"

Objectives of the measure

- To improve the perception of citizens on the quality, comfort, safety and reliability of PT services;
- To increase the modal share of buses and trams.
- To promote the attractiveness of PT modes among citizens;
- To foster a modal shift from private vehicles towards PT and active modes.

Description of the measure

This measure will develop an ambitious underline marketing campaign to showcase the benefits of PT services; this campaign shall highlight the seamless integration between modes, and the time and geographical coverage of existing services, in order to raise awareness and appeal to non-frequent PT users and car users. In addition, a study shall be performed to assess how to attract car users and identify potential service improvements that may prompt a shift towards PT.

Depending on the outcomes of twinning activities, new bus service image features will be designed with the aim of rebranding the PT services to increase their attractiveness and improve the perception of users on their comfort and safety.

Measure outputs:

This measure will deliver:

- An ambitious marketing campaign to disseminate the features of the multimodal PT system in the Lisbon Metropolitan Area;
- An in-depth study on the perceptions of car users regarding PT offer, and the analysis of potential service improvement to attract car users;
- A study on the perceptions of citizens regarding PT services, and the analysis of potential image rebranding strategies to increase their attractiveness.

Related UPPER tools:

The implementation of this measure will be actively supported by two IT tools from the UPPER toolkit:

- **U-GOV:** This tool shall enable establishing a direct communication channel between mobility stakeholders and citizens. Such a medium can be used to display the qualities of the PT services to the communities; on the other hand, it may also be used to gather information on their perceptions regarding the quality of PT services, their concerns and their needs.

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	To collect inputs from user research and behavioural change best practices, regarding the use of private car and PT.	CARRIS, TML, IBV		Data	31/03/2024	Literature researched (topics: best practices; criteria for modal choice; methodologies for measuring the impacts of the campaign)	Completed.
2	To support LIS in study definition aimed on identifying communication keys to attract private car users towards PT use.	CARRIS, TML, IBV		Technical	31/03/2024	Potential strategies identified: feasible communication channels; suitable campaign designs.	
3	Study on the perceptions of car users regarding PT offer	CARRIS, TML		Technical/Tender	31/05/2024	Case study assessed: relevance of choice criteria; applicable strategies; mensurable impact indicators.	02/07/2023: The LIS_03 focus groups will target both PT users and non-users. Thus, it was a decided to wait for the results of the LIS_03, to assess if further studies on car users will be needed.
4	Concept design of the communication campaign; U-GOV role.	CARRIS, TML, IBV		Technical/Tender	31/05/2024	Definition of the campaign approach (target audience, dissemination channels, format)	
5	Design of the communication campaign (messages, channels, planning, …).	CARRIS, TML, IBV		Technical (internal/external)	31/08/2024	Campaign designed	
6	Tools to measure the impact.	CARRIS, TML, IBV		Technical	31/08/2024	Stipulation of: indicators to collect; impact estimation method.	
7	Campaign launch.	CARRIS, TML, IBV		Technical	31/8/2024	Campaign launched	- Social Media Campaign on the 05/06/2024 (Environment Day)
				LAUNCH OF THE DEMO 30/09/2024			-
8	New Communication campaigns, based on LIS_03 results	CARRIS, TML, IBV		Technical	Along 2025		This step exceeds the deadline of WP5, and will be performed within WP6

ANNEX 10 : Measure Monitoring Template LEU_06

Monitoring template for Measure LEU_06 "To launch communication campaigns and digital tools to increase the uptake of PT"

Objectives of the measure

- To improve perception of public transport by improving communication.
- To increase the use of public transport, among those who have a negative perception of it.

Description of the measure

This measure aims to increase the uptake of public transport and the use of park&rides specifically by **implementing communication/nudging campaigns**, aimed at specific groups. Strategies for realizing behavioural change, including nudging and gamification, will be identified and assessed in a participatory process. **Social media campaigns and influencer marketing**, **ambassador programmes** and **more traditional marketing** will be implemented **to improve the perception of public transport**. The measure in particular aims to identify and deploy strategies to improve the perception of **city centre routes**.

Measure outputs:

This measure will deliver:

- Communication strategy plan.
- Communication campaigns.

Related UPPER tools:

This measure will be actively supported by one IT tool from the UPPER toolkit:

- **U-GOV:** citizen engagement to pinpoint effective communication strategies.

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	Communication first fase of new and improved bus network from 1/1/2025	De Lijn	Ester Dewil	Technical	30/11/2023	2 page article in the Leuven residents' magazine	
2	Analysis of the perception of the PT	IBV	Ester Dewil	Social	31/06/2024	Analysis report of the PT perception + Identification of target groups	We requested data from satisfaction surveys from our bus operator. The operator itself does not want to share their data; we can however receive some data from the Flemish Mobility Department.
3	To define objectives of the campaign, possible target users, possible communication actions from M2, 3+4, 5 and other projects/ initiatives and possible communications channels.	IBV	Ester Dewil	Technical	31/08/2024	Document for the preparation of the communication plan	The survey in M1 will provide information to define target users (results in Q2 2024) The outcome of M2, 3+4 and 5 will help determine the objectives of the campaign. For step 2 and 3 (analysis of the perception of the PT/ define objectives and target users of the communication campaign) we are also collecting input from surveys we are preparing and conducting in our measure LEU_1. We should have this input by the beginning of august.
4	To review best practices and successful projects	IBV	Ester Dewil	Technical	31/08/2024	List of ideas	Depending on initiatives for knowledge exchange with the UPPER-cities and partners in WP5 and input from the local communication guidelines from WP8. we are compiling a list of ideas.
5	Design of communication campaign last phase of new and improved bus network	De Lijn, IBV	Ester Dewil	Technical	30/11/2025	communication plan designed	This is after the deadline of WP5 so this step will be executed within WP6.
6	Campaign launch last phase of new and improved bus network	De Lijn, IBV	Ester Dewil	Technical	31/12/2025	Communication campaign implemented	This is after the deadline of WP5 so this step will be executed within WP6. The preparation for the communication campaign for the new bus service is starting soon,
7	Concept design of the communication campaign; U-GOV role.	IBV	Ester Dewil	Technical	30/06/2025	Communication strategy plan designed	Dependency on the outcome of measures 1, 2 3+4 and 5. We don't intend to use U-GOV, we were interested in U-GOV for citizens participation to collect input for some of our measures, but not for the assessment.
8	Design of the communication campaign (messages, channels, planning, …).	IBV	Ester Dewil	Technical	31/12/2025	Communication campaigns designed	This is after the deadline of WP5 so this step will be executed within WP6.

					LAUNCH OF THE DEMO			
9	Campaign launch.			Ester Dewil	Technical	31/06/2026	Communication campaign implemented	

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	Communication first fase of new and improved bus network from 1/1/2025	De Lijn		Technical	30/11/2023	2 page article in the Leuven residents' magazine	
2	Analysis of the perception of the PT	IBV		Social	31/06/2024	Analysis report of the PT perception + Identification of target groups	We requested data from satisfaction surveys from our bus operator. The operator itself does not want to share their data; we can however receive some data from the Flemish Mobility Department.
3	To define objectives of the campaign, possible target users, possible communication actions from M2, 3+4, 5 and other projects/ initiatives and possible communications channels.	IBV		Technical	31/08/2024	Document for the preparation of the communication plan	The survey in M1 will provide information to define target users (results in Q2 2024) The outcome of M2, 3+4 and 5 will help determine the objectives of the campaign. For step 2 and 3 (analysis of the perception of the PT/ define objectives and target users of the communication campaign) we are also collecting input from surveys we are preparing and conducting in our measure LEU_1. We should have this input by the beginning of august.
4	To review best practices and successful projects	IBV		Technical	31/08/2024	List of ideas	Depending on initiatives for knowledge exchange with the UPPER-cities and partners in WP5 and input from the local communication guidelines from WP8. we are compiling a list of ideas.
5	Design of communication campaign last phase of new and improved bus network	De Lijn, IBV		Technical	30/11/2025	communication plan designed	This is after the deadline of WP5 so this step will be executed within WP6.
6	Campaign launch last phase of new and improved bus network	De Lijn, IBV		Technical	31/12/2025	Communication campaign implemented	This is after the deadline of WP5 so this step will be executed within WP6. The preparation for the communication campaign for the new bus service is starting soon,
7	Concept design of the communication campaign; U-GOV role.	IBV		Technical	30/06/2025	Communication strategy plan designed	Dependency on the outcome of measures 1, 2 3+4 and 5. We don't intend to use U-GOV, we were interested in U-GOV for citizens participation to collect input for some of our measures, but not for the assessment.
8	Design of the communication campaign (messages, channels, planning, ...).	IBV		Technical	31/12/2025	Communication campaigns designed	This is after the deadline of WP5 so this step will be executed within WP6.

				LAUNCH OF THE DEMO				
9	Campaign launch.			Technical	31/06/2026	Communication campaign implemented	

ANNEX 11 : Measure Monitoring Template BUD_02

Monitoring template for Measure BUD_02 "To promote more sustainable choice of transport for students based on their modal split patterns"

Objectives of the measure

- **At measure level:**
  - Help students to make more conscious decisions when choosing between transport modes
  - Influence students' mindset towards using sustainable modes
  - Encourage the use of PT and active travel modes
  - Reduce car traffic near schools
- **At city level:**
  - Increase the share of sustainable and public transport modes
  - Reduce trips made by private vehicles

Description of the measure

Recognizing the age when young people get to be more independent might be crucial, because by then, they should already possess a mindset that allows them to assess their actual mobility needs and to be able to make conscious decisions about how they choose to travel. With BUD_02 measure BKK aims to understand the patterns in the mode choices of students, using systemic approach: based on specific parameters of the schools (e.g. geographical, demographical differences, coverage of PT in the area), and investigating other special aspects that may influence them (e.g actual weather conditions, lack of information or lack of confidence in changing the old and less sustainable (inherited) family habits.)

Based on the already existing practice and capitalizing the results and learnings from the school-zone project, BKK will set up a methodology to collect data from schools (different locations and different age groups) to establish a modal split study. Based on the study, BKK will choose specific age groups (the ones that seem to be critical when young people are shaping their own opinion about transportation). Focus will be on schools where modal shift can be more likely achieved, e.g. in schools where many shorter car trips happen that could be more easily replaced by other sustainable modes.

For the groups chosen, BKK will plan different education materials that will be disseminated in the framework of a campaign. Impact of the campaign will be measured: the change between the new and the earlier desired and actual choice of transport mode, and results of the measure will be used to upscale the methodology of school modal split data collection and finetuning the education materials, while also feeding the previously mentioned school-zone project that is to help schools to plan also physical changes (e.g. increasing safety, walkability, cyclability) to promote liveable and healthy movement of children.

Measure outputs:

This measure will deliver:

- Methodology for collection of data for the modal split study
- Modal Split study (about 20-30 selected schools)
- Education materials (for different age groups)
- Education campaign (interactive classes and programs for schools)

Related UPPER tools:

The implementation of this measure will not be supported by IT tool from the UPPER toolkit.

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	Identifying potential partners, schools (list of schools by geographic and other parameters related to accessibility to sustainable modes of transport) /stakeholder analysis Identifying the way of cooperation Plan schedule of the measure activities	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate	Júlia Miczki	Social / Technical	June 2024	List of schools to form cooperation with collection of baseline data	
2	Develop methodology for targeted modal split data collection and assessment Scheduling data collection activities Modal split study preparation and evaluation process for the selection of age groups based on study results	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate, School management / teachers	Júlia Miczki	Technical	July 2024	Methodology for modal split data collection Schedule for data collection activities	
3	Selection of age groups to be targeted through the campaign Preparation of Education material concept and schedule of campaign activities	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate, BKK Communication Department, School management / teachers	Júlia Miczki	Technical	August 2024	Selection of age groups Education material	
4	Data collection Evaluation of data and preparation of modal split study	BKK Strategic Data Management Directorate, School management / teachers / students	Júlia Miczki	Social / Technical	September 2024	Modal split study	
5	Performing campaign and education activities (and monitoring of measure KPIs)	BKK Mobility Planning Directorate, BKK Strategic Data Management	Júlia Miczki	Social / Technical	October 2024	Campaign activities completed	
		Directorate, BKK Communication Department, School management / teachers / students					
6	Collecting additional data for the measure KPIs	BKK Strategic Data Management Directorate School management / teachers / students	Júlia Miczki	Social / Technical	October 2024 and March 2025	Data collected	
LAUNCH OF THE DEMO (Please fill in the date)							

Steps to ready-to-demo measure

Steps	Description	Involved partners/externals	City contact person	Category of action	Deadline	Monitoring indicator	Comments
1	Identifying potential partners, schools (list of schools by geographic and other parameters related to accessibility to sustainable modes of transport) /stakeholder analysis Identifying the way of cooperation Plan schedule of the measure activities	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate		Social / Technical	June 2024	List of schools to form cooperation with collection of baseline data	
2	Develop methodology for targeted modal split data collection and assessment Scheduling data collection activities Modal split study preparation and evaluation process for the selection of age groups based on study results	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate, School management / teachers		Technical	July 2024	Methodology for modal split data collection Schedule for data collection activities	
3	Selection of age groups to be targeted through the campaign Preparation of Education material concept and schedule of campaign activities	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate, BKK Communication Department, School management / teachers		Technical	August 2024	Selection of age groups Education material	
4	Data collection Evaluation of data and preparation of modal split study	BKK Strategic Data Management Directorate, School management / teachers / students		Social / Technical	September 2024	Modal split study	
5	Performing campaign and education activities (and monitoring of measure KPIs)	BKK Mobility Planning Directorate, BKK Strategic Data Management Directorate, BKK Communication Department, School management / teachers / students		Social / Technical	October 2024	Campaign activities completed	
6	Collecting additional data for the measure KPIs	BKK Strategic Data Management Directorate School management / teachers / students		Social / Technical	October 2024 and March 2025	Data collected	
LAUNCH OF THE DEMO (Please fill in the date)							