

Development of a Multi-modal Congestion Assessment Tool and its application in Munich – an example from the project FLOW



Landeshauptstadt
München
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The FLOW Mission

FLOW aims to contribute to a paradigm shift, where **walking** and **cycling** are recognised as effective modes for **relieving urban road congestion**.



FLOW is the first project putting walking and cycling on an equal footing with motorised modes by developing a user-friendly methodology to assess the effectiveness of walking and cycling measures in congestion reduction.

A **new state-of-the-art** will be implemented in **6 FLOW cities** by integrating the FLOW methodology and congestion assessment tools into the current standard transport impact analysis process.



FLOW Outcomes

Congestion reduction assessment methodology	Conceptual framework including a multimodal congestion definition and selected Key Performance Indicators (KPI)
State-of-the-art transport modelling and impact assessment tools	Improved modelling software and economic appraisal including walking and cycling
Training and exchange for practitioners	Webinars and e-learning courses are offered introducing the developed FLOW methodology and assessment tools
Marketplace & take-up support for businesses	Boost communication, know-how and information exchange amongst consultancies and local authorities
Portfolio of congestion reduction measures	It helps cities identify innovative measures and categorise their impacts

Role of FLOW partner cities

- Apply improved transport modelling and simulation tools
- Pilot the assessment methodology
- Develop implementation scenarios and action plans

Aim of FLOW: support take-up of measures by public administrations



The FLOW Congestion Assessment

FLOW is developing improved modelling software and an economic appraisal to better analyse the impacts of (hard and soft) walking and cycling measures on congestion.

Improved transport modelling in terms of walking and cycling

- The software development focuses on new mobility patterns and innovative transport modes.
- Macro scale: improved modelling of B+R and bike sharing schemes; improved route choice options by cyclist traffic assignment...
 - Micro scale: enhanced modelling of interactions between cars, pedestrians and cyclists; shared space; better depicting of walking and cycling behaviour...

PTV VISUM

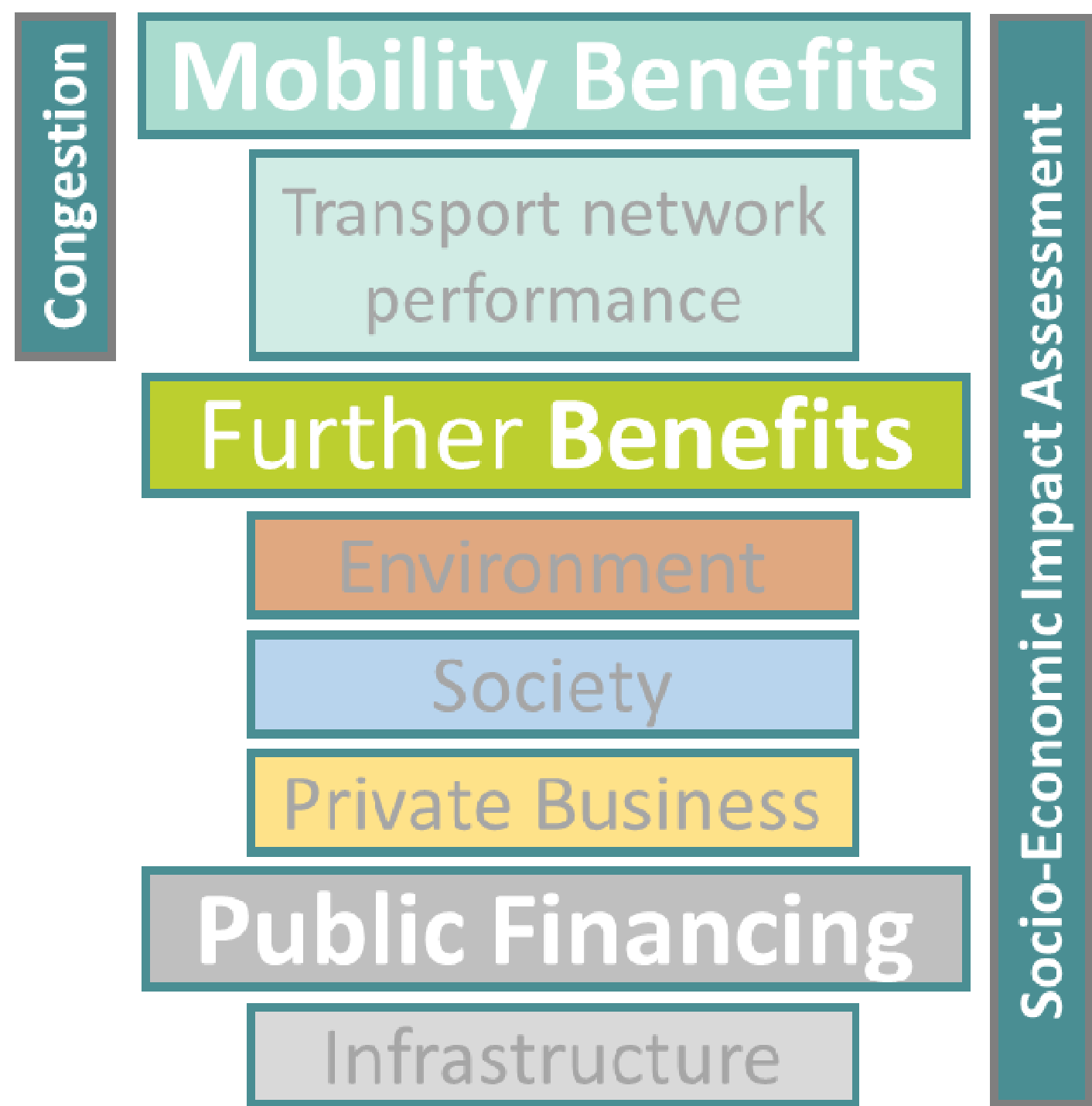


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The FLOW Target System



- The impact assessment tool covers:
- **Direct effects** (i.e. influence on transport network performance)
 - **Wider consequences** (health, environmental, social and economic benefits)

Impact Assessment: Evaluation of Measures

The comprehensive impact assessment tool includes a **cost-benefit analysis (CBA)** and **qualitative appraisal** to measure both quantitative and qualitative impacts.

FLOW in Munich

Modelling and Simulation – Testing New Tools for:

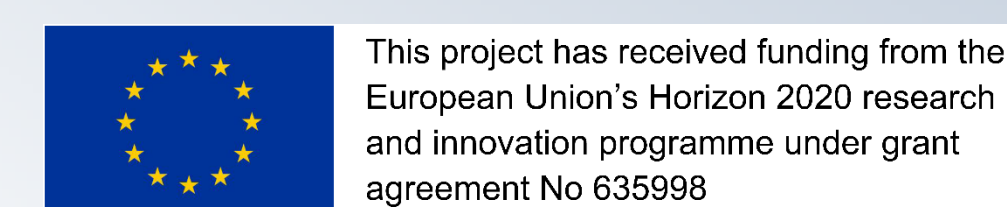
- Reorganization of road space
- Pedestrianisation
- Cycling acceleration and safety

Expected Outcomes

- Creating better public places
- Creating better cycling corridors
- Better understanding of walking and cycling



www.h2020-flow.eu
Twitter: @FlowH2020



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traject
mobility management

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EUROPEAN CYCLISTS' FEDERATION

Measures

Kunstareal/"Art district" (Site 1)

- High-profile area with international universities, museums, galleries
- Ongoing process to improve cooperation, communication and accessibility (Projekt Kunstareal)
- Develop and test measures for better crossings, traffic calming, urban design
- Sharing road and public space



Vision: "Boulevard Arcisstrasse"

Kapuzinerstrasse (Site 2)

- „Lighthouse project“ for cycling implemented in 2013
- New bike lanes – loss of car lane
- Benefits for pedestrians
- More congestion?
- Time losses for public transport?



Generating knowledge - Evaluation of project