

SUMP measures selection process in MobiliseYourCity cities

22 October 2024

Objectives

- **Understand the articulation between the vision and the plan** for mobility development
- **Understand the MobiliseYourCity approach to project** (aka measure) selection
- **Appreciate methods of definition** of mobility scenarios and measures

Speakers



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Developing Sustainable Urban Mobility Plans

Guidelines for MobiliseYourCity geographies



The MobiliseYourCity SUMP Guidelines

What is specific about the MobiliseYourCity SUMP methodology?



Prepare a readiness assessment



Set objectives in favor of climate change mitigation and adaptation



Make the most of innovation and digital technologies' potential



Establish sustainable mobility observatories for monitoring and evaluation of the SUMP



The Guidelines are embedded within a robust system of support for cities

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Translating The Goals into Scenarios

How to define scenarios and measures during the planning process?

In the planning process, the scenarios and measures come after the vision and goals for urban mobility have been established.

- Clear diagnosis and goals are necessary for having impactful, realistic and relevant scenarios and measures.
- Data collection within the diagnosis is key to prepare data-driven scenarios that can be evaluated quantitatively.
- Quantifying the impacts allows best preparation of the action plan: priorities, costing, etc.

All must participate !



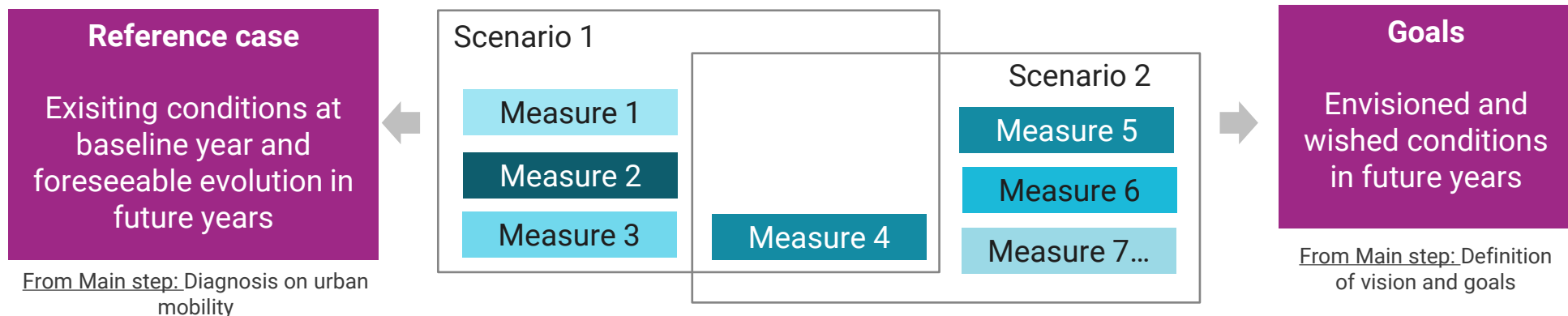
How do we translate the mobility goals into mobility scenarios?

Diagnosis: where we are.

Goals: where we want to go.

Scenarios: how to get there.

- **Measures identified:** through benchmarks or brainstorming between stakeholders. **Ongoing or committed measures must be included.** There can be as many measures as necessary.
- **Measures are grouped by scenarios:** not all measures can be implemented simultaneously. Similarly, interrelationships between measures can be identified according to the objectives. There should be between 2 and 4 scenarios. Measures may be part of different scenarios.



Key principles for the scenario's definition

The scenarios must be realistic and allow for reaching the goals set out before.

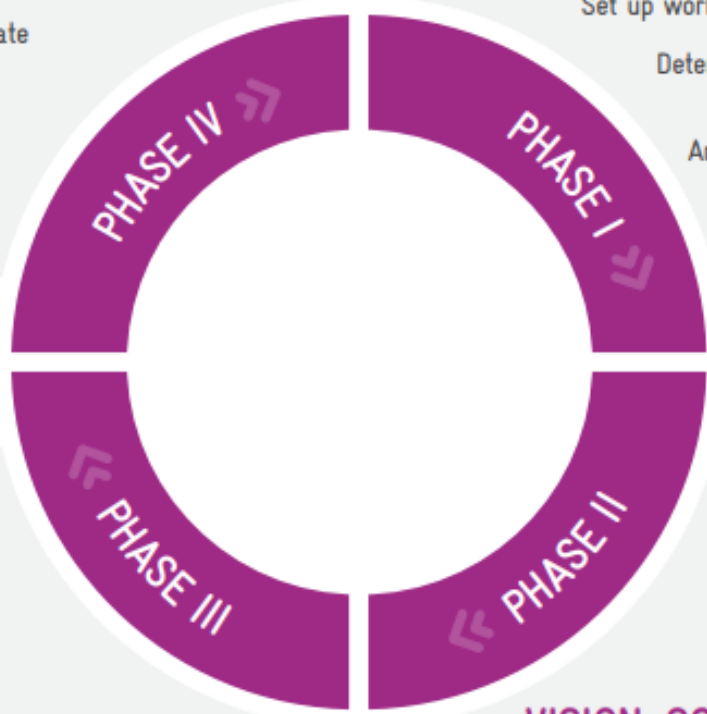
- Scenarios must **reflect the goals** of mobility development **realistically**
- Scenarios are **not frozen** : they are a tool to lead to the SUMP action plan
- They are **evaluated against the reference case** and **between themselves**
- Scenarios will be **evaluated on economic, technical, financial, institutional feasibilities**
- Scenarios contain measures: at the end and for the action plan, **several measures from different scenarios** are combined together





IMPLEMENTATION AND MONITORING

- 10 Manage implementation
- 11 Monitor, adapt and communicate
- 12 Review and learn lessons



MEASURE PLANNING

- 7 Select measure packages with stakeholders
- 8 Agree actions and responsibilities
- 9 Prepare for adoption and financing

START



PREPARATION AND ANALYSIS

- Perform a readiness assessment 0
- Set up working structures 1
- Determine planning framework 2
- Analyse mobility situation 3



VISION, GOAL SETTING, AND SCENARIO BUILDING

- Build and jointly assess scenarios 4
- Develop vision and objectives with stakeholders 5
- Set indicators and targets 6

The SUMP Cycle

Vision & Goals



Scenarios

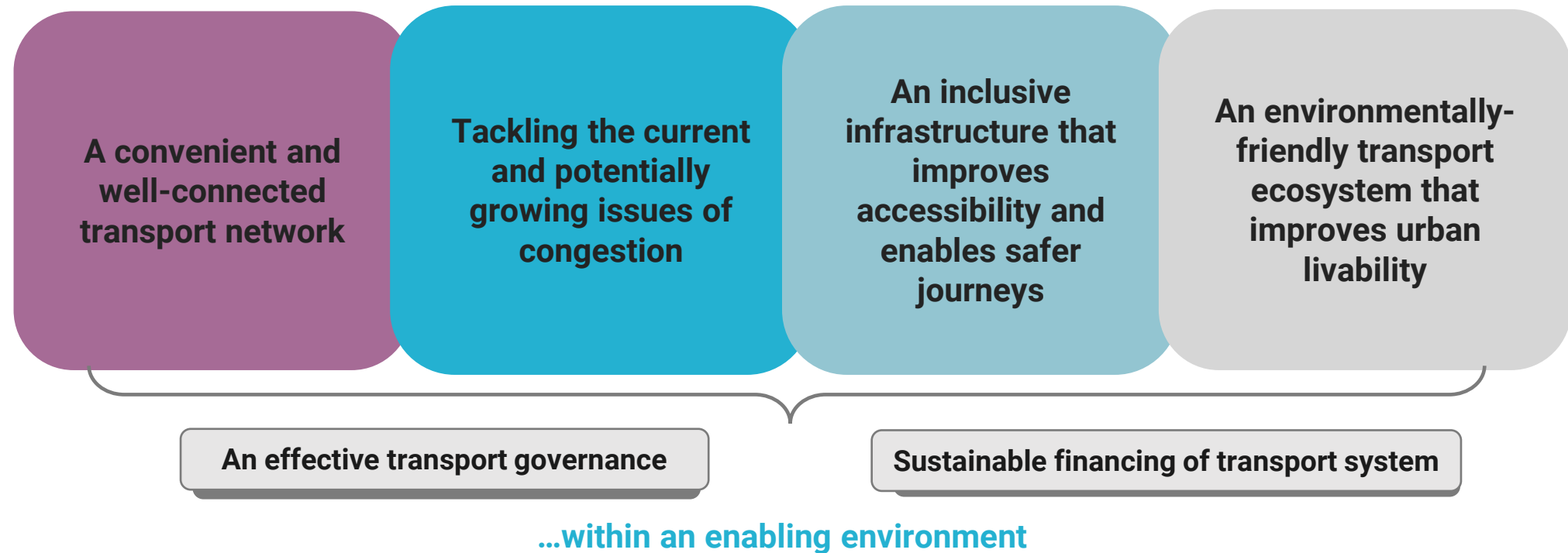


Measures

Case study: tailoring the Mebidangro urban mobility goals

Medan Region
Case Study

Building a sustainable, integrated and equitable transportation system for Mebidangro...



Case study: tailoring the Mebidangro urban mobility goals

Medan Region
Case Study

These are propositions for realistic scenarios as a base for discussion.

Scenario 1 : Reference case

→ Business as usual, projects that are committed in the baseline year 2020 are implemented.

Scenario 2 : Conventional

→ Focus on sustainable mobility. Investments are minimum and current assets are optimized, with minimum ambition

Scenario 3 : Ambitious

→ Mass transit implementation and changes in the governance of mobility for Mebidangro. Investments are important and there is strong support for a change of paradigm.

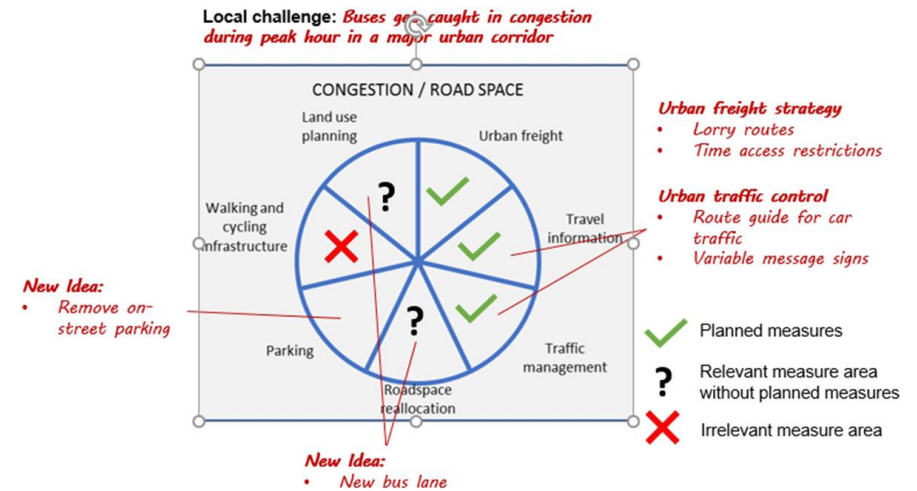
At the end, scenarios can be mixed depending on positive aspects: scenarios are just a tool.

What Measures Should We Plan ?

How do we select measures?

The measures shall stem from local agencies for best ownership.

- Urban mobility challenges
- Brainstorm with stakeholders to identify measures
- Insure compatibility with planned and committed developments
- Measures shall cover all transport modes on all time horizons.
- Measures can be as numerous as needed.



Tool : Sundberg Cakes

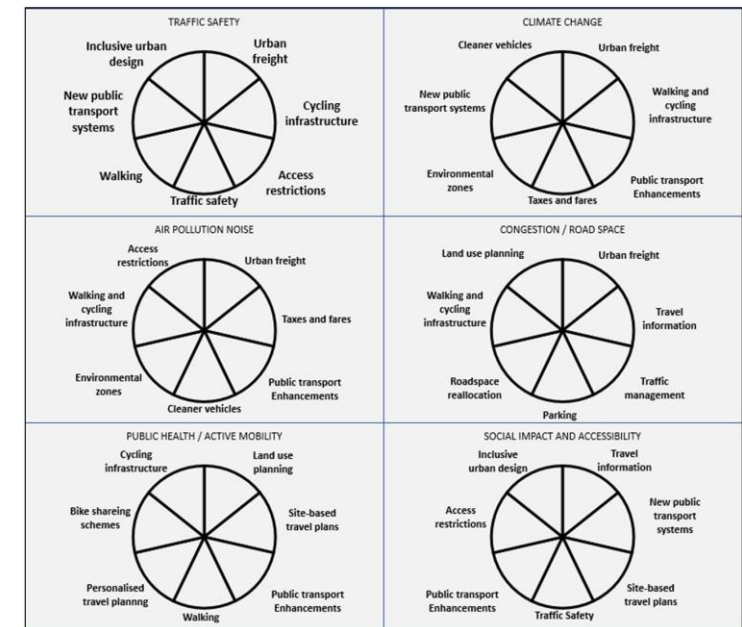
How do we select measures?

The measures shall stem from local agencies for best ownership.

→ **All measures shall be ad-hoc and specific to the local context:** importance of culture, acceptance, and readiness.

→ **Possible to use tools**, such as the Sundberg Cakes to foster ideas for measures

- Urban Transport roadmaps : www.urban-transport-roadmaps.eu
- KonSULT Measure Option Generator : www.konsult.leeds.ac.uk



Tool : Sundberg Cakes

Identifying the right scenarios & timeframe for each measure

Scenarios and measures must observe a coherent split

Measures can be part of one or several scenarios if the integrated packages are coherent and realistic.

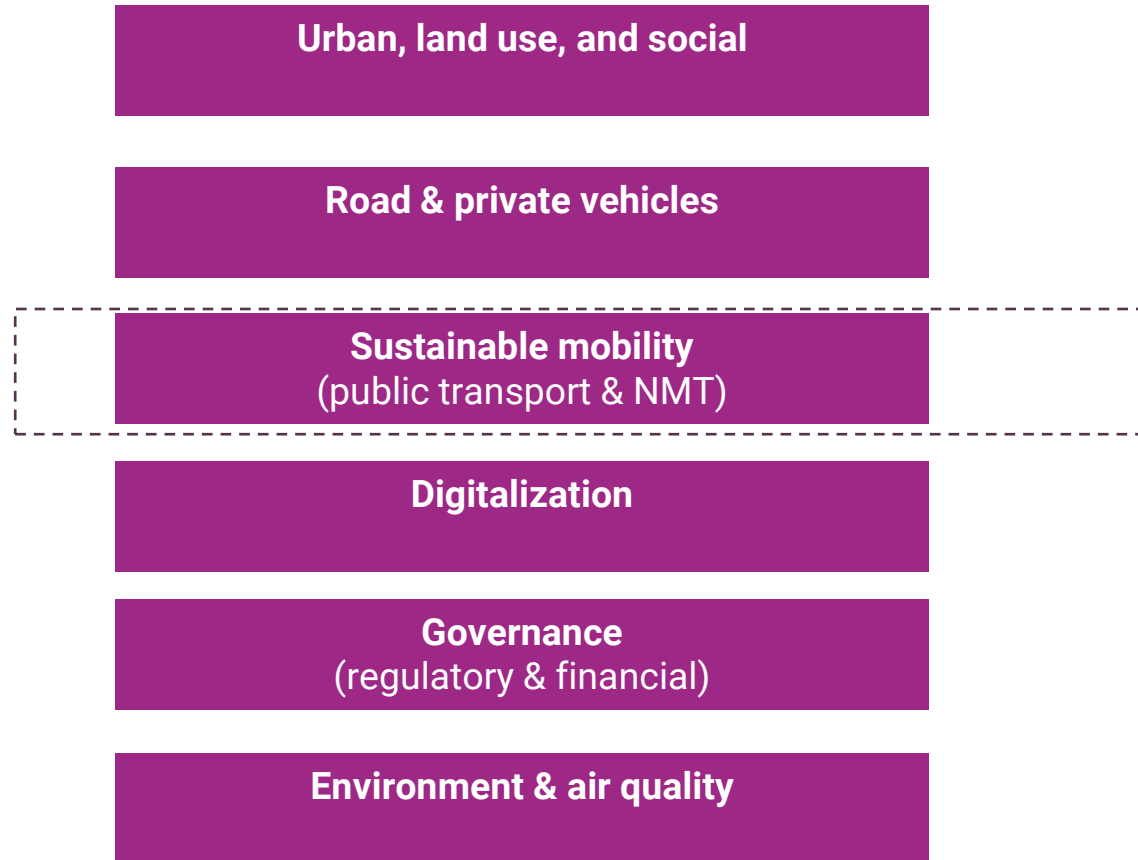
- A measure can be differentiated according to the scenarios.
- Resulting scenarios shall have a similar number of measures, cover multiple modes and have the same time horizons.
- Measures timelines can be modified to make the scenarios more coherent and realistic.
- SUMP updates can refine scenarios and measure thanks to the MRV process. New measures shall be identified in the medium-term following the evolution of the situation

Coherent split:

- **Type of measure.**
- **Acceptability**
- **Objective or challenge**
- **Focus Area**
- **Costs**
- **Bundling for external financing**
- **Around larger projects**

What measures should we implement?

6 general themes



Identification of measures: what should we do? Add / delete

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Add measures to Scenario 1 if necessary – and add or delete measures in Scenario 2 and

	No	Measures	Scenario 1	Scenario 2	Scenario 3
			Reference	Conservative	Disruptive
Urban, land use, and social					
Road & private vehicles	1	Car-free zones		Short 2023	
	2	Mixed-use zones in secondary urban centers			Medium 2028
Sustainable mobility (public transport & NMT)	3	Reinforce driving license process		Short 2023	
Digitalization	4	Road safety campaigns, especially at black spots		Short 2023	Short 2023
	5	Promote public transportation			Short 2023
Governance (regulatory & financial)	6	Framework for TOD developments			Medium 2028
	7	Comfortable and safe sidewalks		Medium 2028	Medium 2028
Environment & air quality	8	Land Value Capture law			Medium 2028

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	No	Measures	Reference	Conservative	Disruptive
Urban, land use, and social	9	Circular roads	Medium 2028	Medium 2028	Medium 2028
	10	Enhance road link Medan - Berastagi		Medium 2028	Medium 2028
Road & private vehicles	11	Standardized road signage accross Mebidangro		Medium 2028	Medium 2028
	12	Traffic calming measures, in city center and periphery		Short 2023	
Sustainable mobility (public transport & NMT)	13	Dedicated parking hubs		Medium 2028	Medium 2028
	14	One-way streets		Short 2023	Short 2023
Digitalization	15	Traffic law enforcement		Short 2023	Short 2023
	16	Signs informing of vehicle real-time speeds			Short 2023
Governance (regulatory & financial)	17	Park & ride at public transportation hubs			Medium 2028
Environment & air quality	18	Quality road network all accross Mebidangro		Medium 2028	Medium 2028
	19	Limit freight vehicles to night travel			Short 2023

Identification of measures: what should we do? Add / delete

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			Scenario 1	Scenario 2	Scenario 3
	No	Measures	Reference	Conservative	Disruptive
Urban, land use, and social	20	BRT line 1		Short 2023	Short 2023
	21	Wider BRT network			Long 2035
Road & private vehicles	22	Wider city buses network		Medium 2028	
	23	Implement waterbuses		Medium 2028	
Sustainable mobility (public transport & NMT)	24	Urban rapid rail lines (tramway, LRT, MRT TBD)			Medium 2028
	25	Tramway and/or tram-train		Short 2023	Short 2023
Digitalization	26	Increase service levels of existing rail		Short 2023	
	27	Increase quality of existing minibuses			Medium 2028
Governance (regulatory & financial)	28	Increase quality of service of existing buses		Short 2023	
	29	School buses		Short 2023	
Environment & air quality	30	Employee buses		Short 2023	
	31	Safe NMT ways			Short 2023
	32	Key multimodal hubs		Medium 2028	Medium 2028

Identification of measures: what should we do? Add / delete

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measures in Scenario 2 and			Scenario 1	Scenario 2	Scenario 3
Urban, land use, and social	No	Measures	Reference	Conservative	Disruptive
Road & private vehicles	33	Carpooling		Short 2023	
	34	Monitoring system at Mebidangro level			Medium 2028
Sustainable mobility (public transport & NMT)	35	Passenger information in real-time & at stations		Short 2023	Short 2023
Digitalization	36	MaaS (on-demand services)		Short 2023	
Governance (regulatory & financial)	37	Fare intermodality		Medium 2028	
Environment & air quality					

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measures in Scenario 2 and			Scenario 1	Scenario 2	Scenario 3
Urban, land use, and social	No	Measures	Reference	Conservative	Disruptive
Road & private vehicles	38	Mebidangro transit authority			Medium 2028
Sustainable mobility (public transport & NMT)	39	Reform minibus industry under Province			Medium 2028
Digitalization	40	Corporate tax on mobility			Medium 2028
Governance (regulatory & financial)	41	Capacity building (Technical Assistance)		Short 2023	Short 2023
	42	Law to restrict urban sprawl		Long 2035	Long 2035
	43	Separate track and train operators			Medium 2028
Environment & air quality					

Identification of measures: what should we do? Add / delete

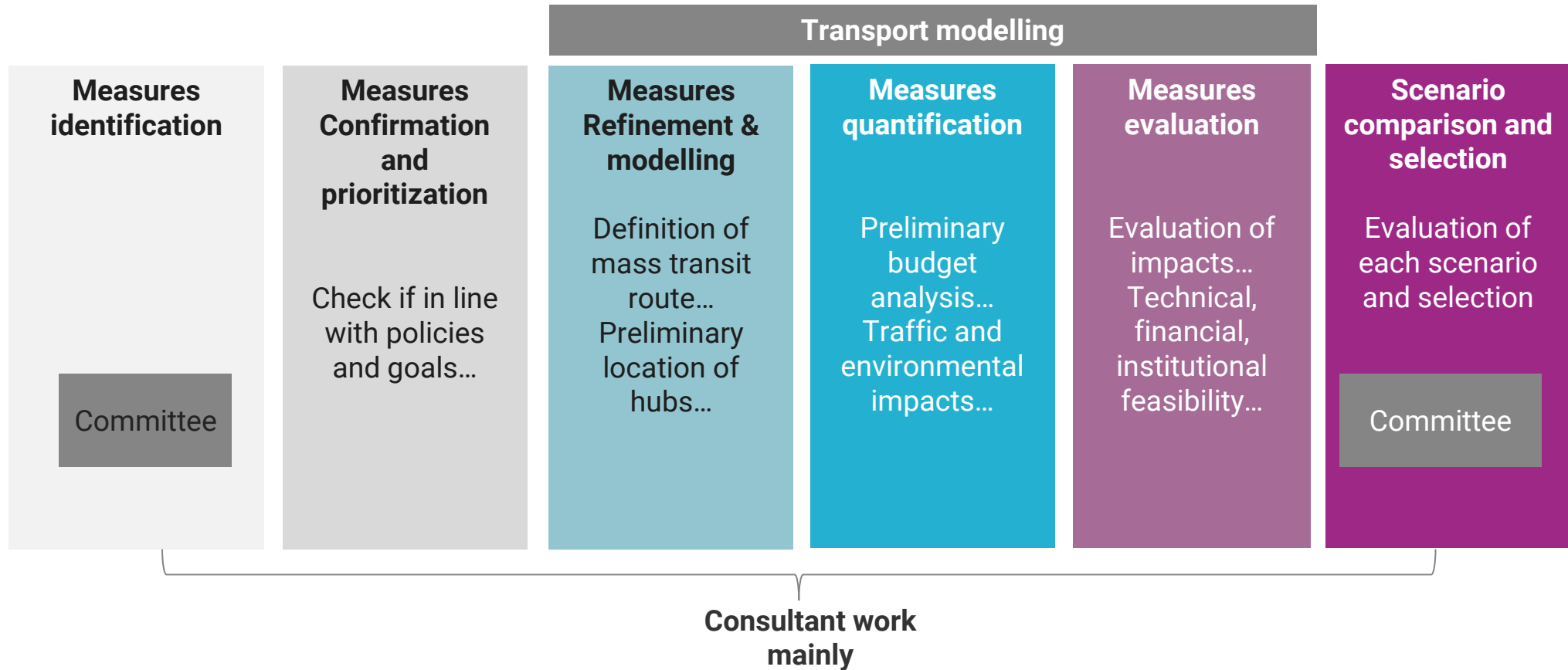
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measures in Scenario 2 and		Scenario 1	Scenario 2	Scenario 3	
Urban, land use, and social	No	Measures	Reference	Conservative	Disruptive
Road & private vehicles	44	Tax on motorized vehicles using urban roads		Medium 2028	Medium 2028
	45	Incentives to reduce fuel consumption		Short 2023	
Sustainable mobility (public transport & NMT)	46	Remove fuel subsidy within city			Medium 2028
	47	Renewable energies for rail transportation			Short 2023
Digitalization	48	Renewable energies for road public transportation		Medium 2028	
Governance (regulatory & financial)	49	Renewable energies for private vehicles			Medium 2028
Environment & air quality					

Iterations towards the scenario comparison

CONCLUSION



Main takeaways

- Definition of scenarios and measures is a participative and iterative process
- SUMP's to help prioritise sustainable measures at a political level and facilitate further evaluation
- Measures established in the scenario selected should have stakeholders and community approval, ensuring their commitment to further implementation
- Further socio-economical evaluations might be required, important to quantify all potential benefits according to the information available.

Thank you for your attention

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