

POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL
CONFERENCE
2022

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EINDHOVEN

30 November
1 December, 2022
Brussels, Belgium



#POLIS2022

Make way for emergency services, pedestrians, bikes, public transport and trucks!

The value of multimodal network policy information

2B: Tools and strategies for modern traffic management

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| City of Eindhoven / SmartwayZ.NL*

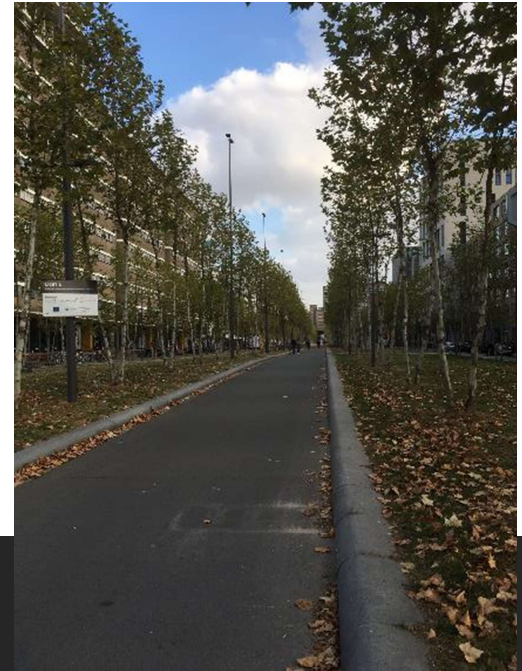


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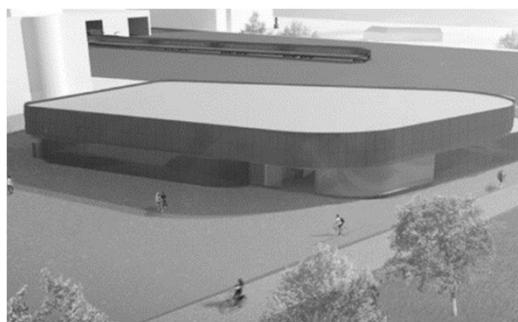
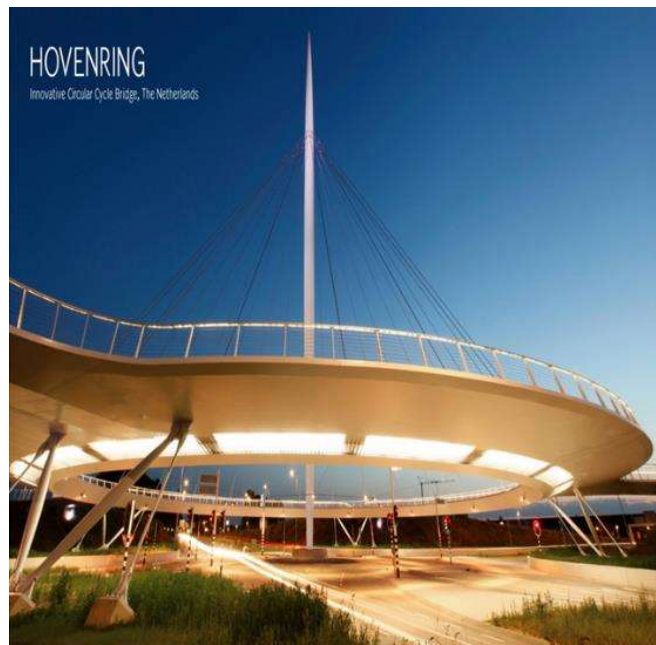
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**WHO
ARE
YOU**

A black silhouette of a human head in profile, facing right. Inside the head, a large, white question mark is visible. The text 'WHO ARE YOU' is positioned to the left of the head, with the 'O' in 'YOU' being a solid black circle.



WALKING



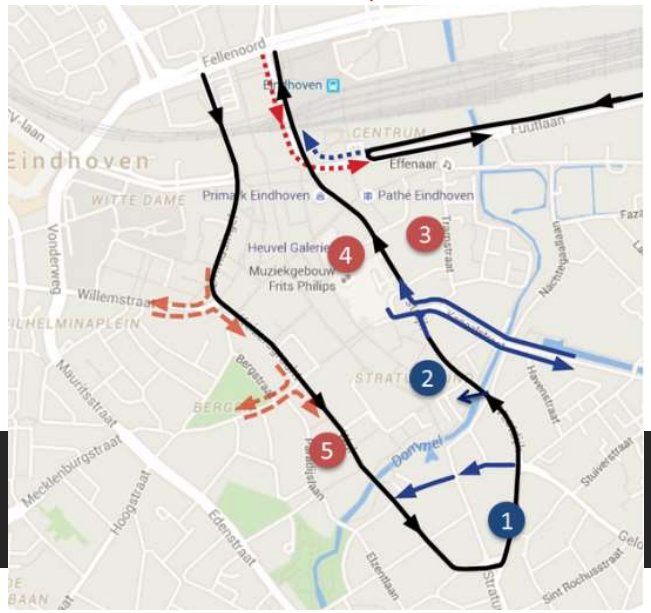
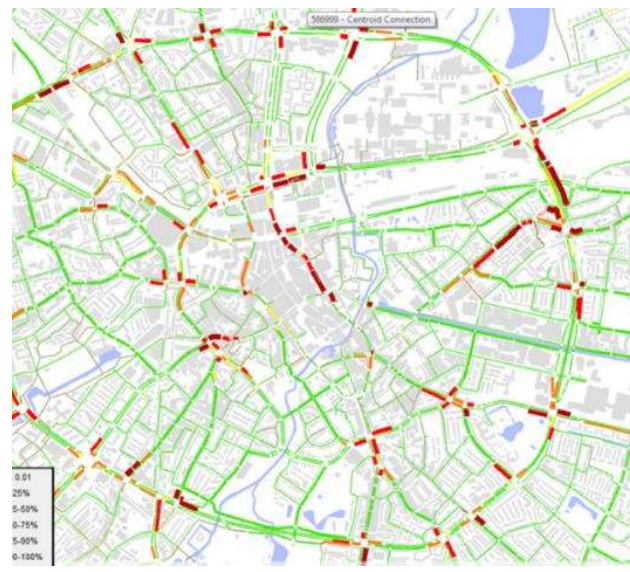
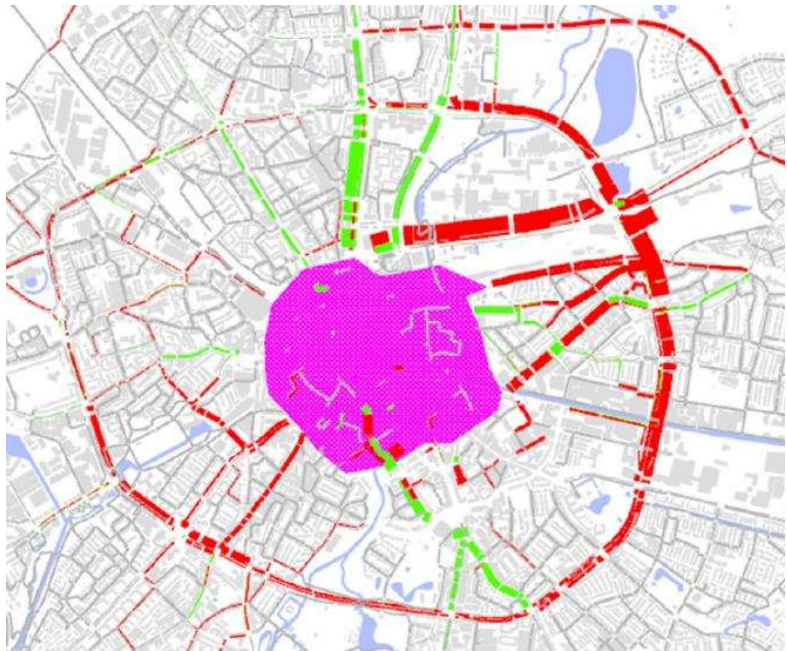
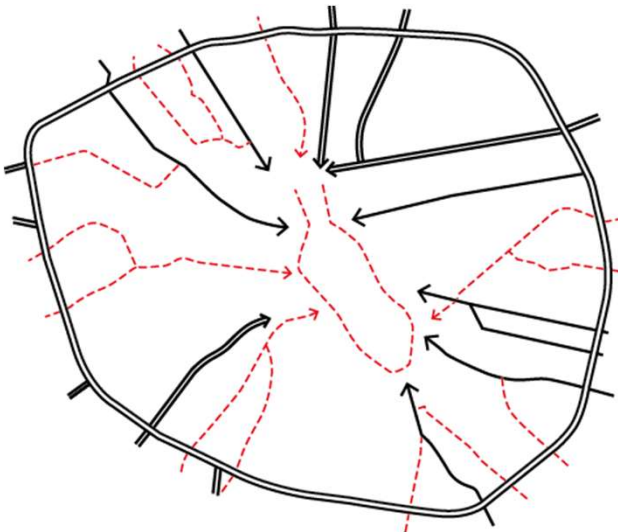
CYCLING





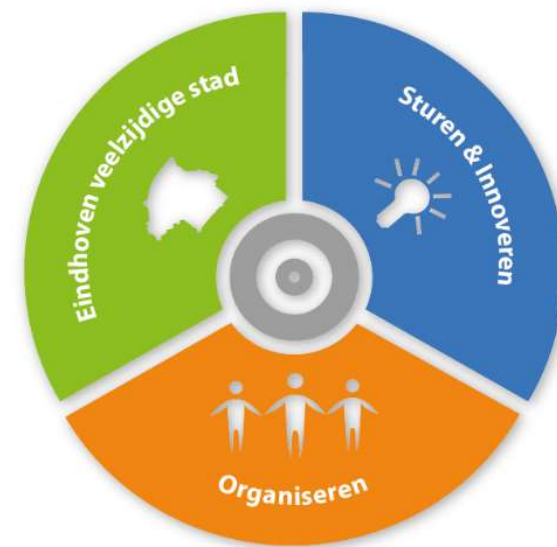
HIGH QUALITY PUBLIC TRANSPORT





CAR TRAFFIC

people and places, sustainably connected in
Eindhoven versatile city



EINDHOVEN 
en route

ACTUAL MOBILITY POLICY (2013)



centre and center ring road

attractive, dynamic and healthy centre

neighbourhoods and radial roads

relieving old radial roads, intensifying use of modern radials

neighbourhoods and inner ring road

ring road as recognizable central distributor road in car accessibility of the city

region and outer ring road

links the city to national and international networks



pedestrian

pedestrian on site most important

fine-grained network of streets and pavements, combined with variously arranged squares

pedestrian on site most important, development of new routes in favour of new dynamics

limit barrier effect inner ring road, particularly on old radial roads

campuses are the new villages
link pedestrian network to recreational routes



cyclist

most important traffic participant in linking places

centre ring road most important connecting cycle route in city centre

fast cycling routes by means of historic radial roads as contribution to neighbourhood lifeline

fast radial cycling routes as contribution to city life
maintain and improve cycle crossing of the inner ring road

fast cycling route Brainport Avenue
fast cycling routes to surrounding municipalities



public transport user

fast, high-frequency, comfortable and reliable travel on longer distances for larger passenger flows

BRT two-directional along centre ring road
central bus station
Neckerspoel/railway station as transport hub and entry to city

BRT corridors as carrier for urban development
customised public transport for target groups and areas

BRT corridors connect 'places to be'
if possible BRT grade-separated crossing with inner ring road

sustainable landside access to Eindhoven Airport
adjusted public transport networks with seamless transfers



motorist

raised-awareness users: less often, cleaner, main roads, parking at remote distance/incentive parking

centre ring road no longer a continuous circular vehicle route
no expansion visitor parking in city centre

within the inner ring road 30 km/h and cyclist priority on roads with the exception of modern and new radial roads

less and/or easier junctions with inner ring road
fourth category in road's classification: neighbourhood access roads

optimise national and international road network, taking city accessibility into consideration



All transport modes

Cultural history

Public space

Sustainability

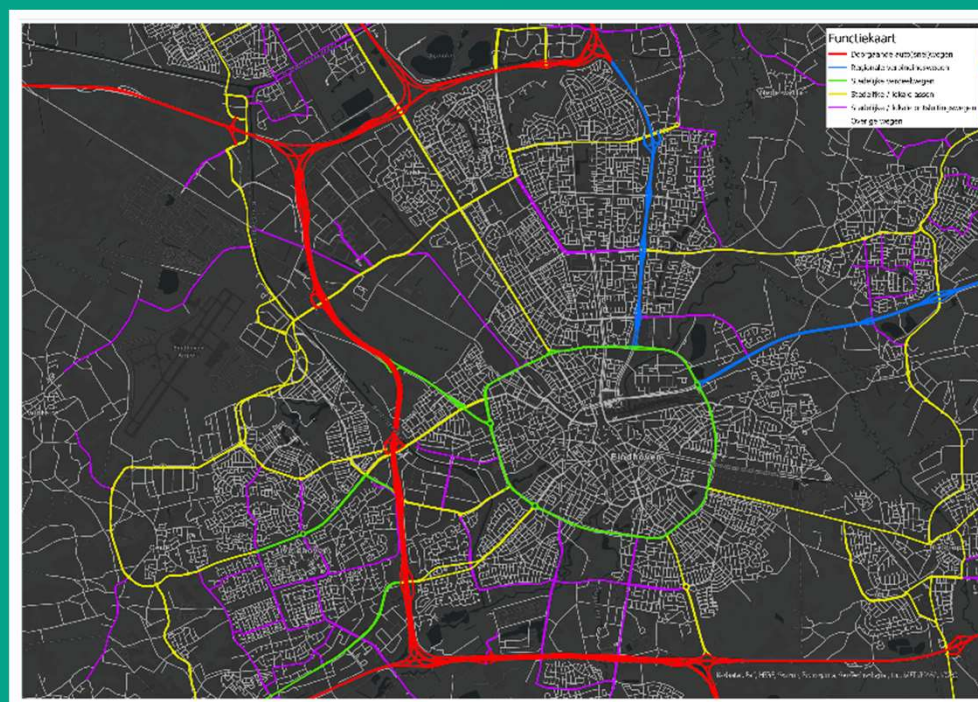
Economic development

LEADING DECISIONS TAKEN

Multimodal network policy information: Why?



- As a basis for the implementation of operational traffic management (like traffic lights).
- A translation of the existing (multimodal) mobility policy of the road authorities into **one uniform, digital map**.



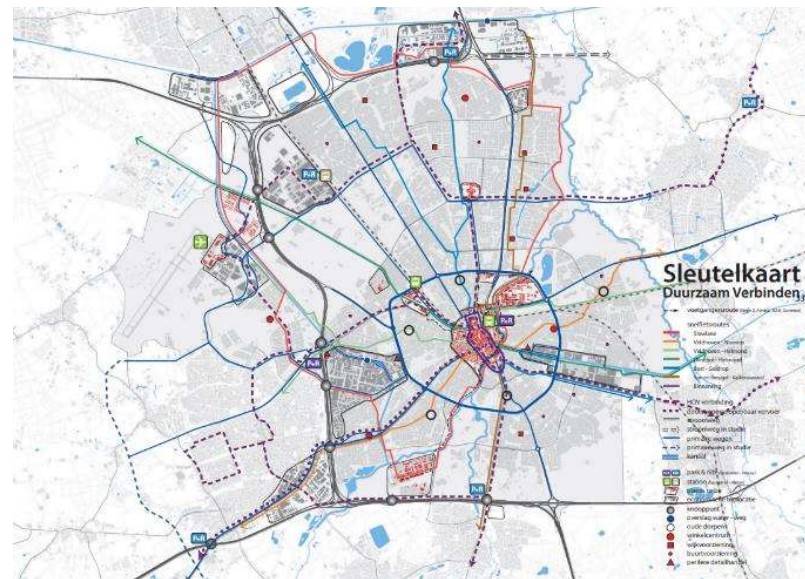
Multimodal network policy information: Goal

The **aim** of the MNK is to translate the mobility policy of road authorities into:

- Desired function of network parts for different modalities
- Desired mutual priorities of functions and modalities
- Desired level of quality in terms of traffic flow

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Multimodal network policy information: How does it help the road authority?

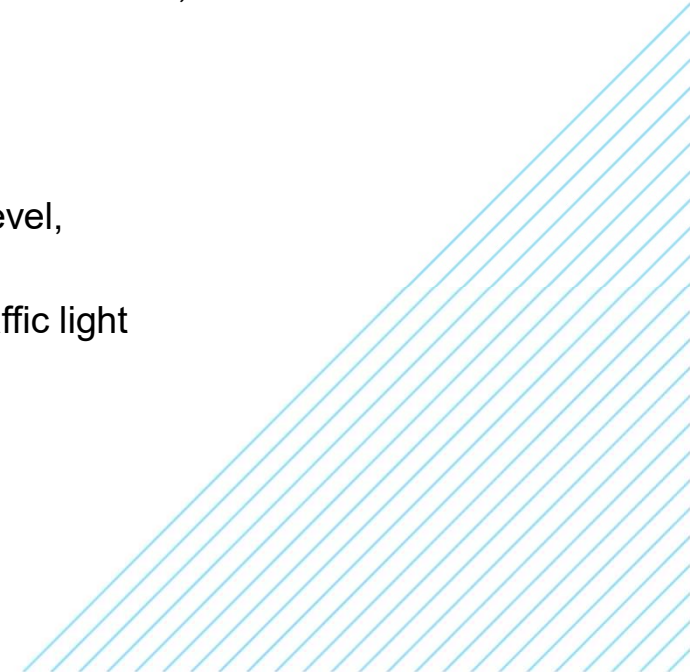


Undesirable use of roads such as stealth traffic, school zones, freight traffic through inner cities

- Basemap sharing with service providers
- Avoidable routes for through traffic are passed on and, in the near future, included in navigation apps
- Distinguishing between target groups/modalities when using the road network: car traffic, freight traffic, bicycle traffic

Lack of opportunity to prioritize other target groups ("car always first")

- Multimodal network policy information helps to make choices at intersection level, especially where multiple target groups come together.
- May be a reason to realize (accelerated) instruments/measures (intelligent traffic light controllers)



Multimodal network policy information: Applications



- Share with service providers to prevent the use of unwanted routes. Through agreements with service providers, traffic can be more concentrated and facilitated on roads and routes that are suitable for this (see [Smart Steering](#)).

→ Digitizing mobility policy information is necessary for Data Top 15 ('digital network vision' is part of data item control scenarios), must be in order by 2023.

- Determining functionalities in traffic light controllers (Use Cases and other control technical solutions) in order to optimally inform, prioritize or optimize modalities
- . → The traffic light controllers are not a goal in themselves, but a means for making **concrete contributions to policy goals** in the short term and serving the '**customers**' for this purpose.
- Determining and monitoring service levels for operational traffic management and thus used for new control scenarios and bottleneck analyses.





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To be continued... with serviceproviders

National – standardization technique:

- Shortcuts
- School zones

Regional - behavioural change:

- Keep through traffic on desired roads during rush hour (prevent unwanted traffic)
- Keep freight traffic on the most appropriate roads (without legal measures)
- Guide traffic based on liveability goals (zero-emission zones)



To be continued...
traffic light controllers

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To be continued... monitoring

Knelpuntenanalyse RVT Noord-Brabant

Filter op periode: Oktober 2022 | Filter op regio: Zuidoost Brabant

Op de kaart worden **1,262** wegvakken weergegeven

Opvallende knelpunten van geselecteerde maand

- PNB - ZOB
- N2R m. Centrum (30) - Veldhoven (31)
- PNB - ZOB
- Biezendreef/Biezendreef/Biezendreef
- PNB - ZOB
- Biezendreef/Biezendreef/Biezendreef

Maandgemiddelde snelheid avondspits

Tijd	Gemiddelde van de selectie
16:00	51.5
16:15	51.0
16:30	51.0
16:45	50.5
17:00	50.5
17:15	49.5
17:30	52.0

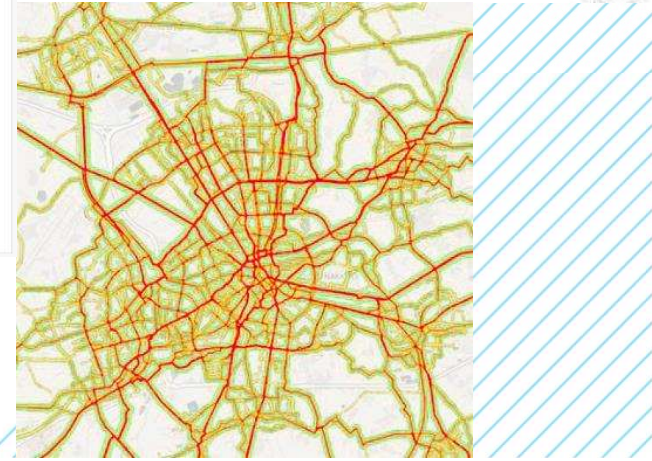
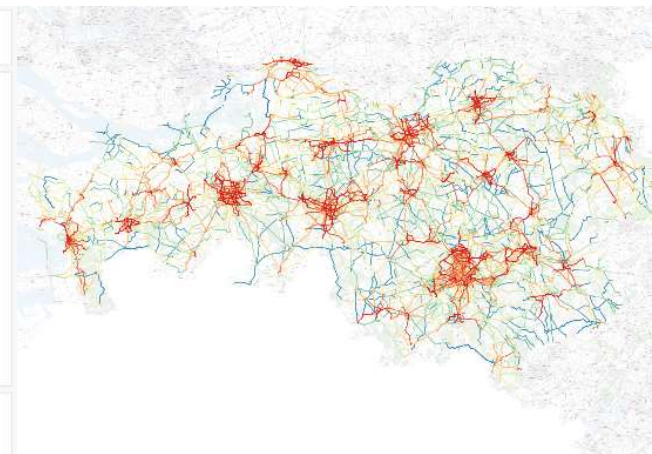
Trend in maandgemiddelde snelheid avondspits

Maand	Gemiddelde van de selectie
November 2021	51.5
Januari 2022	52.5
Maart 2022	53.0
Mei 2022	52.0
Juli 2022	51.0
September 2022	54.0

Referentiesnelheid | Vorige maand | Jaargemiddelde

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Thank you for your attention!

Questions?



More information?

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