

How to plan for resilient sustainable urban mobility?

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SUMP Concept & Guidelines

- Integrated, strategic, long-term transport plan with clear goals and monitoring that aims at better accessibility and quality of life for the functional urban area.
- Main European concept for urban mobility planning
 - Essential milestones of the New European Urban Mobility Framework 2021



SUMP is a clear recommended process for urban change



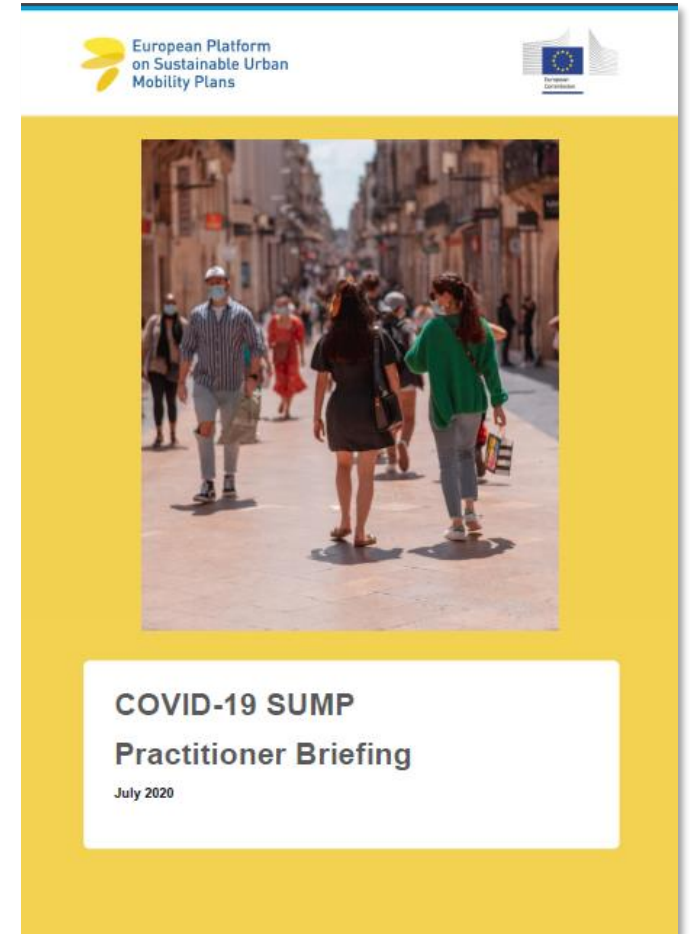
Covid-19 SUMP practitioners' briefing

- SUMP process has provided cities with a portfolio of fit-for purpose measures to be fast-tracked
- **SUMP as a leading process during crisis**

Lessons learned (until June 2020) for immediate, mid-term and longer-term actions from European cities and regions

Going beyond planning for COVID-19 and towards planning for RESILIENT CITIES with a new SUMP Topic Guide published *in February 2021*:

Planning for more resilient and robust urban mobility



Principle of resilience

- Describes the capacity of a system to resist, adapt itself and transform itself to recover from a shock, absorb its consequences and maintain levels of functionality
- Resilience offers a comprehensive socio-technical perspective that emphasises the importance of anticipating and reducing one's vulnerability in combination with the monitoring efforts, the ability to respond to and the capacity to learn from crises
- Broad concept for all areas of urban development

**Going beyond road
infrastructure resilience**



**The 7 principles of
resilience**

Reflective

Robust

Redundant

Flexible

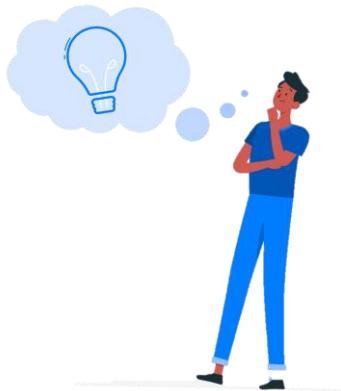
Resourceful

Inclusive

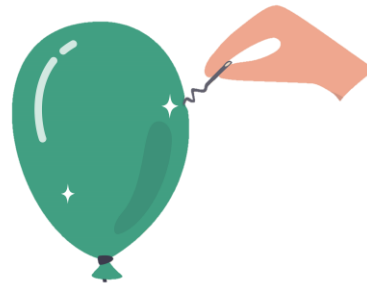
Integrated

Resilience principles in the context of sustainable urban mobility planning

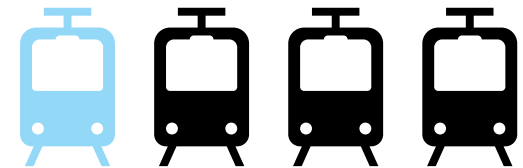
Reflectiveness



Robustness



Redundancy



Resilience principles in the context of sustainable urban mobility planning

Flexibility

Resourcefulness

Inclusiveness

Integrated

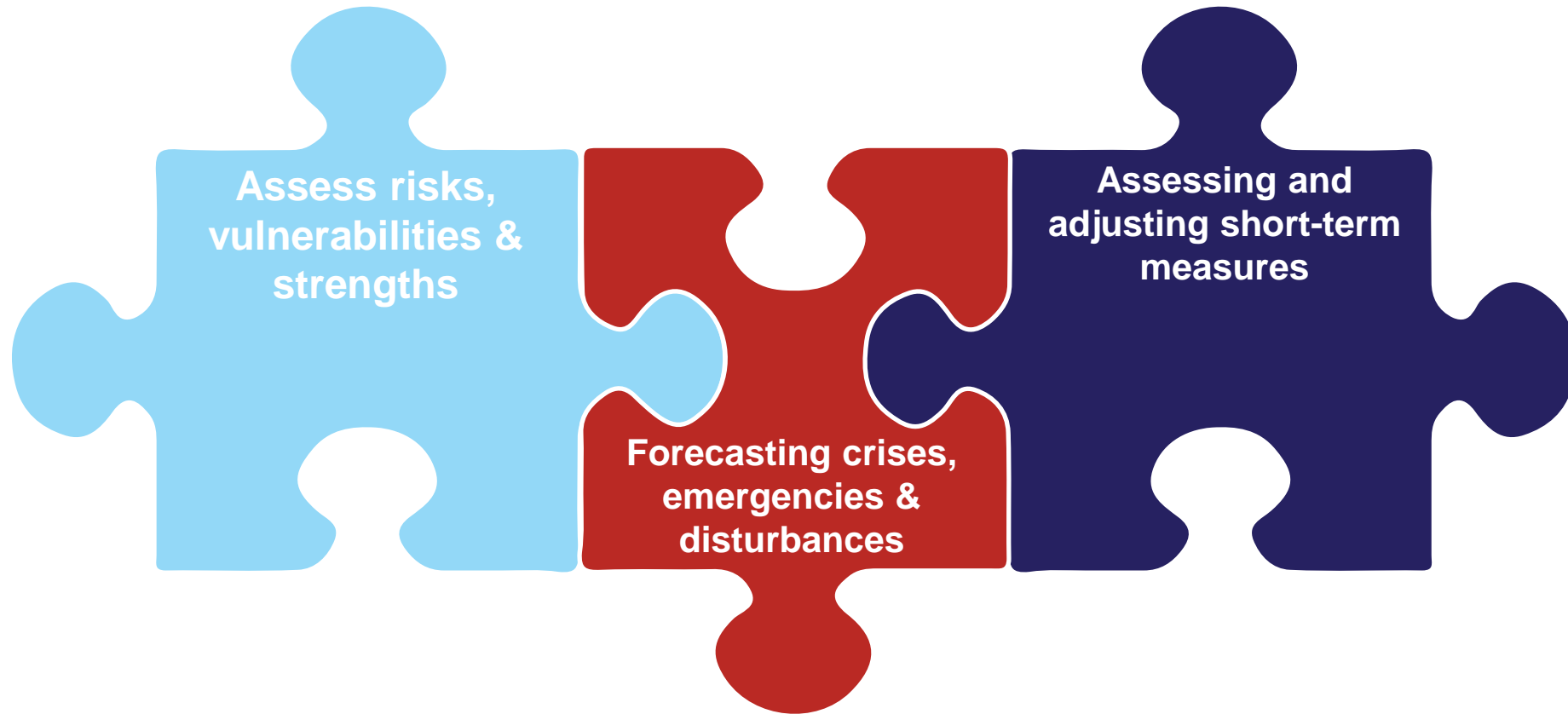


What it addresses

- Crisis = any event that may lead to an unstable and dangerous situation which affects the urban mobility systems
- An immediate crisis can cause **further long-term changes** and **increase the impact of other major trends**, such as climate change.
- Managing such fundamental change processes is a **key challenge for urban mobility practitioners to integrate into their plans.**



Snapshot: What does it mean in practice



Assess risks, vulnerabilities and strengths

- Regular risks assessments to be built into working routines
- Allows to:
 - Identify adaptation measures
 - Vulnerable areas where actions is required first
 - Vulnerable population that requires targeted assistance

Forecast of crises, emergencies & disturbances to achieve a resilient system

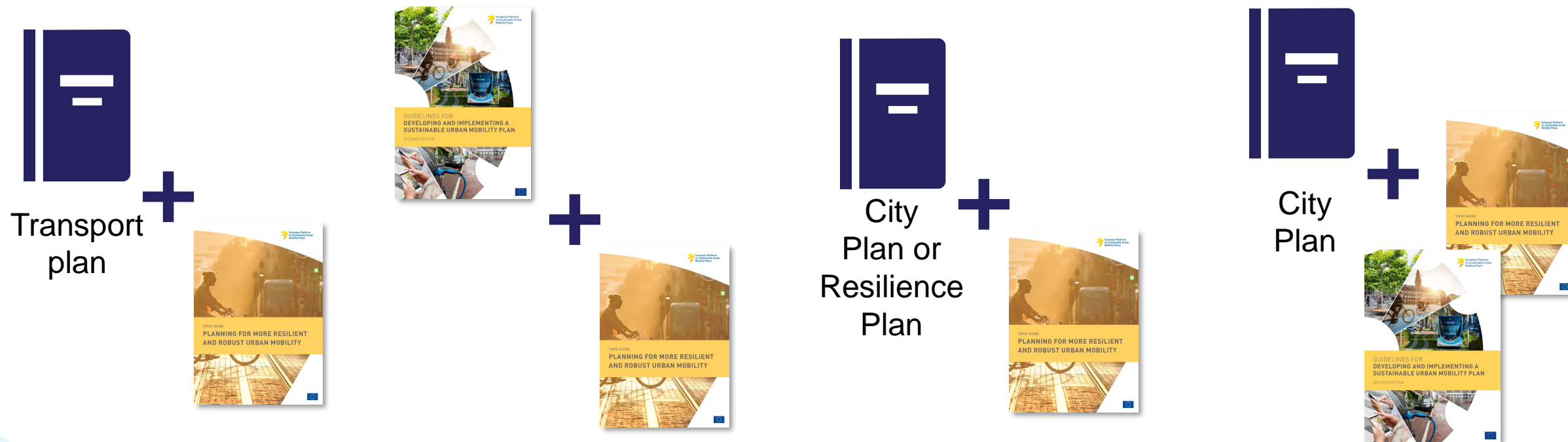
- Develop various scenarios
 - Business-as-usual scenario
 - Low carbon scenario
 - *Worst case scenarios*
 - *Absurd scenarios*
 - *Recovery scenario planning*
 - *Business continuity planning*
- Using projections
 - Climate change projection
 - Urban development projection

Assess and adjust short-term measures

- Selecting and implementing temporary measures
 - Test measures on small scale with low-cost & unobtrusive infrastructures
 - Involve citizens in the evaluation
 - Collecting opinions of users and stakeholders
 - Refer to risk assessments results when evaluating short term measures
- Adjust short-term measures to implement long-term measures

Integrating resilience in urban mobility planning

How does it look like?



Resilient planning of Thessaloniki



Objective A: Build an integrated resilient mobility system

The mobility system in Thessaloniki is facing a number of significant challenges including limited public transport options, over reliance on private car use, and ageing infrastructure.

The city has experienced a number of emergency situations in recent years, many due to the insufficient and reduced capacity of the public transport system, and in particular, the bus system.

This has led to severe traffic congestion and obstruction of the city road network. The completion of the main metro line by 2020 will be a significant step towards a more resilient mobility system.

Resilience
Dividend
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Objective B: Adopt Transit Oriented Development (TOD)



Objective C: Develop smart urban logistics



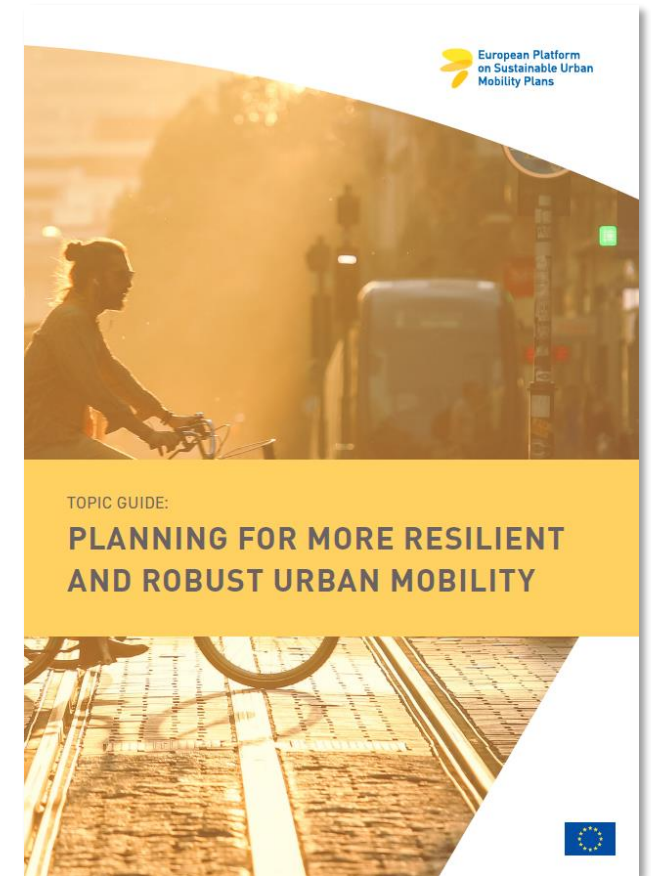
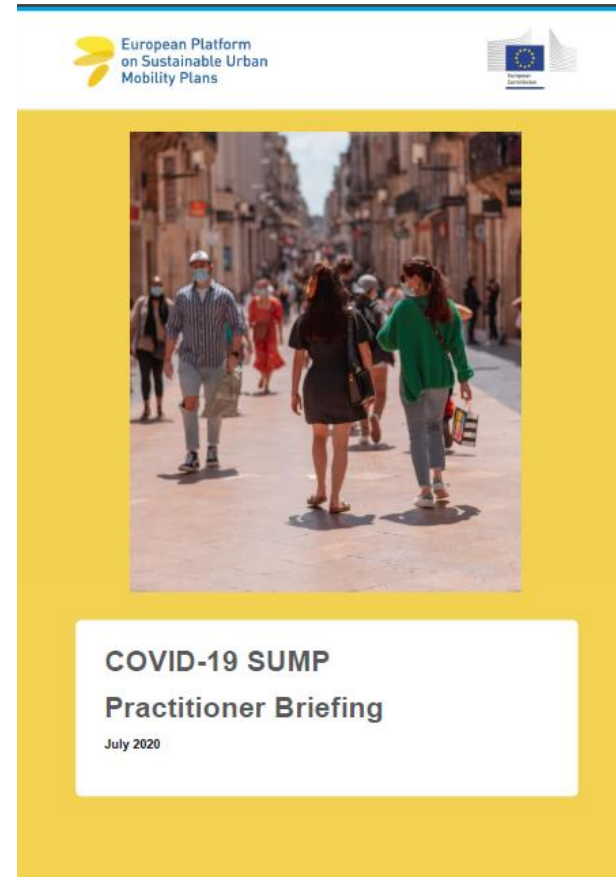
Objective D: Move to clean power for transport



Objective E: Reduce air pollution and urban noise



Key documents





Thank you!



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