POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION
ANNUAL CONFERENCE 2024

Improvement of SUMP-Methodology for Climate Mitigation

Governance & Integration
Supporting SUMPs

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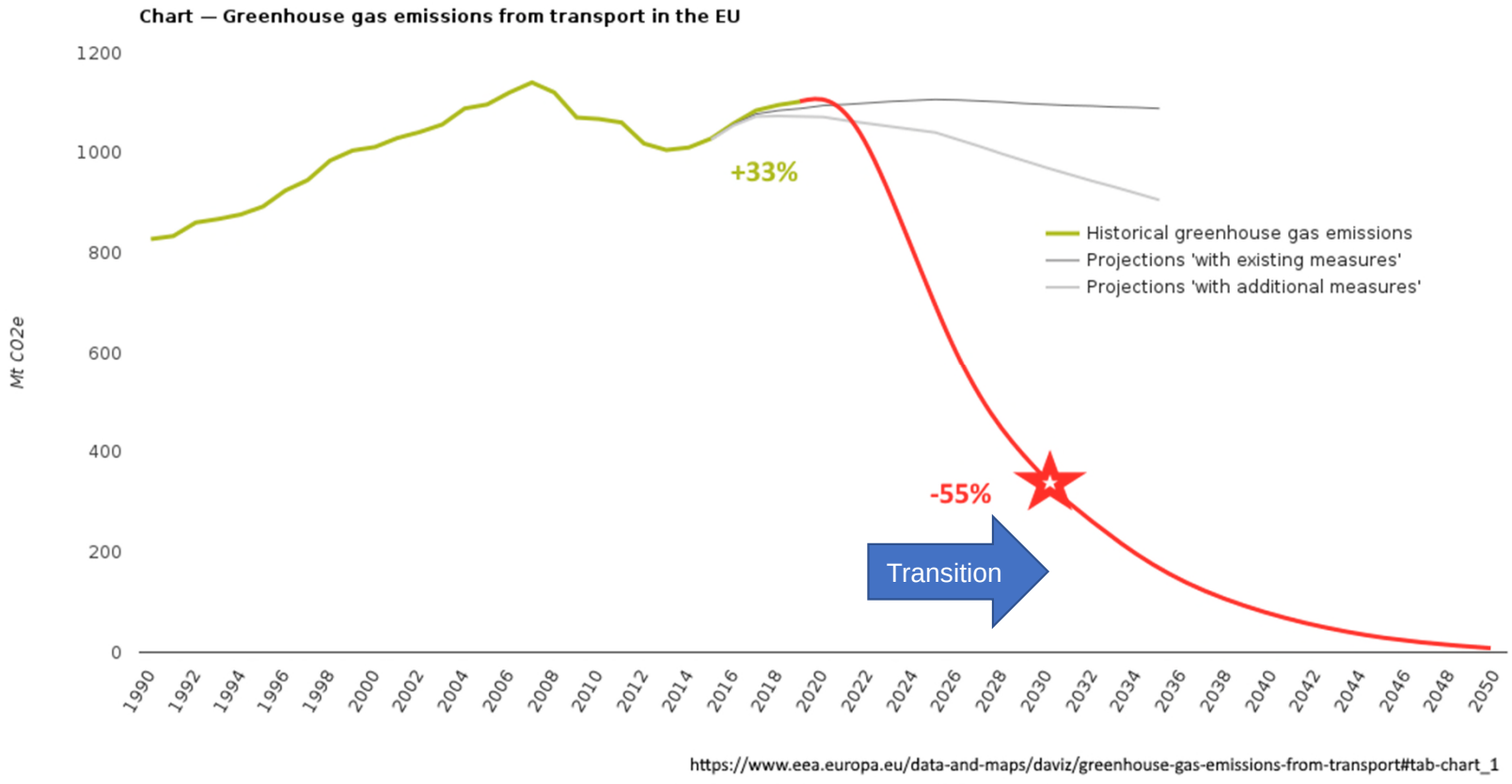
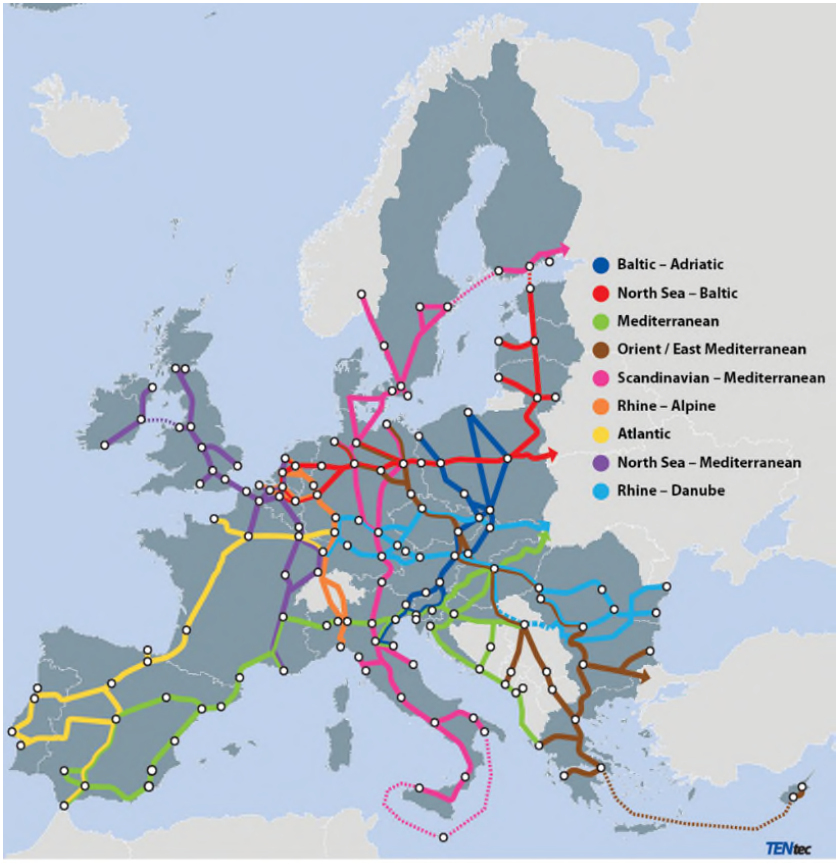
Fraunhofer ISI

Future pathway needed to achieve climate targets



New EU TEN-T Regulation

- Sustainable Urban Mobility Plan (SUMP)
- More than 432 large and medium-sized cities should develop a SUMP by 2025 and collect relevant urban mobility data.
- Contributing to EU Green House Gas reduction targets as set in the Climate Law
  (including -55% by 2030).

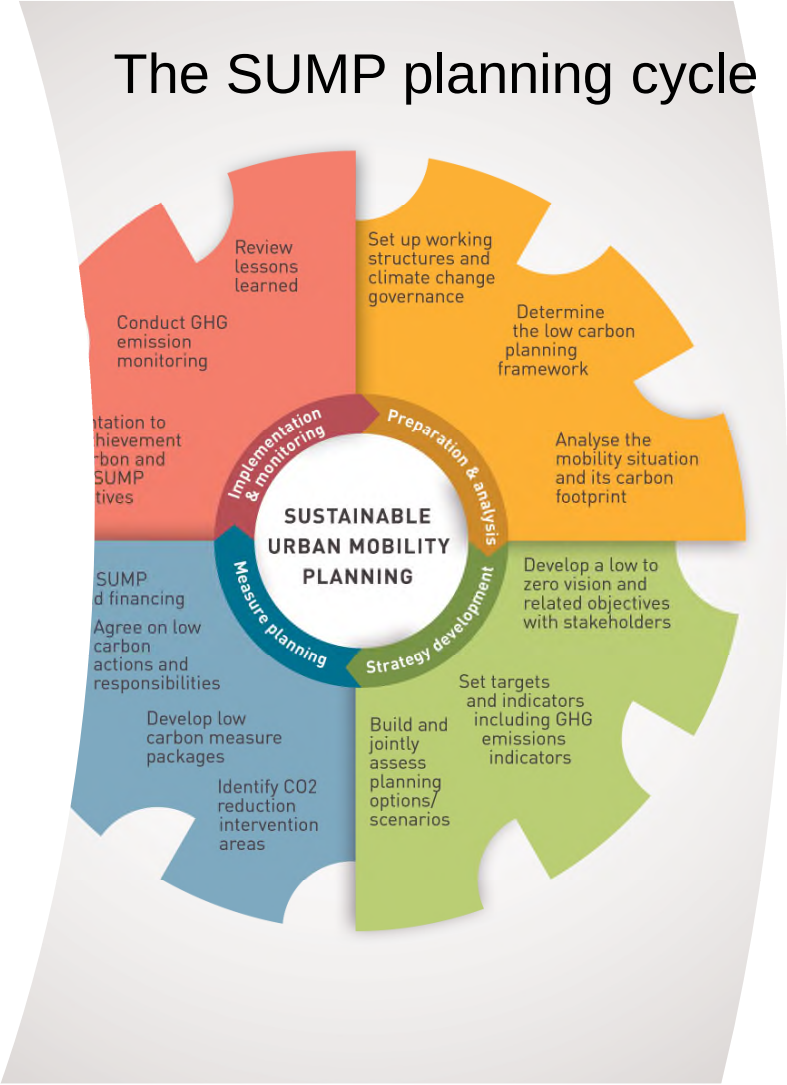


Note: the nine TEN-T core network corridors are based on the CEF and TEN-T Regulations (1316/2013 & 1315/2013); they have been created as a coordination instrument to facilitate the completion of major parts of the core network of strategic importance.
Source: European Commission, Directorate-General for Mobility and Transport, TENtec Information System

Source: https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_6729

SUMP Methodology

Sustainable urban mobility planning steps



Source: https://urban-mobility-observatory.transport.ec.europa.eu/sustainable-urban-mobility-plans

Sustainable Urban Mobility Plans in practice

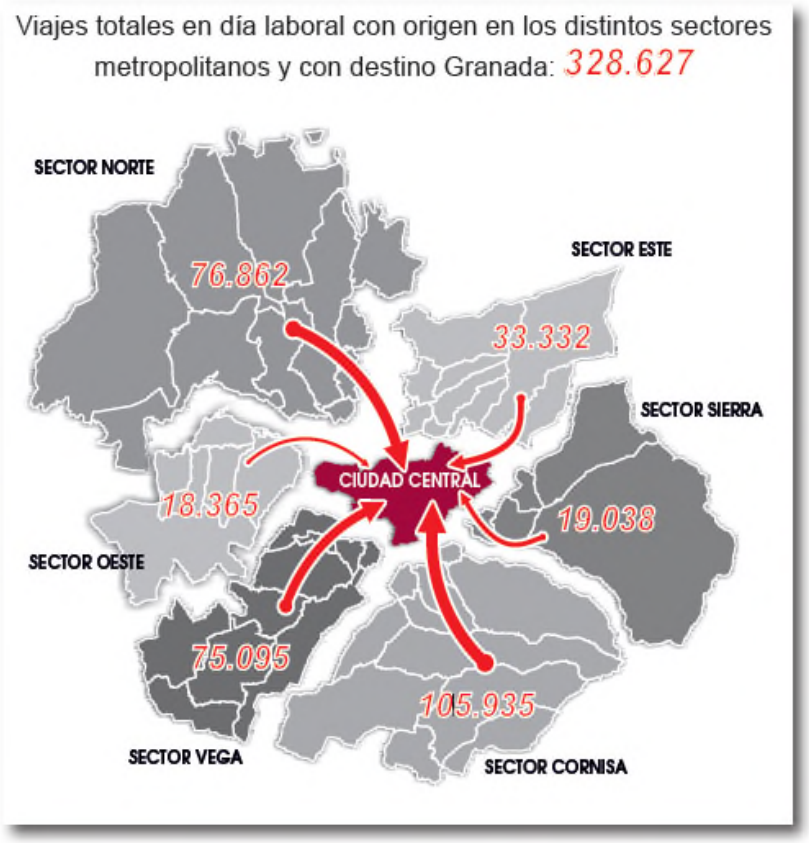
Analysis of SUMPs

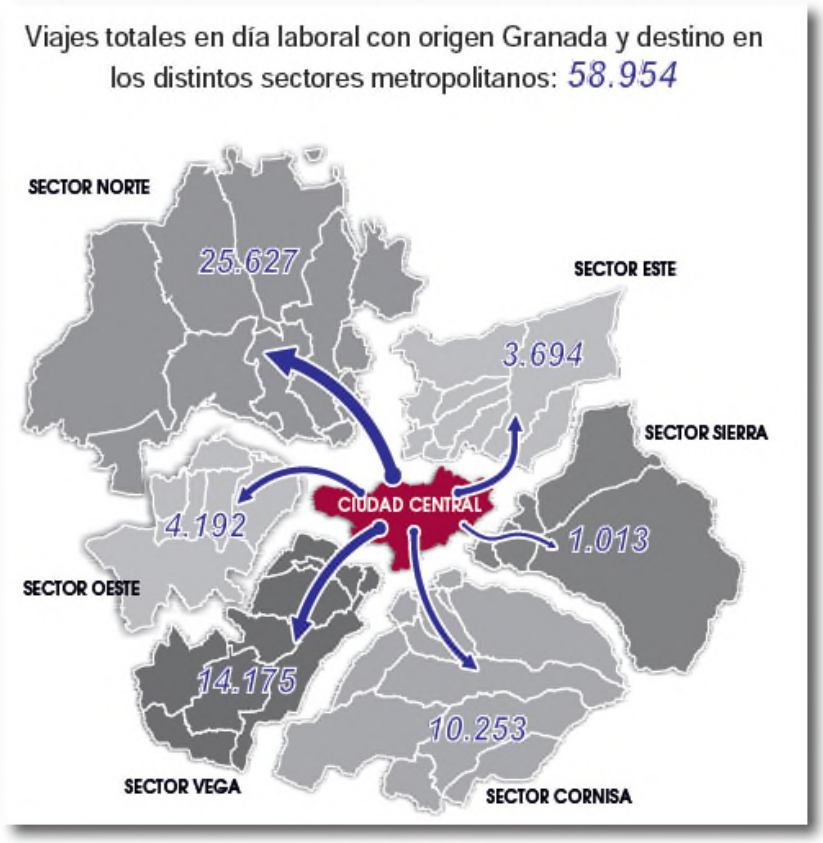
Broad screening of 168 SUMPs

- Climate targets are often not clearly defined at the outset: Less than half of SUMPs have quantitative climate targets for transport.
- Climate targets are often not sufficient to meet Paris goals.
- Impacts of transport measures on GHG emission are often not quantified.
- Monitoring: Ex-post evaluation of target achievement and implementation of measures is foreseen in less than half of the SUMPs studied.
- Lack of implementation, even if ambitious targets exist. Climate change targets have not been achieved in almost all cases.

Source: Sutter, Daniel; Maleika Wörner; Caspar Esche (INFRAS) und Niklas Sieber (2022): Overview of Urban Mobility Climate Mitigation Strategies and Climate objectives in Urban Mobility Plans (SUMPs), European Investment Bank EIB / JASPERS, Final Report, Zurich / Stuttgart, 6 January 2022. http://www.niklas-sieber.de/Publications/2022%20Urban-Climate-Strategies-and-Urban-Mobility-Plans.pdf

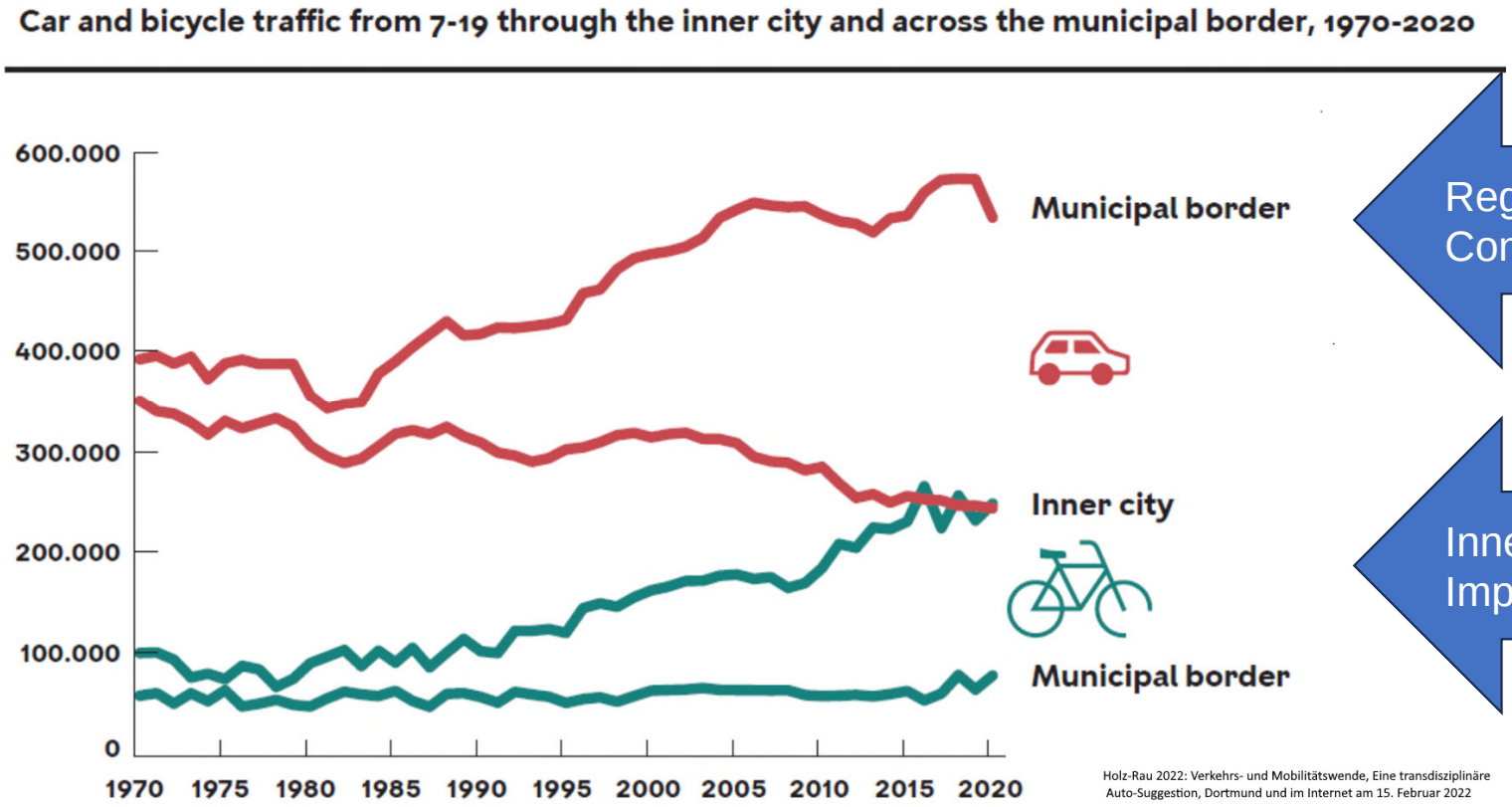
No regional scope of SUMPs





Granada 2025, Plan de Movilidad Urbana Sostenible

Best practice City: Copenhagen



Holz-Rau 2022: Verkehrs- und Mobilitätswende, Eine transdisziplinäre Auto-Suggestion, Dortmund und im Internet am 15. Februar 2022

Region:
Continuing Urban Sprawl

Inner City:
Improvement of Modal Split

Political preference for Pull Measures

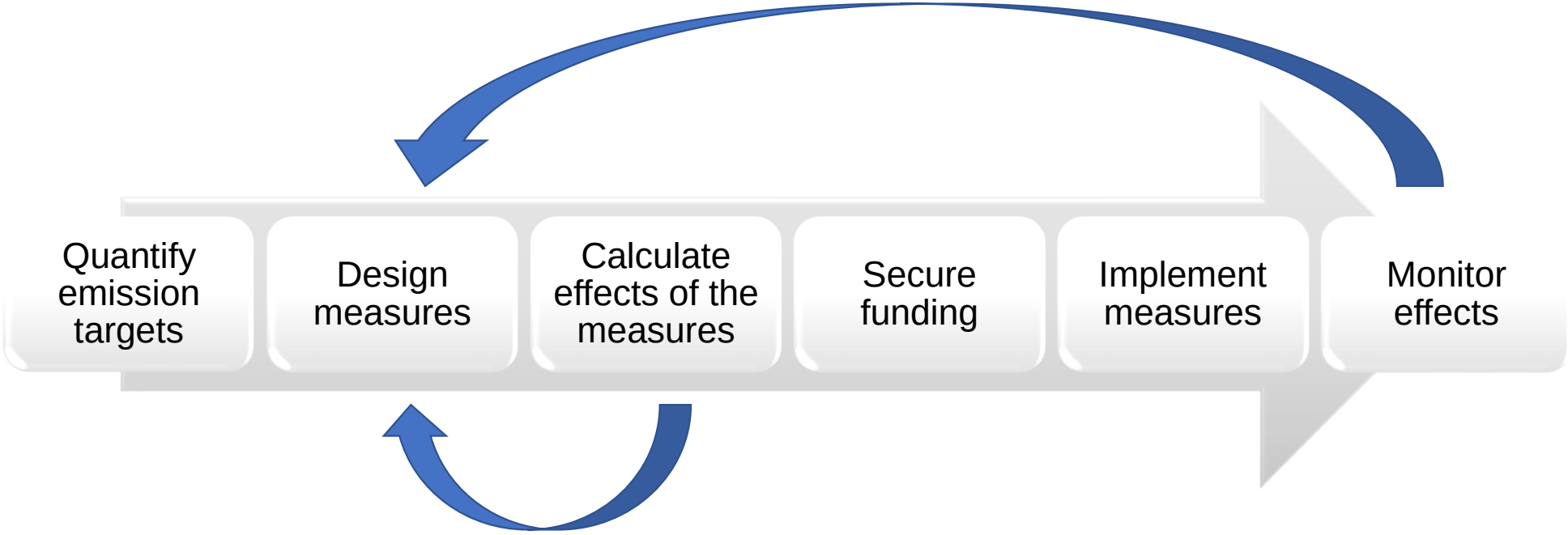
- Push measures that make car traffic unattractive have a low acceptance.
- Improvements in public transport do not automatically lead to a reduction in car traffic; and due to the improved supply of public transport, CO_2 emissions might even increase.

- Push- und Pull-Maßnahmen im Verkehr. © Müller, P., Schleicher-Jester, F., und TOPP, H. (1992): Konzepte flächenhafter Verkehrsberuhigung. In: Flächenhafte Verkehrsberuhigung – Folgerungen für die Praxis. Herausgeber: Bundesministerien für Verkehr, für Umwelt und Reaktorsicherheit, für Raumordnung, Bauwesen und Städtebau, Bonn.
- Eriksson, L; Garvill, 1.; Nordlund, A. M. (2008): Acceptability of single and combined transport policy measures: The importance of environmental and policy specific beließ. In: Transportation Research Part A, Vol. 42, S. 1117-1128.
- Häkler, Martina et.al. (2022): Push & Pull. Aktueller Forschungsstand. Ergebnisse einer Literaturanalayse der internationalen Diskussion. In: Internationales Verkehrswesen (4).

Improvement of SUMP Methodology

Reversal of planning procedures through backcasting

- Previous practice is often trend-extrapolation: Predict & Provide
- Future practice backcasting: set maximum emission quantity as target value



What can governments do to promote SUMPs?

Support from central government:

- Incentives: Money for planning and investments.
- Tie financing of infrastructures to their provision within the SUMPs.
- Initiate regional cooperation (functional urban area) for SUMP development.
- Set common planning standards.
- Provide technical support.
- Control target achievement.

Support from local government:

- Political consensus on achievement of Paris goals in transport
- Agree on the SUMP
- Secure finances
- Avoid later discussions about measures

Mobile City Game on Polis 2024

Booth 35:
Technology Region Karlsruhe

Mobile city

Fraunhofer ISI

Thank you for your attention!

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