

# FLOW: Increase walking and cycling. Decrease congestion.

6 December 2017  
Polis Conference

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Funded by  
the Horizon 2020 Framework Programme  
of the European Union

# The (co)benefits of walking and cycling

## health



## environment



## economy



## transport



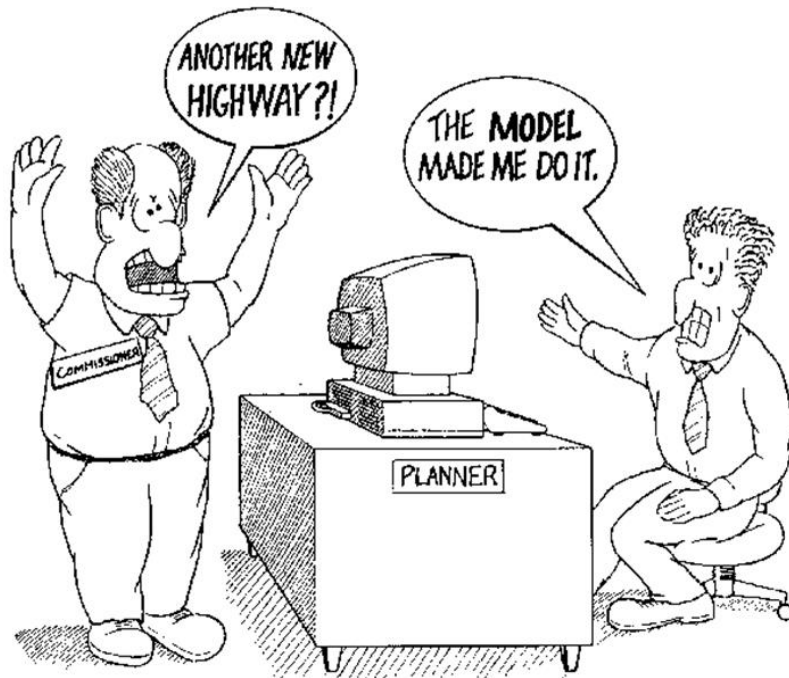
# Multimodal congestion





## Bringing two worlds together

Transport models  
determine action.



Cycling and walking are playing  
a larger role in people's  
transport choices.



Désirée Palmen / Zebra / C-print / 2002 / 30 x 59 inches

# FLOW partnership

## Support partners

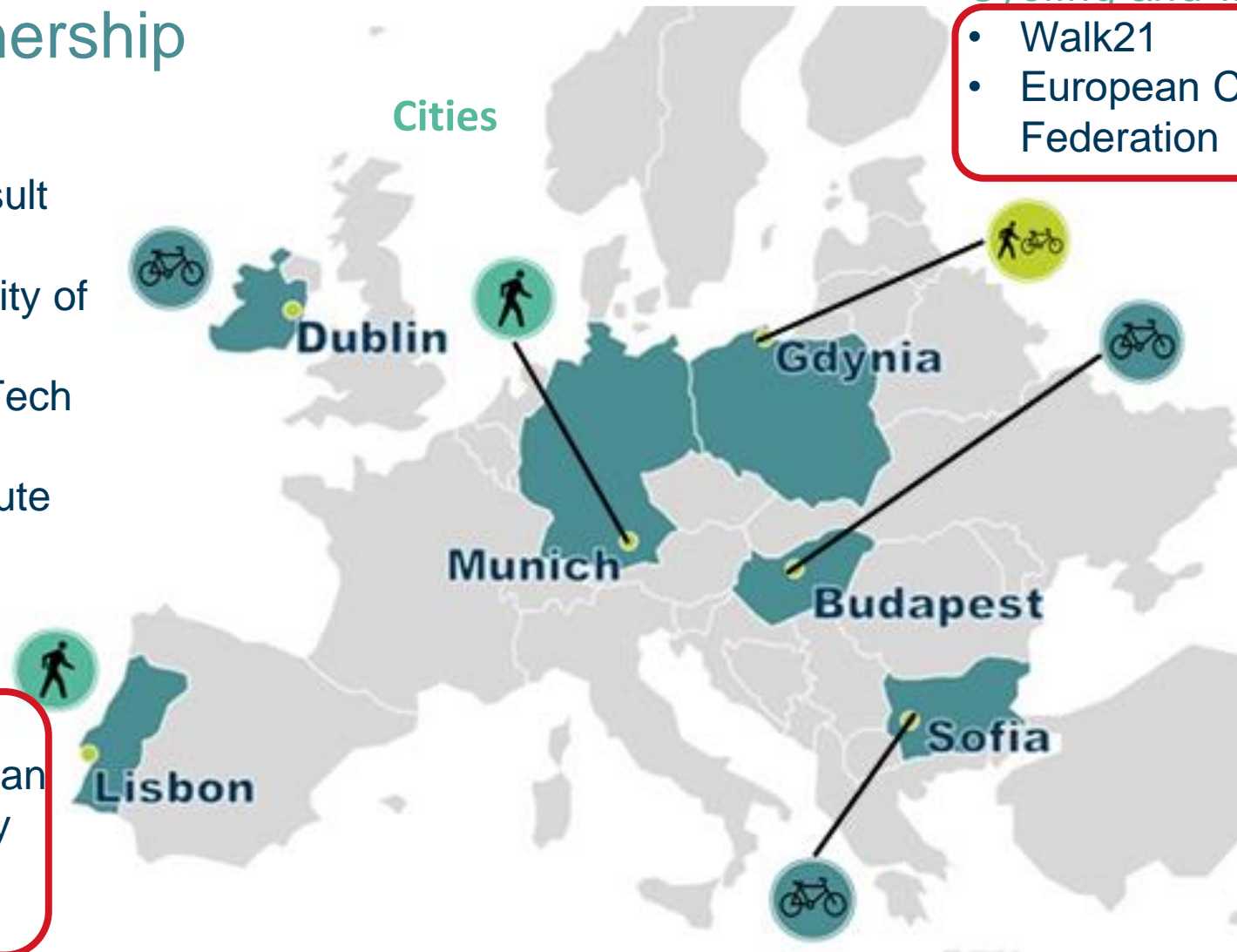
- Rupprecht Consult (coordinator)
- Gdansk University of Technology
- Budapest U of Tech and Economics.
- Wuppertal Institute
- Traject
- Polis

## Technical

- PTV
- Forum of European National Highway Research Laboratories

## Cycling and walking

- Walk21
- European Cyclists' Federation



## FLOW objectives

- Define the role of walking and cycling in congestion reduction
- Develop and apply tools (modelling and impact assessment) for assessing the congestion-reducing potential of walking and cycling measures
- Increase awareness of the congestion reduction potential of walking and cycling
- Foster the market up take of FLOW tools in cities and transport planning consultancies

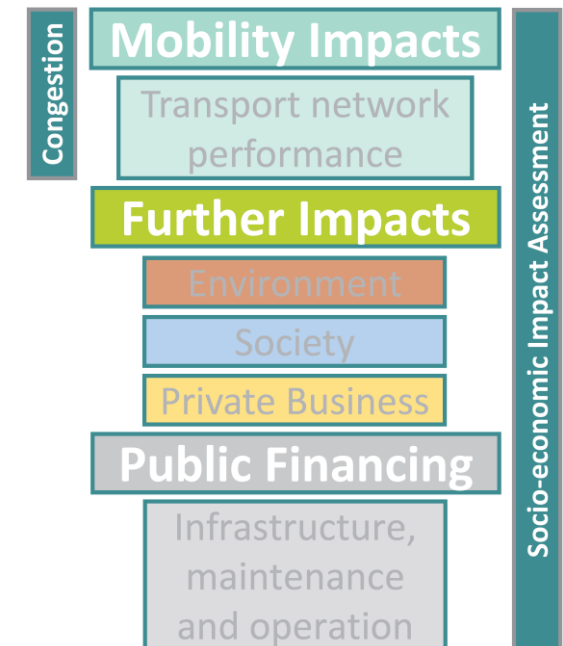
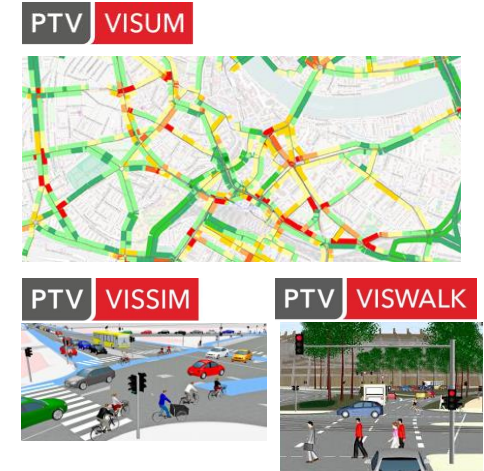


## FLOW tools



- ✓ Multimodal Transport Analysis Tools
- ✓ Improved micro and macro modelling software
- ✓ Impact assessment tool

*Leading to fewer cars and more space for people*





# Pedestrians and cyclists in planning and modelling

## Strategic planning

- Macroscopic modelling
- Walking and cycling in transport development plans

## Operational planning

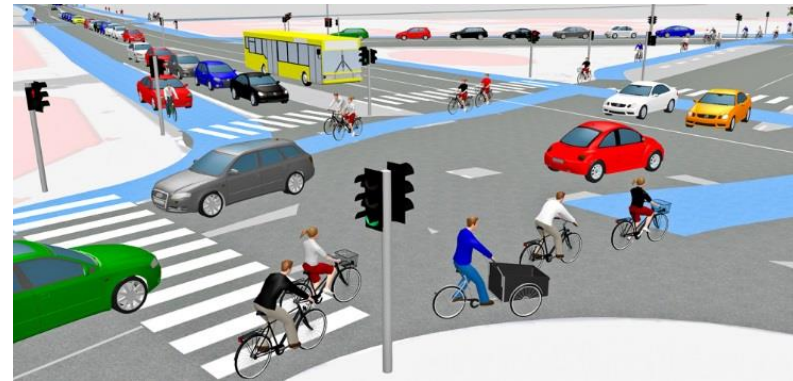
- Microscopic modelling
- Interaction with other modes at intersections

PTV VISUM



PTV VISSIM

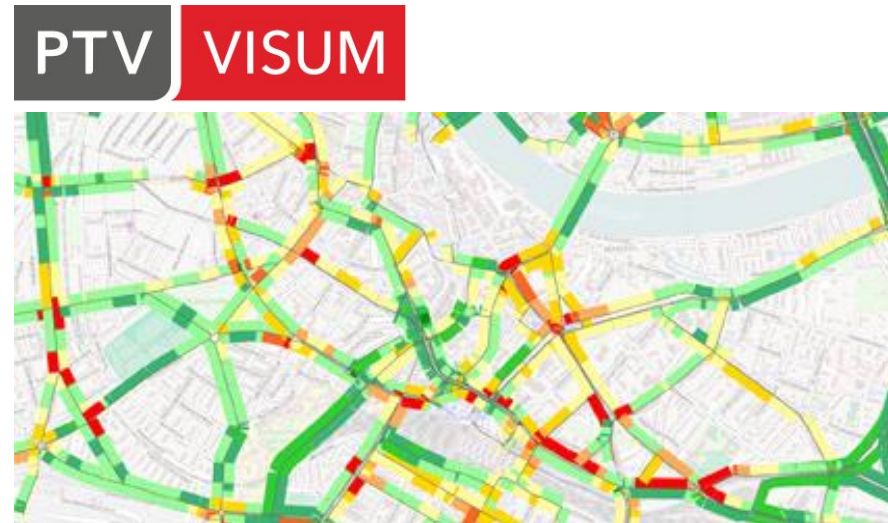
PTV VISWALK





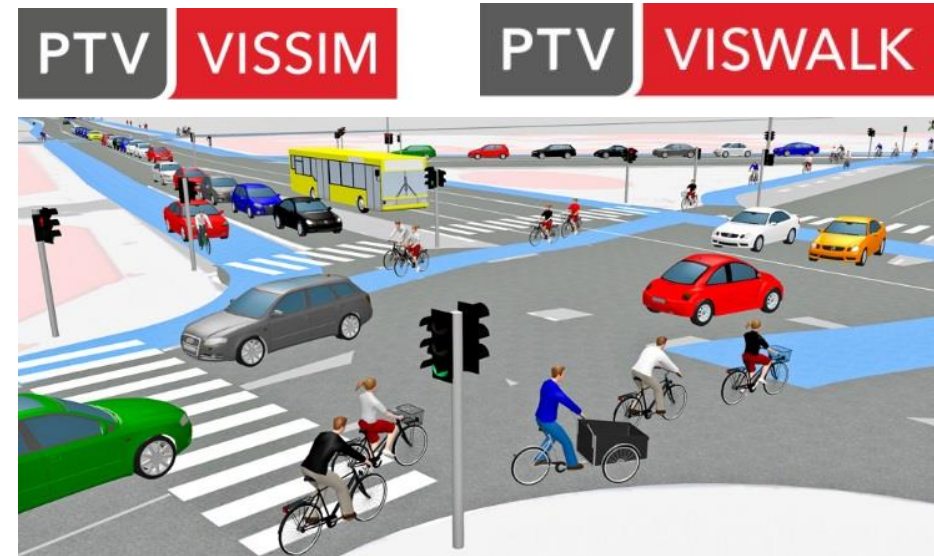
## Active modes in macroscopic models

1. Bike assignment: Path-level attributes in stochastic assignment (e.g. slope, amount of car traffic)
2. A platform for combining two path legs (e.g. for bike+ride or walk+ride)
3. Bike share: enhanced mobility sharing in PT assignment

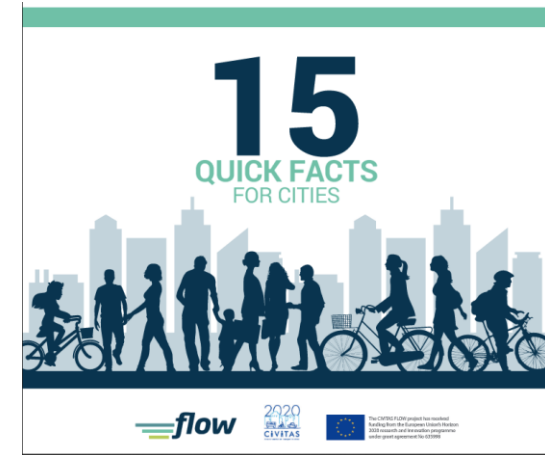
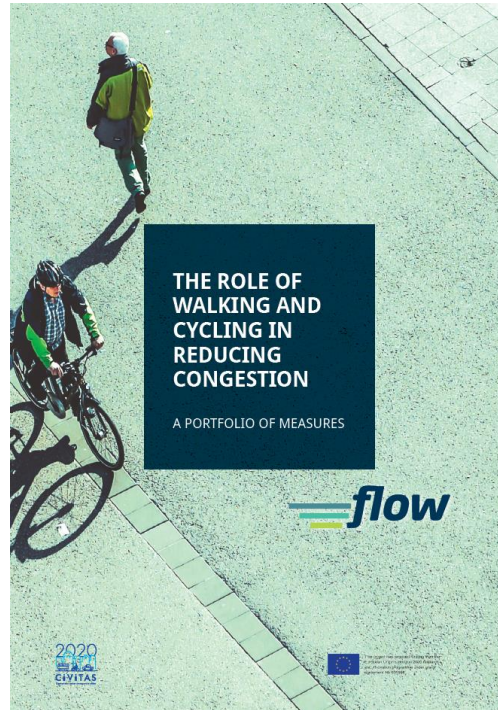


# Active modes in microscopic modelling

1. Incorporating behaviour parameters, new mobility patterns
2. Interaction of bikes and pedestrians
3. Shared space
4. Enhanced modelling of conflict zones between cars and pedestrians



# FLOW resources



- ✓ Portfolio of measures
- ✓ Quick facts for cities
- ✓ Animated video



# Opportunities

## The FLOW Award

- Innovative tools and services
- Reduce congestion through walking and cycling
- Deadline: 31 January 2018

## FLOW final conference

- Learn more about the tools, resources and recommendations
- 13-14 March 2018, Brussels





# Thank you for your attention.



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# Bike share in Budapest

## MOL Bubi bike share system



## Application of FLOW assessment tools

- Macroscopic analysis
- Include bike share in assignment model
- Congestion impact
- Impact on traffic flow



# Removing a pedestrian overpass – Lisbon

## Current situation

- Unused pedestrian overpass
- Fear of congestion keeps it from being replaced with a level crossing



## Application of FLOW Assessment tools

- Microscopic analysis of level crossing
- Congestion impact



# The future of congestion management

Before FLOW	After FLOW
Decision makers fear congestion	Decision makers understand congestion
Bias toward motor vehicles	Balanced focus across modes
Mono-modal definition	Multi-modal definition
Cities model motorised modes of transport	Cities model motorised and non-motorised modes at the same level of detail using appropriate microscopic and macroscopic modelling tools