

REFORM
Interreg Europe



Sustainable Urban Mobility Planning – Enhancing Planning Capacities Through Training & Learning

T.1.5 SUSTAINABLE URBAN MOBILITY PLAN (SUMP) TRAINING & LEARNING EXCHANGE PROGRAMME

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Table of contents

1	INTRODUCTION	5
2	REFORM TASK 1.5 OBJECTIVES	5
3	BACKGROUND TO THE REFORM TRAINING PROGRAMME	6
4	STRUCTURE OF THE SUMP TRAINING MODULES	6
4.1	Overview of Modular Structure.....	8
4.2	Outline Programme for the 'standard' 2-day training course	9
4.3	Trainer Selection	12
4.4	Core Material – 'AnyRegion' and AnyCity' Case Study.....	12
5	SUMP MODULE TRAINING PRESENTATIONS.....	12
5.1	Module 1: SUMP Concept & Approach.....	13
5.2	Module 2: SUMP Preparation & Structure.....	13
5.3	Module 3: SUMP Information Gathering & Analysis Tools	14
5.4	Module 4: SUMP Problems, Vision & Objectives	14
5.5	Module 5: SUMP Identifying & Sifting Measures.....	15
5.6	Module 6: SUMP Implementation Plan	16
5.7	Module 7: SUMP Monitoring & Evaluation.....	16
6	SUMP TRAINING GROUP EXERCISES & TASKS	17
6.1	Module 1: SUMP Concept & Approach.....	17
6.1.1	Background	17
6.1.2	Task for each sub-group.....	18
6.1.3	Group feedback	18
6.1.4	Task materials.....	19
6.2	Module 2: SUMP Preparation & Structure.....	19
6.2.1	Background	19
6.2.2	Task for each sub-group.....	19
6.2.3	Group feedback	19
6.2.4	Task materials.....	20

6.3	Module 3: SUMP Information Gathering & Analysis Tools	20
6.3.1	Background	20
6.3.2	Task for each sub-group.....	20
6.3.3	Group feedback	21
6.3.4	Task Materials	21
6.4	Module 4: SUMP Problems, Vision & Objectives	21
6.4.1	Background	21
6.4.2	Task for each sub-group.....	22
6.4.3	Group feedback	22
6.4.4	Task materials.....	22
6.5	Module 5: SUMP Identifying & Sifting Measures	23
6.5.1	Background	23
6.5.2	Task for each sub-group.....	23
6.5.3	Group feedback	23
6.5.4	Task materials.....	24
6.6	Module 6: SUMP Implementation Plan	24
6.6.1	Background	24
6.6.2	Task for each sub-group.....	24
6.6.3	Group feedback	24
6.6.4	Training materials.....	25
6.7	Module 7: SUMP Monitoring & Evaluation.....	25
6.7.1	Background	25
6.7.2	Task for each sub-group.....	25
6.7.3	Group feedback	26
6.7.4	Task material	26
6.8	Test for delegates.....	26
7	REFORM PARTNER SUMP TRAINING EVENTS.....	27
7.1.1	Introduction	27
7.1.2	Region of Central Macedonia, Greece (4-5 December 2018).....	27
7.1.3	Emilia-Romagna, Italy SUMP Training Event (11-12th December 2017).....	30
7.1.4	Greater Manchester SUMP Training Event – 4-5 January 2018	33
7.1.5	Parkstad Limburg, Netherlands SUMP Training – 11th January 2018.....	35

7.1.6	SUMP Training Events for Non-Partners.....	38
8	OVERALL CONCLUSIONS.....	42
	REFORM PARTNERS.....	44
	REFORM CONTACT.....	44

1 Introduction

This report provides a summary of the process adopted for the development of the SUMP training programme that was delivered across all four partner regions as part of Task 1.5. More specifically, it summarises the background to the development of the materials used to undertake the training sessions on SUMP (Sustainable Urban Mobility Plans) across each of the REFORM Partner countries, by Mott MacDonald on behalf of Transport for Greater Manchester (TfGM).

The document sets out the details and content for the standard 2-day course, split across 7 key modules, developed by the Mott MacDonald project team and the contents of each module. It also provides background on the group exercises scheduled for each module.

2 Objectives of REFORM's Training & Learning Activities (Task 1.5)

The key objective of this task is to 'train regional and municipality technical staff for supporting cities in SUMP development and implementation', aimed at enhancing the planning capacities of the REFORM regions.

The primary objective of REFORM task 1.5 was to train a small number of trainers, as well as a small number of municipality representatives from each REFORM region on how to successfully develop and deliver SUMPs within their own region. It was proposed to adopt an approach which combines trainers from each region, together with a selection of municipality/regional staff to offer maximum value to the training delivery. This would enable refinement of the training if needed for subsequent roll-out in each region.

By combining trainers and regional/municipality representatives in the training course, this helped to speed up the training process significantly and enabled the consortium to deliver a good level of training as quickly as possible that would usefully feed into REFORM'S action plan development process during 2018. Each regional training programme was designed to accommodate up to 12 people (comprising a mixture of both trainers & trainees), although this could be extended to 16 if considered necessary.

Following delegate feedback on the individual training courses within each region, the nominated trainers will be able to deliver additional training themselves to other regional/municipality representatives to strengthen knowledge and application of the SUMP process in the context of the region.

By delivering a training course on SUMP to representatives across the Partner regions, completion of this task sought to contribute toward the following important project outcomes:

- Improvement of the average level of knowledge among Cities' officers and technicians about SUMP;
- Awareness raising at regional level about the scope and content of SUMP;
- Direct involvement of non-partner Cities and of other Regions in the learning process and in dissemination activities; and
- Increased capacity of participating regions' staff and municipalities' staff or other relevant public servants (already 50 regional staff and 100 municipalities staff have increased their capacity and receiving training certificate).

3 Background to the REFORM Training Programme

With training programmes keeping people actively involved is often a key challenge, and therefore it was considered by the REFORM partners that a participatory structure to the training programme with a lot of interaction and group working would help keep the attendees focused and actively involved during each module. This participatory element of the training was considered essential to motivate and encourage trainees to learn, apply and exchange their knowledge of the SUMP process in the context of each region. In working with the nominated REFORM trainers the objective was to enable them to be fully confident to deliver subsequent interactive sessions with trainees across their region.

At the outset of this task it was important to understand the background and level of knowledge of SUMP that each nominated trainer has, plus experience of delivering training sessions. The ability to strongly communicate and engage is a key requirement here and to confidently convey SUMP and regional principles and issues to trainees. It is also considered important to interact in a friendly manner with delegates when delivering the training course material and group exercises, so as to make the delegates feel relaxed and at ease.

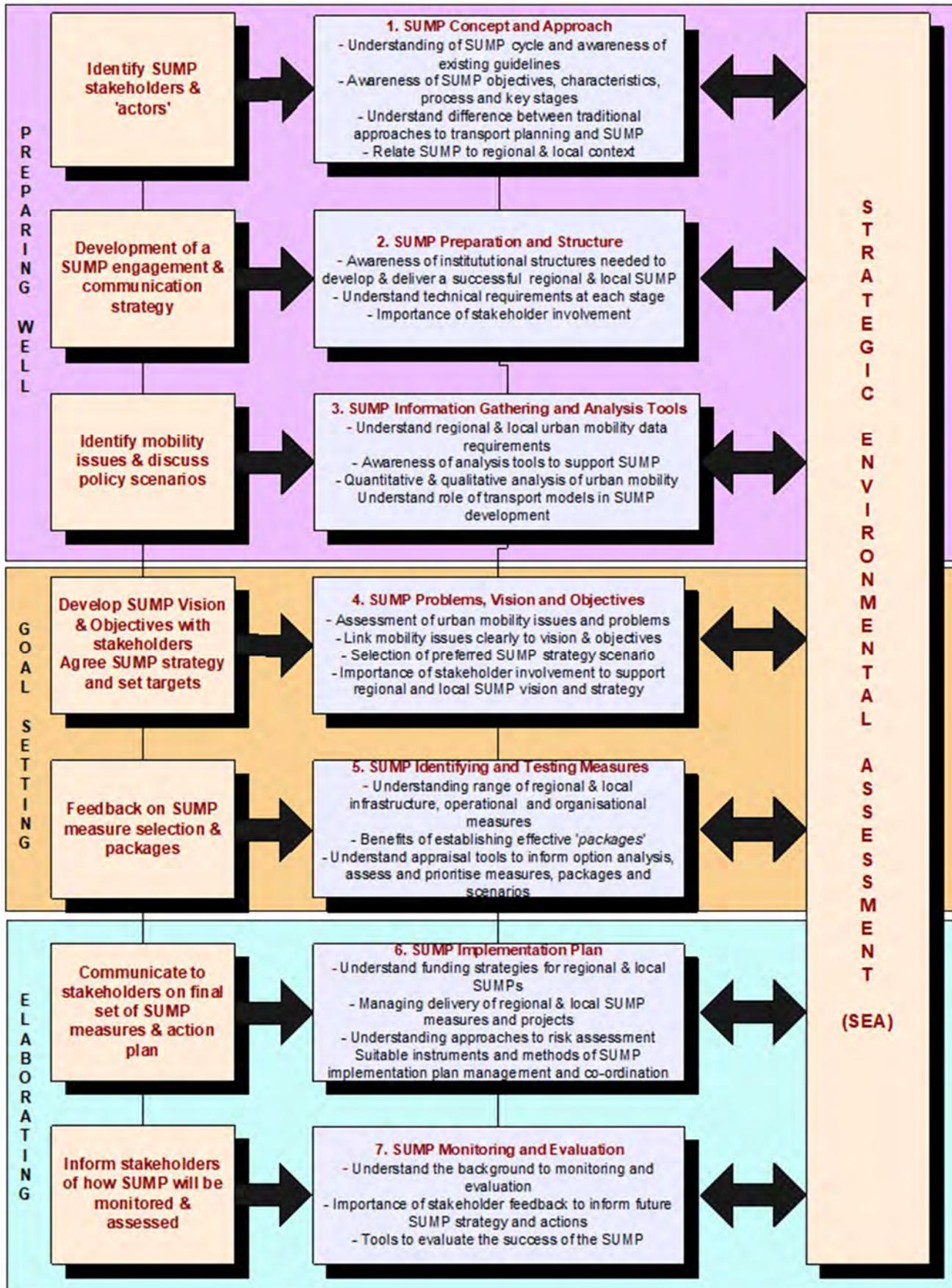
Given the regional differences in terms of institutional/governance arrangements, the different urban mobility issues and challenges across the different REFORM partners, as well as current status of SUMP development, it was considered important to have flexibility to tailor and adapt the training modules according to each region's requirements as necessary. This was reflected as far as possible in the programme material, although it was not possible to adapt or modify the central case study for each regional training programme. It should be noted that for some region regions (notably Emilia-Romagna and Central Macedonia), for the delivery of their non-partner learning events adapted the material for their learning events to fully capture regional issues and context more fully. This included modification of the presentation material used to support the events but also the structure and discussion topics that sought to maximise exchange and interface between participants on both regional priorities and needs. This was considered important, not only to engage more fully with representatives from each region but to discuss specific topics and issues that currently impact successful SUMP development and implementation by municipalities.

For the regional SUMP training programme, the training course material was structured around a fictional case study that reflected both regional and municipality SUMP perspectives and urban mobility issues. Common mapping and data was used that was adapted to cover regional variations as far as possible, as well as addressing both important regional and municipal issues and interactions.

The case study was designed to take the delegates through the whole SUMP process, from initial process and scope definition through to monitoring and evaluation. Details of the case study was shared with trainees in advance of the training session to help facilitate the group exercises during the programme. Presentation material for each training module included reference to relevant good examples of approaches/tools on the different SUMP elements, reflecting good practices that have been identified across Europe.

4 Structure of the SUMP Training Modules

A summary of the training modules proposed on the SUMP process are summarised in the diagram overleaf. These modules were structured to take trainees through each stage of the preparation and planning of a successful SUMP, using presentation material summarising the key stages, requirements and relevant issues to consider. It was proposed that for each SUMP training module simple worksheets would be prepared to help participants understand and learn from the topics presented.



The structure of these worksheets related to the presentational material on tools/approaches for each module and helped participants prepare ahead of the simple multiple choice test presented at the end of the training programme. The emphasis of the course was to develop and deliver interactive and stimulating work for trainees, enabling participants to demonstrate their knowledge of the SUMP process and tools in a regional context, as well as apply and share this knowledge through the various interactive case study tasks. The successful delivery of these group tasks will require the trainers to fully understand and be able to lead each modular task confidently and clearly to potential trainees. At the end of the course it was intended that each trainer will be expected to be able to deliver the full SUMP Training Course to others – applying the ‘hierarchy of learning’ approach outlined below to get the most out of the process.

4.1 Overview of Modular Structure

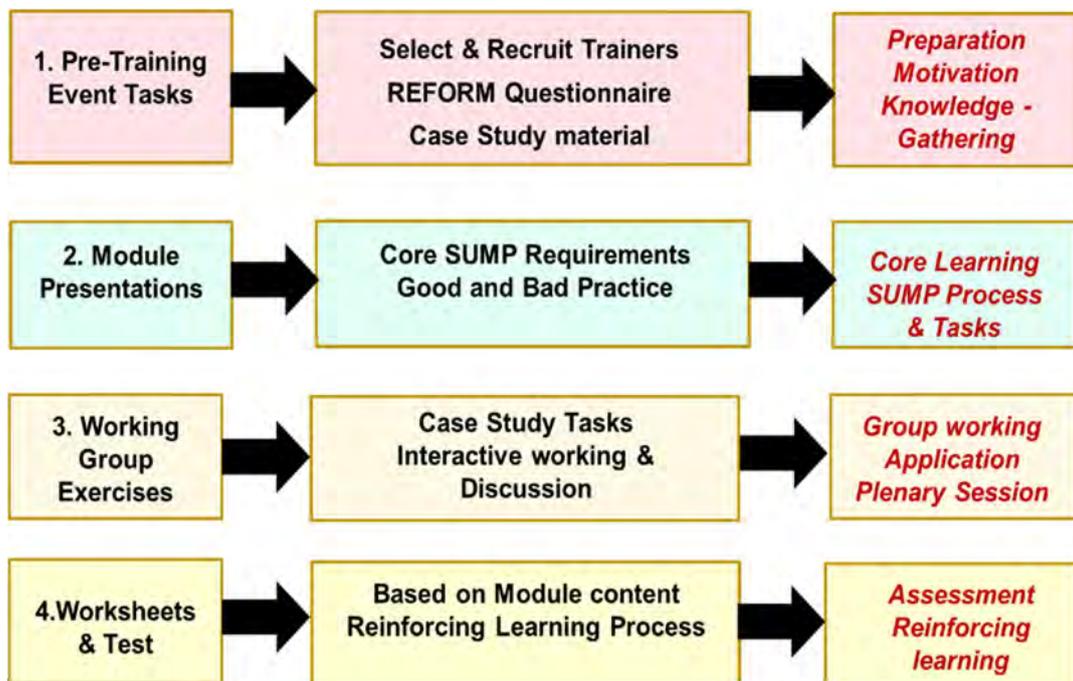


Figure 1: Structure of the SUMP Training Modules



As highlighted in figure 1 above the structure of each module and the mechanism for delivery included a technical presentation, hands-on exercises that were undertaken in sub-groups based around central case study material, followed by a group discussion reflecting on the outcomes of the exercise.

The technical presentations by the training team was accompanied by a series of 'worksheets' for the delegates. The worksheets included a small number of key summary questions, which the delegates could complete whilst listening to the presentation. This helped to keep the delegates engaged with the presentations, and also helped them prepare for the test at the end of the 2-day training course.

The group exercises included in the/ training programme were based on a case study of a fictional city, 'Anyregion'. The advantage of using a fictional case study for the exercises was that it could be purposely 'tweaked' to create maximum learning value for the delegates. Using a single case study throughout the 2-day programme also minimised the amount of time delegates needed to spend familiarising themselves with the materials. During the training programmes the participants were split into two groups for the case study exercises.

The case study included a variety of information on the background to urban mobility including data and information that enabled delegates to establish a good understanding of the specific mobility issues that exist and to then to work through the various modular tasks in sequence using this knowledge/information.

The information presented included a mixture of plans, figures and data, as well as some photographs that brought an element of 'reality' to Anyregion and made it easier for delegates to work with. At the end of the 2-day training course, delegates were given a brief test, aimed at assessing how well the delegates understood the different topics relating to SUMP.

Following successful completion of the test, candidates received a certificate to testify that they had successfully completed the SUMP training course.

4.2 Outline Programme for the 'standard' 2-day training course

The standard programme structure and timetable for the 2-day training course is set out in Tables 1 and 2 overleaf.

Table 1 Day 1 Training Schedule

REFORM SUMP TRAINING SCHEDULE: DAY 1	Role	Schedule
Introduction & Welcome to Day 1 <ul style="list-style-type: none"> SUMP Training Overview SUMP Training Programme – Day 1 	Training Team Training Team	0900 – 0910 0910 – 0920
1. SUMP Development Process & Context: <ul style="list-style-type: none"> Presentation focus: <ul style="list-style-type: none"> What makes a successful SUMP - good practice in SUMP development? Group Exercise Group Feedback 	Training Team Two groups All	0920 – 0945 0945 – 1015 1015 – 1045
Coffee Break 1045 - 1100		
2. SUMP Preparation & Structure: <ul style="list-style-type: none"> Presentation focus: <ul style="list-style-type: none"> How should stakeholder engagement be approached to support SUMP development? Role of Strategic Environmental Assessment? Group Exercise: Group Feedback 	Training Team Two groups All	1100 – 1130 1130 – 1200 1200 – 1230
Lunch Break 1230 – 1315		
3. SUMP Information Gathering & Analysis Tools: <ul style="list-style-type: none"> Presentations: <ul style="list-style-type: none"> What are the challenges in obtaining and analysing data to effectively support a SUMP? Group Exercise Group Feedback 	Training Team Two groups All	1315 – 1400 1400 – 1445 1445 – 1515
Coffee Break 1515 – 1530		
4. SUMP Problems, Vision and Objectives: <ul style="list-style-type: none"> Presentations: <ul style="list-style-type: none"> How to establish a balanced SUMP strategy – including suitable ‘carrots and sticks’? Group Exercise Group Feedback 	Training Team Two groups All	1530 – 1615 1615 – 1700 1700 – 1730
General Feedback & Close to Day 1	Training Team	1730 – 1745

Table 2 Day 2 Training Schedule

REFORM SUMP TRAINING SCHEDULE: DAY 2	Role	Schedule
<p>Introduction & Welcome to Day 2:</p> <ul style="list-style-type: none"> Overview of SUMP Training Programme – Day 2 	Training Team	0900 – 0915
<p>5. SUMP - Identifying & Sifting Measures:</p> <ul style="list-style-type: none"> Presentation focus: <ul style="list-style-type: none"> Identifying the best solutions and measures to deliver a SUMP Vision Group Exercise Group Feedback & Discussion 	<p>Training Team</p> <p>Two groups All</p>	<p>0915 – 1000</p> <p>1000 – 1100 1100 – 1130</p>
Lunch break 1130 – 1215		
<p>6. SUMP Implementation Plan:</p> <ul style="list-style-type: none"> Presentation focus: <ul style="list-style-type: none"> What are the challenges in SUMP implementation and how to overcome these? Group Exercise Group Feedback & Discussion 	<p>Training Team</p> <p>Two groups All</p>	<p>1215 – 1300</p> <p>1300 – 1400 1400 – 1430</p>
Coffee break 1430 – 1445		
<p>7. Monitoring & Evaluation:</p> <ul style="list-style-type: none"> Presentation focus: <ul style="list-style-type: none"> What makes a good monitoring and evaluation framework for a SUMP? Group Exercise Group Feedback & Discussion 	<p>Training Team</p> <p>Two groups All</p>	<p>1445 – 1515</p> <p>1515 – 1600 1600 – 1630</p>
<p>SUMP Training Test & Close to SUMP Training:</p> <ul style="list-style-type: none"> SUMP Test & Certificates Closing Remarks 	<p>All</p> <p>Training Team</p>	<p>1630 - 1700</p> <p>1700 - 1715</p>

4.3 Trainer Selection

It was important that each region carefully considers the capacity of the trainers to be able to effectively deliver training across their region. This requires consideration of the skills, knowledge and behaviours needed to get the learning across, including existing awareness of the SUMP process and key issues. Whilst some of the attributes were shared during the training programme trainers needed to be aware of the need for a range of attributes, such as good presentation, facilitation and coaching skills, and the ability to positively engage with trainees at different levels of experience and knowledge.

4.4 Core Material – ‘AnyRegion’ and AnyCity’ Case Study

At the outset of the project and discussions with the partners it was concluded that the group exercises included in the training programme should be based on case study material relating to a fictional city, ‘AnyCity’ that sits within a regional setting (Anyregion). The advantage of using such fictional case study material for the exercises is that it can be purposely ‘tweaked’ to create maximum learning value for the delegates.

Using a single case study throughout the 2-day programme also minimised the amount of time delegates were required to spend familiarising themselves with the materials. During the group tasks themselves participants would be split into two groups for the case study exercises taking into account the number of delegates attending at each training event.

The development and structure of the case study included a variety of information on the background to urban mobility including data and information relating to both regional and local (city) level that enabled both trainers and trainees to establish a good understanding of the specific mobility issues that exist at both spatial levels. This was deliberately structured to capture all regional and local urban mobility aspects in the training material as fully as possible.

As a result, participants were able to work through the various modular tasks in sequence using this knowledge/information and were able to consider and capture both regional and local urban mobility perspectives. The information presented included a mixture of plans, figures and data, as well as some photographs that helped to bring an element of ‘reality’ to both AnyCity and AnyRegion which sought to make it easier for delegates to work with.

5 SUMP Module Training Presentations

Each module started with one or more brief presentations by the training team. The presentations focused on giving the delegates a good understanding and awareness of the main issues for that part of the SUMP process, without being overly technical. The presentations included reference to relevant good examples of approaches/tools on the different SUMP elements. In terms of the non-partner learning events, the presentation material was adapted more fully to reflect the regional setting, to enable participants to discuss key SUMP issues that are faced by municipalities on a regular basis.

The technical presentations by the training team were accompanied by a series of ‘worksheets’ for the delegates. The worksheets included a small number of key summary questions, which the delegates were able to complete whilst listening to the presentation. The information contained

within their worksheets gave the delegates all the information they need to successfully complete the test at the end of the 2-day course.

Each module contained an overview of examples of good practice that has been seen in cities across Europe in developing their SUMP, paying attention to the modular topic and different approaches that may have been used to address these requirements. It was considered important for trainees to understand the different methods and approaches that cities and towns have adopted when developing their SUMP and what works well in different contexts.

The sections below provide a brief overview of the aims and objectives of the presentations in each module. The full set of presentation material used to support the training programme are presented in Appendix A.

A summary of the SUMP training module material and objectives is set out below.

5.1 Module 1: SUMP Concept & Approach

From the material presented in this module participants:

- Understood the SUMP cycle and availability/content of existing guidelines.
- Developed a good awareness of SUMP - objectives, characteristics, process and key stages, measures and outputs. This includes compliance with national and EU policies. Particular emphasis was placed on consistency with the SEA (Strategic Environmental Assessment) process:
 - Understood the policy drivers and implications at the national and local levels to inform the plans and programmes review as part of the SEA process; and
 - Understood the relationship and interactions between the SUMP development and the SEA process to ensure the SEA can influence the development of the SUMP. This includes consideration of the different SEA methodology options available.
- Distinguished the key differences between traditional approaches in transport planning and SUMP requirements.
- Were able to relate the SUMP idea to their own individual attitudes and experiences gained through working on urban mobility and sustainable development issues.
- Clearly understood the topics and areas that SUMP's address and understand that the process is not only planning, but includes better co-operation between different agencies.

Relevant best practice/case study examples were used to highlight the above and what to look for. This included practical examples of how the SUMP and SEA relate to each other.

5.2 Module 2: SUMP Preparation & Structure

From the material presented in this module participants:

- Understood the importance of including a scoping exercise to define SUMP study area;
- Appreciated the institutional structures required to successfully develop and deliver a SUMP;
- Appreciate the different technical inputs required to deliver a successful SUMP throughout the different stages of plan development;

- Understand the importance of parallel Strategic Environmental Assessment work throughout SUMP process; and
- Understand the importance of effective stakeholder engagement to underpin a successful SUMP.

Relevant best practice/case study examples were used to highlight the above and what to look for.

5.3 Module 3: SUMP Information Gathering & Analysis Tools

From the material presented in this module participants:

- Understood the wide range of datasets/information required to support SUMP in terms of understanding existing mobility issues and constraints. This includes data/information on:
 - Infrastructure (quality, quantity of infrastructure, etc.);
 - Information on organisation and operations/maintenance available (quantity and quality of public transport services per mode, etc.);
 - Transport/mobility demand data available from surveys/counts; and
 - Demographic, economic data (including forecasts).
- Gained an awareness of different quantitative and/or qualitative methods for use in SUMP process and the appropriateness of these to assess different urban mobility situations;
- Understood the importance of applied tools and models to assess the current network and test future scenarios/options (including specific software tools – transport models), including:
 - Reviewing the impacts of different types of future scenarios informed by SEA work; and
 - Consideration of climate change issues relating to the SUMP, including mitigation and resilience adaptation.
- Understood the importance of transport models to the SUMP process:
 - Awareness of best practice in transport modelling and how this supports SUMP; and
 - Appreciation of models with sufficient geographical and modal scope and quality (including model structure (simple vs complex), supporting datasets and calibration).
- Have an awareness of the suite of tools that are available to them through the ELTIS network, including the Urban Transport Roadmaps Tool, and how to apply this to their local context.

Relevant best practice/case study examples were used to highlight the above and what to look for.

5.4 Module 4: SUMP Problems, Vision & Objectives

From the material presented in this module participants:

- Understood the benefits of strong strategic analysis on urban mobility – sufficient analysis of problems and potentials carried out, addressing (at least):
 - Organisation, demand, operations, infrastructure and maintenance;
 - Demand, capacity and level of service (across all modes) for both passengers and freight; and
 - Environment, safety and social issues.

- Understood the significance of long-term assessment of spatial impacts of development and identification of network problems and weaknesses.
- Understood the need to link urban mobility issues clearly to vision, objectives and goals
 - Understood the benefits of a hierarchical structure linking SUMP vision, high level and specific objectives.
- Understood the importance of identifying a preferred strategy scenario in consultation with stakeholders.
- Appreciated the need for strategic indicators to support strategic assessment of a SUMP.
- Understood the importance of defining KPIs (Key Performance Indicators) for SUMP objectives with target values.
- Understood the importance of aligning SEA (Strategic Environmental Assessment) environmental objectives with SUMP objectives:
 - This included understanding the necessity of consultations with key stakeholders in preparation of SUMP concept, involvement of the general public during the SEA procedure and incorporation of outcomes and their integration in the final SUMP document.

Relevant best practice/case study examples were used to highlight the above and what to look for.

5.5 Module 5: SUMP Identifying & Sifting Measures

From the material presented in this module participants:

- Gained knowledge of the range and approaches of measures, actions and projects in SUMPs.
- Understood the importance of developing measures clearly linked to SUMP objectives/analysis.
- Structuring/packaging of measures into complementary and alternative groups of measures – including prioritising measures according to urban mobility issues.
- Understood the process for scenario development and packages of integrated measures.
- Understood the process for appraisal of measures, packages and scenarios including Multi-Criteria Analysis (MCA) including assessment against SUMP objectives.
- Use of Urban Transport Roadmaps Tool provided at ELTIS to develop better understanding of the potential impact of a set of measures.
- Use of SEA to appraise final preferred SUMP strategy/Plan:
 - Any options should be appraised as part of the SEA process using the SEA Framework and assessment methodology developed as part of the SEA scoping stage;
 - The Preferred SUMP strategy/plan is then also assessed and cumulative effects examined; and
 - Ensuring the formal SEA requirements are met in terms of public statement summarising the justification of selection for preferred strategy and alternatives considered.

Relevant best practice/case study examples were used to highlight the above and what to look for.

5.6 Module 6: SUMP Implementation Plan

From the material presented in this module participants:

- Were able to identify the most suitable interface between planning and implementing and have a knowledge of the tools required to manage delivery:
 - As part of the SEA appraisal process, mitigation measures and opportunities to enhance benefits are identified and developed, which are subsequently incorporated into the SUMP.
- Understood barriers and drivers for developing measures and initiatives.
- Were made aware of SUMP measure prioritisation, linking problems and measures and reflecting value for money.
- Understood funding strategies for SUMP including funding sources and options.

Relevant best practice/case study examples were used to highlight the above and what to look for.

5.7 Module 7: SUMP Monitoring & Evaluation

From the material presented in this module participants:

- Understood the importance and background to SUMP monitoring and evaluation:
 - Understand the need for SEA monitoring linked to identified effects and indicators. This
 - includes consideration of environmental impacts relating to the choice of indicator selection.
- Understood the different data and information required to review how effective the SUMP is achieving its vision & objectives;
- Understood the difference between SUMP outputs and outcomes; and
- Understood the importance of stakeholder engagement & information in relation to addressing comments on final programme and environmental issues.

Relevant best practice/case study examples were used to highlight the above and what to look for.

6 SUMP Training Group Exercises & Tasks

Group exercises were an essential part of the training programme. The trainees used their knowledge gathered during the module presentations in the practical context of a case study. To fit all sizes, the group exercises used the case study of fictitious Anyregion, which provided realistic datasets with issues and opportunities that illustrated typical urban mobility conditions for SUMP preparation.

All trainees were presented with the Anyregion Case Study material in advance of attending the training programme. The case study material was used to support all tasks specified in Modules 1-7 and so prior knowledge and understanding which greatly speed up the tasks during the programme. This was considered an important pre-training task that was emphasised to those registered for the training course in advance.

At the beginning of the group exercises, two sub-groups were formed:

- Anyregion representatives – covering all governing bodies of Anyregion ; and
- Anycity representatives – covering the regional capital's mobility planning team.

The two groups reflected potentially different views on priorities of transport planning between the regional government and municipalities. Despite coming from Anyregion or Anycity, members of both groups belong to one SUMP Working Group and therefore they need to find the balanced solution in every Module to move the SUMP development forward.

During each of the seven modules there was extensive interaction and discussion between group representatives. This covered not only about different perspectives and issues relating to the tasks undertaken and results of thee, but also real situations and experience within their own municipality or regional setting. This was an important part of the learning exchange in terms of understanding key urban mobility challenges and potential solutions in each of the Partner regions. The training and learning events were considered a unique opportunity for technical staff to engage together in a positive and informative way and to share a wide range of experience across all stages of SUMP development.

6.1 Module 1: SUMP Concept & Approach

6.1.1 Background

The aim of the first group exercise, based on the Anyregion Case Study, was to get delegates to think in more detail about the differences between traditional planning approaches and SUMP. The case study presented brief background information on a previous transport plan produced for Anycity, the '2006 Traffic Management Plan', which was not very successful in terms of priority topics as well as regional context.

The mixed experience from previous transport plan was deliberate for REFORM'S training, because it opened a discussion about better approach for the new Anyregion SUMP. The trainees were asked to suggest the key improvement areas for Anyregion SUMP compared to the previous Anycity approach.

6.1.2 Task for each sub-group

Task 1/1: SUMP Characteristics

1. Based on your understanding of Sustainable Urban Mobility Planning, to what extent does the 2006 Traffic Management Plan in Anycity align with the SUMP characteristics?
2. What is the lesson learnt for Anyregion compared to the experience with Anycity Traffic Management Plan?
3. Think of the most recent transport plan or strategy document from your local area. To what extent does it align with the SUMP characteristics?

This was a warm-up exercise to initiate discussion and exchange of experience among the trainees. First of all, delegates shared their thoughts on individual statements of SUMP methodology and compared this with the previous Anycity 2006 Traffic Management Plan:

- A strategic plan designed to satisfy the mobility needs of people and businesses
- Primary objectives are accessibility and quality of life
- Long-term vision and clear implementation plan
- Participatory approach
- Balanced and integrated development of all transport modes
- Horizontal and vertical integration
- Assessment of current and future performance
- Regular monitoring, review and reporting
- Consideration of external costs for all transport modes

Following this, the trainees then formulated the key improvement areas for Anyregion SUMP, using the same guidance of SUMP methodology statements.

Finally, trainees were able to talk about their personal experience from the local area where they work. This also informed the trainers on the real situation in the particular region, which helped to focus the following modules in the right way. This exchange on current developments in SUMP across each Municipality was important to assess the overall status of SUMP development, as well as capacity and skills available in urban mobility planning.

6.1.3 Group feedback

The sub-groups were first asked to briefly share their findings from the case study exercise for Module 1: to what extent does the 2006 Traffic Management Plan align with the characteristics of a SUMP? What were the key improvement areas for Anyregion SUMP?

The SUMP Working Group, that consisted of Anyregion and Anycity sub-groups, declared their common understanding of the SUMP concept.

In general discussion at the end of this module, there were opportunities for the group to reflect on their findings and discuss topics such as:

- What are the key problems relating to urban mobility?

- What does sustainable urban mobility look like?
- What are the characteristics of visions and strategic targets of sustainable urban mobility?
- What are the key opportunities and key restrictions for sustainable mobility and where are they?
- What is sustainable mobility planning and how does it differ from standard transport planning?
- What does a successful SUMP look like?

6.1.4 Task materials

- Information on the '2006 Traffic Management Plan' (Anyregion Case Study); and
- Blank sheets for each sub-group to fill in.

6.2 Module 2: SUMP Preparation & Structure

6.2.1 Background

The case study exercise for Module 2 put the delegates into the shoes of the SUMP Working Group. The case study material presented information on a range of different governing bodies, organisations and stakeholder groups in Anyregion, which the delegates needed to use in completing the exercise.

The aim of this exercise was to think about who to involve in the SUMP process and why. The level of influence as well as level of interest were considered. This exercise aimed to show that some stakeholders have a high degree of influence, but they might not be supportive to SUMP process (and vice versa).

The list of governing bodies reflected traditional organisations with direct impact in mobility, while the stakeholder groups represented various opinions from public, central government and local businesses.

6.2.2 Task for each sub-group

Task 1/1: SUMP Stakeholders

Identify stakeholders you think you will need to involve in the development of the SUMP in Anyregion. What level of interest and influence do they have compared to the traditional governing bodies?

All delegates in the sub-group worked together. Governing bodies and Stakeholders were printed on paper cards; these cards should be placed in the appropriate quadrant, based on to short discussion in the sub-group for each card. The "high influence – high interest" quadrant should have top organisations which need to be definitely involved, while the "low interest – low influence" quadrant can be omitted.

6.2.3 Group feedback

The sub-groups were first asked to briefly share their findings from the case study exercise for Module 2: who are the most crucial stakeholders that need to be involved in the development of the SUMP for Anyregion?

Following this, the SUMP Working Groups agreed on the "high influence – high interest" organisations as well as "low interest – low influence" organisations. The difference in outputs between Anyregion

and Anycity sub-groups was clearly explained. It was considered good to find some balance between the different Anyregion and Anycity opinions.

There were opportunities for each group to reflect on their findings and discuss topics such as:

- What governance/institutional arrangements should be established to successfully develop and implement SUMP programmes and measures?
- How can stakeholder involvement be effectively used to support SUMP vision statements, objectives and implantation plans?

6.2.4 Task materials

Task materials for this module combined Anyregion Case Study with printed materials that were laid on table:

- Information on stakeholders;
- Stakeholder diagram; and
- Printed paper cards for each sub-group.

6.3 Module 3: SUMP Information Gathering & Analysis Tools

6.3.1 Background

The SUMP development process moved to the end of data collection exercise. The participants representing the SUMP Working Group, now all available outputs presented in the Anyregion Case Study such as a wide range of background statistics, contextual information, as well as regional mobility data, but still some data might be missing.

This exercises focused on the typology and relevance of various data sets for SUMP analysis. It often happens on the first sight, that the data presented do not clearly describe the mobility trends, although it is very detailed. Even some datasets might not be regularly collected, although needed to identify trends in mobility.

It was important for the trainees to understand the content of the Anyregion Case Study at this stage. For this reason, one of the trainers introduced this module by the bespoke presentation, covering the key datasets contained in the Case Study. The trainer commented on the different data sets only and did not reveal any trend information that was apparent from this data.

The trainees were also asked to undertake a critical review of the case study content in case they saw that something that was wrong or missing. In this way delegates were able to demonstrate their full understanding of different mobility issues and the importance of different types of data that support SUMPs.

6.3.2 Task for each sub-group

Task 1/2: Positive and negative trends

Based on the data you have been given and your knowledge of Anyregion and Anycity, identify positive and negative trends that the SUMP will need to address in your view.

Discussions were held within each sub-group. The emerging ideas were immediately recorded using prepared sheets with no limit of postings, but the delegates agreed on the final preferred list of the

top 5 positive trends and 5 negative trends at the end. The intention was that each item was linked to the data and evidence gathered from the Case Study material. The resulting trends were written on flipcharts.

Task 2/2: Data gap analysis

What other types of data which are not included in the Case Study would you like to see? Think of other sources of information which could have helped you to understand the wider context of mobility issues and opportunities better.

Based on the previous discussion, the delegates raised some topics that were not fully linked to the data collected to date or there were some potential issues / opportunities which were not supported by the Case Study at all. Records of this were made on separate sheets.

6.3.3 Group feedback

The sub-groups were first asked to briefly share their findings from the case study exercise for Module 3: what were the main mobility issues for the Anytown that could be identified based on the data sources available? What other data sources would be useful in identifying key mobility issues?

Following this the two lists of trends from Anyregion and Anytown were compared and merged together. The only case for additional discussion took place if the two sub-groups stated different positive and negative trends in the opposite way.

At the end of this group exercise, there was an opportunity to discuss topics such as:

- What are the feasible methods of assessing and analysing the current situation with required and available data?
- What are the local issues in qualitative and quantitative approaches to urban mobility analysis?
- Which method is best suited to each problem of analysis? What data is collected in their locality?
- What is the local experience with multi-modal modelling in region/cities to support SUMPs?

6.3.4 Task Materials

Task materials for this module combined Anyregion Case Study with flipchart records:

- Key transport and socio-economic datasets (Anytown Case Study material); and
- Flipchart papers sheets for Trends / Gaps.

6.4 Module 4: SUMP Problems, Vision & Objectives

6.4.1 Background

This module exercise aimed to reflect the finalised analysis in vision setting and definition of strategic objectives for the Anyregion SUMP. It was critical to cover all positive and negative trends that were jointly identified by Anyregion and Anycity sub-groups during the previous tasks. Public opinions as well as previous strategic materials were also considered by the SUMP Working Group.

This module, more than the previous ones, focused on gaining a common understanding and balanced view on mobility priorities between regional and municipal levels. Therefore sufficient time was reserved for exchange of ideas between subgroups and the search for a compromise.

6.4.2 Task for each sub-group

Task 1/1: Vision and objectives

1. Anyregion has already set out new strategies for economic growth, carbon reduction and housing. Your task, as a group, is to develop a common vision for mobility in Anyregion to 2040 and define 5 objectives to support the vision.
2. You should also record how your objectives are linked to the positive and negative trends for Anyregion identified in Module 3.

The sub-groups were asked to record their outputs on flipchart paper. The links to Module 3 did not necessarily need to be limited to the list of 5 positive and 5 negative trends, but could also address other reference material taken from the Anyregion Case Study. The information on the related strategic documents (economic growth, carbon reduction and housing) and survey on public perceptions were also taken into account when thinking about the vision and objectives (see Anyregion Case Study section 6).

At the end of the exercise the SUMP Working Group were asked to create a SUMP Vision 'poster' which clearly presented their Vision and objectives that support this. This poster was displayed on the wall for the rest of the training modules that started in day 2.

6.4.3 Group feedback

The sub-groups were first asked to briefly share their findings from the case study exercise for Module 4: what vision and objectives have they set for the Anytown and why? How does it relate back to the mobility issues identified in the exercise for Module 3? How was buy-in for the vision created amongst the different stakeholders?

Following this, Anyregion and Anytown sub-groups jointly created a poster, that represented the common vision and 5 objectives that were agreed by both sub-groups.

At the end, there was an opportunity for the groups to discuss topics such as:

- What is the balance of environmental, social and economic objectives as part of the SUMP vision & objectives?
- How are the different stakeholder views & feedback reflected in the establishment of the analysis of the problems and setting the SUMP vision & objectives?
- Is it often difficult to reach balance between regional and municipal vision & objectives?

6.4.4 Task materials

Task materials for this module combined Anyregion Case Study with flipchart records:

- Information on new strategic plans from other domains (Anyregion Case Study material);
- Key findings from a recent survey among residents about their attitudes and views on transport issues;
- Flipchart for vision and objectives by individual sub-groups; and
- Flipchart for the final presentation poster of SUMP Working Group.

6.5 Module 5: SUMP Identifying & Sifting Measures

6.5.1 Background

This was the first interactive session in Day 2.

The aim of this exercise was to pick up a sensible list of measures from the list provided so that the sub-groups would have to make tough choices about which measures they thought are most strongly aligned with their vision and objectives. For this reason, each measure contained a detailed description on scope, cost, anticipated benefits and dependency on other measures (if applicable).

The pre-defined list of interventions provided a typical mix of infrastructure and soft measures. Among these, there were some deliberately contradictory measures, while the others required additional investment to be fully utilised. Although this exercise was open in selection of the most demanding interventions the next step in module 6 made some restrictions in terms of resources and timescales.

6.5.2 Task for each sub-group

Task 1/1: Identification and sifting of measures

1. As the SUMP Working Group, your task is to develop a prioritised list of interventions, out of the 20 measures identified. Based on your knowledge of SUMP vision, objectives and targets, think about what criteria / rules you would use to sift the proposed measures down to a prioritised list that fits your plan.
2. You should prepare three groups of measures: prioritised, neutral and rejected. You have a preliminary financial limit for investment per year and planning period.
3. For prioritised measures, please add all the potential links to the 5 objectives you have set in the Module 4. For rejected measures please explain the reasons.

The long-list of interventions contained a selection of potential schemes at a range of different complexity, costs and benefits, forced delegates to make decisions about the viability of different measures versus the agreed vision for mobility in Anyregion. Every measure was printed on a separate sheet to be able to make the best mix of measures. Delegates were able to add two more measures if they considered this beneficial.

6.5.3 Group feedback

The sub-groups were asked to briefly share their findings from the case study exercise for Module 5: which improvement measures did they prioritise? Why those ones, and what method was used to appraise the different schemes?

The outcomes of the two sub-groups was compared. There needed to be some conformity on schemes rejected (at least), because these were not used in the next group exercise for Module 6.

Finally, there was an opportunity for the group to reflect topics such as:

- What are the different types of infrastructure measures, operational measures and organisational measures that can support SUMP vision & objectives?
- What are some of the Multi-Criteria Analysis approaches relevant to SUMP?

6.5.4 Task materials

- Paper cards with basic information on each improvement measure: cards with predefined projects and two empty cards for any open options.

6.6 Module 6: SUMP Implementation Plan

6.6.1 Background

The prioritised list of measures in Module 5 to support the SUMP vision for Anyregion was reviewed and agreed by the SUMP Steering Group.

The sub-groups followed with the prioritised list of measures to the detail of programme for implementing the measures. The limited resources as well as constrained timeline was challenging when placing the right measures to the right order without exceeding the resource sheet. Trainees also discussed the correct order, timing and interdependencies of measures in the implementation plan.

Both sub/groups started with the same set of measures (rejected schemes were agreed in Module 5 and they were removed from the Module 6 exercise in both sub-groups).

The aim of the task was to get the delegates to think about the constraints planners typically face when preparing an implementation plan for a SUMP. Some items from the prioritised list of measures were discarded due to time / capacity reasons, although being pointed out as beneficial schemes overall.

6.6.2 Task for each sub-group

Task 1/1: Implementation programme

1. Before the SUMP can be finalised and submitted to the Regional Government, you need to work out the implementation programme which shows that all measures are feasible in constraints of time and resources.
2. You should work with your prioritised as well as neutral measures. You can also revise your list of measures if necessary.
3. At the end of this exercise, you should explain what timeline you have prepared, what are the interdependencies and risks.

Each sub-group completed the assessment of measures using a matrix approach considering resources and time. The delegates were provided with 'blocks' for the measures they had previously prioritised during the previous module.

At the end of this exercise, the sub-groups were asked to align their implementation plan with the vision and objectives, developed in Module 4.

6.6.3 Group feedback

The sub-groups were first asked to briefly share their findings from the case study exercise for Module 6: how did they allocate time and resources to the prioritised improvement measure? What are some of the main risks to the successful implementation of the SUMP for Anyregion?

Following this, the approach of Anyregion and Anycity sub-groups was compared and the differences discussed. The common implementation plan was then established.

There were opportunities for each group to reflect on their findings and discuss topics such as:

- What management and assessment activities need to be part of the implementation process?
- What are the most suitable instruments and methods of management, communication and coordination?
- What are typical problems and obstacles of implementing actions/initiatives? What are the best ways to deal with these problems?
- What part does risk management plan within SUMP?

6.6.4 Training materials

Training materials were prepared by the trainers. The content of measures was required to fit with Module 5 outputs (i.e. rejected schemes were moved from the list.)

- Sheet for resources and time on which to present the selection of measures and consider resources; and
- Measures for each sub-group to represent the different SUMP interventions.

6.7 Module 7: SUMP Monitoring & Evaluation

6.7.1 Background

The SUMP Working Group was asked to monitor how effective the measures included in Anyregion's SUMP will be. They therefore needed to develop a Monitoring and Evaluation Plan which could be used to monitor the SUMP over the next few years.

The sub-groups worked with the final list of interventions that was finetuned in the previous Module 6. The aim of the last exercise was to think about how to measure (monitor) the impact of the plan and where to find the suitable data sources.

6.7.2 Task for each sub-group

Task 1/1: Monitoring and Evaluation Plan

1. Pick up to 10 indicators from the list provided and decide the catchment area (Anyregion, Anycity or both).
2. You should also discuss what data sources should be used to get the desired list of 10 indicators.
3. For each desired indicator, please decide on the future trend you would like to see when comparing with the current data sets.

Each sub-group was asked to work with the proposed list of indicators by:

1. Selecting the top 10 indicators representing the SUMP objectives in the most relevant way;
2. Deciding about catchment area of every selected indicator (Anyregion, Anycity or both);
3. Estimating future trend for selected indicators.

6.7.3 Group feedback

The sub-groups were first asked to briefly share their findings from the case study exercise for Module 7: what are the expected outcomes and wider impacts from their set of prioritised SUMP measures? What indicators would the sub-group monitor to determine whether or not these are achieved? And what data sources should be used?

Each sub-group understood the choice of indicators of the other group. Differences were discussed fully, especially when the same indicator showed divergent data sources or trends.

Following this, there were opportunities for the groups to discuss topics such as:

- What are common performance indicators for SUMP, and what data is required to monitor these?
- What urban mobility outcomes are expected from the SUMP strategy and proposals?

6.7.4 Task material

- A summary table of indicators with empty columns for coverage, data source and estimated trend, for each sub-group.

6.8 Test for delegates

The 2-day training session concluded with a brief test for the delegates. This test was structured based on the presentations and the worksheets delegates filled in. The test comprise a number of multiple choice questions, aimed at assessing how well the delegates have understand the different topics relating to Sustainable Urban Mobility Plans.

The questions presented reflected the different training modules delivered over the 2-day training programme. Following successful completion of the test, candidates received a certificate to confirm that they had successfully completed the SUMP training course. A copy of the training module presentations was also provided on a USB stick.

7 REFORM Partner SUMP Training Events

7.1.1 Introduction

During Autumn 2017 discussions took place with each of the Partner regions in order to develop a training programme that responded to regional needs and priorities in terms of SUMP development. In particular, it was considered important to understand the background and level of knowledge of SUMP across each region to help inform the training team when planning the training sessions. Given the limited time and budget available to develop fully bespoke training material for each regional training programme the modular content carefully reflected the wide range of mobility issues and topics across the REFORM consortium. More adapted material was incorporated by both RCM and RER during the development and delivery of their non-partner learning events.

For each region a two day training programme was planned with the first two training events scheduled for Central Macedonia and Emilia-Romagna in December 2017. This was then followed by the remaining training sessions in Greater Manchester and Parkstad Limburg in January 2018. The feedback and outputs of these training events would then inform the future roll-out of non-partner training programmes as part of the REFORM project to widen capacity and knowledge of the SUMP process across the regions. Details of each regional training event are set out below.

7.1.2 Region of Central Macedonia, Greece (4-5 December 2017)

The Region of Central Macedonia is one of thirteen administrative regions of Greece, with total population of 1.9 million inhabitants. Many cities across Greece and the regions are currently in the process of developing their SUMP. Themi has already developed and adopted a SUMP (covering a population of 53.000 inhabitants, a process that took one year supported by a range of stakeholder engagement activities. The region is very popular with tourists with more than 3 million tourists per year and the region has the 9th largest GDP per capita in Greece. There is currently a lack of good transport links to the rest of Europe such as motorway connections and intermodal freight movement and whilst this has improved in recent years there is still scope for significant improvement.

There is a high dependency on the use of the private car to cater for mobility needs across the region and as a result there are environmental impacts with local air pollutions problems as well as safety issues (as a result of high vehicle speeds) evident in the urban centres across the region. Improving urban transport networks within urban centres and across the Central Macedonia region as a whole is a key priority. There is currently a low level of cycle network development in the region and so there is a greater need to focus on non-motorised transport development and sustainable travel modes within local SUMP. At a regional level there is a desire to establish a Regional Competence Centre in SUMP, with a clear focus on monitoring and evaluation at a regional level, with local Municipalities developing programmes of sustainable urban mobility improvements for implementation at a local level.

In terms of regional and local capacity there is little knowledge and understanding of the SUMP process with a clear requirement to broaden knowledge of requirements and different tools and approaches that are available to successfully develop a SUMP. The SUMP is seen as a tool with potential to reform transport decision-making at a regional level especially relating to improving integration (institutional arrangements as well as between transport modes), as well as funding.

There is an aim to establish a cooperative structure with the municipalities through a new regional structure in the form of an Observatory for Sustainable Mobility. Such a structure would then provide a mechanism to establish a system for monitoring key mobility Indicators, aligned with local

municipality SUMP's to assess performance at a regional level. Further work is required to develop and establish such an organisation at a regional level which would support the local municipalities and help ensure consistency of local SUMP's with the regional transport vision and strategy.

A two-stage training process was envisaged for Central Macedonia which included the following:

- Targeting regional public servants as part of a new cooperative (Regional Transport Observatory) who will interface with Municipalities. Aim here is to increase administrative, normative capacity on SUMP. Important to include information to facilitate exchange of SUMP experience.
- Municipality representatives to help fulfil their role in the co-operative with the regional team. Whilst SUMP's delivered by external companies – it is essential for Municipality staff to be full aware of the stages/tasks/issues relating to SUMP develop to ensure high quality SUMP's are delivered.

As part of the preparation of the material for the RCM event, the training team were asked to include material on SUMP data collection and analysis as this is an area that many of the local municipalities are struggling to deal with in terms of the wide range of evidence base information that is used to support local SUMP strategies and proposals.

The training event was held in Thessaloniki at the Hellenic Institute of Transport on 4-5th December 2017. A total of 12 regional representatives actively participated in the event together with a number of passive observers who were able to view both the presentations as well as observe the training group exercises and tasks and the exchanges that took place during the modules over the two days.

The full two-day training programme was delivered covering all seven modules and during the course of both days participants were split into two working groups for the execution of the group tasks. One group focused on regional aspects of the SUMP whilst the other group represented the local municipality perspective. This enabled all participants to fully understand the different issues and institutional challenges in SUMP development and delivery.

A good level of debate took place during both days, in terms of the process and tools required for SUMP development, as well as regional/local challenges that need to be considered when developing SUMP's across the region.

Figure 2: RCM SUMP Training



Source: Mott MacDonald

Figure 3: RCM SUMP Training



Source: Mott MacDonald

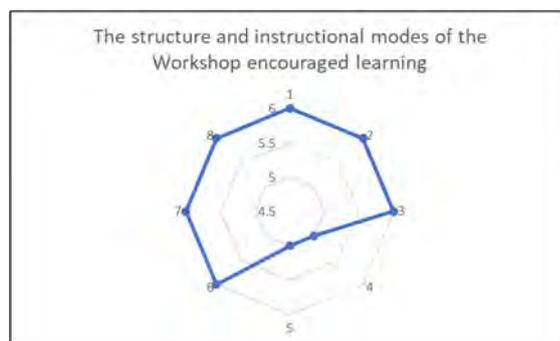
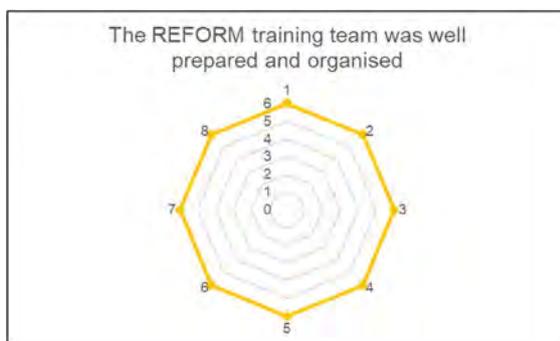
Delegate feedback on the training programme was very positive, with participants happy with the preparation and structure of the training modules and supporting material. There was also positive

comments and feedback provided on the level of interactive learning included in the training with the pace of the training delivered being satisfactory over the two days. However, given the complexity of the SUMP topics some people felt that the duration of the course itself could be further extend to cover 3-4 days to allow more in-depth work on core SUMP topics such as data collection, strategic appraisal and evaluation.

There was strong feedback that the level of engagement throughout the training was good and that the course supported effective learning outcome with training objectives largely fulfilled for participants. The training team were considered effective in terms of encouraging and responding to questions throughout the modules over the two day programme. As a result, the majority of participants considered that a high quality training event had been provided, which was positive in terms of the proposed roll-out of other training to other regional/municipality representatives.

Figure 4: Delegate Feedback – Organisation

Figure 5: Delegate Feedback – Encouraged Learning

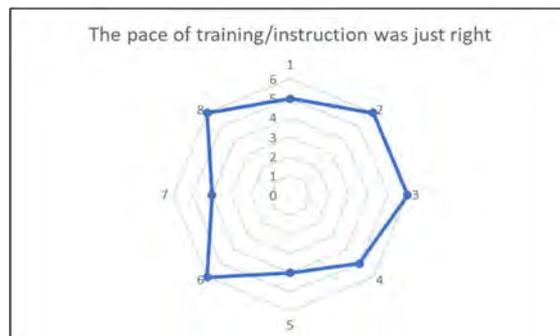
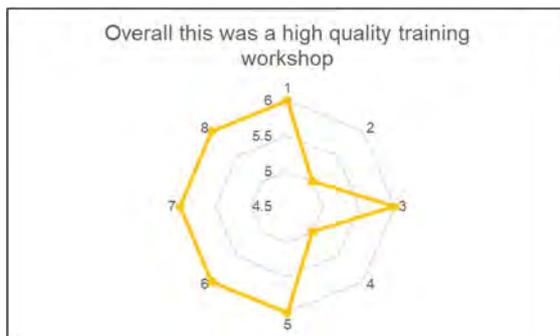


Source: Mott MacDonald

Source: Mott MacDonald

Figure 6: Delegate Feedback – Quality of Event

Figure 7: Delegate Feedback – Pace of Training



Source: Mott MacDonald

Source: Mott MacDonald

Delegates were asked to comment on the most useful aspects of the course and feedback from the Region of Central Macedonia event highlighted the following topics as being most beneficial:

- Everything about the course which covered the full range of SUMP topics;
- Group Exercises and their interactive nature;
- Topics relating to SUMP preparation and structure, as well as monitoring and evaluation for SUMPs;
- Information on the SUMP methodology and approach which can be used in other places;

- New way of thinking and acting, also planning our work; and
- Details relating to the SUMP Implementation Plan process.

Delegates were also asked about possible future SUMP topics that could be beneficial in any future training events. A number of areas were highlighted including the following:

- Information on Geographical Information Systems (GIS) and other technological tools that can be used to help support SUMP development and implementation;
- More information and detail on SUMP best practice examples and case studies that could be useful for SUMP development;
- More information on methodology approach to SUMP development including management tools which will be beneficial to give clear results; and
- Greater inclusion of real case studies, if possible from Greece to reflect the national, regional context of urban mobility. There is also a benefit to including wider participants in the training including politicians or other local representatives that would benefit from a greater knowledge of SUMP.

In terms of the general feedback and comments on the training event delivered in Thessaloniki these were as follows:

- 'Great team, well prepared, 3-4 days duration.'
- 'The training workshop could be one more day (3 days) in order for the presentations to be easy to absorb the procedures and the new way of thinking.'
- 'Gave a good opportunity to all participants to get familiar with SUMP.'
- 'Interesting.'
- 'It's an effective tool of needs for all matters of mobility.'
- 'There is a need for more detailed applied tools for decision making.'
- 'Very satisfied.'

7.1.3 Emilia-Romagna, Italy SUMP Training Event (11-12th December 2017)

Within Emilia-Romagna there are a total of nine Provinces with a total of 12 City SUMPs currently being developed covering a population of nearly 4.5million population inhabitants. An overarching regional transport plan exists with individual city SUMPs now under way. In support of the process, Urban Mobility Plan Guidelines have been developed for each city, with different levels of information set out within each guideline document. Cities across Emilia-Romagna are currently at different stages of SUMP development. The city of Parma has already developed and adopted a SUMP, which took two years to develop, covering a population of 190.000 inhabitants.

In Italy, the development of SUMPs is mainly led by traffic engineers, with limited knowledge of wider urban mobility planning amongst local municipality departments. Limited analysis of area-wide urban mobility patterns to support SUMP development. The focus of SUMP is at city/municipality level. The region demonstrates a large tourist industry including coastal area which generates tourism market. As a result, Emilia-Romagna is considered a wealthy region with the third highest GDP per capita in

Italy, which is reflected in the high quality of life across the region. The region as a whole is highly populated area with extensive urban sprawl. It has four airports and numerous well-equipped ports, and cities generally have good public transport services with high capacity road networks across the region and links with neighbouring regions.

In terms of the context for the training programme, despite the fact that some cities have yet to adopt their SUMP there is a clear desire to focus on SUMP implementation aspects, as well as the selection and establishment of effective KPIs for SUMP as part of a strong monitoring and evaluation strategy as part of SUMP development. In general, at city level there is currently fragmented sectoral planning with problems to integrate wider policy themes to support a defined mobility vision and SUMP. There is also a lack of a common set of indicators for the monitoring of urban mobility across the region. In terms of SUMP ownership and support there is also considered to be a poor structure of stakeholder involvement with little in the way of instruments or methodologies currently in place at regional or national level to guide this. As a result, local municipalities have a challenge in delivering effective stakeholder engagement to support the development of their SUMP. In terms of sustainable transport solutions being addressed by cities across the region, there is a heavy emphasis on sustainable public transport, especially actions related to alternative fuels and electric/automated mobility across the region.

For the training programme, the region is looking to establish a total of 3-5 trainers across the Municipalities who would be able to roll out the delivery of additional training programmes to other representatives across the region. Given that some municipalities have already started their SUMP preparation and others still to do so it was considered appropriate to offer a 2-day course covering the entire process that would offer 'something for everyone' and also enable delegates to compare their application of SUMP in their own locality.

The training event was held in Bologna at the regional authority offices on 10-11th December 2017. A total of 12 representatives actively participated in the event, covering both regional and local municipality staff.

Figure 8: Emilia-Romagna SUMP Training



Source: Mott MacDonald

Figure 9: Emilia-Romagna SUMP Training



Source: Mott MacDonald

Positive feedback was received from delegates on the entire course in terms of structure, delivery and learning outcomes. Indeed, participants felt that the course had benefited them in terms of their knowledge and appreciation of sustainable transport issues and practices that they could apply in their

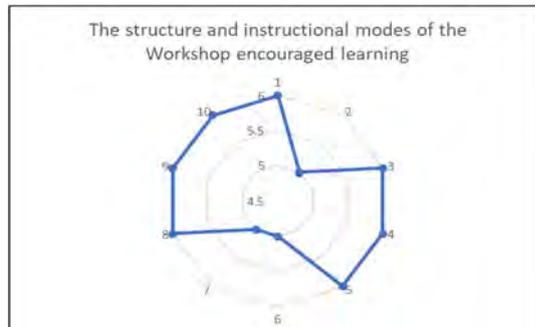
own work. There was good feedback on the structure and format of the course itself, not least the interactive nature of the training modules and group exercises which actively engaged everyone over the two days. As a result, delegates responded that they felt the course demonstrated a high quality event that delivered their training objectives, as well as learning outcomes.

Figure 10: Delegate Feedback – Urban Mobility Planning



Source: Mott MacDonald

Figure 11: Delegate Feedback – Learning Process



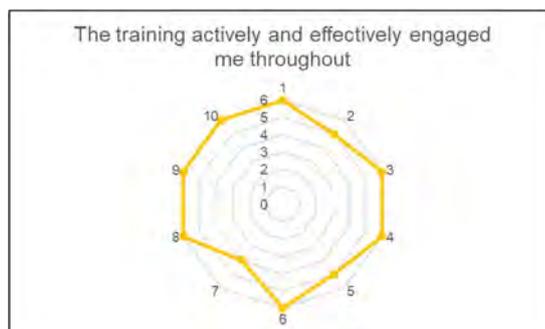
Source: Mott MacDonald

Figure 12: Delegate Feedback – Quality of Event



Source: Mott MacDonald

Figure 13: Delegate Feedback – Effective Engagement



Source: Mott MacDonald

Delegates were asked to comment on the most useful aspects of the course and feedback from the Emilia-Romagna event highlighted the following topics as being most beneficial:

- Module 2 (Preparation), Module 4 (Problem Analysis, Vision & Objectives), as well as Module 5 (Identifying Measures & Strategy Development)
- Working Group (Group exercises) and their interactive nature; and
- Monitoring & evaluation including SUMP performance indicators.

Delegates were also asked about possible future SUMP topics that could be beneficial in any future training events. A number of areas were highlighted including the following:

- More detail on institutional co-operation, including regional/local government interface and co-operation and project management issues relating to SUMP more generally;
- New information on communication methods and marketing of sustainable mobility that can be addressed as part of SUMP development and implementation;
- More detailed information on module 7 (SUMP monitoring & evaluation), with a particular focus on identifying and selecting the most appropriate SUMP performance indicators in more depth to inform SUMP development.

In terms of the general feedback and comments on the training event delivered in Bologna these were as follows:

- 'OK!'
- 'Very useful activity both on technical and institutional aspects'
- 'Great job!'
- 'Very good'

7.1.4 Greater Manchester SUMP Training Event – 4-5 January 2018

In the UK, Local Transport Plans are the equivalent to SUMP. The regional SUMP for Greater Manchester was developed in Spring 2017 comprising the Metropolitan Area of Greater Manchester with ten local authority districts and a population of over 2.8 million inhabitants. The SUMP took two years to develop, with extensive involvement of stakeholders, together with extensive data collection and research on urban mobility issues and patterns.

Within Transport for Greater Manchester and the local districts there is a wide range of technical/development skills and capacity available covering all aspects of SUMP development (eg. data collection, modelling, stakeholder consultation, sustainable travel etc). The focus of SUMP is at a regional level (polycentric), with a regional centre at the core and a number of urban centres across the districts, with strong transport links to neighbouring areas and complex travel patterns across the region as a whole.

The primary emphasis of the Greater Manchester SUMP is on providing sustainable transport networks, with a Key Route Network approach across Greater Manchester, supported by packages of measures to support improved access to employment and improving neighbourhood connectivity. A number of urban mobility objectives are set out in the SUMP including the following:

- Better city-to-city connections to other cities in north of England;
- Improved travel across the city region – faster orbital links/connections between urban centres, reduced congestion and accidents & regeneration of town centres;
- Connected neighbourhoods -focus on high quality public transport, walking/cycle networks; and
- Heavy emphasis on local community enhancement & wider travel choices.

With the Greater Manchester SUMP now in place, the emphasis for the training was considered to most likely to relate to implementation aspects and delivery of sustainable travel improvements. It was felt important to ensure wider staff across Greater Manchester region have knowledge of SUMP process and issues to embed this practice for future SUMP development and updates.

Therefore it was agreed to deliver the training to a selection of junior District staff across Greater Manchester to reinforce and strengthen knowledge of the SUMP process.

Figure 14: Greater Manchester SUMP Training



Figure 15: Greater Manchester SUMP Training



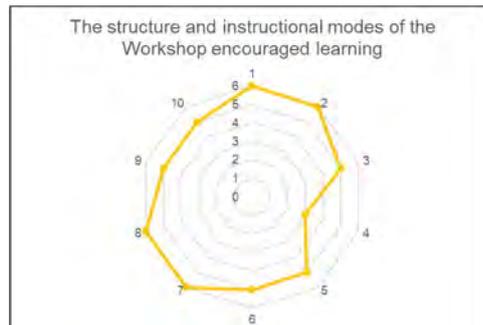
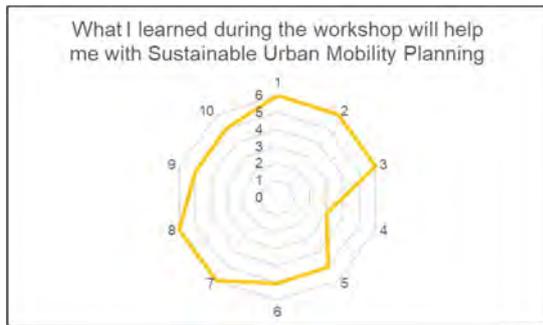
Source: Mott MacDonald

Source: Mott MacDonald

The full 2-day training programme was delivered to trainees during 4-5 January 2018. A total of 16 representatives attended the event including TfGM staff, plus a number of staff from Greater Manchester Local Districts, with a variety of knowledge of SUMP processes and background.

Figure 16: Delegate Feedback – Urban Mobility Planning

Figure 17: Delegate Feedback – Learning Process

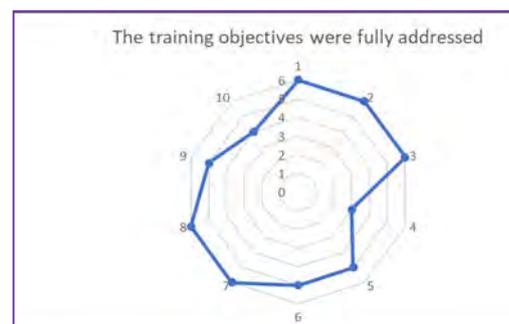


Source: Mott MacDonald

Source: Mott MacDonald

Figure 18: Delegate Feedback – Quality of Event

Figure 19: Delegate Feedback – Training Objectives



Source: Mott MacDonald

Source: Mott MacDonald

Overall, the event was received positively by the delegates, who felt that they had enhanced their learning & knowledge of the SUMP process over the two days, with a high quality workshop having

been delivered. The modules and in particular the group exercises had actively engaged the participants and overall the training objectives had been met. Delegates were asked to comment on the most useful aspects of the course and feedback from the Greater Manchester event highlighted the following topics as being most beneficial:

- Identifying SUMP measures and packages in terms of the different types of potential SUMP measures and the process for selecting and prioritising these;
- Examples of good practice presented for other cities and regions across Europe that could provide inspiration for the city; and
- Positive feedback on group tasks, activities and discussions on a variety of SUMP-related topics.

Delegates were also asked about possible future SUMP topics that could be beneficial in any future training events. A number of areas were highlighted:

- Further information on cost-benefit analysis and appraisal relating to SUMP;
- More information on approach to evaluation and monitoring for SUMP; and
- Additional material on stakeholder engagement and the different approaches that are taken on this.

In terms of the general feedback and comments on the training event delivered in Manchester these were as follows:

- 'Great days, interesting, enjoyable & informative'
- 'A good refresher on many issues & ways of working I had not used for a while. A reminder of why I chose strategic transport policy & planning as a profession!'
- 'The process was clear and confirmed current direction of travel'
- 'Very clearly presented although possibly targeted at those new to the sector'
- 'This was an interesting and useful course'
- 'Good - very useful'.

7.1.5 Parkstad Limburg, Netherlands SUMP Training – 11th January 2018

Parkstad Limburg is a polycentric region, comprising a total of eight municipalities with a total population of 250,000 dispersed across the region. There is a transition from a traditional mining area to supporting future economic growth aspirations across the region which is currently well served in terms of road and rail infrastructure. There is a heavy focus on polycentric SUMP issues particularly the transport links and connections with neighbouring urban centres. Work on the development of the regional SUMP for Parkstad Limburg is in progress with a vision document having been produced thus far.

The focus of the Parkstad Limburg SUMP is at regional level and unlike many other cities and regions in Europe, congestion isn't main issue – improving connectivity across region (especially by sustainable transport modes) is a major objective, especially facilitating and promoting cycle tourism. In recent years the region has suffered from depopulation issues, with educated young people often leaving region which has resulted in issues relating to the closure of public facilities and services.

Currently, cycling and walking levels are positive in terms of sustainable travel patterns and modal share, whilst there is good quality public transport provision, although better connections are needed as part of an enhanced integrated transport system. Despite the positive urban mobility aspects, most trips are still made by car (greater than 50%) due to the lack of integration and connectivity across the region and as a result there is a need for a greater focus on sustainable travel solutions including alternative fuels and e-mobility solutions.

In terms of the SUMP training and specific topics of interest to both regional and municipality staff, this includes information on strategy development, SUMP implementation aspects, as well as monitoring and evaluation. It was felt that there is currently a deficiency in policy integration on transport issues, including other sector involvement in SUMP, as well as a need to strengthen stakeholder engagement to support the SUMP.

There is a desire to draw on good practice in successful application of urban mobility tools and practices relating to e-mobility and the use of electric vehicle technology, as well as behavioural change initiatives that could be considered and incorporated into the regional SUMP. In terms of the target delegates for the training, it was agreed that one representative from each municipality area would be invited to participate in the course, together with representatives from the region.

Whilst the original request was for a single training day covering SUMP aspects – it was felt beneficial to deliver a full 2-day training course to ensure that all representatives understand fully the SUMP issues and approaches required. Any adaptation to the course material and content could be incorporated at a later date.

The event was scheduled to take place on 10-11th January 2018 in Heerlen. Unfortunately, due to one of the trainers being taken ill, it was not possible to deliver the training on the 10th January and so a slightly modified programme was developed for the 11th January which sought to deliver all seven modules during a compressed programme, with the early modules covered in less detail given the participants exist knowledge of the SUMP process. This enabled the delegates to focus on those modules where there was a greater level of group working and exchange during the later training modules.

Figure 20: Parkstad-Limburg Training



Source: Mott MacDonald

Figure 21: Parkstad Limburg Training



Source: Mott MacDonald

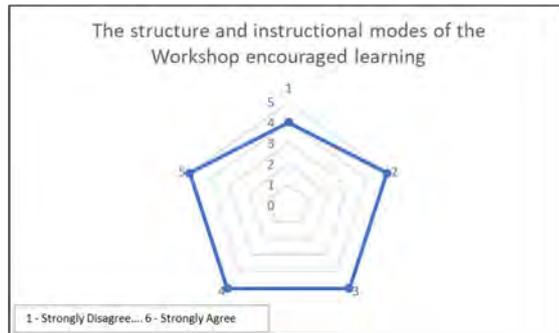
A total of seven representatives attended the event in Heerlen, comprising a mix of both regional staff and experts from the local municipalities.

Figure 22: Delegate Feedback – Urban Mobility Planning



Source: Mott MacDonald

Figure 23: Delegate Feedback – Learning Process



Source: Mott MacDonald

Figure 24: Delegate Feedback – Quality of Event



Source: Mott MacDonald

Figure 25: Delegate Feedback – Training Objectives



Source: Mott MacDonald

In terms of the training event feedback, overall there were positive comments received although the curtailed structure of the event and condensed nature of some of the modules will have had some impact on delegates' opinions. The interactive nature of the modules and exercises delivered were well-received in terms of engaging with participants during the event, as well as sharing good practice on a number of SUMP themes throughout the presentations.

Delegates were asked to comment on the most useful aspects of the course and feedback from the Parkstad Limburg event highlighted the following topics as being most beneficial:

- Different information on SUMP practices and processes – which could be compared to work currently taking place in the region;
- The exercise on objectives and goals setting for SUMP; and
- Group exercises, given the interactive nature and delegate participation.

Delegates were also asked about possible future SUMP topics that could be beneficial in any future training events. The main comment was that more information on planning aspects could be beneficial in terms of future training events, given the need for SUMP to be fully integrated with wider policy agendas and plans as well as responding to future travel demand and development growth.

7.1.6 SUMP Training Events for Non-Partners

A core part of the project is the ability for regional partners to engage with local municipalities and regional stakeholders and to deliver SUMP training based on the agreed programme amongst the partners. Given the current status of SUMP work in Greater Manchester and Parkstad Limburg, decisions were taken not to progress further roll out of training as the initial training that had been provided included the key individuals from those regions.

Region of Central Macedonia Non-Partner Training Event

On the 8th and 9th of March the learning event for non-partners took place in the Region of Central Macedonia, organised by REFORM Project Partner 2 (Regional Development Fund of Central Macedonia - RDFCM) with the cooperation of the Region of Central Macedonia (RCM). The Hellenic Institute of Transport (HIT) of the Centre of Research and Technology Hellas (CERTH) (Lead partner) undertook the overall technical responsibility for the delivery of the training.

The learning event for non-partners followed the first learning activity of REFORM, namely the “training for trainers” event that involved regional staff (representing various departments, i.e. Transport, Development, Environment, Energy, Spatial Planning and Management of Public Space, etc.). The “training for trainers” event provided the first opportunity for building a new cooperative scheme within RCM for the monitoring of sustainable mobility.

The learning event for non-partners was aimed at helping municipalities in co-developing and supervising/monitoring their (local) SUMPs, in line with the Regional Strategy and European standards. The event also provided the opportunity for the municipalities to exchange their experience and common problems they face during strategic mobility planning and sustainable development, as well as starting to explore their interaction with the new cooperative scheme of RCM. The event for non-partners was hosted at CERTH's offices.

The training material that was used was the one developed by Mott MacDonald (external expert of Project Partner 6 - Transport for Greater Manchester) for the needs of the REFORM project. The training material was translated in Greek (this was considered necessary in order to reach out to the technical staff of the Municipalities, who are not so familiar with the English language and terms), but was further adjusted by HIT in order to better address the SUMP development reality in Greece.

HIT has significant experience in the processes of SUMP development in Greece, as it was actively involved in the creation of the Greek National Guidelines, and is also an active consultant for Municipalities across Greece that are currently in the process of developing a SUMP. The adjustment made to the training material mostly concerned the role that Municipalities will be called to play for their (local) SUMP development, as for the development of the local SUMPs external expertise will be sought (there is no in-house capacity). Therefore, presentations included some further, tailor-made, information about the procurement phase and points of attention during the request for data collection.

The SUMP learning event was attended by a total of 38 representatives from 18 Municipalities across the region of Central Macedonia. During the group exercises, the delegates were grouped into four teams with two taking the role of “Any Region” when fulfilling the tasks and the remaining two groups taking the role of “Any City”. From a technical and coordination point of view, one member of HIT undertook the responsibility of presenting the course modules (Maria Morfoulaki) and two members took the responsibility of presenting the case study and introducing the module tasks (Maria

Chatziathanasiou and Katerina Chrysostomou). A total of six members of RCM that were trained during the “training for trainers” REFORM event, coordinated the working groups over the two-day training event.

Figure 26: RCM Training in Practice



Source: CERTH

Figure 27: RCM Training in Practice



Source: CERTH

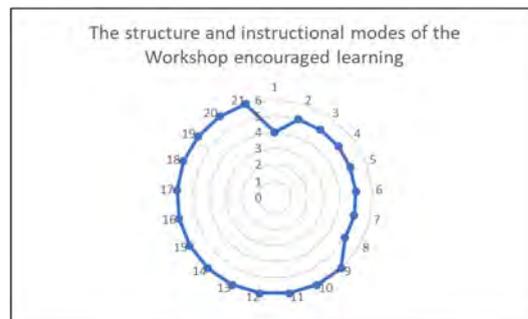
The learning event workshops provided basic national framework information and guidelines for the /development of SUMP, training on the key implementation steps of the SUMP (with examples of good practice) and the possibility of interactive workshops for the exchange of knowledge. The structure of the workshop was fully in line with the European guidelines for the development of the SUMP, tailored to the needs of the Greek cities. The event for non-partners was highly appreciated with a total of 21 participants completing the evaluation form.

Figure 28: Delegate Feedback – Urban Mobility Planning



Source: Mott MacDonald

Figure 29: Delegate Feedback – Learning Process



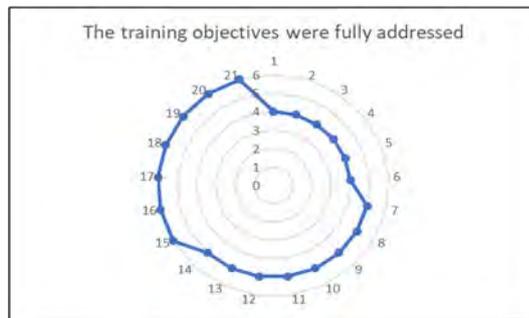
Source: Mott MacDonald

Figure 30: Delegate Feedback – Actively Engaged



Source: Mott MacDonald

Figure 31: Delegate Feedback – Training Objectives



Source: Mott MacDonald

In terms of commentary on the feedback, overall the feedback was extremely positive with the majority of participants expressing views that the training event had added value to their knowledge of SUMP processes and on urban mobility concepts. This high rating also extended to the learning outcomes that participants felt they obtained from attending the training which also actively engaged them throughout the two days. Overall, participants felt that their training objectives had been met and were very satisfied.

Some specific comments were made from the participants that are useful for any future SUMP training that might be provided across the region:

- The duration of the training event should be extended. It was considered that 2 days for this type of training was too short and that there should be an additional day or two to ensure that everything is covered in sufficient detail.
- More detail should be provided for the module (module 7) that focuses on the monitoring and evaluation of SUMPs. This last module was considered to lack a little balance in relation to the others and more detail on the monitoring phase of the SUMP process would be beneficial.
- It was felt that more time should be allocated in the programme for Municipalities to discuss and exchange views on the real problems they face during procurement of SUMP work.
- Views were received that the SUMP training case study could be adapted to be more “tailor-made” for small municipalities, reflecting the specific urban mobility issues and conditions that smaller municipalities face.
- The duration that is given for the measures implementation in the exercise of Module 6 should be re-considered.

The participants agreed that there is a great need to develop synergies in SUMP approach and application between the Municipalities (minimum between the Municipalities of the Metropolitan area of Thessaloniki) and argued that the creation of a general framework by RCM could help to reduce the problems.

A presentation was made by the Regional Governor of Central Macedonia, Mr Apostolos Tzitzikostas who listened to participants' views on the difficulties faced by the Municipalities in the development and implementation of their mobility plans, and he commented on the value of this learning activity and committed the full support of the Region to the Municipalities for the implementation of their SUMPs.

Emilia-Romagna Regional Non-Partner SUMP Training

On 20th April 2018 a second SUMP training programme was delivered in Bologna to local municipalities and stakeholders across the region. A total of 33 participants were involved in a one-day event, covering a wide range of municipality representatives across the region, as well as other agencies.

The training team comprised representatives from the Municipality of Ravenna, Municipality of Faenza & Municipality of Reggio Emilia, supported by RER and ITL. The training course was developed as a one-day event mainly because all the municipalities are already in an advanced phase of SUMP development and expressed the desire not to go through the very basics of the SUMP process. As a result, the initial four modules of the course were presented and summarised by ITL and Region Emilia-Romagna during the first part of the training event.

Figure 32: RER Training in Practice



Source: RER

Figure 33: RER Training in Practice



Source: RER

The majority of the training programme was devoted to Modules 5-7, which centred on the development of SUMP measures, strategy development, implementation plans, as well as monitoring and evaluation. The desire to concentrate on these aspects of SUMP emerged from numerous meetings and events that took place with local municipalities and stakeholders prior to the event.

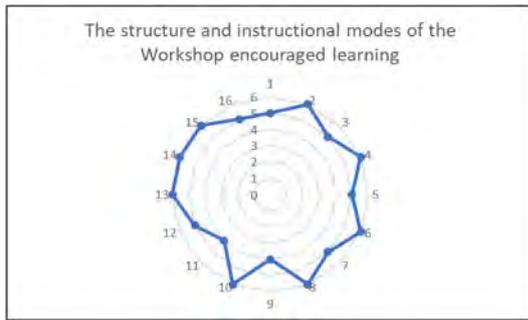
As part of the programme that was delivered, during Module 5 (Measure selection and strategy development), a regional member of staff from RER experienced in Strategic Environmental Assessment (SEA) work across the region delivered an overview of the requirements, process and feedback on the SEAs that have been submitted to date. SEAs are currently a compulsory requirement within SUMP in Emilia Romagna and therefore the information shared with local municipalities was greatly appreciated.

After the module presentations, each municipality shared its' vision, range of SUMP projects being progressed and ongoing work on their implementation plan process (both current and planned). It was decided to base the training structure on real-life situations within the region, rather than the original 'Anyregion' Case study. This was to who are well into the SUMP process and have experiences each module's theory. They also engaged in discussion on some specific issues that they are facing (planning of measures is particularly hard) and performed the group exercise. Each municipality was asked to present its situation step-by-step in relation to the modules of the training, and discussed its priorities/measures in their SUMP.

The group exercise on budgeting and measure section was explained and carried out jointly in smaller groups groups of municipalities. Trainers managed the exercise and supported these smaller group in the discussion. By structuring the event this way, RER met the needs of the local municipalities without losing the original structure of the REFORM training programme.

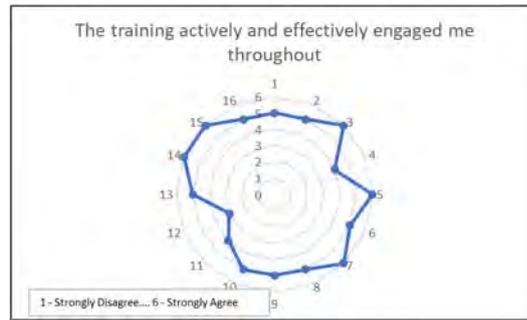
Municipalities expressed their satisfaction with the event. According to them, the event has improved their knowledge and increased their awareness on SUMP development. Particularly, they felt that the group exercises were a useful tool to plan their own budgets and measures, although it was pointed out that 'theory is always different than reality'. All the material (in English) was provided to the participants on a USB stick. Overall, the training team received positive feedback from the people who took part, with 16 representatives completing the evaluation form.

Figure 34: Delegate Feedback – Encouraged Learning



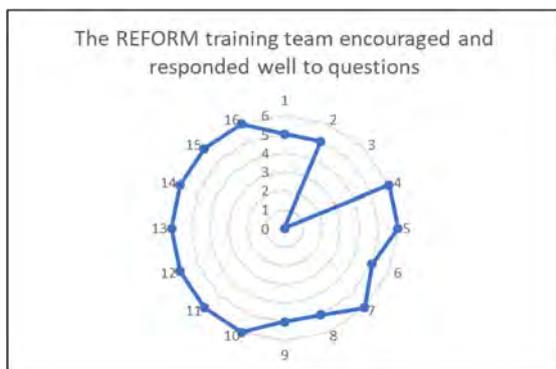
Source: Mott MacDonald

Figure 35: Delegate Feedback – Learning Process



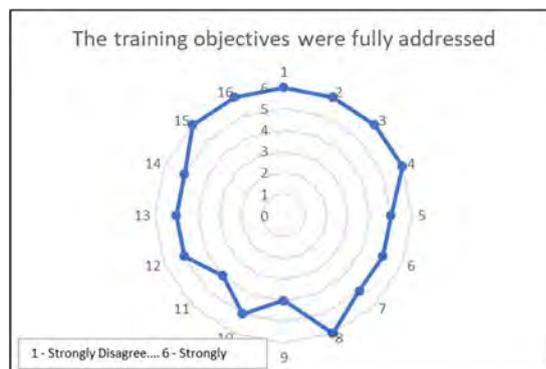
Source: Mott MacDonald

Figure 36: Delegate Feedback – Response of Team



Source: Mott MacDonald

Figure 37: Delegate Feedback – Training Objectives



Source: Mott MacDonald

A total of 16 evaluation forms were completed on the training event, with a wide range of positive feedback received. The majority of participants felt that the course structure and content encouraged learning of SUMP processes and issues effectively. The interactive nature of the group exercises was viewed very positively by delegates and resulted in their active engagement throughout the day. The performance of the training team was viewed positively in terms of how they encouraged comments and input from participants and how they addressed questions throughout the event. Overall, the majority of participants felt that the training delivered was a high quality event and that their training objectives had been fully met.

8 Overall Conclusions

Since September 2017 as part of Task 1.5 a regional SUMP training programme has been developed/adapted and subsequently delivered to representatives across all four Partner regions. As a result, a number of key outcomes have been achieved including the following:

- Adaptation of training material to effectively consider both regional and local urban mobility issues and themes, representative of those experienced across the REFORM partner regions. This included the development of a regional case study material that reflected these regional urban mobility themes and datasets;
- Successfully delivery of regional SUMP training across all partner regions with a total of 47 regional and local municipality staff undertaking the formal training programme, including a number of 'trainers' within Emilia-Romagna and Central Macedonia;

- Adaptation of training material and approach to successfully develop and deliver non-partner SUMP capacity building and learning in both Central Macedonia and Emilia-Romagna. A total of 69 representatives successfully undertook this training.
- Positive feedback has been received on the training material and approach from both partner and non-partner training events, highlighting that the structure and content of the training programme was appropriate for the audience. In particular, the interactive nature of training (group exercises & tasks) was very well received and greatly appreciated and considered useful to reinforce the content of the training modules.
- Feedback from the training participants included a number of areas for further development which will potentially help inform other SUMP training activities across the Partners in future.

Based on the above there is potential scope to build on the success of the REFORM training programme and deliver further training to regional and local municipality staff as well as wider representatives (such as transport operators and serviced providers. Options include the following:

- Adapting the REFORM training programme and material to include additional technical content/material to feed in suggested topics that delegates considered beneficial;
- Developing new training material that focuses on new SUMP aspects, including implementation themes and topics. This will be especially important for those authorities and municipalities who have already developed their SUMPs with more training support provided to help tackle SUMP delivery and implementation challenges; and
- Consider additional training audience & participants including politicians & decision makers as well as wider policy decision-makers at a regional/municipality level who have a key interest in SUMP outcomes (this could include environmental, planning or health professionals). This reflects a key objective of SUMPs to facilitate wider ownership and involvement of policy representatives as part of SUMP development and would help embed SUMP knowledge and capability at a regional & local level.

REFORM Partners



CERTH
CENTRE FOR
RESEARCH & TECHNOLOGY
HELLAS

POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION



HELLENIC REPUBLIC
REGION OF CENTRAL MACEDONIA



Transport for
Greater Manchester



parkstad
stadsregio limburg

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APPENDIX A – REFORM SUMP TRAINING MODULE PRESENTATION MATERIAL



REFORM
Interreg Europe

European Union
European Regional
Development Fund

SUMP Training Programme

Transport for Greater Manchester

REFORM SUMP Training Programme

Training Structure

Structure of the training includes the following:

- Introduction to SUMP:
 - Key background information and the national framework conditions/norm requirements
- Training on the core elements/stages of SUMP and requirements:
- Interactive group workshop discussion sessions and exercises – based on fictitious Case Study SUMP document for 'Anyregion':
 - Background information and data to be used for Group Tasks
 - Aims to understand attendees knowledge and understanding of SUMP process and tools
- Training materials draws on best practice examples where practicable

2

SUMP Training Facilitators:
Mark Finer – Mott MacDonald

Nearly 25 years experience in strategic transport planning – including sustainable urban transport plans in UK & Europe

10 years with Mott MacDonald and another 10 years working for local authorities developing urban mobility strategies and local transport plans including award-winning City of York

Worked in several countries – including strategic transport plans in Czech Republic, Bulgaria, South Africa, Gibraltar

Lead trainer for EIB JASPERS on SUMP training

Lead trainer on Sustainable Urban Mobility Plan in Romania, Czech Republic and also Kenya



3

SUMP Training Facilitators:
Daniel Sestak – Mott MacDonald

- Specialist in urban integrated sustainable transport solutions leading development of feasibility studies, transport plans and master plans in Europe.
- Daniel has worked in various countries including the Czech Republic, Slovakia, Bulgaria, Kyrgyz Republic and the UK.
- Experience in the development and management of SUMP in Czech Republic including Plzen SUMP and currently Prague SUMP (branded P+).



4

SUMP Training Facilitators:
Kevin Riley – Mott MacDonald

Expertise in transport master plans and urban design – leading many strategic studies in north west UK

Experience across cities across Europe ranging from Gothenburg to Sofia involved in EU projects INCOME and CAPTURE focussed on public transport infrastructure.

Worked with Mark in delivering comprehensive 2-day training workshop to Ministry of Regional Development staff on SUMP in Romania for JASPERS




5

SUMP 'Training the Trainer' Overview:
What are Our Training Objectives?

- Objectives of the SUMP training:
 - To recruit and train nominated individuals to develop and deliver a comprehensive training programme on SUMP
 - For Trainers to be able to:
 - Explain fully each step in the SUMP process;
 - Present a range of best (and worst) practice in the delivery of SUMP;
 - Explain the need for, and benefit of, important aspects of SUMP development e.g., stakeholder consultation, strategic environmental assessment, policy/project appraisal and prioritisation;
 - Provide trainees with the information needed to successfully implement SUMPs in their local context; and
 - Tailored to fit the individual needs of beneficiary.

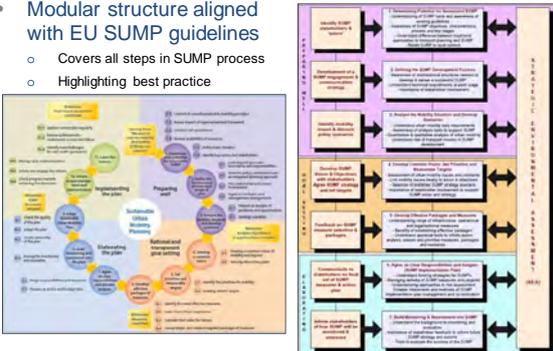




6

SUMP Training Overview:
Modular Training Programme

- Modular structure aligned with EU SUMP guidelines
 - Covers all steps in SUMP process
 - Highlighting best practice




SUMP Training Overview:
Hierarchy of Learning Outcomes

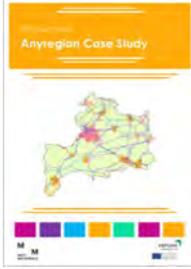
1. Pre-Training Event Tasks	REFORM Anyregion Case Study material	Preparation Motivation Knowledge - Gathering
2. Module Presentations	Core SUMP Requirements Good and Bad Practice	Core Learning SUMP Process & Tasks
3. Working Group Exercises	Case Study Tasks Interactive working & Discussion	Group working Application Plenary Session
4. Worksheets & Test	Based on Module content Reinforcing Learning Process	Assessment Reinforcing learning



SUMP Training Overview:
Pre-Training Tasks

Anyregion Case Study:

- Critical part of training process
- Fictitious region & city with range of urban mobility issues – applicable in medium/large EU cities
- Range of datasets & background supplied
- Ability to manipulate data & information for purposes of training
- Aim for trainees to read through before training event – pre-read material
- Designed to simulate interest & debate



9

REFORM SUMP Training:
SUMP Module Presentation Material

- Structured material aimed at target audience – concise and focused
- Suite of module presentations covering entire SUMP process
- Focus on understanding and awareness of key issues for trainees
- Important to not be overly technical
- Reference to relevant good examples of approaches/tools as well as issues to avoid



10

SUMP Training:
Importance of Interactive Group Tasks

- Carefully designed tasks for group working – SUMP processes
- Interactive and stimulating for trainees
- Based on data & information collated for the Case Study
- Training team on-hand to support but largely down to groups themselves
 - Facilitating team working
- Supported by plenary session to share feedback and exchange views



11

SUMP Training:
Worksheets & Test

- Develop worksheets for each module to assess level of learning & understanding:
 - Multiple choice and different formats
- Based on module presentation material – audience can relate to it easily
- Final simple test to draw training to a close – focus on fun to finish!



12

Sustainable Urban Mobility Plans:
Outline Agenda



Day 1:

- **SUMP Training Overview**
- **SUMP Development Process & Context:**
 - Key elements of successful SUMPs
- **SUMP Preparation & Structure:**
 - Institutional Issues/ Strategic environmental assessment
 - Stakeholder engagement
- **SUMP Information Gathering & Analysis Tools:**
 - Data collection, surveys & modelling tools
- **SUMP Problems, Vision and Objectives:**
 - Linking problems with establishing a vision & objectives

Close for the day

13

Sustainable Urban Mobility Plans:
Outline Agenda



Day 2:

- **Quick recap of Day 1**
- **SUMP - Identifying & Sifting Measures:**
 - Identifying the solutions and measures to deliver a SUMP Vision
- **SUMP Implementation Plan:**
 - What are the challenges in SUMP implementation and how to overcome these?
- **SUMP Monitoring & Evaluation:**
 - What makes a good monitoring and evaluation framework for a SUMP?
- **SUMP Test & Certificates**

Close

14

Thank you





**Mark Finer, BSc,(Hons), MSc, MCIHT,
TPP
Senior Project Manager
Mark.Finer@mottmac.com
Tel: +420 221423924**

Questions welcome

   *Project s media*

15

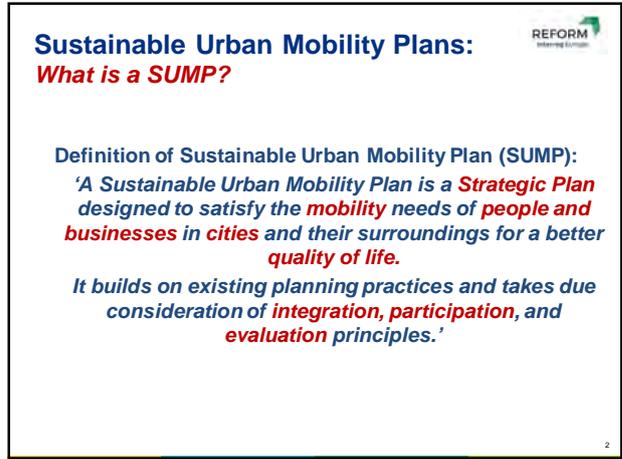


REFORM
Interreg Europe

European Union
European Regional
Development Fund

SUMP Training Programme
Module 1 – Concept & Approach

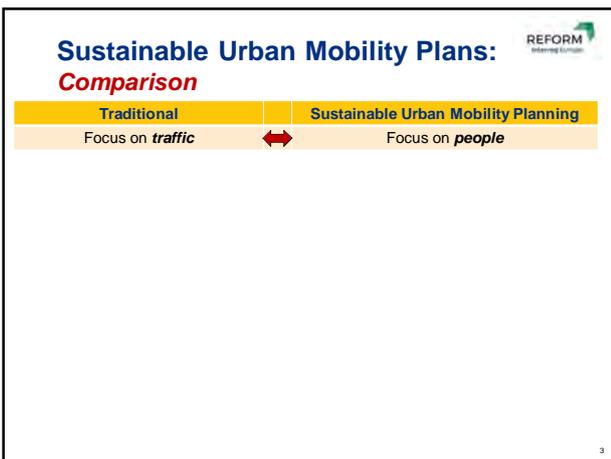
Transport for Greater Manchester



Sustainable Urban Mobility Plans:
What is a SUMP?

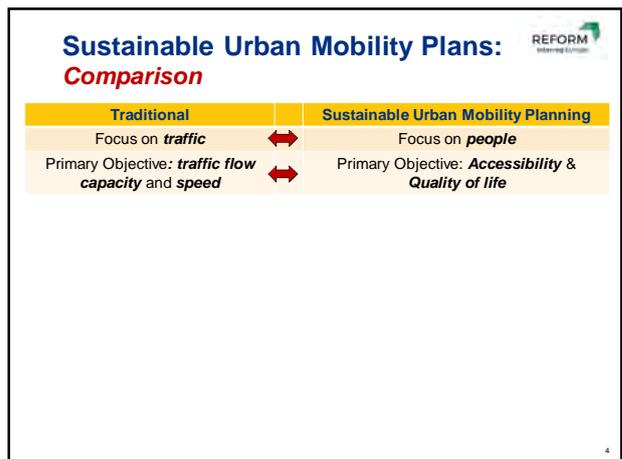
Definition of Sustainable Urban Mobility Plan (SUMP):
*'A Sustainable Urban Mobility Plan is a **Strategic Plan** designed to satisfy the **mobility needs of people and businesses in cities and their surroundings** for a better **quality of life**.*

*It builds on existing planning practices and takes due consideration of **integration, participation, and evaluation principles**.*



Sustainable Urban Mobility Plans:
Comparison

Traditional		Sustainable Urban Mobility Planning
Focus on <i>traffic</i>	↔	Focus on <i>people</i>



Sustainable Urban Mobility Plans:
Comparison

Traditional		Sustainable Urban Mobility Planning
Focus on <i>traffic</i>	↔	Focus on <i>people</i>
Primary Objective: <i>traffic flow capacity and speed</i>	↔	Primary Objective: <i>Accessibility & Quality of life</i>

Sustainable Urban Mobility Plans: Comparison

Traditional		Sustainable Urban Mobility Planning
Focus on <i>traffic</i>	↔	Focus on <i>people</i>
Primary Objective: <i>traffic flow capacity and speed</i>	↔	Primary Objective: <i>Accessibility & Quality of life</i>
Political mandates and planned by experts	↔	Important stakeholders are actively involved

5

Sustainable Urban Mobility Plans: Comparison

Traditional		Sustainable Urban Mobility Planning
Focus on <i>traffic</i>	↔	Focus on <i>people</i>
Primary Objective: <i>traffic flow capacity and speed</i>	↔	Primary Objective: <i>Accessibility & Quality of life</i>
Political mandates and planned by experts	↔	Important stakeholders are actively involved
Emphasis on traffic engineers	↔	Inter-disciplinary planning

6

Sustainable Urban Mobility Plans: Comparison

Traditional		Sustainable Urban Mobility Planning
Focus on <i>traffic</i>	↔	Focus on <i>people</i>
Primary Objective: <i>traffic flow capacity and speed</i>	↔	Primary Objective: <i>Accessibility & Quality of life</i>
Political mandates and planned by experts	↔	Important stakeholders are actively involved
Emphasis on traffic engineers	↔	Inter-disciplinary planning
Infrastructure as the main topic	↔	Combination of infrastructure, services, information & promotion

7

Sustainable Urban Mobility Plans: Comparison

Traditional		Sustainable Urban Mobility Planning
Focus on <i>traffic</i>	↔	Focus on <i>people</i>
Primary Objective: <i>traffic flow capacity and speed</i>	↔	Primary Objective: <i>Accessibility & Quality of life</i>
Political mandates and planned by experts	↔	Important stakeholders are actively involved
Emphasis on traffic engineers	↔	Inter-disciplinary planning
Infrastructure as the main topic	↔	Combination of infrastructure, markets, services, information & promotion
Investment-guided planning	↔	Cost efficient goals – Value for Money

8

Sustainable Urban Mobility Plans: Comparison

Traditional	Sustainable Urban Mobility Planning
Focus on traffic	Focus on people
Primary Objective: traffic flow capacity and speed	Primary Objective: Accessibility & Quality of life
Political mandates and planned by experts	Important stakeholders are actively involved
Emphasis on traffic engineers	Inter-disciplinary planning
Infrastructure as the main topic	Combination of infrastructure, markets, services, information & promotion
Investment-guided planning	Cost efficient goals – Value for Money
Focus on large costly projects	Greater emphasis on efficiency & optimisation

Sustainable Urban Mobility Plans: Comparison

Traditional	Sustainable Urban Mobility Planning
Focus on traffic	Focus on people
Primary Objective: traffic flow capacity and speed	Primary Objective: Accessibility & Quality of life
Political mandates and planned by experts	Important stakeholders are actively involved
Emphasis on traffic engineers	Inter-disciplinary planning
Infrastructure as the main topic	Combination of infrastructure, markets, services, information & promotion
Investment-guided planning	Cost efficient goals – Value for Money
Focus on large costly projects	Greater emphasis on efficiency & optimisation
Limited impact assessment	Wider assessment of impacts and learning processes

Sustainable Urban Mobility Plans: Comparison

Traditional	Sustainable Urban Mobility Planning
Focus on traffic	Focus on people
Primary Objective: traffic flow capacity and speed	Primary Objective: Accessibility & Quality of life
Political mandates and planned by experts	Important stakeholders are actively involved
Planning for cars = more car traffic & congestion	Planning for people = better mobility & accessibility
Infrastructure as the main topic	Combination of infrastructure, markets, services, information & promotion
Investment-guided planning	Cost efficient goals – Value for Money
Focus on large costly projects	Greater emphasis on efficiency & optimisation
Limited impact assessment	Wider assessment of impacts and adoption of learning processes

- ### Sustainable Urban Mobility Plans: Changing Emphasis
- Looking at *longer-term horizon* for setting the vision, objectives and targets
 - Taking into account *wider geographical area and cross boundary travel*
 - Building *stakeholder involvement* into the process more fully to get better *ownership of the Plan*;
 - Focusing on the contribution of transport to supporting the *wider policy agenda*
 - Demonstrating clear linkages between objectives and measures implemented to *achieve outcomes*.

Sustainable Urban Mobility Plans: *Scope of SUMP*

SUMP policies and measures should address the following:

- All modes and forms of transport
- Entire urban agglomeration
- Public and private
- Passenger and freight
- Motorised and non-motorised
- Moving and parking
- Door to door mobility

13

Sustainable Urban Mobility Plans: *Benefits of SUMP*

Added value of intensive strategic planning within urban areas
Cities/towns are able to:

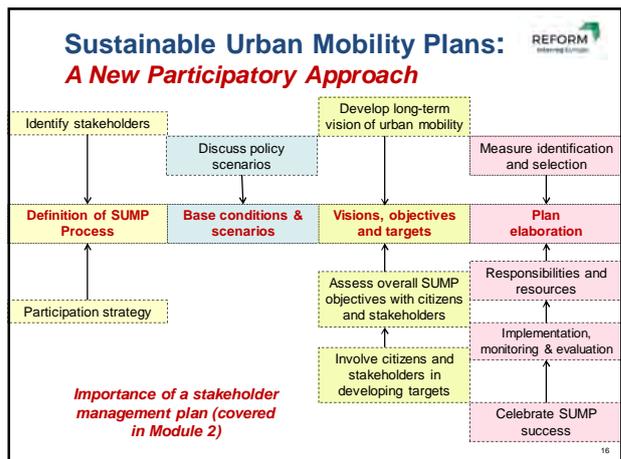
- Analyse and assess local transport problems and challenges
- Identify effective and cost-efficient measures to overcome challenges
- Understand different development scenarios and policy options
- Understand interests and expectations of transport system users
- Develop a common vision on urban transport development
- Choose and agree an appropriate feasible set of measures
- Prioritise and schedule measures:
 - According to most urgent problems
 - Easy-to-achieve 'quick wins'
 - In line with available budget and implementation capacities

14

Sustainable Urban Mobility Plans: *Benefits of SUMP*

- Public & stakeholder decisions
- Environmental & health benefits
- Improved Image of a city
- Better Quality of Life
- Improved Mobility and Accessibility
- Ability to reach more people
- Political vision for new integrated transport system
- Fulfilment of legal obligations

15

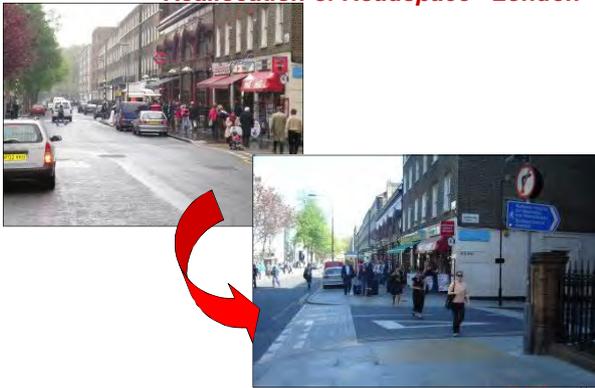




- ### What Makes a Successful SUMP?
- Summary of key approach*
- Emphasis on sustainability:**
- Balancing **economic development, social equity** and **environmental quality**
- An approach that involves the following tasks:**
- **Status analysis** and baseline scenario
 - Definition of a **vision, objectives and targets**
 - Selection of range of **urban mobility policies & measures**
 - Assignment of **responsibilities & resources**
 - Arrangements for **monitoring** and **evaluation**
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Sustainable Urban Mobility Plans
Reallocation of Roadspace - London



The top photograph shows a wide London street with a car in the foreground and several other vehicles further down. The bottom photograph shows the same street after a roadspace reallocation, with a significantly wider pedestrian crossing area and a blue-painted cycle lane. A large red arrow points from the top image to the bottom image.

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Sustainable Urban Mobility Plans:
Reallocation of Roadspace - London



The top photograph shows a narrow London street with a car in the foreground and several other vehicles further down. The bottom photograph shows the same street after a roadspace reallocation, with a significantly wider pedestrian crossing area and a blue-painted cycle lane. A large red arrow points from the top image to the bottom image.

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Sustainable Urban Mobility Plans:
Reallocation of Roadspace - London

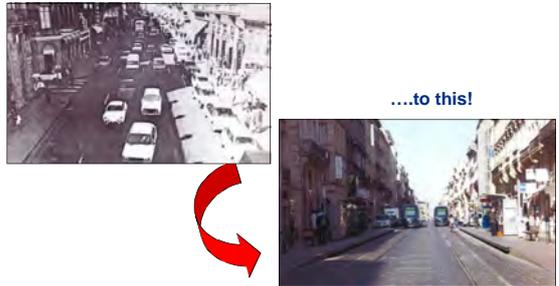


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Successful Urban Mobility Plans:
Reclaiming the Street – Brussels
From this.....

....to this!



The top photograph shows a wide Brussels street with many cars parked along the sides and driving in the lanes. The bottom photograph shows the same street after a successful urban mobility plan, with a significantly wider pedestrian crossing area and a blue-painted cycle lane. A large red arrow points from the top image to the bottom image.

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Successful Urban Mobility Plans:
Reclaiming the Street – Ghent

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Sustainable Urban Mobility Planning:
A few more thoughts....

Transport and movement as a 'support', not the main reason...

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Sustainable Urban Mobility Planning:
Type of 'place' we want to deliver

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Sustainable Urban Mobility Planning:
Understanding types of users & their needs

- Daily low salary 'support' staff from relatively nearby, antisocial hours
- Twice a year visitors coming for weekend from the country
- Regular commuter, perhaps flexible working using IT
- Business person in high pressure job
- Teenagers shopping or visit to the cinema
- Elderly person or school child with mobility or safety needs
- City centre young couple, living to enjoy life....
- Small business manager who needs deliveries efficiently

Thinking about the total journey not just one part of it...

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Sustainable Urban Mobility Planning: *Using examples from other places*

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Glasgow Hamburg Bratislava
Dublin Manchester Lyon Freiburg Dusseldorf Dresden
Prague
Porto Geneva Bucharest
Barcelona Marseilles Dubrovnik
Genoa

29



Successful Urban Mobility Plans
Gateways and Intersections are key to capacity and commercial opportunity



Sustainable Urban Mobility Planning

*Increasing need for flexible places:
Designing for people. Space is limited*

Oslo in Summer

Successful Urban Mobility Planning: *Maximise use of infrastructure to make it economic*

Re-use historic infrastructure innovatively

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Oberhausen, Germany

32



Sustainable Urban Mobility Planning:
*Designing for people. Space is limited
Car park or play area?*

34

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Successful Urban Mobility Plans
*Transport Infrastructure can be part of Urban
Architecture and Image : Sheffield UK*

Sustainable Urban Mobility Planning
*Adapt thinking to geography and needs;
Wuppertal, Germany – along a river valley with little space.....*

Sustainable Urban Mobility Planning: FORM
Understanding behaviours.....
Supersize v Small Eco Cars, but less middle size vehicles



37

Sustainable Urban Mobility Planning: EFORM
Recognising changes
Logistics: Move from Middle Sized Vehicles



38

Thank you

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European Union
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Questions welcome



Project s media

39

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SUMP Training Programme
Module 2 – Preparation, Organisation & Structure of SUMP

Transport for Greater Manchester

SUMP Development - Organisation

Key Issues

- **Key issues to consider:**
 - Skills and experience required to develop successful SUMP
 - Nature and frequency of communication
 - Political process
 - Transparency of decision-making
 - Planning ahead:
 - Data collection
 - Public engagement and feedback
 - Regular reference to and review of SUMP objectives

2

SUMP Development - Preparation

Key Issues & Tasks

- **Establish a technical team to prepare SUMP:**
 - Maybe a consultancy team, in-house experts where these may be available, or by a combination of both.
 - Need day-to-day activities in the preparation of the SUMP and will report to the Steering Group.
 - Any consultant should be brought on board early in process
- **Identify a project manager:**
 - Handle communication between the Contracting Authority and the Technical Team:
 - Requires familiarity with transport and SUMP to be able to engage with Technical Team.

3

SUMP Development - Preparation

Key Issues & Tasks

- **Define and establish a SUMP Steering Group to support and guide the Technical Team:**
 - Representatives Municipality, the Planning Authority, and major transport operators.
- **Establish a list of stakeholders to be consulted during Plan preparation:**
 - Variety of groups
 - Residents/business groups
 - NGO's
 - Transport user groups.

4

SUMP Development - Preparation 

Consultants – Terms of Reference

- Background of the study, and the origins of the need for the Sustainable Urban Mobility Plan
- National/regional/local guidance and standards to support the work
- All existing information/studies that are available and will be provided
- Required duties of the Technical Team
- Duties to be undertaken by the Steering Group and the client Project Manager
- Data collection and expenses to support project
- Ownership of model, data etc. (Intellectual Property Rights (IPR))
- Public consultation requirements managed by the Technical Team
- Reporting schedules and approval procedures for deliverables
- Outline timescale, showing start and end dates for the contract
- Clear tender Instructions

5

SUMP Development - Preparation 

Consultants – Terms of Reference

- **Generally common to assign a single study area for a Technical Team**
- **Smaller study areas - multiple towns can be included within a single contract:**
 - Can be effective for towns with close links/relationships
 - Improves consistency and efficiencies of scale.
 - Need to consider availability of resources to deliver.

6

SUMP Development 

Structural Issues

- **Integration and co-operation:**
 - Commitment to sustainability – balancing economic development, social equity and environmental quality
 - Consultation and co-operation between different agencies to ensure consistency and complementary policies across the sectors – transport, land use and spatial planning, social services, health, education and enforcement/police
 - Exchange with relevant authorities at other levels of government – district, Municipality, agglomeration, region etc.
 - Co-ordination of activities between neighbouring urban areas
 - Reflects correct spatial scale and coverage

7

SUMP Development 

Policy Framework

- **Most effective policy frameworks include the following:**
 - Local planning regulations aligned with national/regional policies aimed at harmonising mobility and land use planning and promoting sustainable modes of transport
 - Design and operational norms/guidelines that underpin cost-efficient maintenance, transport reliability and safe standards of infrastructure:
 - planning guidelines can help delivery of sustainable modes
 - Transparent decision-making processes contribute towards achieving efficiency and prioritisation of transport interventions

8

SUMP Development
Importance of Participation



- **Policy processes and participatory planning:**
 - Institutional structure for SUMP development
 - Political commitment for participation
 - Thorough planning and preparation of stakeholder and public involvement
 - Development of a communication and participation strategy/plan
 - Local partnerships and co-operation with private sector
 - Openness to take-up solutions from agencies not directly involved in transport

9

SUMP Development
Institutional Issues



- **Institutional roles and leadership:**
 - Clear management and leadership structures for policy development and implementation
 - Strategic thinking and planning – making planning process more efficient and effective
- **Clearly defined roles for co-operation across departments and for interaction at various scales of government**
- **Ensuring accountability during project implementation:**
 - Accountability across departments & partners
 - Re-evaluation of SUMP policy at regular intervals

10

SUMP Development
Institutional Issues



- **Involving geographic, political, administrative and Interdepartmental co-operation**
- **Pragmatic co-operation with key ‘actors’ to ensure the take-up of SUMP ideas, principles and policies**
- **Important for wider buy-in and participation in decision-making:**
 - Limited institutional co-operation = less chance of achieving SUMP objectives
- **Includes both vertical and horizontal co-operation:**
 - Internal: Between Municipality disciplines (planning, transport, health, education)
 - Spatial: At urban/agglomeration or regional level

11

SUMP Development
Institutional Issues



- Demonstration of interactions between changes in urban structures (density, functions, socio-economic patterns) and mobility
- Linkages considered between different transport modes rather than addressing them in isolation
- Planning of mobility and transport seen as a *shared policy focus* meeting needs of society – economic, social, environmental – not as an end in itself!
- Definition of how sustainable urban mobility planning and other policies at the local, regional, national and European level can be integrated:
 - Also *plans of transport companies*, and *plans of neighbouring municipalities* important to consider

12

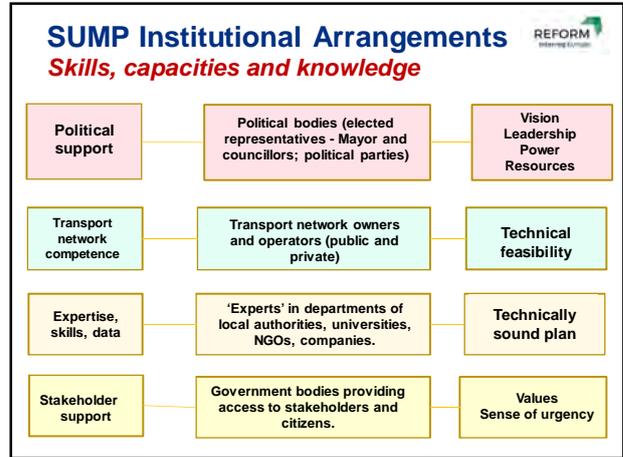
SUMP Development

Skills, capacities and knowledge

- **Specific capacities, skills and knowledge**
- **Project management has to ensure that the partnership has all of them at hand**
- **Different functional abilities:**
 - The capacity to gain political support
 - The competence over transport networks and services
 - Technical excellence in SUMP development
 - Capacity to gain public support or to understand public needs



13





Module 2 – Smaller cities & regional issues

Transport for Greater Manchester

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Sustainable Urban Mobility Plans:

Smaller Cities & Towns in a Regional Setting

- **Key goals are to:**
 - improve accessibility of urban areas;
 - Provide high-quality and sustainable mobility and transport to, through and within an urban area.
 - Maintaining local economy and fabric of urban area
- **Important to focus on needs of the 'functioning urban centre' and surroundings**
- **Outside major urban centres 'poly-SUMP' approach is important:**
 - Collaborative working process to address the sub-regional transport challenges
 - Includes several municipalities and stakeholders working together



16

Sustainable Urban Mobility Plans: *What are 'Poly-centric' Urban Areas?*



- **Networks of medium-to-small cities and urban centres within defined area:**
- **Often within commutable distance and not in the shadow of a large metropolitan city.**
 - Generally involves relatively large urban centre (100-200k population) plus a number of intermediate /smaller urban centres
 - Urban functions generally spread across the different centres
 - Dispersed services across sub-region

17

Sustainable Urban Mobility Plans *Does Typology and Size Matter?*



- **Typology of urban centre & region matters:**
 - Influences the overall evaluation of different urban mobility parameters:
 - Focus on major urban conurbations within metropolitan areas
 - Small towns : less concentrated attractors of traffic
 - Tourist destinations : which can show major seasonal variations
 - 'Competence' and skills of municipalities developing SUMP
- **Size matters:**
 - Scope and reach of mobility measures/actions when tackling the same type of problem
 - Traffic congestion reduction - addressed in a smaller city using a bypass and in a larger city through a mix of measures including demand management
 - Size not only considered in terms of inhabitants:
 - Territorial and administrative parameters, given their crucial impact on viable actions/measures options

18

Sustainable Urban Mobility Plans: *Issues Facing Small Urban Centres*



- **Small town residential areas often disconnected from major services:**
 - Limited choice of mobility options if no public transport
 - Ageing population often disconnected from key services (eg. health)
 - De-population to main urban cities and metropolitan areas
 - Disruption of social patterns
 - Dispersion of different functions
- **Lack of administrative capacity and knowledge:**
 - Lack of funding to provide key mobility connections

19

Sustainable Urban Mobility Plans *Issues Facing Smaller Urban Centres*



- **Lower population/density – lower numbers of vehicles:**
 - However, can mean *higher reliance on cars for personal mobility*
- **Smaller urban areas are often small-scale traffic generators:**
 - Fewer traffic jams/congestion however:
 - Often accessibility/severance impacts
 - Associated speed/safety issues - local amenity affected
 - Tourist areas – seasonal congestion impacts
- **Attractive mobility solutions can support growth and development**

20

Sustainable Urban Mobility Plans:
Smaller Urban Centres – Mobility Issues

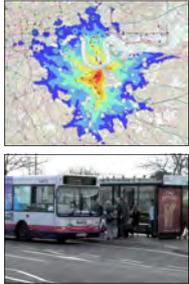
- **Integration of personal mobility with local public transport services:**
 - In less densely populated rural areas, local people often require transport over longer distances.
 - Focus on more demand responsive PT solutions
 - Many routes focus on weekdays to cover school starting and closing times.
- **Responding to 'ageing' population and mobility needs:**
 - Due to the increasing number of elderly citizens require shifts in travel behaviour:
 - Demand for transport to visit doctors, health and recreational facilities likely to increase while the demand for targets of the younger population will decrease
 - Proportion of people with reduced mobility will increase:
 - Provision of an accessible transport service for this increasingly important user group is important
 - Presents a major challenge for sub-regional public transport

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Sustainable Urban Mobility Plans:
Challenges for small City/SUMP approach

- **Scarcity of resources:**
 - Less resources often make it difficult to support local mobility needs
 - Less access to specialist resources
 - Funding targeted at major metropolitan projects (eg higher demand & benefits)
 - Difficult to establish planning function to address urban planning, mobility, environment



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Sustainable Urban Mobility Plans:
Challenges for small urban areas / dispersed regions

- **Less influence on systems such as:**
 - **Planning:** less power to influence the surrounding territory and to involve neighbouring local authorities compared to larger city metropolitan area
 - **Public transport:** rail to road interchange, connections between public transport in urban and sub-urban areas, integration with other modes (walking & cycling)
 - **Addressing social issues:** Longer distance transport services crossing boundaries for high school students, services for persons with reduced mobility/disability, access to health
 - **Economic issues:** Home-to- work mobility for people working in adjacent town/city areas, access to personal mobility (and employment opportunities)

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Sustainable Urban Mobility Plans:
Advantages of Small City/SUMP approach

- **Closeness to the issues & stakeholders:**
 - More limited number of widely recognized problems
 - Increased options to share local urban mobility objectives with stakeholders
 - Better definition of stakeholders and organization of participation
 - Easier for political decision makers to reach consensus



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Sustainable Urban Mobility Plans: Advantages of Small City/SUMP approach

Smaller scope of Plans:

- o Easier to conduct preliminary analyses of mobility:
 - Less need for detailed data collection
- o More focused action within limited spatial territory:
- o Often clearer focus on policy objectives (eg. accessibility & safety)
- o More responsive outcomes and closely aligned solutions to these objectives

Can be less Complex:

- o Relatively easier to involve different departments within municipality
- o shorter times for the elaboration of the plan and its sharing with stakeholders/citizens



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SUMP Best Practice: Bremen Sustainable Urban Mobility Plan

- Co-operation is a key part of both the planning and implementation process
- Joint working approach:
 - Neighbouring municipalities
 - Exchanges with Groningen (Netherlands) and Oldenburg (Germany) on traffic strategies at the trans-national level
- Process is monitored by an advisory board - also covers monitoring and UMP evaluation :
 - Members of the local parliament
 - Eternal stakeholders (motorists' and cyclists' associations, chamber of commerce, environmental NGOs)



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SUMP Institutional Issues Dresden SUMP

SUMP 2025+ Institutional framework:

- Co-operation with a wide range of partners.
- Local stakeholders sat at *Dresden Round Table* - an ad-hoc discussion body created for the SUMP process.
- All Round Table participants brought capacities, skills and knowledge
- Emphasis on establishing strong partnership.




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Best Practice Dresden Sustainable Urban Mobility Plan



Steering committee led by mayor Jörn Marx
Representatives of city council groups, heads of department, City of Dresden offices, councillors, project manager, round table facilitators

Round table
Led by mayor Jörn Marx with facilitator Rüdiger Trisch
Transport providers (3 seats)
Transport associations (2 seats)
Business associations (2 seats)
City administration SUMP project group (3 seats)
Other social interests (5 seats)
City council groups (6 seats)
Spokesperson for scientific advisory board - in advisory capacity

Scientific advisory board
Representatives of transport and transport-related studies, Dresden University of Technology and other German research institutions

Region/neighbours

City administration project group

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SUMP Institutional Issues

Ghent SUMP

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- Municipality identified partners related to different topics and modes of transport.
 - Focus on cross-sectoral and cross-modal integration of SUMPs.
- Identified economy, environment, health, education & social inclusion as key themes:
 - Employers' organisations, businesses and representatives of the transport business (**economy**);
 - local environmental association Gents Milieufrent (**environment**);
 - representatives of health practitioners, firefighters and the local police (**health and safety**);
 - four local schools and representatives of minorities and districts of Ghent (**education and social inclusion**).
- Integration of all modes of transport – different transport providers & interests

29

Greater Manchester SUMP Governance

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Greater Manchester: A Polycentric City Region

31

Governance

32

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TfGM Network Responsibilities

- Greater Manchester benefits from rail, metro, bus, motorway and highway networks.
- The level of control TfGM has over these networks varies:
 - **Rail** = influence but no direct control (Network Rail plus TOCs)
 - **Metro** = full control and ownership
 - **Bus services** = influence but no direct control (Bus operators)
 - **Motorways** = influence but no direct control (Highway England)
 - **Highway network including walking and cycling** = influence but no direct control (Local Highways Authorities)
- **Collaboration is the key to our SUMP success!**

33

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SUMP Best Practice York Local Transport Plan

- Steering Group to oversee development – cross sector
- Officer Group – Technical aspects
- Wider Reference Group – throughout LTP development
- Marketing & Communication Campaign
- Different media used to get public feedback
- TalkAbout Citizens Panel

34

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SUMP Institutional Issues: SUMP Governance

- **Governance arrangements directly affect authority's ability to achieve the main SUMP characteristics.**
- **Important to consider:** institutional, legal or financial barriers in the management and communication process.
- **New SUMP governance arrangements to consider:**
 - Establishing process for **joint-working**:
 - o Other departments, neighbouring public authorities, other policy sectors and public transport operators.
 - o A commitment to undertake specific citizen participation initiatives.
- **Important issues relating to potential success of SUMP:** Needs **horizontal** and **vertical integration** and a **participatory approach** at different levels

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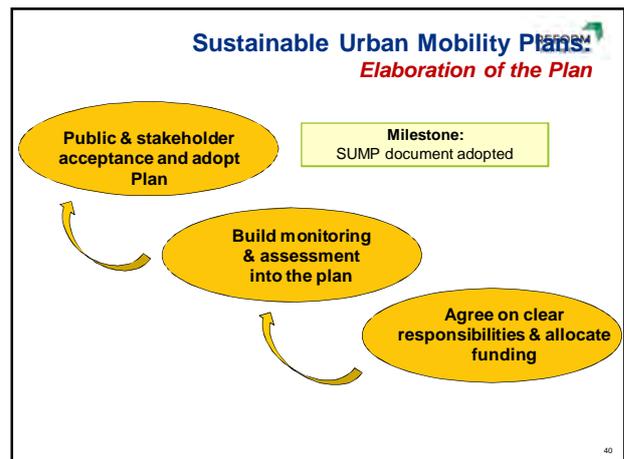
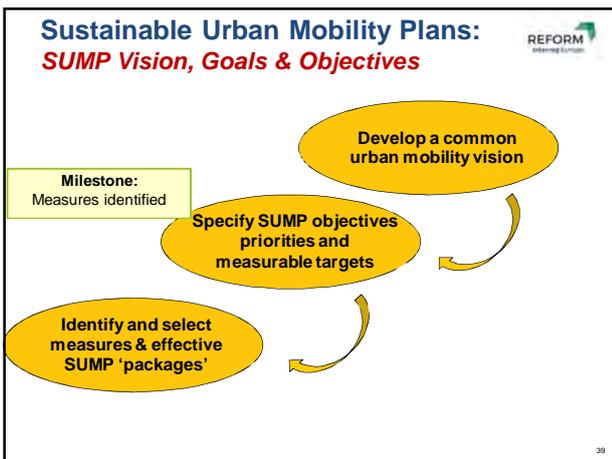
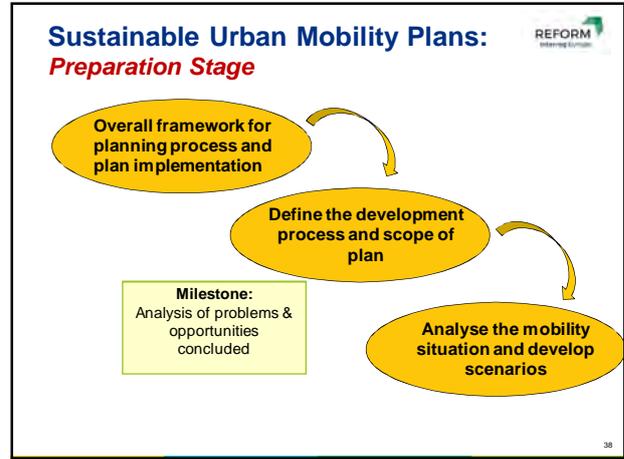
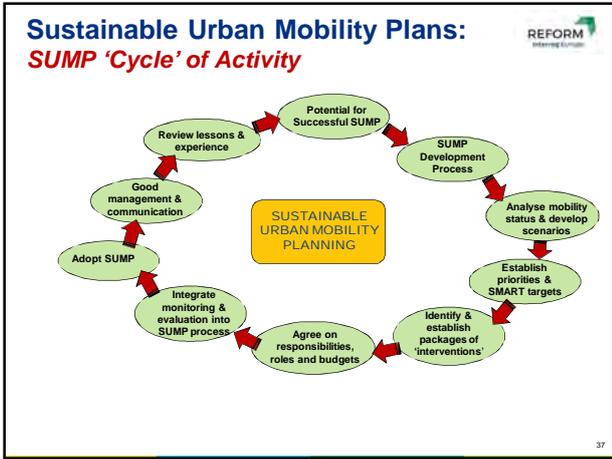
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SUMP Training Programme Module 2 – Stages in preparing a Sustainable Urban Mobility Plan

Transport for Greater Manchester

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Sustainable Urban Mobility Plans:
Plan Implementation

Ensure proper Management and communication

Learn the lessons, check progress and feed results back into process

Milestone:
Final impact assessment concluded

41

SUMP Process - SEA:
What is SEA (Strategic Environmental Assessment)?

An environmental assessment process applied to plans or programmes to inform the decision-making process

↓

More environmentally sustainable urban mobility plan

42

SUMP Process - SEA:
Legislative Context

EU Directive 2001/42/EC (SEA Directive) - assessment of the effects of certain plans and programme on environment

Requires an environmental assessment to be carried out for plans and programmes that are likely to have significant environmental effects

Applies to plans & programmes that are:

- prepared for transport (such as SUMP) and other sectors, and which set the framework for future development consent of projects (listed in Annex I and II of the EIA Directive); or
- in view of the likely effects on European designated sites will require a Habitats Regulations Assessment (under Article 6 or 7 of the Habitats Directive).

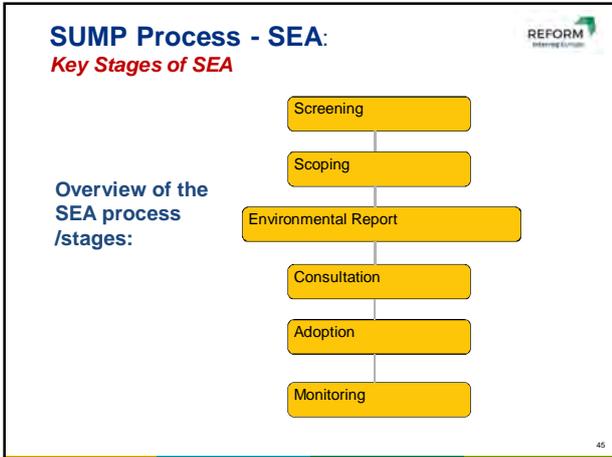
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SUMP Process - SEA:
Aims of SEA

Aims of SEA:

- To improve strategic actions by making them clearer
- To involve the public and other stakeholders in decision making
- To focus on key environmental constraints
- To educate decision makers about the impacts of their potential decisions on the environment
- To help identify the best option for a Plan and Programme to minimise negative impacts, optimise positive ones and compensate for loss

44



SUMP Process - SEA: Relationship with SUMP Process

SUMP Process	SEA Process
Preparation: <ul style="list-style-type: none"> Overview framework for planning process and plan implementation Define development process and scope of plan Analyse the mobility situation and develop scenarios 	Scoping: <ul style="list-style-type: none"> Plans and programmes review Baseline information gathering Identification of key issues and opportunities
SUMP Vision, Goals and Objectives: <ul style="list-style-type: none"> Develop a common urban mobility vision Specify UMP objectives, priorities and measurable targets Identify and select measures and effective UMP 'packages' 	<ul style="list-style-type: none"> Develop SEA Framework Consult on Scoping
	Environmental Report: <ul style="list-style-type: none"> Assessment of SUMP objectives, measures and alternatives

46

SUMP Process - SEA: Relationship with SUMP Process

SUMP Process	SEA Process
Elaboration of the Plan: <ul style="list-style-type: none"> Agree clear responsibilities and allocate funding Build monitoring and assessment into plan Public and stakeholder acceptance and adopt plan 	<ul style="list-style-type: none"> Develop mitigation and monitoring proposals Produce draft Environmental Report
	Consultation: <ul style="list-style-type: none"> Public and stakeholder consultation Review responses and update report
	Adoption: <ul style="list-style-type: none"> Post-adoption statement
Plan Implementation: <ul style="list-style-type: none"> Ensure proper management of communication Learn the lessons, check progress and feed results back into process 	Monitoring: <ul style="list-style-type: none"> Monitoring implementation of plan

47

- ### SUMP Process - SEA: Screening & Scoping
- Screening:**
- If you are unsure whether the plan/programme will have significant environment effects, use the criteria in Annex II of the SEA Directive.
 - Produce a letter or short summary report to submit to the environmental Consultation Bodies for a screening determination
 - Scoping:**
 - Scoping sets the context, baseline and assessment methodology for the SEA.
- 48

SUMP Process - SEA:
Scoping Tasks

Scoping tasks include:

- Plans and programmes review
- Baseline information of the SUMP area (visuals such as maps help the reader) – make sure evolution of the baseline without the plan is included
- Identification of key issues and opportunities
- Development of an SEA Framework: not specifically stated in the SEA Directive. A recognised way of assessing the effects of the plan. Include scoping out of topics that aren't relevant but provide justification. SEA Framework can be objective or receptor based.

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SUMP Process - SEA:
Scoping & Environmental Reports Tasks

Scoping Report sent for consultation to the Consultation Bodies:

- Helps inform the SEA and ensure Consultation Bodies have had input into the development of the SEA process (this is valuable and can avoid issues in the future).

Environmental Report:

- Assessment of likely significant effects of the plan and its alternatives using the SEA Framework
- Make sure reasonable alternatives are considered (this has been an issue for plan rejection in the UK)
- SUMP alternatives - strategy alternatives e.g. main plan focus on car, or public transport. Alternative measures to meet SUMP objective

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SUMP Process - SEA:
Environmental Report Tasks

- Assessment should feed into the decision-making criteria for choosing the preferred Plan.
- Mitigation is an important part of the assessment process. Best practice should also consider opportunities for enhancement.
- Above tasks are presented in an Environmental Report. Annex I of the SEA Directive sets out information to be included in the ER.

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SUMP Process - SEA:
Consultation

Consultation:

- The ER issued for consultation with the Consultation Bodies and the public
- No timescale given in Directive '*early and effective opportunity....*'
- *Tip* – develop a consultation log to record responses and how they have been addressed

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SUMP Process - SEA:
Adoption & Monitoring

Adoption:
 An effective SEA process should influence the development of the plan.

Post-adoption statement:

- how environmental considerations integrated into plan;
- how assessment and consultation taken into account;
- reasons for choosing preferred plan;
- monitoring proposals.

Monitoring:
 You do not have to monitor everything!
 Link monitoring to areas in assessment where significant negative effects or uncertainties were identified
 Investigate any existing monitoring arrangements that could be used



53

SUMP Process - SEA:
Best Practice Examples

West Midlands Strategic Transport Plan

- Regional transport plan to guide future transport development
- SEA assessed the STP policies and key priorities (schemes)
- Assessment workshop with the Consultation Bodies was held so that they could input into the assessment process. This was very valuable and saved time later in the process during consultation as their concerns had already been addressed.



54

SUMP Process - SEA:
Best Practice Examples

Medway Local Transport Plan

- Small plan area, SEA proportionate to plan
- Use of existing data from Council
- Use of scoping and manageable number of objectives
- Workshop to assess effects
- Early involvement of stakeholder
- Monitoring links to indicators in the LTP



55




SUMP Training Programme
Module 2 – Stakeholder Engagement

Transport for Greater Manchester

56

SUMP Stakeholder Engagement:



Why is this important?

- *Basic principle* of sustainable urban mobility planning
- Long-term focus of SUMPs requires a high degree of *public support and acceptance*
- Build *trust*, resolve problems & *reach common goals*
- Integration of public opinion supports *evidence-based decision-making*
- Public involvement *increases transparency* and informs decision-making
- Participation is *knowledge development*
- *Ownership* and *responsibility*

57

SUMP Stakeholder Engagement:

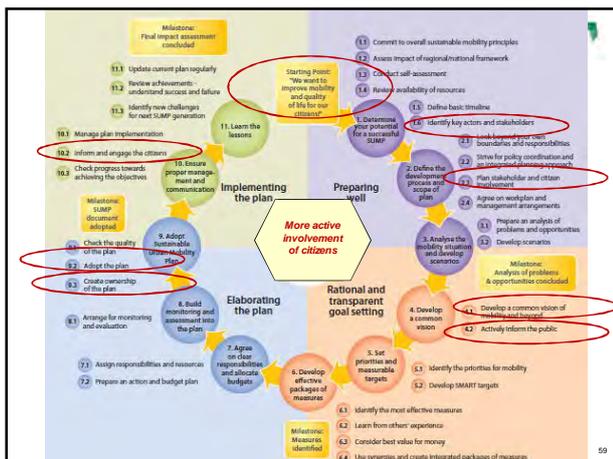


Who is Involved?

Stakeholders frequently interested mobility planning:

- **Government/ municipalities:** politicians, higher-level authorities, neighbouring cities, traffic police, emergency services, project managers, professional staff
- **Businesses/ operators:** business associations, major employers, retailers, utility services
- **Communities/ neighbourhoods:** local community organisations and interest groups, cycle/ walking groups, citizens, landowners
- **Others:** research institutes and universities, experts from other cities, tourists

58



59

SUMP Stakeholder Engagement:



Benefits of stakeholder involvement

For citizens and stakeholders:

- ✓ Can *articulate* ideas, concerns & viewpoints throughout process
- ✓ *Take ownership* of ideas, measures and projects
- ✓ Contribute towards *creative and innovative solutions* (elaboration of concepts/ideas tailored to local situations)
- ✓ Become *part of democratic process*

60

SUMP Stakeholder Engagement: 
Benefits of stakeholder involvement

For city municipalities:

- ✓ Have an opportunity to *explain/ justify* urban mobility measures & strategies
- ✓ *Gain acceptance* of plans, decisions & approach
- ✓ Can "*feel the temperature*" of reaction
- ✓ *Strengthen cooperation* between actors & agencies
- ✓ Persuade citizens to *test measures*

61

SUMP Stakeholder Engagement: 
Benefits of stakeholder involvement

For everyone:

- ✓ *Better awareness* of urban mobility challenges (and complexity of solutions)
- ✓ Higher *efficiency and effectiveness* of policy choices
- ✓ *Greater transparency* of decision making
- ✓ *Reducing 'gap'* between general public & politicians narrows
- ✓ *Increased legitimacy* of measures, projects, strategy
- ✓ *Can encourage better use* of new systems/ services

62

SUMP Stakeholder Engagement: 
Common Challenges

- Political support & participation capacity:
 - * *Poor political support & financial resources*
 - * Perceived as a new and "*unnecessary*" task
- Stakeholder diversity & raising awareness:
 - * *Imbalance of stakeholders & poor consideration of different types*
- Selecting & applying the right mix of involvement formats:
 - * *Inappropriate levels & limited tools of involvement*
- Managing participation process:
 - * *Underestimating effort needed & a lack of skills to deliver*

63

SUMP Stakeholder Engagement: 
Common Challenges

- Legitimacy & accountability:
 - * *frustrating if decisions* have already been *made* or questions remain unanswered
 - * Potentially disappointing for citizens *if limited to a passive role*
- Conflict and confusion:
 - * Dangerous if it becomes a *battleground for opposed stakeholders*
 - * Risky if dominated by very *articulate individual stakeholders*
 - * *Complicated if views* expressed remain *unstructured* or wrong questions are being asked

64

SUMP Stakeholder Engagement:
Contents of an Engagement Strategy

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Logical set of steps:

- Develop *scope, rationale & objectives* for participation process
- Introduction to *SUMP process* & level of involvement
- *Analysis of stakeholders*, interests & *potential conflicts*
- Involvement tools for each SUMP phase
- Plans for implementing the participation + *schedule & milestones*
- *Risk management* and quality controls
- Consider *financial & human resource* requirements
- *Roles and responsibilities* for management of participation process
- Procedures for integrating *feedback into decision* making process
- *Indicators* and procedures for *evaluating* the effectiveness of participation

65

SUMP Stakeholder Engagement:
Different levels of involvement

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- Timely information sharing at all stages of SUMP

Consult

- Listening & acknowledging concerns & feedback on how input influences decision

Empower

- Promise to implement citizens' views in line with democratic principles

Involve

- Working together throughout SUMP stages. People informed how input influences decisions

Collaborate

- Direct contribution to innovative ideas & solutions. Commitment from authority to take on board ideas in final Plan

66

SUMP Stakeholder Engagement:
Involvement Tools

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<p>Public information material:</p> <ul style="list-style-type: none"> • Posters, notices and signs • Letter, brochure • Fact sheet, newsletter • Promotion films/presentations • Use of 3D models 	<p>Information events:</p> <ul style="list-style-type: none"> • Exhibition • Information centre, Info Point • Information session and briefings • Lectures, discussions • Site visits
<p>Telephone and Broadcasting:</p> <ul style="list-style-type: none"> • Telephone techniques • Local radio and television shows 	<p>Engaging stakeholder groups:</p> <ul style="list-style-type: none"> • Community visits and study tours • Focus groups • Workshop engagement • Technical working parties / groups
<p>Internet :</p> <ul style="list-style-type: none"> • Web based forums / public participation platform • Social media – Twitter/Facebook 	<p>Engaging large groups:</p> <ul style="list-style-type: none"> • Sounding board groups • Stakeholder conferences • Transport visioning events • 'Open space' events
<p>Surveying individuals</p> <ul style="list-style-type: none"> • Questionnaire surveys • Stakeholder interviews 	

67

SUMP Stakeholder Engagement:
Involvement Tools - Criteria

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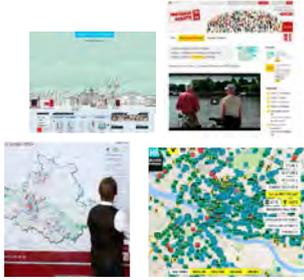
- **Target group:** is the tool suitable for stakeholders?
- **SUMP process:** appropriate for all SUMP development stages?
- **Participation objective:** comply with engagement strategy?
- **Effectiveness:** does it match the outputs & outcomes required?
- **Length:** time required to be used effectively (1 day, 1 week?)
- **Number of participants:** how many can be involved?
- **Selection of participants:** who will participate?
- **Resources:** how much financial & staff resources needed?

68

SUMP Stakeholder Engagement: *Dresden SUMP*

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- Dresden online engagement focus
- Interactive online platform:
 - Access to SUMP-related information
 - Undertake a modal split survey
 - Comment on draft plan (*Dresden debate*)
- Online engagement survey
 - 4,500 website visitors and 43,000 clicks.
- Online mapping tool – mobility issues
- Interactive scenario generator
- Evaluation process included



69

SUMP Stakeholder Engagement: *Bremen SUMP*

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- Use of round table meetings among key stakeholders
- Establishment of SUMP information centres – getting views on future modal split
- Bremen SUMP on tour – interactive engagement activities with the public



70

SUMP Stakeholder Engagement: *Zagreb SUMP*

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- City strengthened participatory planning practices at local level
- Stakeholder workshops on mobility-related goals, priorities and measures City Development Strategy for SUMP
- Culture of planning based on regular communication, mutual consultation and joint decision-making
- Strong emphasis on media and engagement with public (*Tram Wednesdays*)



71

SUMP Stakeholder Engagement: *Ghent SUMP*

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- Use of different engagement formats:
 - public debate evenings on key mobility issues among stakeholders
 - extensive consultation round with stakeholders
 - parallel one-month public inquiry process
- Process included visualisation of SUMP priorities



72

SUMP Stakeholder Engagement: *Budapest SUMP*

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- Focused on a mix of engagement methods to gather SUMP pinions
- Variety of stakeholder approaches:
 - Dedicated SUMP website
 - Online questionnaire to assess importance of SUMP objectives
 - Opportunities to submit comments in writing
 - Series of stakeholder forums
 - Invitation of foreign partners and expert to review draft SUMP
- Supported by *new branding (BMT)*




73

Greater Manchester SUMP Stakeholder Engagement

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74

Greater Manchester: A Polycentric City Region



75

Sustainable Urban Mobility Plans: *Greater Manchester SUMP Engagement*

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Do you share our 2040 vision for transport in Greater Manchester?



76

Sustainable Urban Mobility Plans:
Greater Manchester SUMP Engagement

72% of respondents 'agreed' or 'strongly agreed' that strategy would help achieve sustainable economic growth

Extensive formal consultation process undertaken:

- Consultation leaflet and Executive Summary
- Animation
- Dedicated website
- Social media
- Radio phone-in
- Stakeholder conference
- Advertisements
- Meetings with individual stakeholder groups
- Meetings with District Councils

SUMP Stakeholder Engagement:
West Yorkshire Combined Authorities

- **CityConnect' Initiative:**
 - Technical Stakeholder Board and supporting group
 - Local knowledge, technical, specialist input and project ownership
- **Social media to support engagement process**
 - Promote project and inform public
 - Promote forthcoming activities / events
 - 'Live' communication tool – needs resources
- **'Street audit work' - hard to reach communities (Asian Partnership)**




SUMP Stakeholder Engagement:
Key Recommendations

To establish *participatory mobility planning*:

- ✓ Clearly identify *stages in the SUMP cycle for participation* & confirm engagement tools to be used
- ✓ *Identify engagement skills and internal/external capacity* required
- ✓ Develop a *participation strategy* to ensure people *understand SUMP process & objectives*
- ✓ *Reflect wide range of stakeholders & demographic diversity of those impacted by SUMP:*
 - ✓ Include *'hard to reach' groups* to ensure an *inclusive approach*

Thank you

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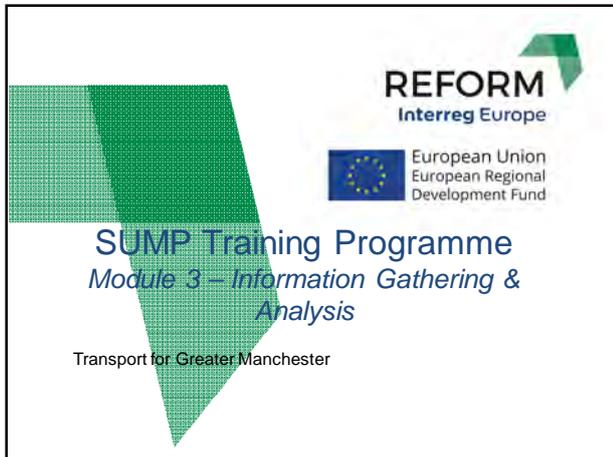
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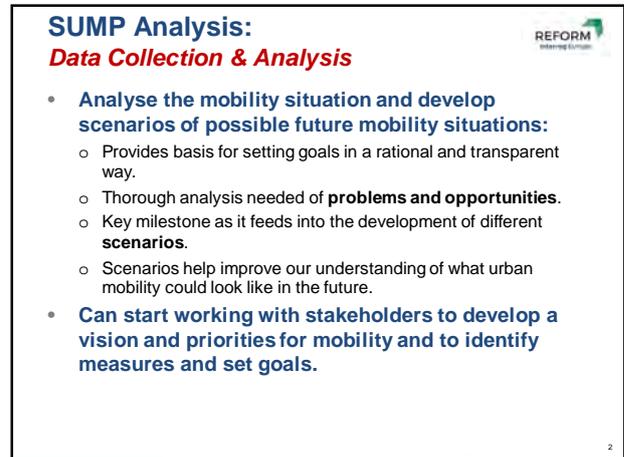


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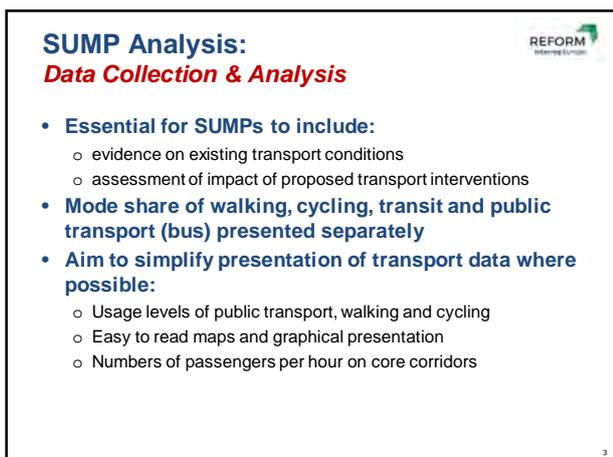
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Module 3 – Information Gathering & Analysis

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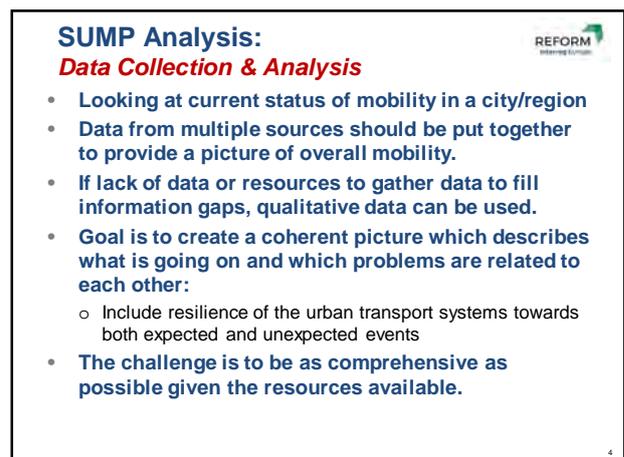
SUMP Analysis:
Data Collection & Analysis

- **Analyse the mobility situation and develop scenarios of possible future mobility situations:**
 - Provides basis for setting goals in a rational and transparent way.
 - Thorough analysis needed of **problems and opportunities**.
 - Key milestone as it feeds into the development of different **scenarios**.
 - Scenarios help improve our understanding of what urban mobility could look like in the future.
- **Can start working with stakeholders to develop a vision and priorities for mobility and to identify measures and set goals.**



SUMP Analysis:
Data Collection & Analysis

- **Essential for SUMPs to include:**
 - evidence on existing transport conditions
 - assessment of impact of proposed transport interventions
- **Mode share of walking, cycling, transit and public transport (bus) presented separately**
- **Aim to simplify presentation of transport data where possible:**
 - Usage levels of public transport, walking and cycling
 - Easy to read maps and graphical presentation
 - Numbers of passengers per hour on core corridors



SUMP Analysis:
Data Collection & Analysis

- **Looking at current status of mobility in a city/region**
- **Data from multiple sources should be put together to provide a picture of overall mobility.**
- **If lack of data or resources to gather data to fill information gaps, qualitative data can be used.**
- **Goal is to create a coherent picture which describes what is going on and which problems are related to each other:**
 - Include resilience of the urban transport systems towards both expected and unexpected events
- **The challenge is to be as comprehensive as possible given the resources available.**

SUMP Analysis:

Data Collection & Analysis



- **Key tasks to be undertaken:**
 - Conduct thorough, quantified review of the current status of important mobility and transport developments
 - Planning documents, traffic situation, accessibility of services and facilities, traffic safety, public transport services) in the urban agglomeration.
 - Identify all available data and assess their quality and accessibility and secure coverage of data requirements for your SUMP.
 - Retrieve available data, synthesise their content and collect additional data to fill important gaps in your data.
 - Based on the above review, identify deficits, problems and opportunities that relate to urban transport and mobility.
 - Select suitable indicators that describe the status of transport and mobility in your city, focused on key policy objectives
 - Together with key stakeholders, prepare a baseline analysis to identify and prioritise key problems to be addressed by the plan

5

SUMP Analysis:

Data Collection & Analysis



Transport system data includes:

- Street network: footways & cycle ways
- Street management: regulated parking, off/on-street parking, accident backspots
- Public transport systems: bus corridors, rapid transit, peak hour frequencies & occupancy, accessibility within 5-minute walk etc.

Integrated Land Use Data:

- Integrated land use models are used to predict land use impacts of transport investment
- Demographic information on population, population densities and future population

6

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Module 3 – Analysis at a regional level (smaller urban areas)

Transport for Greater Manchester

7

Sustainable Urban Mobility Plans:

Approach for regional urban areas



Addressing dispersed / smaller town mobility needs through key steps:

- **Preparing well by understanding your (sub)region**
 - identify and understand the conditions in the 'polycentric' region
 - Reflecting complex relationship with dispersed functions and responsibilities across administrative boundaries.
- **Create common ground and vision:**
 - Consensus between stakeholders and municipalities:
 - Essential to meet neighbouring aspirations and goals
- **Use the outcomes and elaborate the plan:**
 - Tailored solutions to meet mobility needs
 - Often clear focus on policy themes – accessibility & safety

8

Sustainable Urban Mobility Plans: *Approach for regional urban areas*



Mobility planning context and practices

- **Define the region/area:**
 - Defining the administrative boundaries which represent region
- **Identify current framework conditions:**
 - Combination of desktop investigation and qualitative research in the form of interviews with key players in the region
- **Collect policy content:**
 - Collect transport, spatial, environmental, safety and economic policy documents and plans at provincial, regional and local level
 - Understand the current processes – planning & delivery
- **Identify stakeholders and competences**
- **Analyse drivers, barriers and possibilities**

9

Sustainable Urban Mobility Plans: *Collecting mobility data at (sub) regional level*



- **Urban structure, its mobility patterns & transport infrastructure, service supply:**
 - **Population** in each municipality and in each urban centre
 - **Number and type of workplaces** in each urban centre (i.e. jobs supplied)
 - **Workers** employed in each urban centre
 - **Trip distance within urban areas**, average trip distance within the urban area (e.g. from a travel survey), or average radius of the urban centre (km)
 - **Trip distance between urban areas**, average trip distance between urban centres (e.g. from a travel survey), or average distance between the centres (km)
 - **Share of public transport** trips on a working day (%)
 - **Share of non-motorised** trips on a working day (%)
 - **Number of trips** within and between the urban areas

10

Sustainable Urban Mobility Plans: *Some Regional indicators*



- Density of population in built-up urban areas
- Distribution of inhabitants among the urban areas: *highlights how evenly the population is distributed and whether urban areas have similar numbers of inhabitants or not*
- Distribution of workplaces among the urban areas: *revealing how evenly workplaces are dispersed across the area*
- Average travelling distance to work: *average distance of trips from home to the workplace.*
- Average travelling distance to place of education/health/ recreation
- Proportion of public transport trips during the working day: *scope of providing public transport services and meeting local demand*
- Proportion of non-motorised trips for work purposes: *highlights non-motorised transport (walking and cycling) modal split*
- Accessibility to public transport services: *proportion of households who have access to public transport services.*

11

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Module 3 – Data Collection & Surveys

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12

SUMP Analysis:
Data Collection & Analysis



- Mobility planning relies on availability of accurate data together with robust modelling techniques
- Data gaps and limited ability to use transport demand models
- Importance of Non-Motorised Transport (NMT) Modes:
- Towns/cities often lack data on non-motorised transport
 - Importance of walking & cycling is often underplayed within SUMP's
 - Future transport scenarios NMT facilities often not considered

13

SUMP Analysis:
Data Collection & Analysis



- Accuracy and Completeness of Transport Data
- SUMP's include travel demand models – focus on 4 key travel decisions:
 - How often do we travel?
 - What is our destination?
 - What mode of transport do we use?
 - Which route do we follow?

14

SUMP Analysis:
Data Collection & Analysis



Importance of good survey methods:

- Household travel surveys for information on travel characteristics
- Sample needs to be representative of the city population

Potential to ignore short and non-motorised trips:

- Walking & cycling trips are often neglected
- Average trip lengths and walk mode share important land use indicator:
 - Trips shorter than 1 km indicates close mix of land uses
 - Focus on transport/land use planning could aim maximise/replicate this to reduce demand for motorised travel

15

SUMP Analysis:
Data Collection & Analysis



Data Access and Sensitivity

- Significant transport, economic, geo-social, travel, public health and environment data available.
- Data held in wide range of locations & requires sharing of resources across a number of internal and external organisations.
- Important to ensure that all partners willing to share their own data with the other partners.
- Data confidentially can create friction or unwillingness to cooperate among partners (eg. public transport data):
 - Issue needs careful handling to avoid cooperation problems:
 - Clear statement of why the data is required and showing the benefits to be generated by use of data
 - Explanation of how the data will be used and held by the SUMP authority
- Agreement of partners how data is collected and shared (data platform, process, etc.) – aim is for all partners to rely on a single common set of information.

16

SUMP Analysis:
Data Collection & Analysis

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- SUMP's follow 4-step model dealing with transport network:
 - Trip generation
 - Trip distribution
 - Modal split
 - Trip assignment
- Travel demand analysis relies on survey data on existing transport conditions
- Collecting reliable data is essential to estimate demand for potential transport services

17

SUMP Data Collection:
Types of Surveys

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Wide range of surveys can be used to support SUMP:

- Household Travel Diary Surveys
- Journey time Surveys
- Roadside Interview Surveys
- Car Parking surveys
- Bus Passenger Surveys
- Classified Traffic Counts



18

SUMP Data Collection:
Household Travel Diary Survey

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- Type of households and their travel patterns and needs
- Types of People and Places
- Workers; banks, offices, factories, ports, hospitals...
- Business persons; meetings at various locations- (tight time-scale)
 - House Person –malls, hospitals, banks, nursery, family/friends
 - Students– education trip to school, college university
- Consider Where and when survey will be undertaken
- Using census zones as basis for surveys
- Proportionate numbers of households for each zone

19

SUMP Data Collection:
Household Travel Diary Survey

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Purpose

- This information is essential to model where and how people are travelling to and from.
- A selected sample of households are interviewed at home to provide a travel diary of all the journeys they make on a specific day stating:
 - e.g. time of travel, model of travel, start and end locations, purpose of trip, car park used, bus route.

Resources

- Consider teams available to undertake surveys (including 2 supervisors)

20

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SUMP Data Collection: *Household Travel Diary Survey*

Sample Size

- A sample size of approx. 1-2% completed surveys is required:
 - These surveys will be distributed at zone level proportional to the number of houses/dwelling within each zone.
 - The zones will be calculated based on census enumeration zones and numbers of local households within these zones.
- 'Random Walk' approach
- An interview can last between 15 minutes – 25 minutes.
- Each interviewer should be able to achieve least 4 complete interviews per evening (between 17:00 – 21:00).

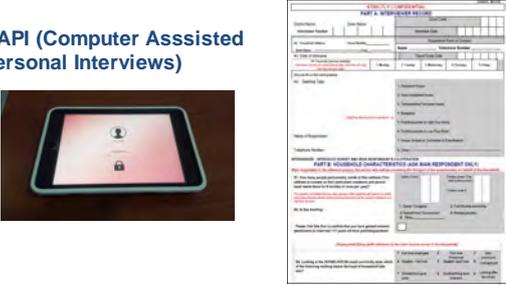
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SUMP Data Collection: *Household Travel Diary Survey*

Overview of Proforma

- CAPI (Computer Assisted Personal Interviews)



22

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SUMP Data Collection: *Household Travel Diary Survey*

Main Components of Survey Quality

- Supervision of interviewers
- Non-response- reach respondent from his/her perspective
- Fieldwork control sheets
- Monitoring interviewer performance
 - Spot checking
 - Observing interviews
- Editing of questionnaire
- Evaluating interviewers
- Returning questionnaires

23

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SUMP Data Collection: *Bus Passenger Surveys*

Purpose

- To obtain information on people's bus travel behaviour

Approach

- All surveys will be conducted during weekdays only excluding Monday and Friday. The survey time periods typically are:
 - 07:30 to 10:00
 - 11:00 to 15:00
 - 15:30 to 19:30
- On-bus interviewers & staff to undertake boarding and alighting counts
- Survey to be carried out by interviewing passengers on bus
- Also surveying people boarding/alighting the bus at each stop
- Persons under the age of 16 should not be interviewed

24

SUMP Data Collection:
Bus Passenger Surveys

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Questionnaire:

- Survey form is designed to record information about the interviewee's current journey.
- Current journey is defined by the origin and destination of the journey (e.g. home to place of work, college to home etc)
- Also asking for people's perception of bus travel – qualitative aspects

25

SUMP Data Collection:
Bus Passenger Surveys

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- Position yourself at the bus stop which will enable you to undertake the surveys but will not interfere with boarding activity
- Board the bus only after all the waiting passengers have boarded
- Introduce yourself to the bus driver and show the bus driver your identity and the letter of introduction.
 - bus drivers/company are already aware of the on-board survey programme

26

SUMP Data Collection:
Bus Passenger Surveys

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Bus Passenger Counts

- Designated enumerator will board on the very first stop for a particular bus service/route
 - This also can be terminating point of a particular bus service/route
- The enumerator on the bus will count and record on count Sheet the number of passenger boarded and alighted by category (adult and child) at each stop along the route

27

SUMP Data Collection:
Bus Passenger Surveys

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- Overview of proforma
- Health & Safety:
 - Letter of authority to be issued for each staff member
 - Dress appropriately
 - Follow the health & Safety procedures pertinent to the bus passenger safety provided by the bus service company



28

SUMP Data Collection:
Journey Time Surveys

Journey Time Surveys and Speed Surveys (Car):

- Key routes during normal working hours
- A total of 12 runs to be undertaken per route (both directions)
- Use of a GPS device will assist this task
- One driver and one enumerator per vehicle per run
- Survey period to cover a week

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29

SUMP Data Collection:
Car Park Surveys

Purpose

- To obtain information on people's parking behaviour

Approach

- Different types of surveys:
 - Car Park Beat Surveys
 - Car Park Origin –destination Surveys
 - Car Park Entry Exit Counts
- Survey period to include 07:30 – 1930 for a single weekday
- A programme of locations and car parks has been identified and programme developed for staff

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SUMP Data Collection:
Car Park Surveys

Car Park Beat Surveys:

- Total of 2 enumerators per car park will be deployed
- For each car park a layout/capacity plan should be prepared – dividing car park into zones.
- For enumeration purposes the start and end points for each zone should be marked on the plan
 - This will guide the enumerator to follow recording car park beat in consistent and timely manner.
- Enumerator will start the first beat at 07:30, walking through each space and recording the first 3 digits of each parked vehicle for each space in a bay

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SUMP Data Collection:
Car Park Surveys

Car Park Beat Surveys (continued):

- If a space is found unoccupied, the registration plate field will be marked as EMP(meaning empty)
- For any car park it should not take more than 30 minutes to complete a half hourly beat
- At the end of the first 30 minutes beat, the enumerator should walk back to the start point and start again on the start of next 30 minutes time band which is 08:00am
- This method should continue throughout the survey period
- Where two enumerators are working, they should organise breaks between themselves without affecting continuity of the survey

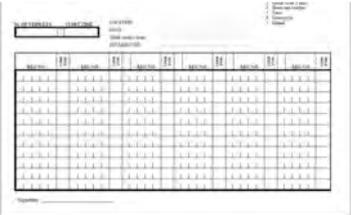
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SUMP Data Collection:
Car Park Surveys

Car Park Beat Surveys

- Overview of proforma



33

SUMP Data Collection:
Car Park Surveys

Car Park Origin & Destination Surveys

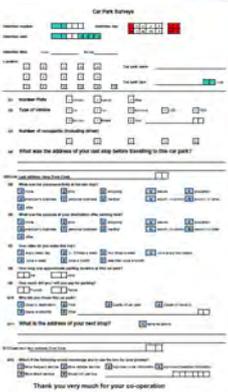
- Two interviewers should conduct car park origin-destination (O-D) surveys with drivers who park their vehicle in that particular car park
- The surveys should be conducted throughout the survey period.
- Comfort and lunch breaks should be arranged in manner that does not affect the continuity of the surveys.

34

SUMP Data Collection:
Car Park Surveys

Car Park Origin & Destination Surveys

- Overview of proforma

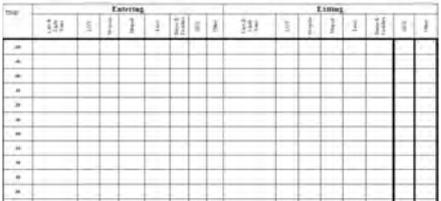


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SUMP Data Collection:
Car Park Surveys

Car Park Entry Exit Counts

- A total of 2 enumerators per car park are deployed
- The survey involves counting traffic both entering and leaving the car park over 15-minute periods using the proforma



36

SUMP Data Collection:
Roadside Interviews



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Interviews

37

SUMP Data Collection:
Roadside Interviews

Purpose

- To obtain information on people's travel behaviour

Approach

- Traffic is stopped on the road and the driver is asked where they are travelling to and from and the reason for the trip (e.g. shopping, travelling to work, business trip, taking child to school).
- The interviewer would also record the time of the trip and number of people in the vehicle.

To safely carry out surveys a layby or coned-off area is required:

- this limits both location and number of vehicles which can be stopped but can still result in excessive delays.

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Interviews

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SUMP Data Collection:
Roadside Interviews

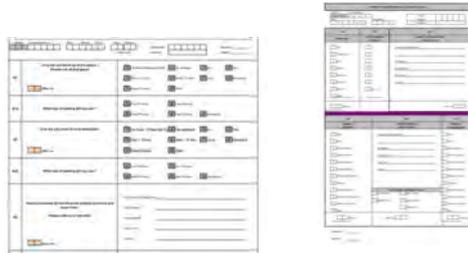
- The police will divert 4-6 vehicles
- Interviewers quickly approach the driver (not the passenger) and ask six questions:
 - Process should not take longer than 1 minute per driver/vehicle)
- Once all interviewers completed the surveys within the bay signal is given by the supervisor to the police man in front of the bay to let vehicles safely move out
- Once the interview bay is empty, the policeman at the entry end of interview bay diverts 4- 6 more vehicles and this process continues

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Interviews

39

SUMP Data Collection:
Roadside Interviews

Overview of Proforma:



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Interviews

40

SUMP Data Collection:
Traffic Counts

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- Counts are being undertaken from Monday to Sunday for 2 week period at each surveys site
- The Automatic Traffic Counts will be used for matrix estimation to infill the matrix with the unobserved trips.
- Vehicles classification; bikes, cars and trailers, 2 Axle long, buses, 2 axle 6 tyre, 2axle single, 4 axle single, > 5 axle double, 5 axle double, >6 axle double, <6 axle multi, 6 axle multi, > 6 axle multi special etc

41

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Module 3 – Data Analysis & Presentation

Transport for Greater Manchester

42

SUMP Data Analysis
Data Presentation and Analysis

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- After data collection important to consider how to present and analyse data
 - Reporting and presentation of data in condensed form to identify problems
 - Assess types of urban mobility problems for an area
 - Use of statistical analysis to identify problems and key issues

43

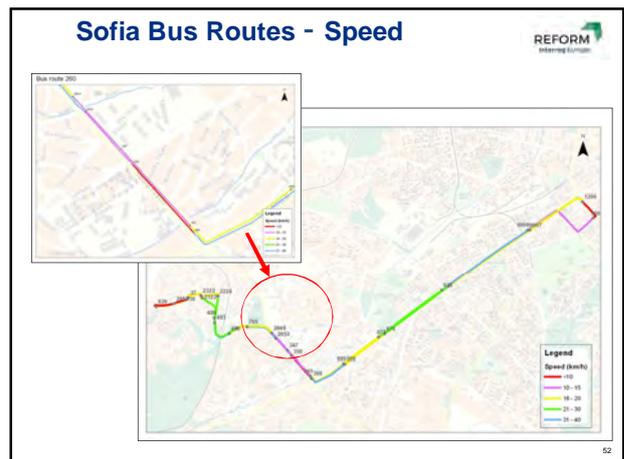
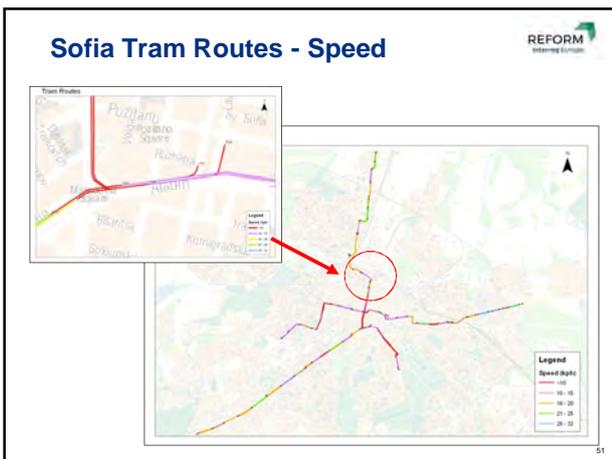
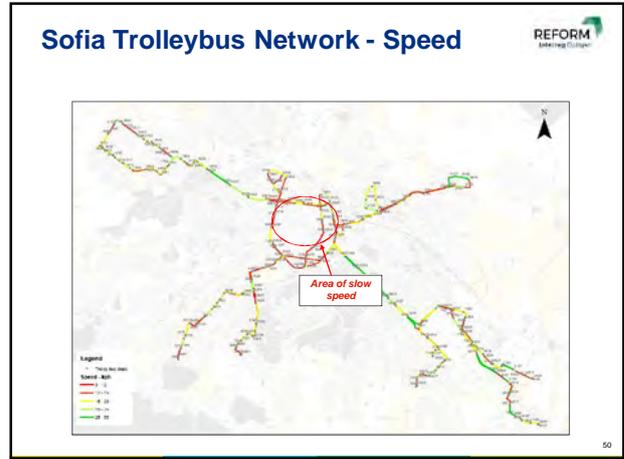
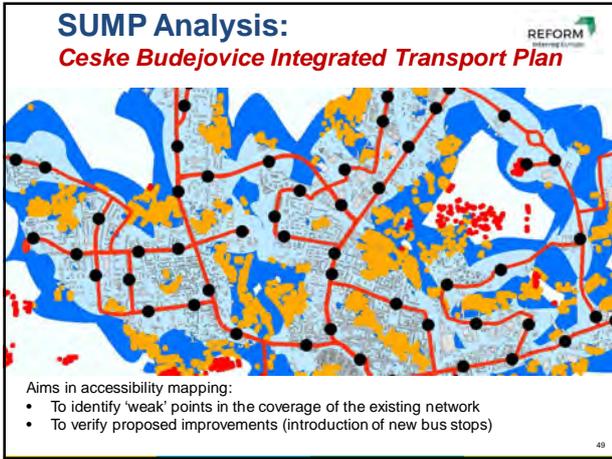
SUMP Data Analysis
Data Presentation and Analysis

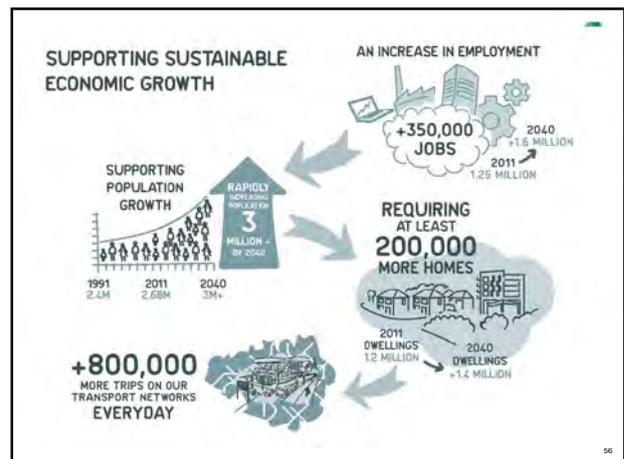
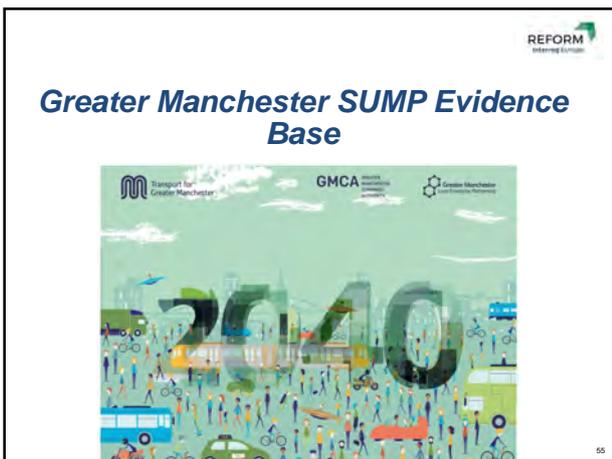
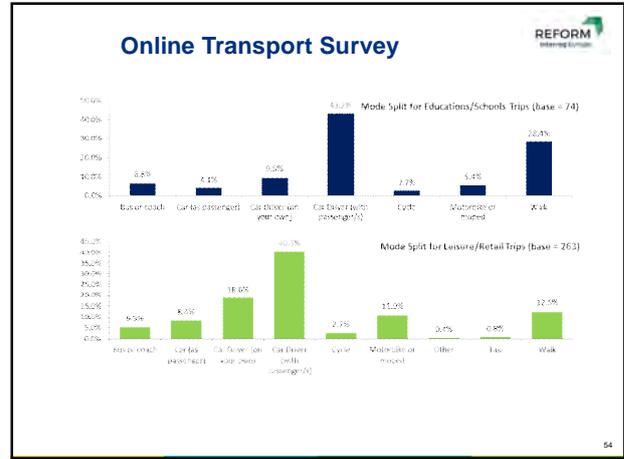
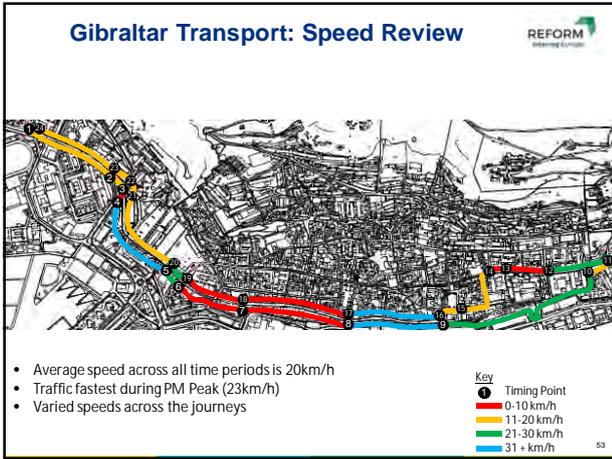
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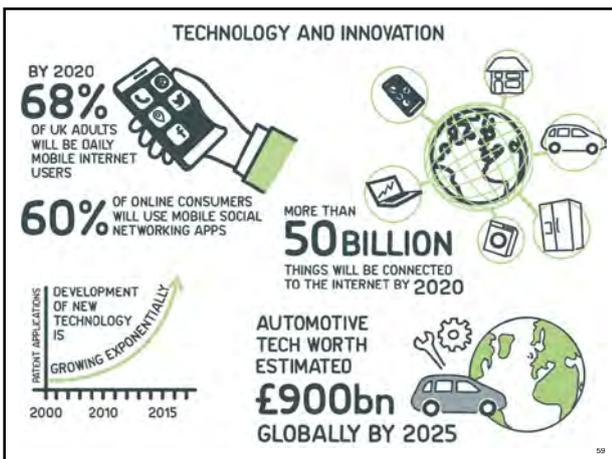
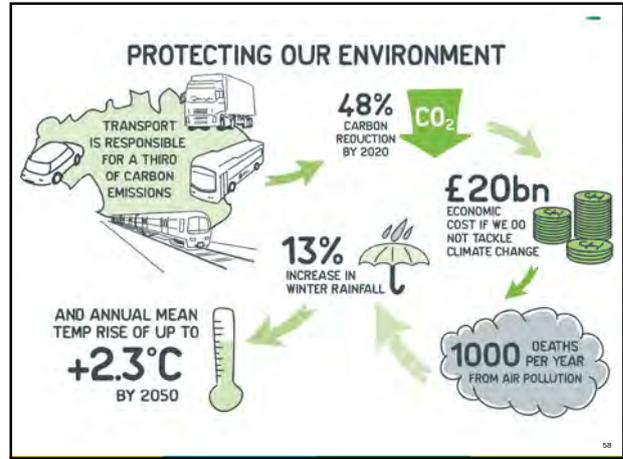
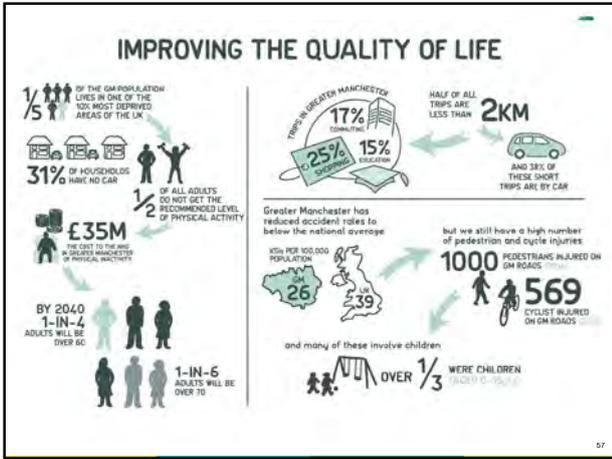
Use of Diagrams & charts:

- Presenting summary tables
- Visualisation of charts, data & maps
- Information needs to be clear & condensed – including summary
- Data needs to be presented in easy understandable form
- Key data presentations to establish key link to SUMP objectives

44







- ### SUMP Information Gathering:
- Some key thoughts**
- Data and information on current & future urban mobility critical to success of an SUMP
 - Quality of data obtained = quality of SUMP
 - Consider all modes of transport (including pedestrians/cyclists)
 - Make best use of existing data sets where possible
 - Mixture of qualitative and quantitative data to support SUMP
 - Use of innovative ways to analyse & present data
 - **Online data analysis** to actively engage with stakeholders
 - Use data/information to **gain consensus** on scale of urban mobility issues and problems



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Module 3 – Transport Model Tools

Transport for Greater Manchester

61



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SUMP Analysis Tools – Transport Model:

What is a Traffic Model?

- A mathematical representation of the real world
- Based on observation of real life travellers
- Used to predict how people will behave and how the transport network will respond:
 - In the future
 - When you implement different schemes/policies



62



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Strategic Transport Assessment:

SUMP Modelling

Why do we need a transport model?

- to inform the Sustainable Urban Mobility Plan process
- to support capital investment in the towns/cities
- to provide quantitative and objective evidence to support long term vision for urban areas

What considerations for a good transport model for EU cities:

- Data
- Functionality
- Software



63



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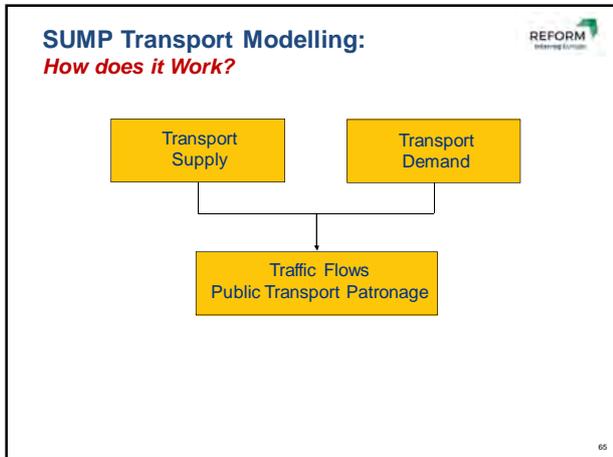
SUMP Transport Modelling:

What is a model used for?

- What will happen if we do nothing?
- Predict future problems, related to growth (economy & population)
- How effective are alternative interventions?
- Helps decide on the best option
- Help obtain funding for infrastructure from banks or financial institutions




64



- ### SUMP Transport Modelling: *How does it Work?*
- Transport Supply**

 - Roads:
 - Lengths
 - Speeds
 - Capacity
 - Car Parking (location, capacity and costs)
 - Junction Type

Transport Supply

 - Public transport provision
 - Bus Routes
 - Times
 - Fares

- ### SUMP Transport Modelling: *Transport Demand Aspects*
- Include:
 - Mode of travel?
 - Purpose of trip?
 - Where do people want to go?
 - Need to take account different types of travellers – residents/tourists/commuters
 - Requires good quality survey data for model to give realistic results

- ### SUMP Transport Modelling: *How the demand is calculated*
- Area being modelled is split into “zones”
 - The number of trips made between each zone is calculated to form a table or “matrix”
 - The number of trips that start or end in a “zone” depends on the population/number of households:
 - Household surveys will give average trip rates which can then be factored to total population levels
 - Where people travel from and to determined from surveys
- Zones – for areas of a town/city**

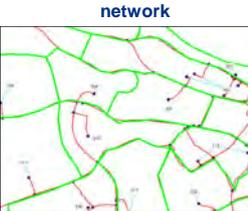
SUMP Transport Modelling: *Demand is connected to the supply*

- Area being modelled is split into "Zones"
- Zones are connected to the road network to allow the trips to be allocated onto roads
- Routings through network worked out through an iterative process

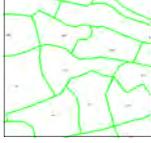
Road Network



Connection of Zones to network



Zones



69

SUMP Transport Modelling: *Traffic on the Network*



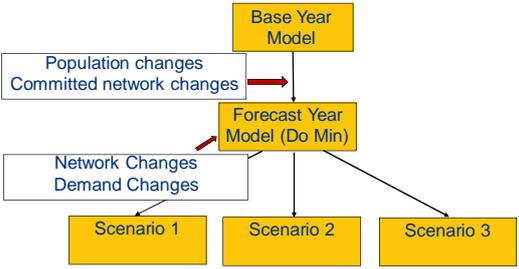
70

SUMP Transport Modelling: *Does the Model work?*

- Outputs from the Base Transport Model compared with observed data:
 - Traffic Counts
 - Journey times
- Never be a perfect match:
 - Guidelines exist on how close the match needs to be for the model to be considered to be acceptable (calibration/validation task)

71

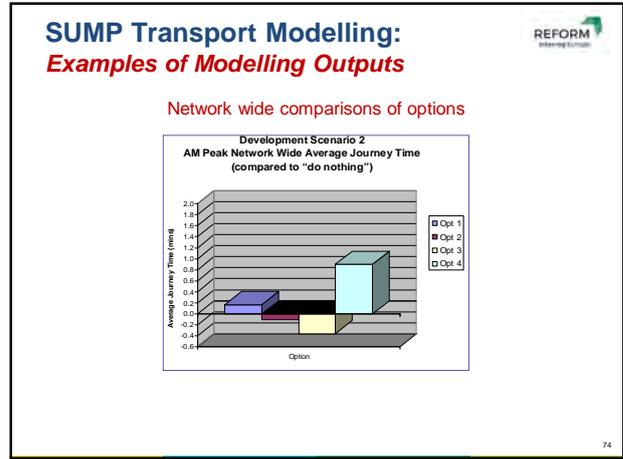
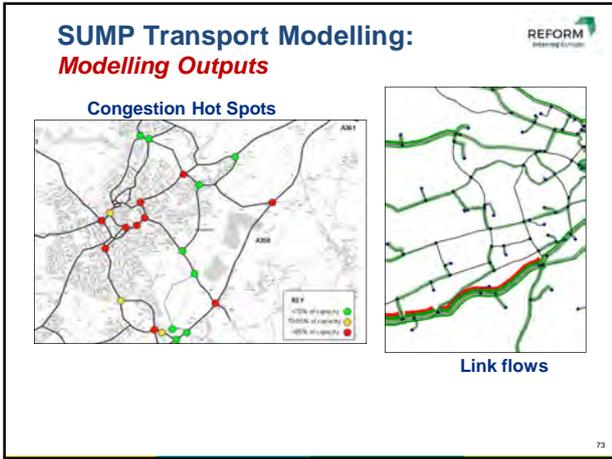
SUMP Transport Modelling: *Forecasting*



```

    graph TD
      BaseYear[Base Year Model] --> ForecastYear[Forecast Year Model (Do Min)]
      Input[Population changes  
Committed network changes] --> ForecastYear
      ForecastYear --> Scenario1[Scenario 1]
      ForecastYear --> Scenario2[Scenario 2]
      ForecastYear --> Scenario3[Scenario 3]
      Input2[Network Changes  
Demand Changes] --> ForecastYear
    
```

72



SUMP Transport Modelling: Modelling: Software

- Software is a tool, a platform for delivery, **NOT** the driving force!
- There are a number of commercial packages that can do the job!
- Recommended approach is to use commercial off the shelf software – continuously maintained and improved
- Issues to consider:
 - Who will own and run the model?
 - What is most used software (access to skills)
 - Software investment

75

SUMP Transport Modelling: Model Hierarchy

Table 2-1: Levels of Towns/Cities for Functional Regional Analyses

Level 1	Level 2	Level 3
Population >100,000 persons	Population 40,000 to 100,000 persons	Population <40,000 persons
Public Transport Complex network with intersecting routes and multiple modes (tram, bus, trolleybus, maxi-taxi)	Public Transport Moderate network of public transport services that may include multiple modes and some interchange opportunities	Public Transport Very few public transport routes, or no services
Road Network Dense road network with a large urban area, numerous routing options for many trips, and with traffic congestion appearing during periods of the typical day.	Road Network Compact urban centre fed by a number of defined approach roads, and with different routing options for traffic travelling into/through the urban area.	Road Network Simple road network comprising a small number of main roads passing through the area, and with limited opportunities for choosing different routes

Source: JASPERS

76

SUMP Transport Modelling: Model Hierarchy



Table 4-1: Transport Model Functionality for Urban Areas

Level 1	Level 2	Level 3
Variable Demand Model Includes: ROAD NETWORK PUBLIC TRANSPORT NETWORK TRANSPORT SERVICES TRIP GENERATION MODEL DEMAND MATRICES ASSIGNMENT MODEL MODE SHARE MODEL	Assignment Model Includes: ROAD NETWORK TRIP GENERATION MODEL DEMAND MATRICES ASSIGNMENT MODELLING SIMPLE MODE SHARE MODEL	Simple Model Includes: PRIVATE TRANSPORT NETWORK LINK FLOWS ON ROADS JUNCTION MODELS SIMPLE MODE SHARE MODEL

Source: JASPERS

77

Thank you






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 Tel: +420 221423924

Questions welcome




Project smedia

78

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SUMP Training Programme
Module 4 – Problems, vision & objectives

Transport for Greater Manchester

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

Important to know current mobility status:

- Draws from the data collection on urban mobility patterns & issues
- Quantified review of the current status of important mobility and transport developments both for passengers/freight
- Prepare a list of deficits, problems and opportunities that relate to urban transport and mobility
- Develop a better understanding of what you really need to know to enhance SUMP planning
- Identify data availability and quality, accessibility and secure coverage of data requirements for SUMP area
- Prepare baseline analysis to identify and prioritise key problems to be addressed by the Plan

2

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

Identify problems and priorities on the basis of clear evidence and data including:

- demographic and socio-economic trends
- environmental issues
- economic circumstances
- existing transport infrastructure capacity
- travel patterns and trip rates
- connectivity of existing networks
- stakeholder views

3

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

Self-assessment:

- Status-analysis and assessment by the municipality on processes and success stories
- Identifying strengths and weaknesses (SWOT)

Mobility Trend Analysis:

- What does this show us about how mobility is changing over time?

External requirements - EU and national standards and targets

Stakeholder Engagement:

- Stakeholder consultation – understanding what works (and not)?

Benchmarking:

- Comparison of performance against other similar cities:
 - Infrastructure, mobility patterns, operational performance etc.

4

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

2 main types of analysis:

- **Strategic: connection between SUMP & other key policy documents:**
 - Helps develop vision and high level objectives
 - Cohesive view on strategic issues relating to transport within urban area
 - Guiding principles for specific problems and analysis
- **Specific: define baseline „business as usual“ transport system**
 - Provides a reference case for analysis and assessment of the measures
 - Use existing state transport model and develop Business-as-Usual Future Model
 - Identify current and future mobility issues (problems/potentials)
 - Overall system, network, operations, users etc.

5

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

Demand, operations, organisation and infrastructure analysis:

- Demographic/land-use and economic development plans/patterns
- Assessment of current and future traffic demand volumes and transport functionality for the urban area covering both passengers and freight
- Organisation/Operations of the transport sector overall and per mode (eg. institutional structure, integration, operational requirements, passenger and freight traffic/demand management, parking etc.
- Accessibility per mode
- Quantity and quality of infrastructure per mode
- Quantity and quality of rolling stock per category per mode
- Transport capacity, network bottlenecks etc.

6

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

Environment, safety and social analysis:

- Safety and security of the transport system.
- Equal accessibility for passengers, especially for people with reduced mobility
- Emissions, noise/vibrations, energy sources etc.
- Mitigation of impacts on the environment
- Climate change mitigation/adaptation, disaster vulnerability

SEA environmental data is analysed:

- Inform environmental objectives, the definition of future trends and strengths, weaknesses and opportunities.
- Linked and consistent with the analysis of environmental issues performed within SUMP

7

Sustainable Urban Mobility Plans:

SUMP Problem Analysis:

Number of key outcomes of this work:

- Summary of assumptions of Business-as-usual transport system and future transport model
- Analysis of main existing policy/planning basis on which SUMP based
- Set of specific main transport system problems based on analysis
- Future environmental trends including strengths, weaknesses and opportunities, as well as set of environmental objectives.

8

Sustainable Urban Mobility Plans:
Developing a SUMP Vision:

- **Analysis of current and future problems and opportunities for mobility:**
 - Set of objectives for development of system can be established
 - Objectives are independent from specific solutions (measures):
 - Range of measures to be proposed/assessed to address them.
 - Objectives focused on desired results & impacts of actions/measures.

Sustainable Urban Mobility Plans:
SUMP Vision, Strategy & Objectives:

Vision and High Level Objectives:

- Vision concisely sets the conditions of transport system to be established
- Framework of objectives for the development of transport system:
 - Draws on the analysis work undertaken
 - Provides a framework for future appraisal and evaluation
- Objectives are independent from specific solutions (measures):
 - Range of measures can be proposed to address SUMP objectives
 - Objectives focused on results and impacts of actions
- High level objectives developed in line with Vision
 - Reflects outcome of analysis work
- Specific SUMP Objectives:
 - Establish a link between high level policy/problems and real mobility issues

Sustainable Urban Mobility Plans:
SUMP Vision, Strategy & Objectives:

Definition of Vision, Objectives and Performance Indicators:

```

    graph TD
      A[Analysis of current & future problems] --> B[Conceptual framework of objectives for transport system]
      B --> C[Overall urban mobility vision]
      B --> D[High level objectives]
      C --- E[Priority themes]
      D --- E
      subgraph E [Priority themes]
        E1[Accessibility]
        E2[Safety & Security]
        E3[Environment & Climate Change]
        E4[Integration]
        E5[Economy]
        E6[Quality of life]
      end
  
```

Sustainable Urban Mobility Plans:
SUMP Vision, Strategy & Objectives

Example:

To significantly reduce public transport travel time by x% from a suburban housing area to the city centre

- Demand analysis shows high car modal share on corridor
- Accessibility analysis shows poor travel time performance for public transport

Strategic backbone of the SUMP:

- Guidelines on which system can develop & targets set

Sustainable Urban Mobility Plans: 

SUMP Indicators & Targets:

- **Key Performance Indicators (KPIs) are defined for select number of SUMP objectives (High level):**
 - Targets defined for these where feasible
 - Usually relate to quantified policy goals (eg. public transport passengers)
 - Show an expected time horizon for their achievement
- **KPI targets used to assess overall SUMP and monitored as part of an ongoing evaluation process**
- **With SEA there should be consistency between the environmental and SUMP objectives**

13

Sustainable Urban Mobility Plans: 

Developing a SUMP Vision:

A vision is an important qualitative description of the desired future:

- Specified by concrete objectives, which indicate the type of change desired.

“
*Imagine your city in 20 years: what would you want it to look like?
 A place where children can play safely? Where the air is clean?
 Where you can walk to do your shopping?
 With lots of parks and green space? Where businesses can prosper?*”

European Union, 2013: Developing and Implementing a Sustainable Urban Mobility Plan

14

Sustainable Urban Mobility Plans: 

Developing a SUMP Vision:

- **Vision for future city development:**
 - Accommodating future growth – housing, economic development
 - Attracting investment
 - Responding to environmental pressures – air quality and pollution etc.
 - Maintaining heritage fabric of an urban area
 - **Meeting future travel demand**
- **Longer-term planning – 15 years**
- **Investment programme to deliver vision**
- **Clear targets set to monitor performance**



15

Sustainable Urban Mobility Plans: 

Developing a SUMP Vision & Objectives

- Definition of objectives provides focus and structure between development of the vision and target-setting
- Continued stakeholder involvement essential to ensure acceptance of urban mobility priorities
- Specification of what SUMP will achieve reflecting the vision
- Formulation of measurable objectives clearly linked to accurate data collated
- Build on the vision by analysing its implications for the objectives.

16

Sustainable Urban Mobility Plans: **Developing a SUMP Vision & Objectives**

- Assess the priorities for mobility together with key stakeholders:
 - Select overall themes that reflect the needs of stakeholders and citizens in the urban area
- Define clear and measurable objectives that help to orientate measure selection and design:
 - Specify what should be achieved and when



17

Sustainable Urban Mobility Plans: **Example SUMP Vision**

- What is a potential SUMP Vision?

“To develop and maintain an integrated transport network which promotes safety and sustainability and contributes to creating a better quality of life for people living, working or visiting”
- Objectives:
 - To manage the transport network effectively to provide network efficiency, **reduce unnecessary delays and traffic congestion**
 - To maintain and improve the transport infrastructure
 - To **maintain and improve accessibility** to facilities and services for all – including pedestrians, cyclists and bus users, and particularly for disadvantaged people



18

Sustainable Urban Mobility Plans: **Example SUMP Vision**

To maintain and improve transport and community **safety and security**, including reducing perceived danger

To improve **environmental conditions** for communities by reducing the adverse effects of transport on the city’s environment

To promote and encourage healthier and more sustainable travel choices and improved **‘quality of life’**




19

Sustainable Urban Mobility Plans: **Strategic Themes for a SUMP**

ECONOMY	SOCIETY	ENVIRONMENT
Improving competitiveness and productivity	Tackling economic and social disadvantage	Promoting environmental sustainability
IMPROVING CONNECTIVITY <ul style="list-style-type: none"> Connectivity to the rest of the world is a vital element to create a successful economy. Improving journey time reliability will help boost productivity, increase access to markets and attract inward investment. Targeted expansion of urban road network Supporting tourism aspirations 	INCREASING ACCESSIBILITY <ul style="list-style-type: none"> Accessibility is a key element to establish a fully inclusive society. Transport has a key role to play in promoting inclusion by improving access to employment and services, particularly for those who do not have access to private transport. Improved public transport system – development of different PT systems 	PROMOTING SUSTAINABILITY <ul style="list-style-type: none"> Sustainability is a key driver of all strategy and policy areas. Addressing congestion, promoting sustainable transport systems and travel behaviour will ensure that negative environmental impacts of travel can be reduced. Development of Clean Urban Transport Systems for the urban area Better traffic management including parking regulation



20

Sustainable Urban Mobility Plans: *Linking Vision & Strategy*

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- SUMP projects identified within scenarios are not always in line with SUMP Vision/Goals
- All projects delivering an SUMP need to be evaluated in terms of contribution to SUMP's Vision/Goals
- SUMP reveals the real challenges that cities face and how conditions will change if the city remains on its current course
- Alignment of the local policy with regional, national and EU-level frameworks and goals

21

Sustainable Urban Mobility Plans: *Copenhagen SUMP Vision*

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- A vision linked to quality of life & green growth

... to make mobility in Copenhagen more efficient and green in order to stimulate growth, contribute to a CO2-neutral city and to the good life for Copenhageners.

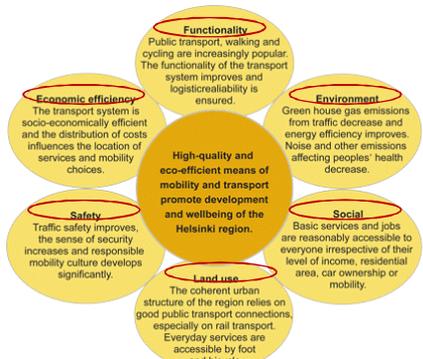
- Copenhagen in the Future
- The World's best city for cycles
- Climate Capital
- A green and blue capital city
- A clean and healthy big city



22

Sustainable Urban Mobility Plans: *Helsinki SUMP Vision*

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23

Sustainable Urban Mobility Plans: *Budapest SUMP Vision*

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- Vision & objectives clearly linked to key problems: **fragmentation, lack of cooperation, poor integration** etc.
- Main direction for change is integration
- Transport-specific strategic objectives of the BMT Plan focused on three different kinds of integration:
 - integration of the transport development into the urban development,
 - integration between the various transport modes, and
 - integration between the urban-, the conurbation-, and the regional systems.

24

Sustainable Urban Mobility Plans: *Budapest SUMP Vision*



FUTURE VISION
 BUDAPEST IS A LIVABLE, ATTRACTIVE CAPITAL CITY WITH A UNIQUE CHARACTER AND A RESPECTED MEMBER OF THE EUROPEAN NETWORK OF CITIES AS THE INNOVATIVE ECONOMIC AND CULTURAL CENTRE OF THE COUNTRY AND THE CITY REGION.

GENERAL GOAL
 THE TRANSPORT SYSTEM OF BUDAPEST SHOULD IMPROVE THE COMPETITIVENESS OF BUDAPEST AND ITS REGION AND CONTRIBUTE TO A SUSTAINABLE, LIVABLE, ATTRACTIVE AND HEALTHY URBAN ENVIRONMENT.

STRATEGIC OBJECTIVES

- 1. LIVABLE URBAN ENVIRONMENT
- 2. SAFE, RELIABLE AND DYNAMIC TRANSPORT
- 3. INTEGRATION TO REGIONAL / COUNTRY SYSTEM

Integration of the transport development into the urban development

Integration between the various transport modes

Integration between the urban, conurbation and the regional systems

Strategic transport objectives developed in more detail in relation to key areas: **infrastructure, vehicles, services and institutions required**

26

Sustainable Urban Mobility Plans: *Bristol SUMP Vision*



'The vision of the SUMP is to enable movement to and through the BTQEZ, whilst following the Mayor's vision for the City'



BRISTOL TEMPLE QUARTER ENTERPRISE ZONE:
 Sustainable Urban Mobility Plan

27



Before Temple Meads was built - Map section from 1826

When Temple Meads was built - Map section from 1855

Temple Meads now - Map section from 2013

THE FUTURE

Reflecting on changes in history and understanding the future possibilities?

Source: Bristol Temple Quarter Enterprise Zone SUMP

27



- > People**
 - Healthy and caring Bristol
 - Respect for the cared for and the caring, living healthy, happy and safe lives.
- Keep Bristol working and learning**
 - A learning city where everyone is able to acquire the skills they need to join our world class workforce.
- > Place**
 - Keep Bristol moving
 - High quality, affordable public transport; cleaner air, better for walking and cycling.
 - Building successful places
 - Well-connected neighbourhoods with a sense of belonging where a diversity of housing ensures that homes become more affordable.
- > Prosperity**
 - Global Green Capital
 - Ensure our 2015 Green Capital year promotes the city on the world stage, driving investment and innovation.
 - Vibrant Bristol
 - Streets alive with activity, every citizen and community participating in our cultural life.
- > Principles**
 - Empowered city
 - We will lead the way in demonstrating the importance of cities being devolved much greater freedom and flexibility.
 - Active citizens
 - Champion the diversity of our neighbourhoods; give local areas greater influence and control over their area.

28

> Objectives

We aim to realise this vision by setting out our priorities and objectives for access and movement specifically for the BTQEZ as development expands in the area. The objectives therefore for the BTQEZ are:

- To facilitate access by active travel to create a healthy and happy workforce;
- To enable movement and increasing the choices of sustainable transport modes to access the BTQEZ;
- To raise Bristol's profile as a prosperous and attractive city in which to invest;
- To involve the community in adapting and implementing the SUMP measures.

> Outcomes

The outcomes of meeting these objectives would be:

- Modal shift towards more active and sustainable modes;
- Reduced levels of congestion;
- Increased levels of investment;
- Increased levels of involvement and participation from local community.

> Benefits

The benefits of these outcomes are numerous, but briefly some are listed as follows:

- Improved health and wellbeing among community and workforce;
- Improved air quality;
- Improved levels of occupancy of public transport, keeping options viable;
- More reliable journey times;
- Reduced levels of noise;
- Improved public realm;
- Improved safety and perceived levels of safety;
- Increased options and reduced barriers to active and sustainable travel;
- Improved quality of life of community and workforce.

Hardware - physical infrastructure measures
Software - operational and policy measures
Mindware - behavioural measures that can influence use of sustainable transport

City of Malmö SUMP

'Walking, cycling and public transport are the first choice for all who work, live or visit in Malmö. These travel choices, together with efficient and environmentally friendly freight and car traffic,

Greater Manchester SUMP Vision & Strategy

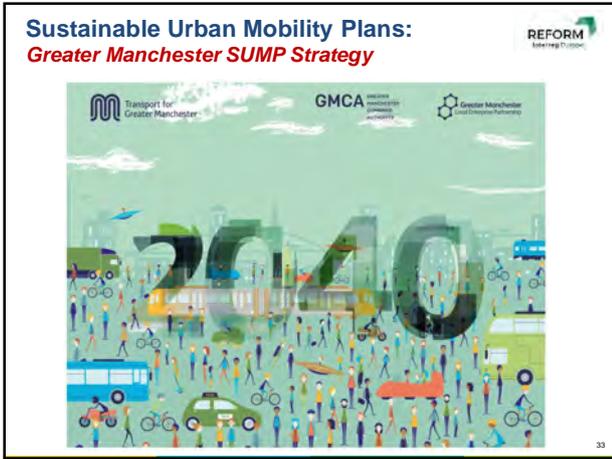
Logos for Transport for Greater Manchester, GMCA, and Greater Manchester Combined Authority are visible.

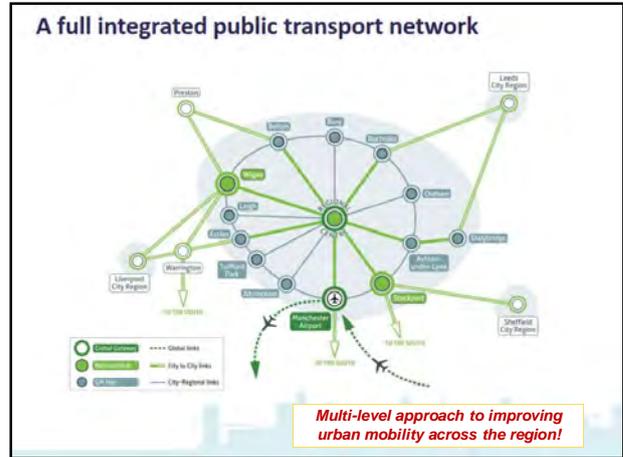
OUR VISION

Travel around West Yorkshire in 2040 will be easy and reliable, using a world-class, modern, well-connected transport network that enhances business success and people's lives.

The Transport Strategy's vision is accompanied by the following high level objectives:

- Create a more reliable, less congested, better connected transport network -**
Increasing business productivity and access to wider labour markets
- Have a positive impact on our built and natural environment and increase resilience against climate change**
- Put people first to create a strong sense of place -**
Increasing access in a safe, inclusive way and encouraging walking and cycling for health and other benefits





Sustainable Urban Mobility Plans: Problems, Vision & Objectives - overview

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Looking for:

- Assessment of set of specific main transport system problems/potentials based on analysis work
- Hierarchical structure linking SUMP Vision with High Level and Specific Objectives
- Defined Key Performance Indicators (KPIs) for selected key Objectives
- A set of Targets for the Key Performance Indicators
- Consolidation of SEA environmental objectives with SUMP objectives
 - Highlighting how environmental issues taken into account in SUMP

39

Thank you

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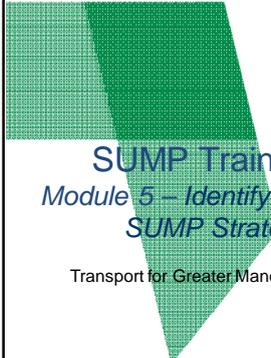
European Union
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Questions welcome

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40



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*Module 5 – Identifying & Testing Measures,
SUMP Strategy Development*

Transport for Greater Manchester

Sustainable Urban Mobility Plans:
Selection of Measures & Projects

- Distinguish between measures and projects!
- Defining optimum set of solutions for SUMP objectives:
 - Solutions considered for each objective
 - Measures/projects tested using the analysis tools as appropriate.
- Different categories of measures including:
 - **Infrastructure:** requires capital investment in physical works
 - **Operational measures:** describe actions to improve operation of transport (eg. travel information, ticketing, traffic management or other intelligent transport systems)
 - **Organisational measures:** involve changes to the structures that oversee the implementation of transport solutions, implemented at institutional level or within specific authorities/agencies.

2

Sustainable Urban Mobility Plans:
Common Barriers for Measure Selection

- Over reliance on pre-conceived ideas
- Lack of awareness of wide range of policy measures available
- Lack of robust evidence on performance of measures
- 'Silo' working – lack of collaborative working between other sectors (eg. health, education, business etc.)
- Lack of expertise in designing a measure to meet local needs
- Failure to appraise measure options properly – effectiveness, acceptability & value for money
- Lack of political will to give measures the priority needed to make them effective

3

Sustainable Urban Mobility Plans:
Selection of Measures & Projects

Each measure needs to be specified in detail, often by defining one or more projects. In doing this, cities need to consider:

- where the measure should operate?
- when it should operate?
- who will use it?
- how intensively it should be used?

4

Sustainable Urban Mobility Plans: Selection of Measures & Projects

Information required on each measure:

- **Describe the measure in detail:** Location, technology, scope, objective addressed and expected impact
- **Any experience of implementing this measure:** This can be used as the basis for inclusion
- **Project Implementability:** Is it possible to implement this project in the study area - are there any risks that will need to be overcome. Does it need other, supporting measures to succeed

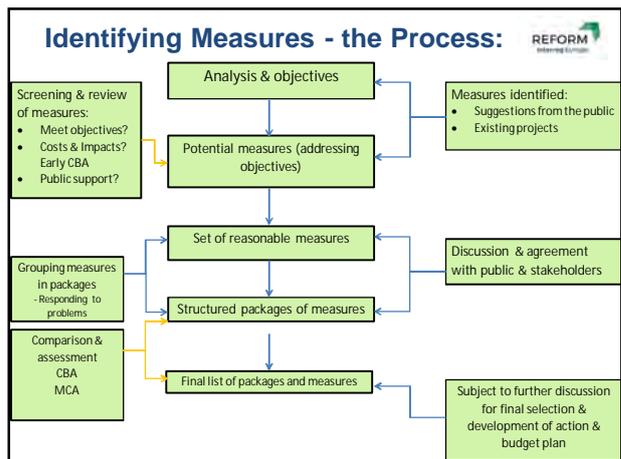
Sustainable Urban Mobility Plans: Selection of Measures & Projects

- **Aiming for most cost effective set of SUMP solutions to meet objectives:**
 - Start with **long-list of measures:** screen measures to remove those measures that do not support the objectives
 - **Identify individual measures** that address numerous objectives: likely to be most cost efficient solutions for SUMP
 - **Consider all possible interventions** and not exclude low cost solutions

Sustainable Urban Mobility Plans: Selection of Measures & Projects

Establishing a realistic set of measures for the SUMP:

- Measures should clearly link to outcome of the analysis work and established SUMP objectives:
- Include measures from previous considerations: projects under implementation do not need further assessment (Business-as-Usual-Scenario).
- Measures reviewed and filtered according to how they meet the objectives
 - Ones that poorly support or conflict with Objectives can be omitted from subsequent consideration
- Any further work required to develop measure concepts should be identified (e.g. additional feasibility studies).



Sustainable Urban Mobility Plans: Selection of Measures & Projects

Range of tools available to help the filtering/screening process:

- Use of Cost-Benefit Analysis (CBA) to assess overall value for money of different interventions
 - For well-developed projects or those with feasibility studies undertaken.
- Use of Multi-Criteria Analysis (MCA) to provide a mix of assessment criteria on projects:
 - Mix of qualitative, quantitative or monetised criteria to evaluate project suitability
 - UK – WebTAG includes MCA assessment through use of Appraisal Summary Tables (AST)

Sustainable Urban Mobility Plans: Multi-Criteria Analysis

OPTION SELECTION MCA MATRIX		INTERVENTION 1 (High Priority)	INTERVENTION 2 (High Priority)	INTERVENTION 3 (High Priority)	INTERVENTION 4 (High Priority)	INTERVENTION 5 (High Priority)
Consider how the intervention performs against the criteria Suggested layout of the table: - rows: number of criteria to be used - columns: criteria to be used - rows: specific to the project/benefit etc.						
EVALUATION CRITERIA	Accessibility					
	Safety					
	Integration (e.g. other modes)					
	Economics					
	Environment					
	ACTION					

Sustainable Urban Mobility Plans: Selection of Measures & Projects

- Understanding the connection between problems identified, solutions and contribution to vision & strategic SUMP themes
- Different types of measures – which ones are appropriate?:
 - Infrastructure Schemes
 - Planning & Operational
 - Organisation/regulation

← Combination of these
- Long list of measures identified to tackle solutions – consider:
 - Contribution to addressing problem?
 - Contribution to supporting SUMP policy objective/theme?
 - Assessment of costs and benefits & wider MCA?
 - Feedback from the public & stakeholders?
 - Synergy with other schemes and initiatives?

Sustainable Urban Mobility Plans: Screening Outcomes

Range of different outcomes:

- Scheme rejected:** Shows poor case for the project/measure
- Scheme accepted:** Some of which will be considered a high priority with a strong case for early implementation
- Scheme accepted:** Other schemes accepted but with a lower priority – there is a clear case but not for immediate implementation
- Scheme accepted:** However the case may be conditional ie. The measure may be dependent on other issues/measures (eg. Quality Corridor)

Consider 'state of readiness' and deliverability too

Sustainable Urban Mobility Plans: Challenges with Assessing Measures

- Making one thing a priority implies other things are not. This can generate resistance from stakeholders and require difficult decisions to be made.
- The process must be flexible and robust. The technical process may need to be balanced with political and practical requirements.
- Requires robust evidence about scheme impacts.
- Stakeholder expectations need to be managed.
- The process can be time consuming and resource intensive unless well managed.

Sustainable Urban Mobility Plans: Challenges with Assessing Measures

- **The assessment process should:**
 - inform decision makers' choices, not dictate them
 - be based on a technically robust and defensible process
 - involve a wide range of officers, politicians and stakeholders in the process
 - produce a realistic and deliverable balanced programme of schemes and interventions
 - allow sufficient time for development of the methodology (involving consultation, testing and modification), and training for those involved in the process.

Sustainable Urban Mobility Plans: Measure Option Generator

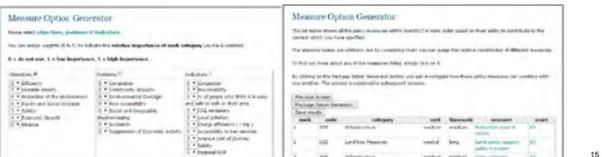
CH4ALLENGE has developed a Measure Option Generator

- incorporated into the Knowledgebase on Sustainable Urban Land use and Transport (KonSULT). <http://www.konsult.leeds.ac.uk/>

Identifies appropriate policy measures and packages for their specific contexts.

Users specify context, including their objectives and strategy:

- Measure option generator provides an ordered list of the 64 measures contained in the knowledge base



Sustainable Urban Mobility Plans: Focus on Changing Mobility Needs

- Demand will decline due to demographic changes, particularly in the "underdeveloped" regions/urban areas:
 - Important to look for alternative solutions to maintain the mobility of children, young people and older citizens.
- SUMP's to focus on introduction of alternative forms of public transport operation that will:
 - Increase the operational efficiency and cost of service
 - Enhance mobility options (compared with fixed public transport services with long cycle intervals – more bespoke service based on demand)
 - Regional network (core & secondary services)




Sustainable Urban Mobility Plans:
Focus on Changing Mobility Needs:

Opportunities to derive new travel patterns:

- o Sub-regional cycle networks
 - Supports other policy options – active travel & health benefits
 - Wider connectivity to public transport nodes (connectivity)
 - Tackles car ownership issues
- o Opportunity to collate resources to support new parking function:
 - Critical mass to support enforcement team?
 - Sharing technology and benefiting from economies of scale (traffic signals)
 - Consistency of application between urban areas




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Sustainable Urban Mobility Plans:
Focus on Changing Mobility Needs:

Improvement of mobility services includes:

- o Quantitative and improvement of existing levels of service
- o Improve the quality of existing services
- o Smaller vehicles with lower fuel consumption, including less and zero emission vehicles
- o Vehicles will only serve destinations where passengers wish to travel
- o Vehicles can shorten the route at intermediate stops if no passengers want to get on or off




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Sustainable Urban Mobility Plans:
Focus on Changing Mobility Needs:

Alternative forms of public transport in small towns and urban areas

Approaches for small urban areas:

- o Alternative forms of bus operation used in sparsely populated areas in the first line are of "general interest" (or in the "public interest")
- o Specialist services help ensure mobility (eg. public buses, car sharing, carpooling, etc.) including private initiatives




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Sustainable Urban Mobility Plans:
What approach should be taken?

Process for a polycentric urban region:

- o Common ground, visions and goals:
 - Responding to issues raised by stakeholders
- o Action plan – how to reach the goals set:
 - Prioritise actions:
 - Process changes and institutional arrangements
 - Physical mobility improvements:
 - Smaller towns – accessibility (PT) and road safety
- o Consider:
 - Relevance of improving sustainable urban mobility planning across urban centres
 - Feasibility of their proposed implementation



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Successful Urban Mobility Plans:
City of York Local Transport Plan

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'Package' approach used to establish LTP programmes:

- Changing emphasis of balance of infrastructure and behavioural measures between LTP1 and LTP3

Adoption of MCA option appraisal process to prioritise, refine set short, medium and longer term projects

Criteria used included:

- Objectives
- Potential cost
- Consultation results
- Timescales/Deliverability
- CO2 emissions

Funding profiles



21

Sustainable Urban Mobility Plans:
SUMP Packages of Measures/Projects

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- Following problem identification possible to identify measures – option generation
- Consider how to establish the most appropriate 'package' of measures
- Long list of measures assessed for appropriateness = shortlist of promising measures:
 - Screening process
- Selection and prioritisation of measures – option appraisal:
 - Informed by Multi-Criteria Analysis
 - Informed by stakeholder engagement
 - Scenario techniques based on modelling

22

Sustainable Urban Mobility Plans:
SUMP Packages of Measures/Projects

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- **Isolated measures likely to have only limited impact:**
 - Packages of measures can make use of synergies and reinforce each other
 - Analysis of measures & options helps inform meaningful combined packages of measures
 - Packages finally selected should aim for integration of transport modes (inter-modality), with land-use planning and other sectoral planning activities (e.g. environmental, health or economic measures).

23

Sustainable Urban Mobility Plans:
SUMP Packages of Measures/Projects

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- **Effective packages of measures and possible synergies identified**
- **Set of packages of measures selected as input for discussion on final selection and action and budget plan**
- **Well-selected measures ensure that defined SUMP objectives and targets are met**
- **Selection of SUMP measures builds on:**
 - Effective dialogue with city stakeholders
 - Experience from other places with similar policies and evidence of success

24

Sustainable Urban Mobility Plans:
SUMP Packages of Measures/Projects

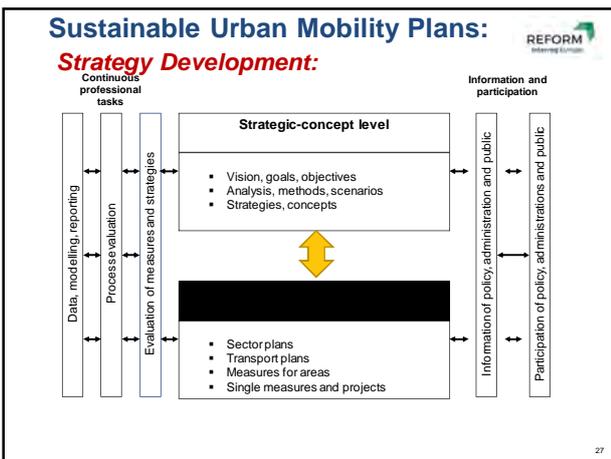
- Each SUMP objective to have groups of measures developed that respond to identified problems:
 - Outcome is comprehensive, balanced set of measures
 - Qualitative assessment of groups of measures against alternatives to establish preferred set
- Final result is list of potential groups of measures which significantly support SUMP objectives:
 - Focus on effective and efficient solutions and now considered for inclusion in the SUMP.
 - Ready to move forward to testing and developing SUMP strategy

26

Sustainable Urban Mobility Plans:
Identifying Measures - Key issues:

- Option generation is often highlighted as one of the weaknesses of urban transport policy formulation.
- A failure to consider the full range of possible measures can lead to:
 - an over-reliance on preconceived ideas
 - a tendency to focus on supply-side measures rather than demand-side measures
 - lack of experience of the wider range of policy measures available
 - lack of evidence of the performance of those measures in other contexts

26



Sustainable Urban Mobility Plans:
Strategy Development:

Set of preferred groups of measures combined into a “do-all-scenario”:

- Measures are tested using SUMP Transport Model
- Assessment against indicative value of the selected group of KPIs for the whole set of preferred Groups of measures.
- Where KPIs do not reach the established Target values:
 - SUMP Targets should be reviewed
 - Different measures / options might be included
 - Preliminary assessment of alternative groups of measures repeated

28

Sustainable Urban Mobility Plans: 

Strategy Development:

Strategic Environmental Assessment (SEA) process:

- Proposed SUMP measures / 'packages' assessed in terms of anticipated impacts:
 - including secondary effects, synergistic, cumulative, short-term, medium and long-term, permanent and temporary, positive and negative.
- According to the outcome of the assessment, adjustments, mitigation measures and monitoring plan should be proposed.
- Results of ongoing consultation process included in process

29

Sustainable Urban Mobility Plans: 

SUMP Scenarios

- Important to have up-to-date information on policy options, transport impacts or outcomes of transport activities:
 - Include 'business-as-usual' forecast scenario
- Optimising land use and transport systems to deliver future vision:**
 - **Urban growth scenarios developed in combination with strategic level transport networks** – SUMP/MCA models used to assess impact of these
- Lack of alternative scenarios often occurs in SUMP process:**
 - Traditional approaches often ignored complete set of transport policy interventions
 - Analysing wide range of potential future situations is beneficial
 - Arriving at a preferred pattern of land use and transport system through transparent evaluation process

30

SUMP Strategy Development : 

Parma Urban Mobility Plan

- Phase 1: Understanding urban area and transport system
- Phase 2: Setting up model and definition of plan scenarios:
 - **Land-use plan scenario**
 - **Sustainability scenario** - negative environmental and social impacts
- Phase 3 Selection of the plan scenario:
 - SUMP model: transport, environmental and economic impacts
 - Measures: city centre regulation, traffic calming, non-motorised modes, integration of public transport modes
 - Short-term and medium-term indicators for effective monitoring




31

SUMP Strategy Development : 

Milan Urban Mobility Plan

- SUMP developed through a participation process to identify agreed strategies and actions
- Deep analysis of the current situation and trends
- Four mobility strategies identified:
 - Shared mobility governance with co-ordinated strategies and tools (**balanced approach**)
 - **Urban accessibility** using PT;
 - **Urban space** as common goal;
 - **Passenger & freight mobility demand management**
- Projections to 2024 of main transport variables to evaluate SUMP against reference case scenario



32

SUMP Strategy Development :
Opava Urban Mobility Plan

- Plan contains long-term vision meet the mobility needs of citizens and businesses in a sustainable way to 2020.
- Three scenarios proposed:
 - Optimistic:** Reduction in car use by 20%
 - Medium:** Car-use is 33%
 - Low:** 40% car-use
- Based on its available finances, City chose the medium scenario:
 - Developed package of 19 logical measures or activities
 - Safe cycling; safe streets and crossings; parking regulation; the promotion of public transport; and Mobility Management.

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SUMP Strategy Development :
Plzen Urban Mobility Plan

Regulatory Scenario	Liberal Scenario	Maintenance Scenario
<ul style="list-style-type: none"> Network traffic management Parking system with price controls Preference for public transport Development of pedestrian and bicycle networks Quality of publicspace Use of information technology 	<ul style="list-style-type: none"> Network according to the needs of car traffic Capacity improvements Additional parking capacity Development of public transport infrastructure, - not at the expense of car traffic Improve conditions for pedestrians/cyclists Information technology to ease traffic movement 	<ul style="list-style-type: none"> Achieving very good condition existing transport infrastructure Parking regulation and cheap construction of car parks Partial preference of public transport Infrastructure repairs to existing routes Solving transportation needs with repairs and renovations

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SUMP Strategy Development:
Dresden's mobility strategy in the past

City development and transport

Transport infrastructure

Transport management

Mobility management

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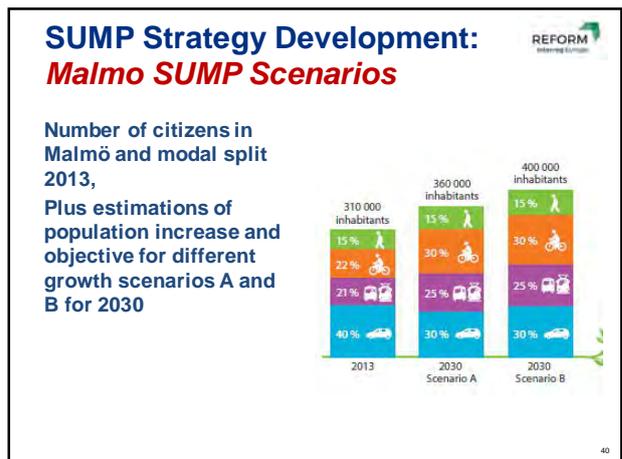
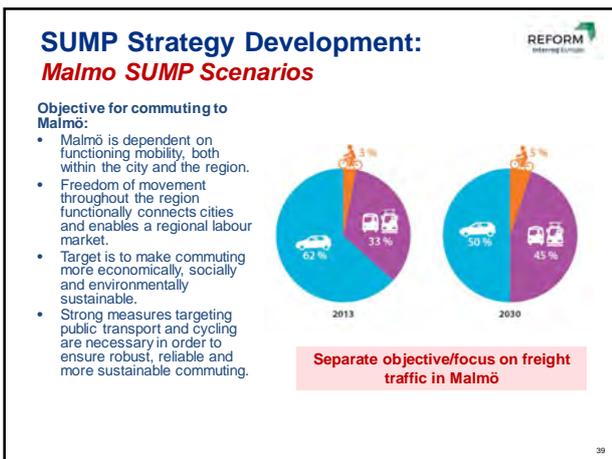
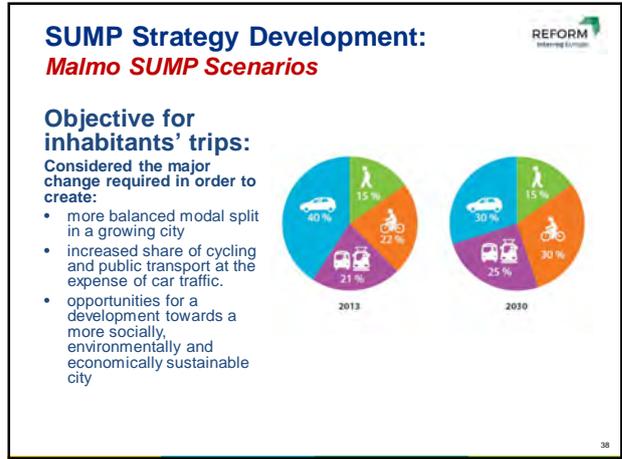
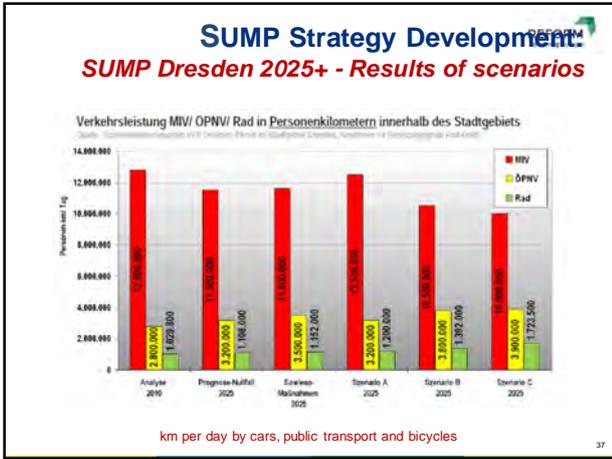
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SUMP Strategy Development:
Dresden's future mobility strategy

SUMP Dresden 2025+ : New Strategic Bridge

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SUMP Strategy Development: Malmö SUMP Scenarios

**Modal split and number of commute trips to Malmö 2013
Plus estimated growth in commuting to Malmö and objective in modal shares for growth scenarios A and B 2030**

Year/Scenario	Commuters	Car	Public Transport	Walking/Cycling
2013	62,000	62%	33%	3%
Scenario A 2030	70,000	57%	39%	4%
Scenario B 2030	80,000	50%	45%	5%

41

Sustainable Urban Mobility Plans: Key Challenges & Issues

- Authorities often face problems in getting strategies agreed
- Agreement on assessment criteria for filtering of projects:
 - Can be difficult to agree which criteria are most important (MCA)
- Adoption processes – political approval process:
 - Issues relating to political challenge can cause delays and variations of projects
 - Meeting public expectations and requirements
- Need for further refinement:
 - To accommodate new/favoured projects (do these relate to Vision/Objectives?)
 - Reflecting the outcomes of Strategic Environmental Assessment:
 - Does the strategy need modifying to take account of environmental impacts & consultation feedback?

42

Sustainable Urban Mobility Plans: Key Points to Note

- Has the SUMP gone through a screening process to assess measures for the SUMP strategy:
 - Contribution towards objectives?
 - Stakeholder feedback?
- Synergies & Packages of SUMP Measures:
 - Have effective packages of measures been identified?
 - Package integration:
 - With land use planning?
 - Other city sectors? (health, education etc.)
- Scenarios been considered for the future?
 - Do scenarios support SUMP Vision & objectives?
- Have preferred package of measures been selected for discussion on final plan selection?

43

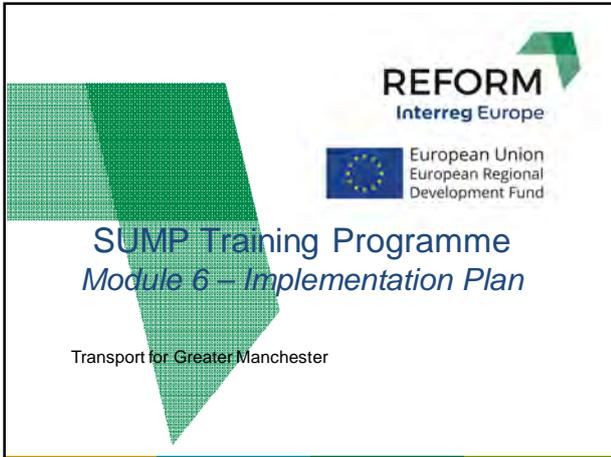
Thank you

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44

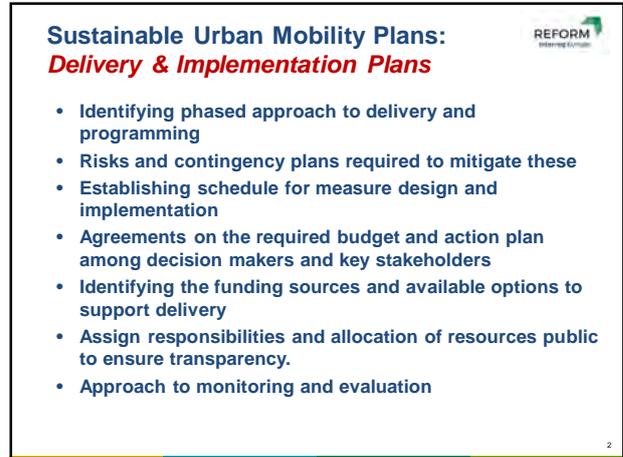


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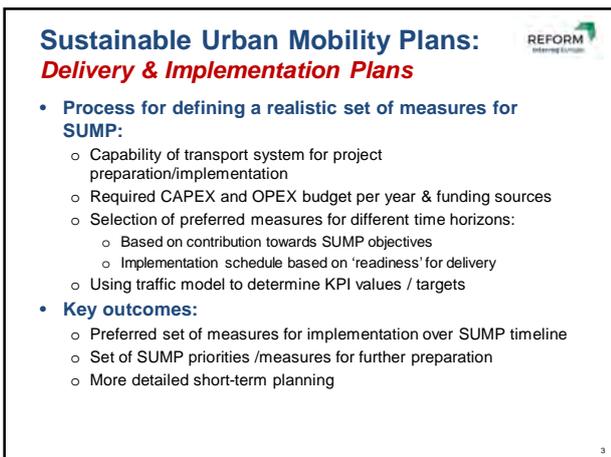
SUMP Training Programme
Module 6 – Implementation Plan

Transport for Greater Manchester



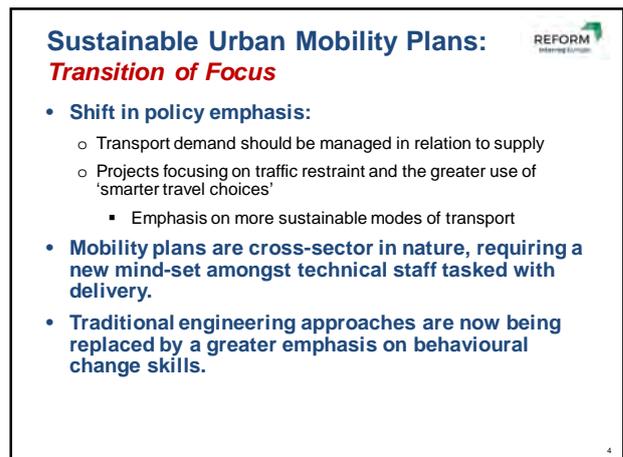
Sustainable Urban Mobility Plans:
Delivery & Implementation Plans

- Identifying phased approach to delivery and programming
- Risks and contingency plans required to mitigate these
- Establishing schedule for measure design and implementation
- Agreements on the required budget and action plan among decision makers and key stakeholders
- Identifying the funding sources and available options to support delivery
- Assign responsibilities and allocation of resources public to ensure transparency.
- Approach to monitoring and evaluation



Sustainable Urban Mobility Plans:
Delivery & Implementation Plans

- **Process for defining a realistic set of measures for SUMP:**
 - Capability of transport system for project preparation/implementation
 - Required CAPEX and OPEX budget per year & funding sources
 - Selection of preferred measures for different time horizons:
 - Based on contribution towards SUMP objectives
 - Implementation schedule based on 'readiness' for delivery
 - Using traffic model to determine KPI values / targets
- **Key outcomes:**
 - Preferred set of measures for implementation over SUMP timeline
 - Set of SUMP priorities /measures for further preparation
 - More detailed short-term planning



Sustainable Urban Mobility Plans:
Transition of Focus

- **Shift in policy emphasis:**
 - Transport demand should be managed in relation to supply
 - Projects focusing on traffic restraint and the greater use of 'smarter travel choices'
 - Emphasis on more sustainable modes of transport
- **Mobility plans are cross-sector in nature, requiring a new mind-set amongst technical staff tasked with delivery.**
- **Traditional engineering approaches are now being replaced by a greater emphasis on behavioural change skills.**

Sustainable Urban Mobility Plans:
Transition of Focus



- **Adoption of new management approaches:**
 - Robust SUMP management and governance to ensure delivery of the desired outcomes
- **Approach to financing:**
 - urban mobility policies should be underpinned by what works
 - important to assess robustly all the potential investments against value for money, deliverability and affordability criteria, as well as the contribution they make to strategic priorities

5

Sustainable Urban Mobility Plans:
Transition of Focus



- **Increasing emphasis on maximising use of existing assets:**
 - including better approaches of asset management and maintenance
- **Importance of introducing a robust and comprehensive approach to anticipating and managing risks**
- **Policy effectiveness clearly demonstrated to stakeholders to ensure they understand impacts and outcomes of successful implementation**

6

Sustainable Urban Mobility Plans:
Assigning Responsibilities & Resources



- **After selection of final SUMP measures resources and responsibilities identified for the implementation of SUMP packages**
- **Measures are clearly prioritised and realistically deliverable**
- **Secure efficient and effective allocation of resources (human, knowledge, funds)**
- **Close coordination and discussion among actors on development and implementation of SUMP measures/packages:**
 - Stakeholder collaboration where involved in scheme design/implementation
 - Agreement on responsibilities and resources
 - Identify options for who can take the lead in implementing a measure and where the funding could come from.

7

Sustainable Urban Mobility Plans:
Assigning Responsibilities & Resources



- **Plan validation:**
 - Ensure consistency between planned activities & targets with allocated budgets
- **Optimising use of financial resources at local levels:**
 - Shift from traditional transport investment towards sustainable transport projects
 - Ensure that solutions adopted make the most cost-effective use of funds available
- **Take account of financial dependencies:**
 - Partnership funding, timing and availability (corridor package measures)

8

Sustainable Urban Mobility Plans:
Best Value for Money

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- **Measure selection to be guided by:**
 - Effectiveness in delivering outcomes
 - Value for money
- **Aim for maximum impact from available resources:**
 - Assessment of options and costs and benefits (appraisal process)
 - Realism on what measures can be implemented:
 - Avoid 'pie-in-the-sky' projects
 - Choose only measures that are financially feasible
 - Avoid selection of financially unrealistic measures and packages
- **Important that maintenance costs are taken into consideration and ongoing revenue support**

9

Sustainable Urban Mobility Plans:
Funding Sources & Options

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- **Good coordination between different funding sources - range of funding options:**
 - **EU subsidies**
 - **State subsidies**
 - **Local municipality budgets**
 - **Local taxes:** a special local transport tax for public transport paid by public or private enterprises, developers
 - **Revenue funding:** parking fees, urban pricing, congestion charging, advertising
 - **Private sector operators:** developers, industry knowledge and skills

10

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Module 6 – Example of Action Plan Development

Transport for Greater Manchester

11

Public Transport Corridor:
Ceske Budejovice Line 3

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Line 3 Corridor
Length 5.72 km
160 connections a day
Articulated trolleybuses
Peak interval: 4-5 minutes
Off-peak interval: 7.5 minutes

12

Public Transport Corridor: Ceske Budejovice Line 3 Components







Infrastructure

Vehicles

Traffic management



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13

Public Transport Corridor: Line 3 Managing Delivery



User

Assesses the overall journey experience from point A to point B



Partner Roles

Roles split across a number of agencies:

- Public transport operator
- City transportation coordinator
- Communications manager
- City traffic management
- Czech Police

14

Public Transport Corridor: Line 3 Managing Delivery



- Overall benefits of partnership management approach for corridor initiative:
 - "Visualisation" of common goals of the different agencies
 - 'Integrated' approach to the corridor, with phasing of a wide variety of measures over time
 - Clear division of responsibilities and obligations of the different partners




15

Public Transport Corridor: Line 3 Managing Delivery





- Short term Measures identified
- Efficiency improvements
 - To reach an overall **balance** of service provision, closely aligned to user needs
 - To define a new '**core network**' with higher quality standards
 - To identify quick/reliable **connections**, competitive to car access
 - To introduce a new process for service **planning** (timetable, interchanges)

16

Public Transport Corridor:
Line 3 Managing Delivery



- 6 core lines covering all the important corridors/parts of the city
- Routes selected to minimise waiting and travel times to the city centre
- Introduction of modern, accessible and high capacity fleet
- Focus on environmentally friendly measures (operated by trolley-buses)
- Strong evidence - presence in the city



17

Public Transport Corridor:
Line 3 Managing Delivery




- Partnership Programme:
 - „Bus Quality Corridor“
 - Pilot project of 'Total Journey Experience' improvements
 - „Minibuses“
 - Better public transport penetration into specific areas of the city (historical centre, low density housing areas)
 - Replacing traditional buses with smaller vehicles on the lines with low level of use
 - „From Information to Marketing“
 - Individual campaigns explaining the new schemes
 - Increased customer understanding of the 'full travel picture'

18

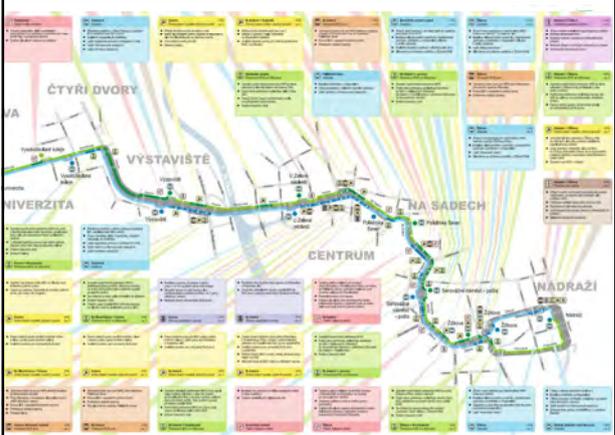
Public Transport Corridor:
Line 3 Managing Delivery



- Package of 'integrated' measures:
- Traffic management to improve flow
- Junction and signal improvements
- At-stop infrastructure improvements
- Improved information and marketing
- Demand management (parking controls)
- Improved pedestrian crossings/access



19



20

Extract from Corridor Programme

- Dedicated bus priority lane approaching junctions
- Improved pedestrian capacity at stops
- Traffic signal priority at junctions
- Traffic management and changing directional flow of traffic
- Safe pedestrian crossings

Public Transport Corridor: *Line 3 Managing Delivery*

Lessons Learnt:

- Little or no user perspective has contributed to inefficient network performance
- Focusing on 'quick wins' was an important catalyst for developing a new approach to network planning
- New strategy for integrated corridor development – infrastructure and service enhancements:
 - importance to have strong evidence-base
 - greater 'customer-focus' will be most successful approach
 - 'partnership delivery' and clarity of roles and responsibilities will help maximise benefits of service and infrastructure measures

Sustainable Urban Mobility Plans: *Programme Management*

Programme Management – managing LTP (SUMP) projects:

- Nottingham City Council monitor and manage the LTP through a centralised the programme/project system - programme dependencies prepared at operational level but managed at strategic level.
- Important that progress is monitored and reviewed monthly covering all aspects of the programme (Finance, Resources, Priorities, Delivery Schedule, Risk Register)

Sustainable Urban Mobility Plans: *Programme Management*

Programme Performance Review:

- Buckinghamshire County Council has introduced robust Governance of the LTP Programme which includes the management of the new contract in place.
 - There is rigorous monitoring and control at both Corporate (COMstat) and Transport (TRANstat) level
- Nottingham City Council and Liverpool City Councils both adopt and use the principles of Gateway Reviews as part of their LTP Programme processes
 - Resulted additional rigor to their management of projects

Sustainable Urban Mobility Plans:
Risk Assessment

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- **SUMP Implementation – Why does this fail?:**
 - Redundancy of projects/initiatives:
 - Change in circumstances (land use or technology)
 - Robustness of any specific measures:
 - At all stages from pre-feasibility, through feasibility to construction
 - As a result of consultation process:
 - Especially controversial schemes & resistance from public
 - Non-Cooperation from authorities/agencies
 - Funding constraints and changes:
 - Changing construction costs & ongoing maintenance Cost
 - Reliance on grants/loans & also 'partnership' contributions

25

Sustainable Urban Mobility Plans:
Risk Assessment & Management

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Risk Management:

- **It is important to identify and manage programme risks , escalating these as necessary, as well as address significant project risks that impact the programme**
 - Buckinghamshire County Council has adopted both a corporate and transport approach to risk, with a programme level and individual project approach to risk that is managed regularly with clear ownership
 - Plymouth City Council has a strong emphasis on risk management with work undertaken to 'educate' senior managers and members on using risk positively and openly

26

Thank you

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27

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Module 7 – Monitoring & Evaluation

Transport for Greater Manchester

Sustainable Urban Mobility Plans:
Monitoring & Evaluation - Definitions

- **Monitoring:**
 - Systematic collection of data on specified indicators
 - Provides information for potential adjustment & re-planning
 - Undertaken at shorter period intervals
- **Evaluation:**
 - Systematic and objective assessment of ongoing/completed plan
 - Determines fulfilment of objectives & targets
 - Usually referred to as 'ex-post'
 - Focus on effectiveness & value for money

Sustainable Urban Mobility Plans:
Monitoring & Evaluation

- **Monitoring and evaluation core element of a SUMP**
- **Essential management tools to keep track of the planning process and measure progress:**
 - Identify barriers and drivers for SUMP measure design and implementation
 - Learn from planning experience – what works well and not well.
 - Option to “repackage” measures in order to achieve targets more efficiently
 - Proof of the effectiveness of the SUMP and its' measures

Barriers & Drivers

What did not work ?

Amendment

What worked well ?

Sustainable Urban Mobility Plans:
Monitoring & Evaluation – Why is it important?

- **Increases efficiency of planning processes**
- **Leads to higher quality SUMP (and process)**
- **Assesses quality of measures & packages**
- **Fills the 'gap' between objectives and targets**
- **Enhances empirical evidence for future planning**
- **Provides quality management for all partners**
- **Helps optimise allocation of resources**
- **Improves communication with stakeholders**

Sustainable Urban Mobility Plans:
What makes successful Monitoring & Evaluation?

- Commitment by decision-makers & resources
- Establishing a culture that understands requirements
- Initiate good project management and task allocation
- Build up expertise:
 - Data collection techniques across all partners
 - Understanding evaluation approach
- Ensure good communication – all levels:
 - Decision-makers
 - SUMP partners
 - Stakeholders & general public

Sustainable Urban Mobility Plans:
Monitoring & Evaluation – Challenges

Different types of barriers exist:

- Attitudinal barriers in terms of perceptions & expectations:
 - Decision-makers & stakeholders
- Institutional barriers:
 - Poor co-operation between agencies (sharing data/information)
- Financial barriers:
 - Lack of financial/staff resources
- Technological challenges:
 - Gaps in knowledge & insufficient tools/techniques to undertake robust monitoring & evaluation

Sustainable Urban Mobility Plans:
Monitoring & Evaluation

- Key steps in monitoring, appraisal and evaluation are
 - Definition of objectives
 - Definition of performance indicators
 - For appraisal (ex-ante evaluation)
 - Determining a do-minimum base against which to assess the proposal
 - Predicting the effects of the proposal
- For evaluation (ex-post evaluation) :
 - Measuring the before conditions
 - Measuring the after conditions
- Analysis, interpretation and, if appropriate, assessing value for money

Sustainable Urban Mobility Plans:
Monitoring & Evaluation

Planning phase:

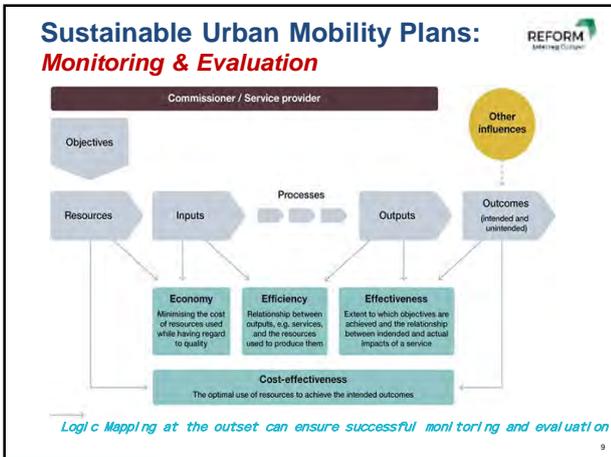
- Objectives and targets
- Performance indicators
- Responsibilities, resources, time scales

Monitoring and Evaluation Plan:

- Implementation and monitoring phase
- Measuring the before conditions
- Measuring the during/after conditions
- Reporting

Evaluation phase:

- Determining a 'without' base against which to assess the proposal
- Analysis, interpretation and, if appropriate, assessing value for money



- ### Sustainable Urban Mobility Plans: Developing a Monitoring & Evaluation Plan
- **Introduction & key concepts:** justification for monitoring & evaluation activities
 - **Urban description:** background to current situation & problems
 - **Objectives & strategies:** clarify aims to be met by the Plan
 - **Evaluation & Monitoring Procedures:** Organisation framework for monitoring & evaluation
 - **Evaluation & monitoring indicators & targets:** List of outcome, output and input indicators to select from to monitor Plan
 - **Data reporting, analysis & evaluation methods:** what methods will be used to monitor & evaluate
 - **Resources required to support evaluation & monitoring:** include staff/finance, tools/models etc.

- ### Sustainable Urban Mobility Plans: Types of Indicators
- Definitions:**
- **Outcome indicators:** measure actual impacts for objectives
 - **Output indicators:** measure extent to which policy instruments & services have been improved
 - **Input indicators:** provide information on the amount of resources required to deliver the plan
 - **Contextual indicators:** information on external developments that have an influence on successful delivery of the SUMP (eg. External economic development)

- ### Sustainable Urban Mobility Plans: Monitoring & Evaluation
- **Important to focus on SUMP outcomes not outputs:**
 - **Output (action taken):** newly constructed infrastructure
x km bicycle lanes or new transport and x new bus services in operation
 - **Outcome (impact of action):** real and measurable improvements in quality of life/transport services
Congestion (vehicle delay) or the number of new cycling trips.
 - **Is there a work plan for monitoring and evaluation activities established within SUMP – includes regular data collation and evaluation tasks?**
 - **Arrangements in place for ex-ante evaluation (checking how well a scheme or strategy performs) assists to make choices between options?**

Sustainable Urban Mobility Plans: Monitoring & Evaluation

• Typical SUMP core indicators:

Objective	Core Indicators
Mobility	<ul style="list-style-type: none"> • Modal split for journeys to work • Car ownership level
Efficiency	<ul style="list-style-type: none"> • Average time lost per person km / ton km by mode • Public transport punctuality
Environment	<ul style="list-style-type: none"> • CO2 emissions of traffic in city • Days exceeding critical levels
Equity & Social Inclusion	<ul style="list-style-type: none"> • Non-car accessibility to main services • Accessibility for disabled people
Safety	<ul style="list-style-type: none"> • Killed and seriously injured persons • Accidents by mode
Economic Growth	<ul style="list-style-type: none"> • GDP per capita • Employment

Sustainable Urban Mobility Plans: Some Regional indicators

- Density of population in built-up urban areas
- Distribution of inhabitants among the urban areas: *highlights how evenly the population is distributed and whether urban areas have similar numbers of inhabitants or not*
- Distribution of workplaces among the urban areas: *revealing how evenly workplaces are dispersed across the area*
- Average travelling distance to work: *average distance of trips from home to the workplace.*
- Average travelling distance to place of education/health/ recreation
- Proportion of public transport trips during the working day: *scope of providing public transport services and meeting local demand*
- Proportion of non-motorised trips for work purposes: *highlights non-motorised transport (walking and cycling) modal split*
- Accessibility to public transport services: *proportion of households who have access to public transport services.*

Sustainable Urban Mobility Plans: Monitoring & Evaluation

- **General view is that it is counter-productive to include a large number of targets for key and intermediate outcome indicators:**
 - Optimum number of indicators in an effective set appears to be between twenty and forty, partly dependent on the size and characteristics of the plan (UK experience)
 - Fewer targets may prove more effective in certain contexts, - in urban areas where limited resources or experience in SUMP development.
- **Realism is important when developing targets:**
 - In many cities targets for urban transport and mobility can sometimes reflect aspirations rather than what can realistically be achieved.
 - Require honest assessment of likely achievement – also relates to selection of measures.

Sustainable Urban Mobility Plans: Monitoring & Evaluation

- **Key stakeholders should be involved in developing quantitative and qualitative targets and indicators:**
 - Groups can be set up which meet to prepare, realise and follow-up on the targets' indicators.
 - Aim should be to adopt and/or develop indicators that are representative of the objectives set.

Sustainable Urban Mobility Plans: *Monitoring During Implementation*

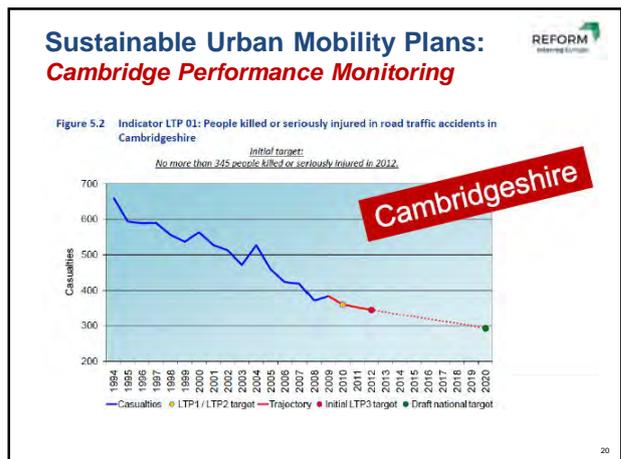
- Data on performance of schemes is collected & reported
- Identify whether resource inputs, project outputs and outcomes are being met
- Process:
 - Data collection to identify problems & establish baseline
 - Monitoring undertaken at key moments:
 - After implementation of specific measures (eg. Infrastructure or service improvement)
 - When certain implementation activities are completed (eg. awareness raising)

Sustainable Urban Mobility Plans: *Rationale for SUMP Target Setting*

- Targets are important!
- Define and adopt targets that allow monitoring of progress towards achievement of the objectives
- Establish a key reference point for assessing efficiency and effectiveness of the measures
- Involve key stakeholders in developing quantitative and qualitative targets – have they been involved?
- Are localised urban targets included to reflect different transport patterns /opportunities (a part of a city etc.)
- Include trajectories or milestones to monitor progress...helps understand over the plan what is expected to happen

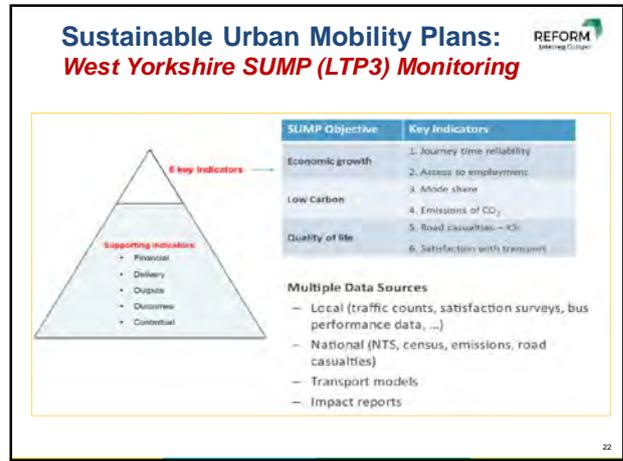
Sustainable Urban Mobility Plans: *Rationale for SUMP Target Setting*

- Setting SUMP targets important to demonstrate clear desire to achieve degree of change within a given timeframe:
 - Assess whether an adopted measure achieves desired outcomes
 - Essential for monitoring and evaluation purposes
 - Transparency and clarity on what SUMP aims to achieve city transport and mobility



West Yorkshire LTP2 Indicators

INDICATOR	RELEVANT TARGET	DATA SOURCE AND COLLECTION TECHNIQUES	TIMESCALE
Accessibility	Mandatory M1	Use of Accession modelling suite	Updates produced annually and/or during services changes
Bus punctuality	Mandatory M2	Roadside Surveys and RTPI system	Updates produced annually
Satisfaction with local bus services (BVS 104)	Mandatory M3	Information supplied by ODPM, Supplemented by Metro market research	Data produced every 3 years
Annualised index of cycling trips	Mandatory M4	A representative selection of sites across West Yorkshire have been chosen to reflect a variety of cycling environments. Both on and off road sites are monitored. Data collected both automatically and manually	Automatic sites collect data continuously. Manual counts undertaken in neutral months
Average journey time per person mile on key routes	Mandatory M5	14 routes have been selected across West Yorkshire. Occupancy, flow and journey times undertaken on each route	Annual counts carried out in neutral months
Change in peak period traffic flows to urban centres	Mandatory M6	Automatic Traffic Counts (ATC) on five urban centre corridors	Annual counts carried out in neutral months
Mode share of journeys to school	Mandatory M7	Method of collection deferred until 2007	
Satisfaction with LTP funded public transport facilities	Local L1	Market research surveys	Scheme by scheme assessment
Cycling trips to urban centres during the morning peak	Local L2	Mode split surveys into five main urban centres across West Yorkshire	Annual counts carried out in neutral months
AM peak period mode split to urban centres	Local L3	Mode split surveys into five main urban centres across West Yorkshire	Annual counts carried out in neutral months
Peak period rail patronage	Local L4	Peak period surveys at Leeds rail station	Annual counts carried out in neutral months
Patronage on Quality Bus Routes	Local L5	Electronic ticket machine data on selected routes	Scheme by scheme assessment
Number of sidestressor KPIs in			



Sustainable Urban Mobility Plans: City of York Performance Monitoring

Performance monitoring:

- Capital programme manager to closely monitor and scrutinise delivery programme
- Strong set of LTP indicators identified to monitor performance:
 - Indicators measure *direct level of success* of the Plan (levels of cycling or number of bus passenger journeys)
 - Indicators measuring the *indirect impact of policies* in the LTP (Such as area-wide traffic volumes or bus punctuality.)
 - All indicators are related to specific outcomes



Sustainable Urban Mobility Plans: Other Examples from Europe



Project Name	Examples of Good Practice	Application for others
Toulouse, France (SUMP)	<ul style="list-style-type: none"> Establishing a partnership monitoring commission Installing an urban development/mobility commission Continuing the PDU observatory Creating a mobility cost account Developing balanced score cards 	<ul style="list-style-type: none"> Utilising a partnership approach by engaging with a large number of public and private stakeholders to discuss progress made utilising the monitoring results.
Real Time Copenhagen	<ul style="list-style-type: none"> Modal split data to show the relevant changes in cycling Socio-economic analysis (including health, profit and loss for society) to be compared against a given initiative Measures of public satisfaction Measures of traffic safety and the risk of being involved in a serious accident 	<ul style="list-style-type: none"> Utilises new technologies to undertake monitoring Measures public satisfaction levels to inform policy development

25

Thank you



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Questions welcome



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26