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**1st
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1

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Dissemination
level:

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- *safety; improvements of traffic flow*
- *lack of information*

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3.1

³ <https://www.iru.org/who-we-are/members/members-directory>

⁴ <http://chelseasociety.org.uk/>

⁵ <https://en.fussverkehr.ch/list-of-city-members/>

⁶ <https://www.uitp.org/all-members>

a temporal-spatial *horizontal approach* *top-down vertical approach* *from*

- **Macro-level**

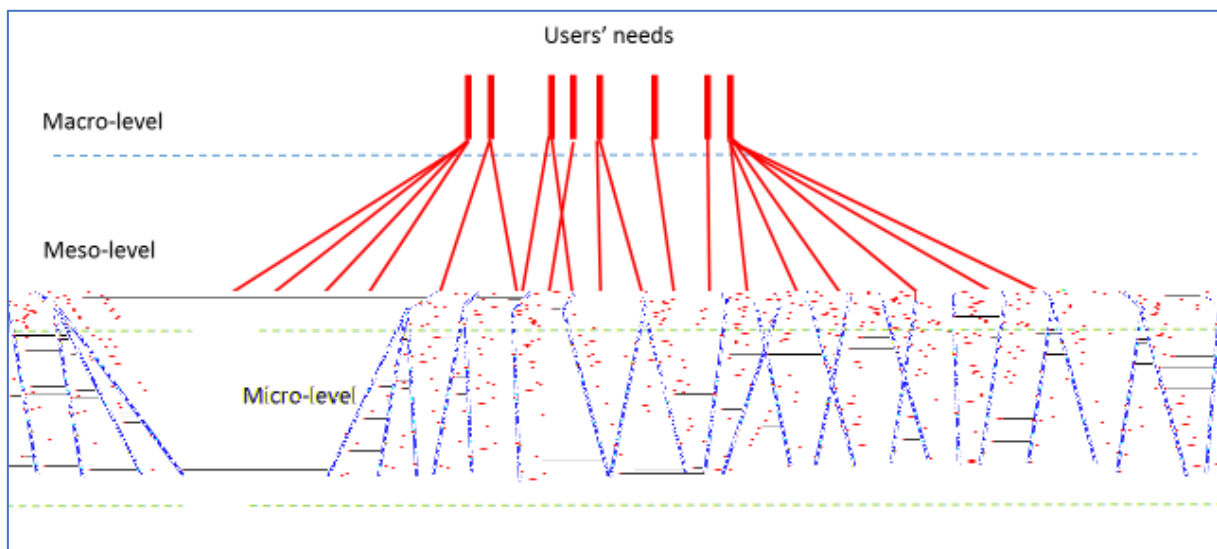
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- **Meso-level**

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- **Micro-level**

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⁷ <https://www.pedestrians-int.org/en/>

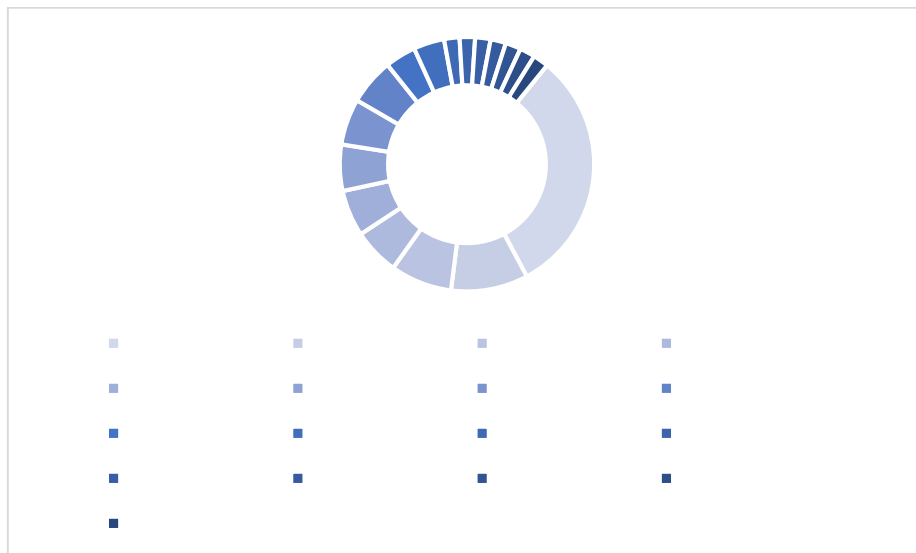
⁸ <https://ecf.com/>

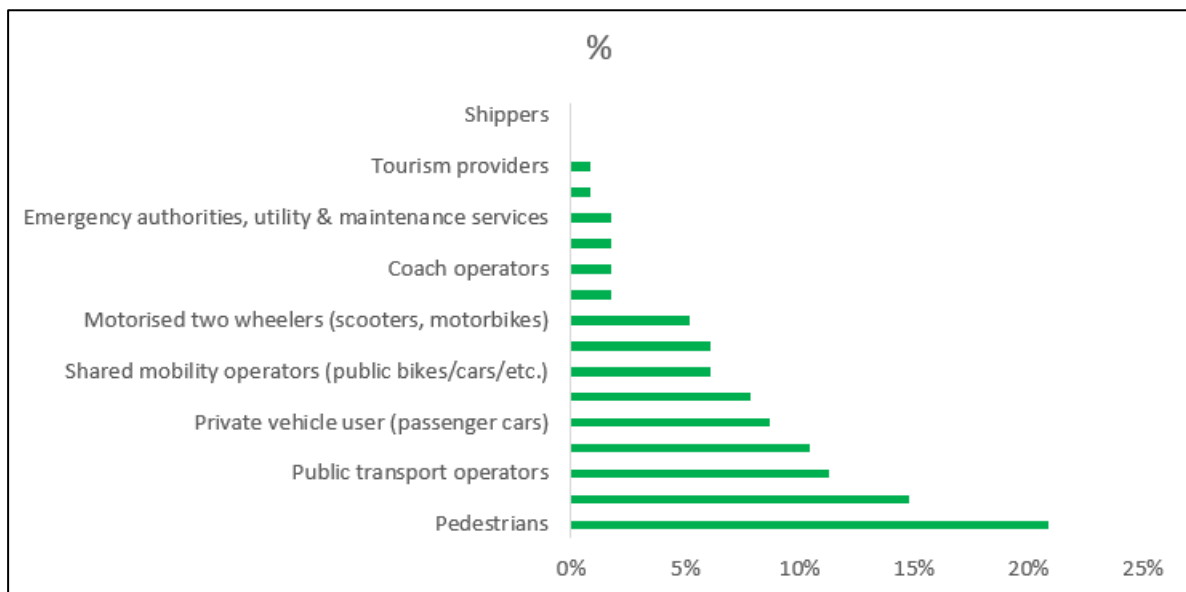
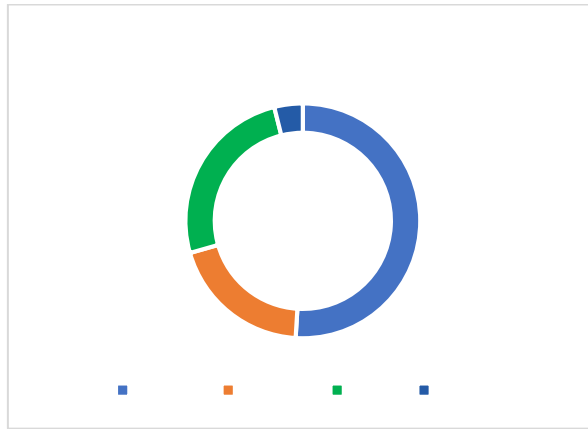
⁹ <https://www.iru.org/who-we-are>

¹⁰ <https://www.polisnetwork.eu/about/about-polis>

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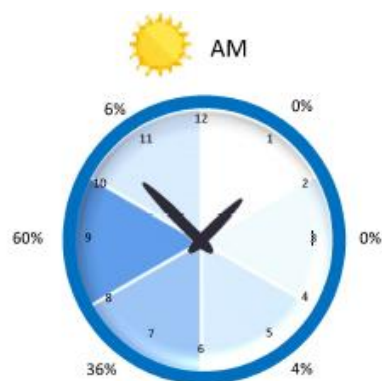
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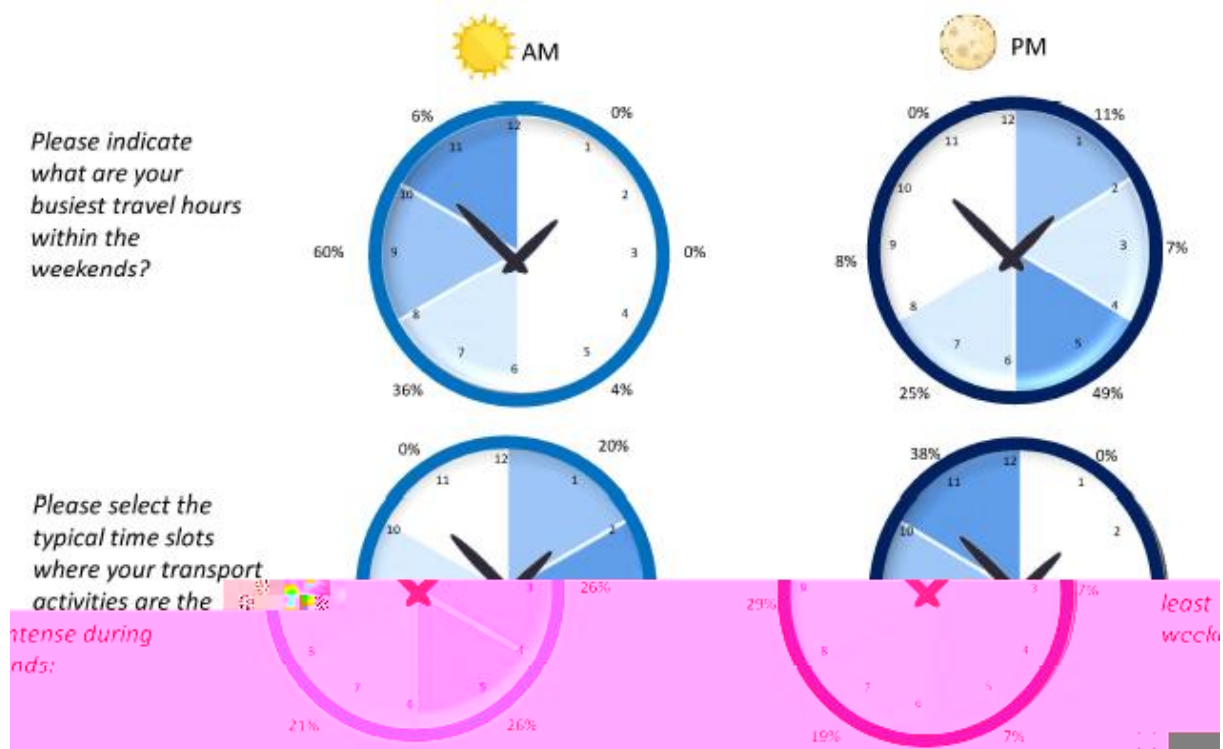
4.2

*Please indicate
what are your
busiest travel hours
within the
weekdays?*



*Please select the
typical time slots
where your transport
activities are the least
intense during
weekdays:*





4.3

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① EDUCATION CENTRES (schools, universities, libraries, etc.)



② BUSINESS DISTRICT / OFFICES / WORKPLACES
RESIDENTIAL AREAS WITHIN THE URBAN AREA
URBAN MULTI-MODAL TRANSPORT HUBS (METRO/BUS/TAXI/BIKE-CAR/SHARING STATIONS)



③ CITY HALL & ADMINISTRATIVE CENTRES

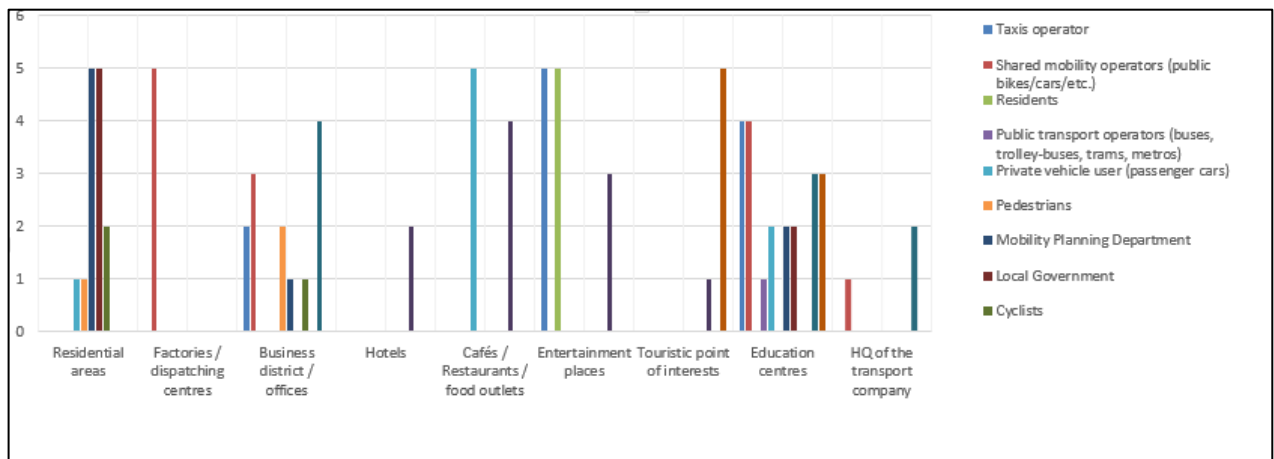
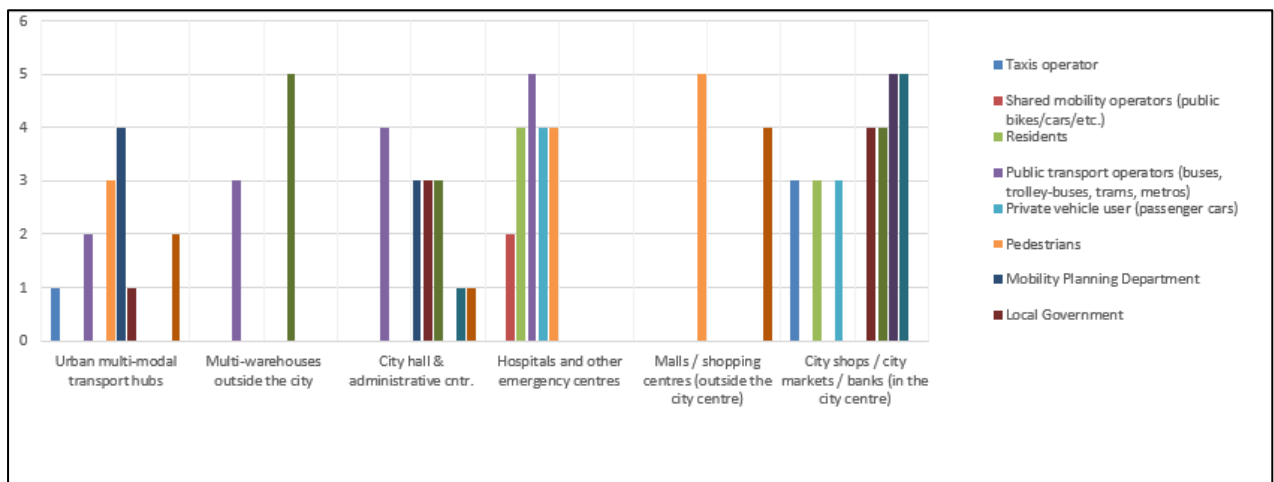


④ HOSPITALS AND OTHER EMERGENCY CENTRES (INCLUDING POLICE STATIONS)

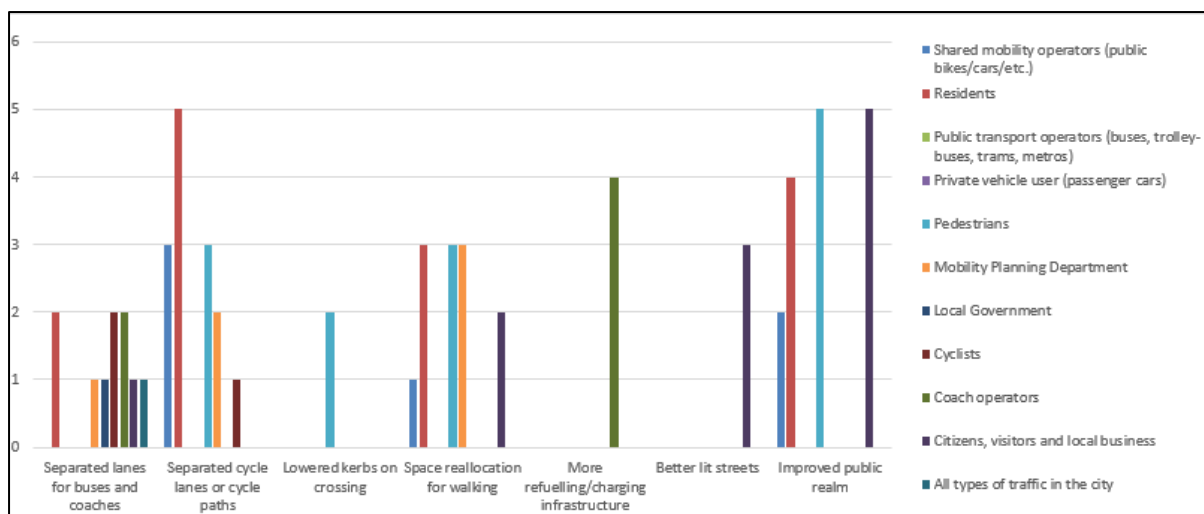
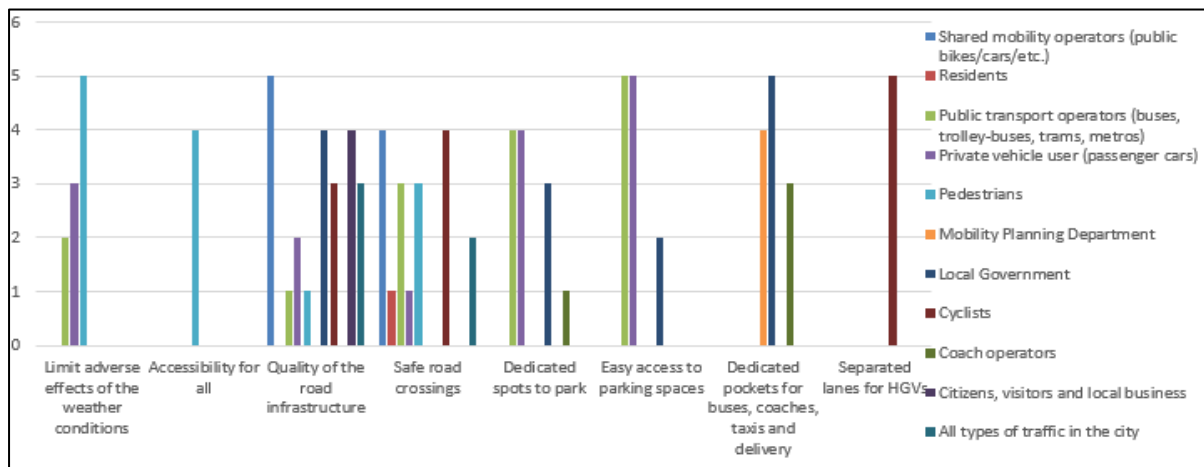


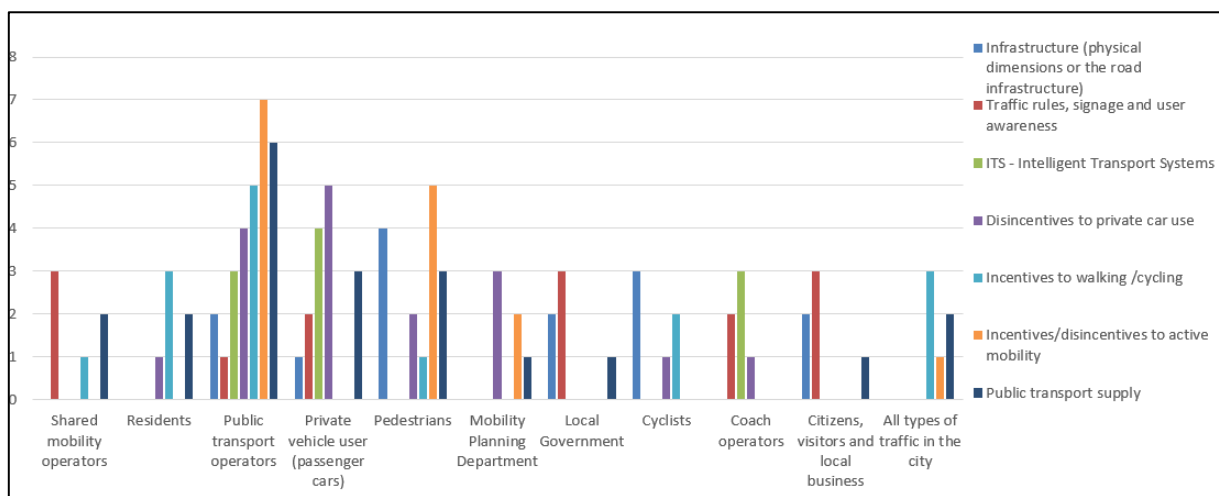
⑤ MALLS / SHOPPING CENTRES / SUPERMARKETS (AT THE PERIPHERY OF THE CITY CENTRE)
CITY SHOPS / CITY MARKETS / BANKS / POST OFFICES (IN THE CITY CENTRE)
ENTERTAINMENT PLACES (CINEMAS, CONCERT HALLS, STADIUMS, THEATRES, ETC.)

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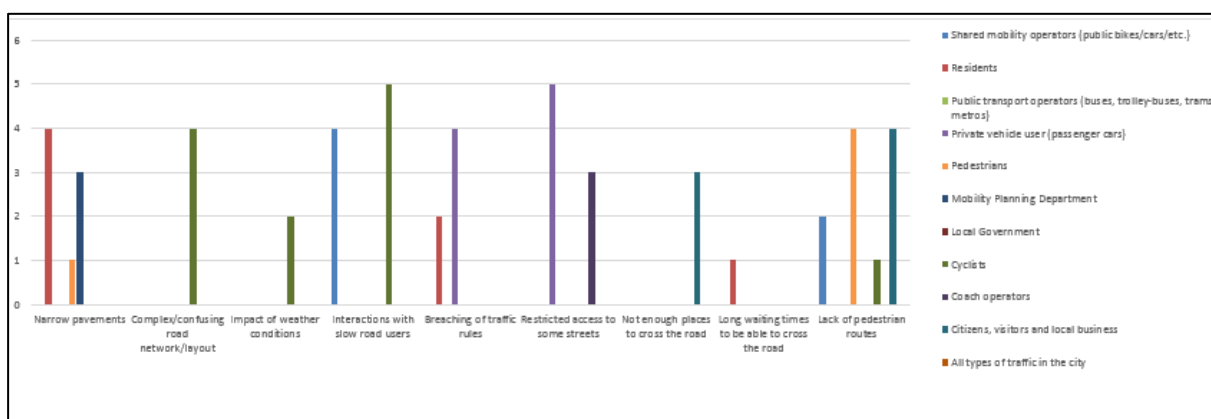
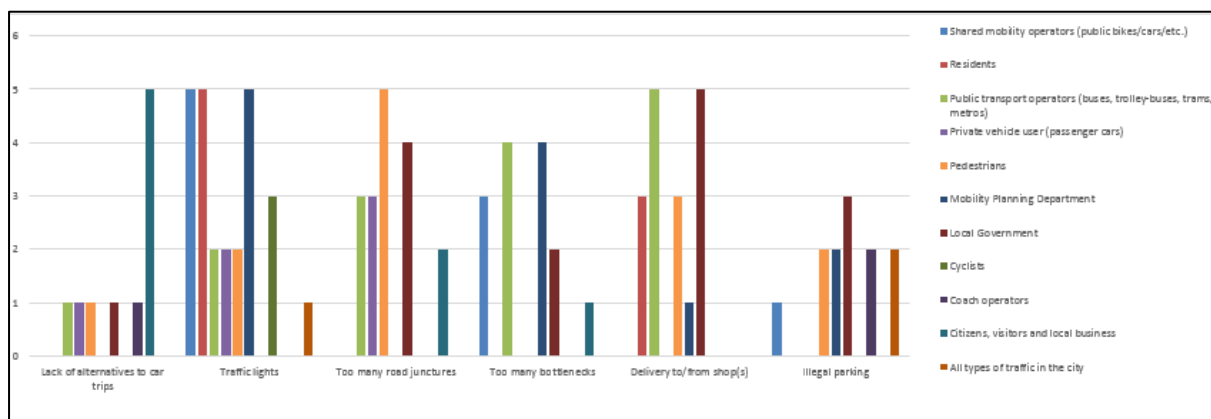


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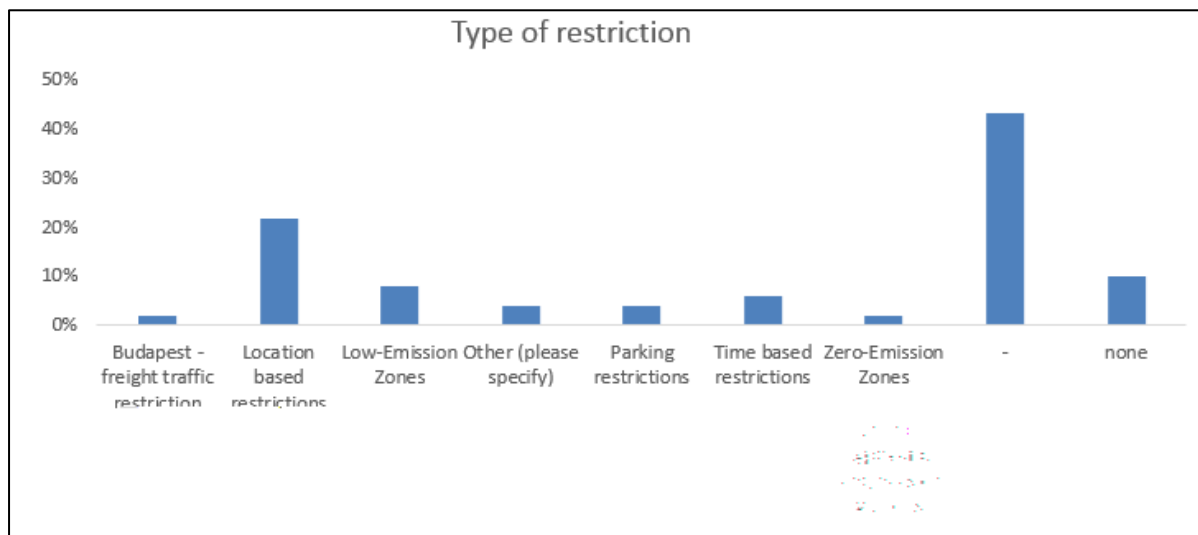
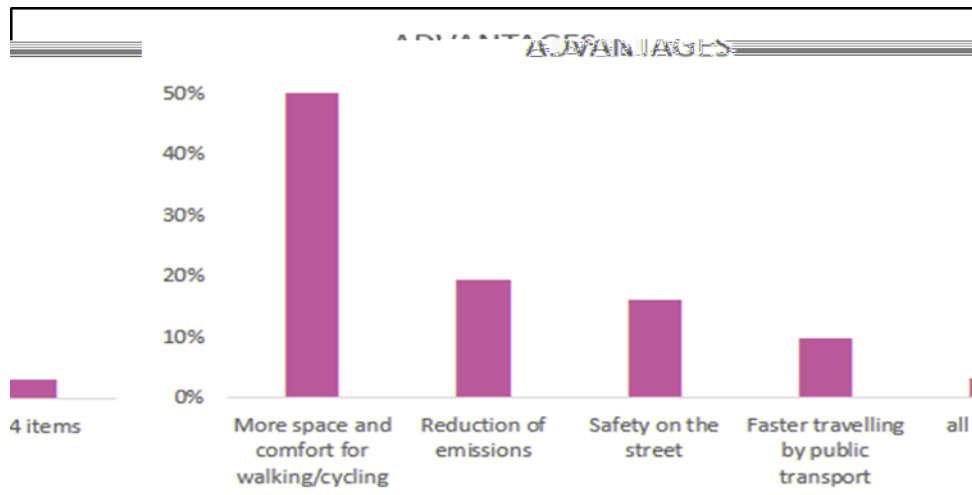




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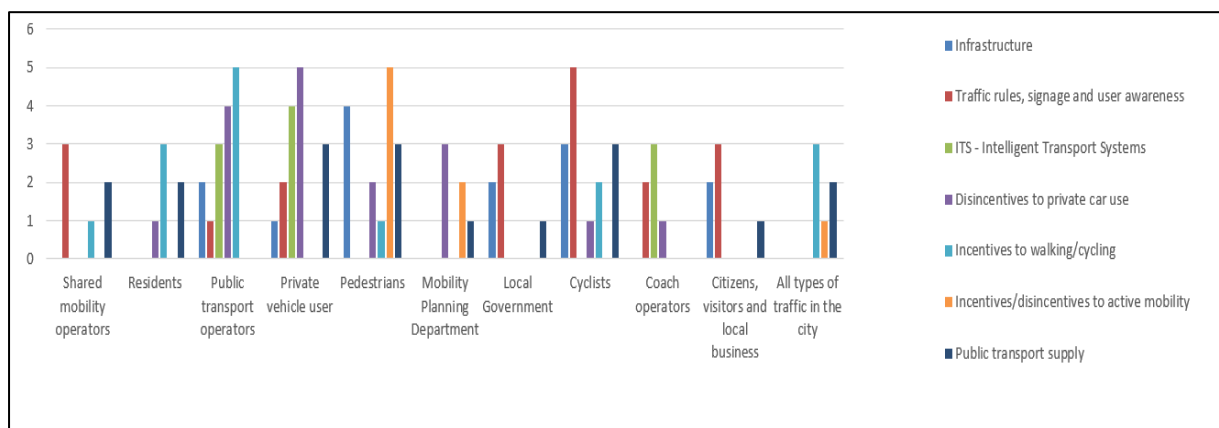


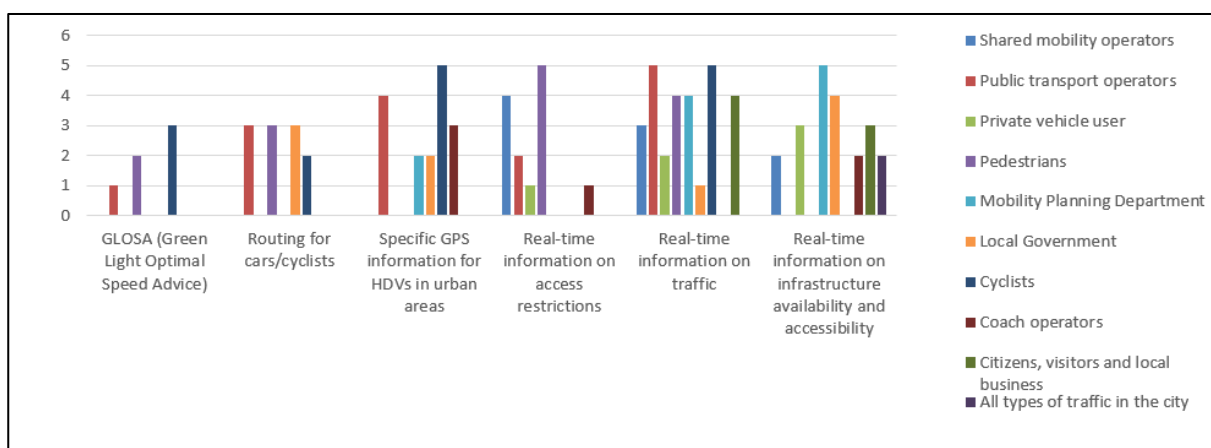
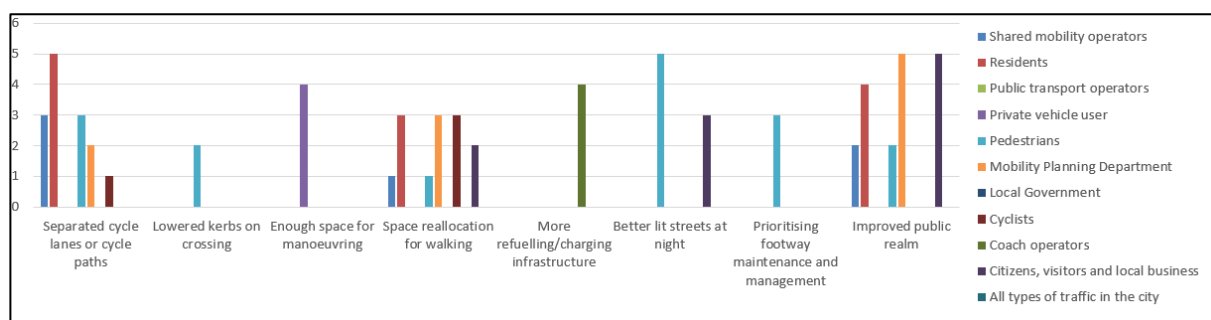
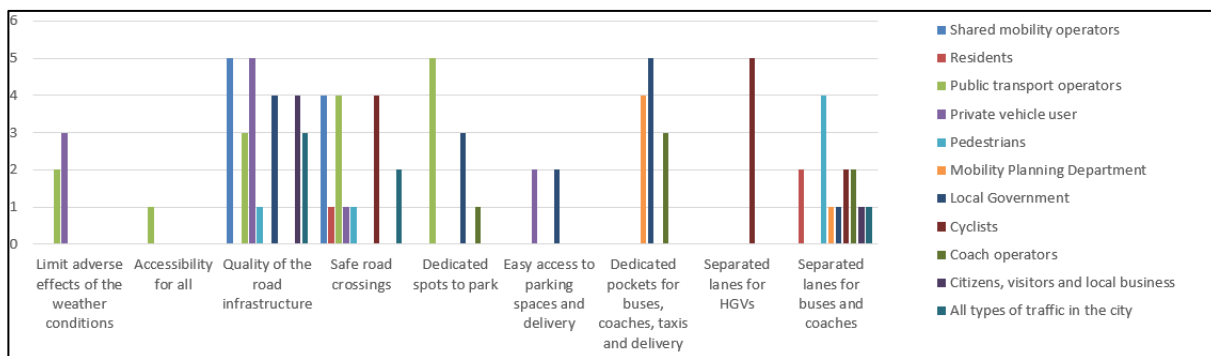
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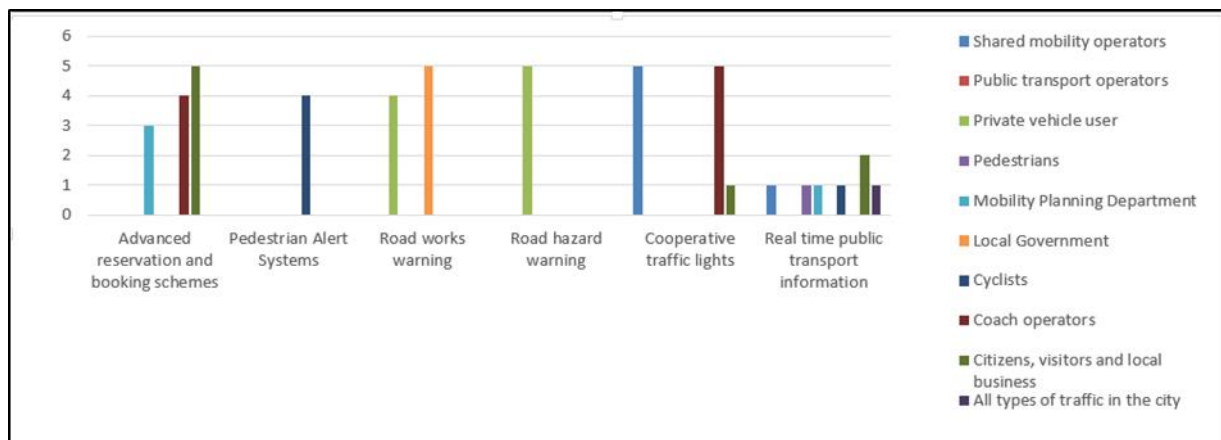


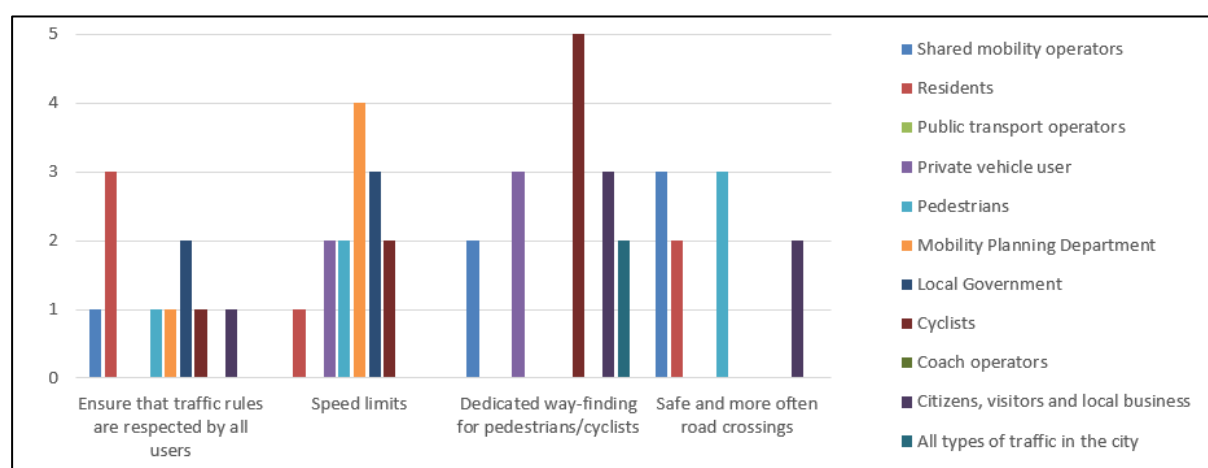
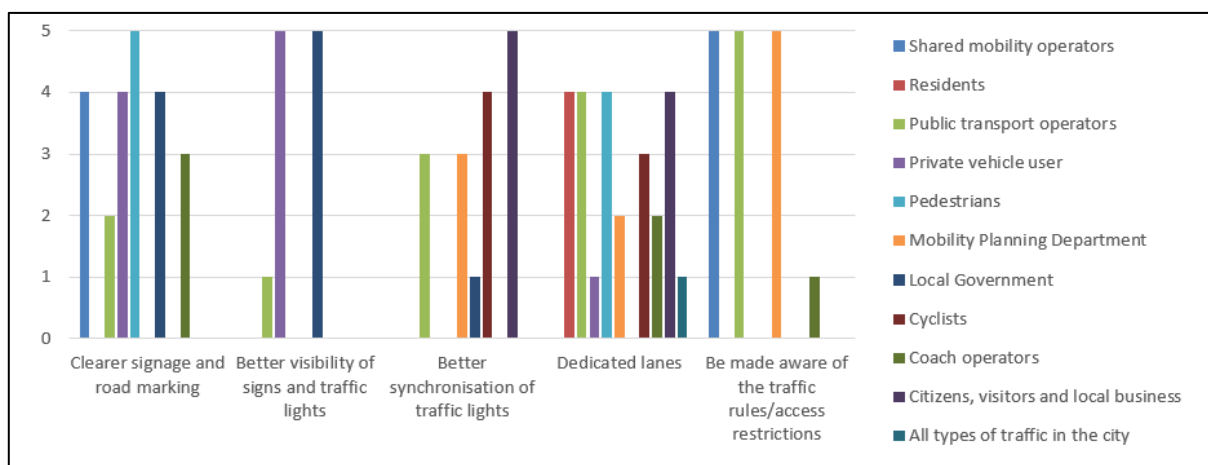
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5.1



5.1.1

¹¹ <https://www.polisnetwork.eu/about/about-polis>

¹² CIVITAS CREATE, Project Summary and Recommendations for Cities, 2017, Available from: Urban Mobility: Preparing for the Future, Learning from the Past: <http://www.create-mobility.eu/create/Publications/Reports>

5.1.2

Together towards competitive and resource-efficient urban mobility

¹³ <http://www.sump-challenges.eu/content/participation>

¹⁴ https://www.eltis.org/sites/default/files/guidelines_for_developing_and_implementing_a_sustainable_urban_mobility_plan_2nd_edition.pdf

5.1.3

¹⁵ https://ec.europa.eu/transport/modes/road/road_charging/charging_private_vehicles



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5.1.4

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¹⁶ City Lounge Concept, available at: <https://www.rotterdam.nl/wonen-leven/binnenstad/City-Lounge-english-concept-v3-liggend.pdf>

¹⁷ Thinking Cities magazine #12 "Finding balance in the Thinking City", June 2019 (Page 20): <https://www.polisnetwork.eu/uploads/Modules/PublicDocuments/tc-june2019.pdf>

¹⁸https://www.polisnetwork.eu/uploads/ModuleXtender/MembersEvents/130/7-Portvik_Olso.pdf

“create a more common approach amongst cities and Member States to issues such as vehicle categories, enforcement, exemptions, pricing, and information provision”

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Governance level	Comment
What vehicles for the EU?	Industrial policy, Mobility Package II
What vehicles sold in Member states?	... Norway: fully electric vehicle by 2025 ...
What vehicles in my city?	UVAR: non-binding guidelines
What vehicle in my street? ... at this charging point, at this parking spot?	Even if propulsion / AQ is solved! Kerb side access/management C-ITS could play an important role in the future

¹⁹ <https://www.eltis.org/discover/news/brussels-and-londons-access-regulations-show-signs-success>

²⁰ https://ec.europa.eu/transport/sites/transport/files/uvar_final_report_august_28.pdf



²¹ <http://www.civitas-reveal.eu/>

²² <https://energy-cities.eu/best-practice/superblocks-free-up-to-92-of-public-space-in-barcelona/>

²³ <https://www.citylab.com/transportation/2019/03/amsterdam-cars-parking-spaces-bike-lanes-trees-green-left/586108/>

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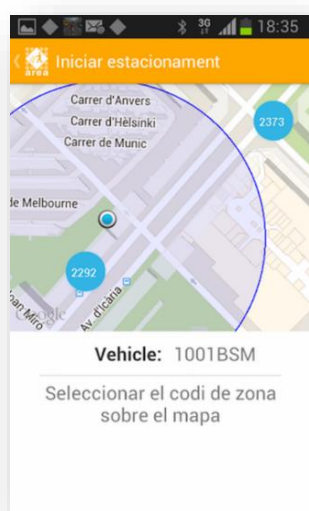


Figure 26 Management and enforcement of delivery area app

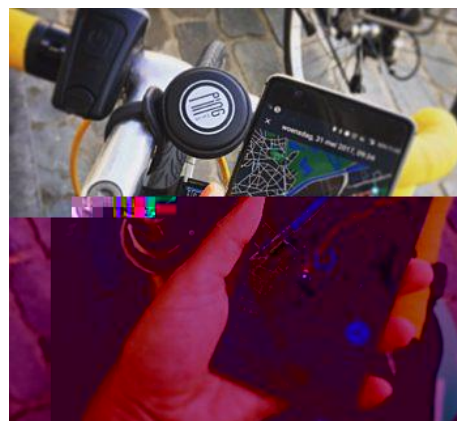


Figure 25 Data collection apps

²⁴ <https://www.nweurope.eu/projects/project-search/ehubs-smart-shared-green-mobility-hubs/>

²⁵ <https://www.mobiel21.be/campagnes-en-projecten/ping-if-you-care>

²⁶ <http://app.cycleprint.eu/>

co-creation processes

Regina Urban Ecology

33 <https://civitas-sunrise.eu/>

34 <http://www.metamorphosis-project.eu>

35 http://www.metamorphosis-project.eu/sites/default/files/downloads/Metamorphosis_D2.2_v1.1.pdf

Intelligent Transport Systems (ITS)

operative Intelligent Transport Systems (C-ITS)

Geofencing



³⁶ https://ec.europa.eu/transport/themes/its_en

³⁷ <http://cimec-project.eu>

³⁸ Reclus Fabrice, Drouard Kristen, (2009) Geofencing for Fleet & Freight Management, IEEE

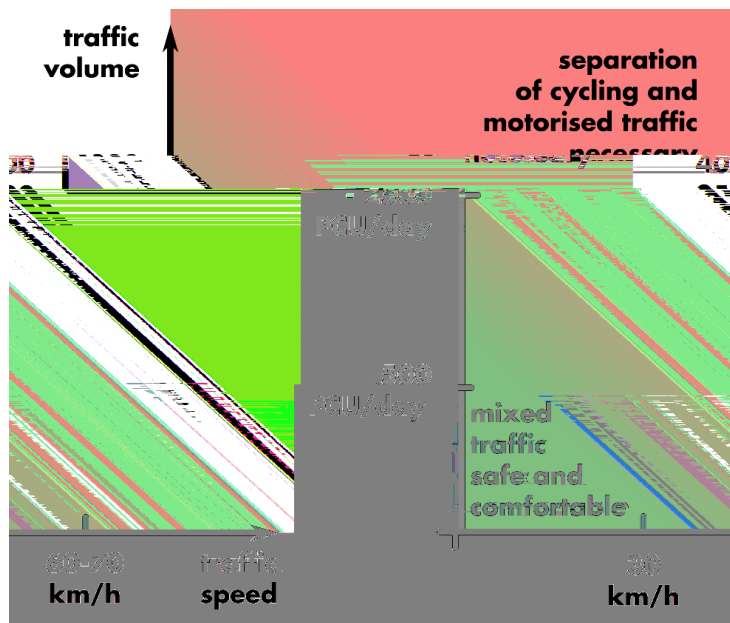


5.2

5.2.1

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5.2.2



- Separation from fast and heavy traffic
- Thresholds vary between countries and guidelines

5.2.3

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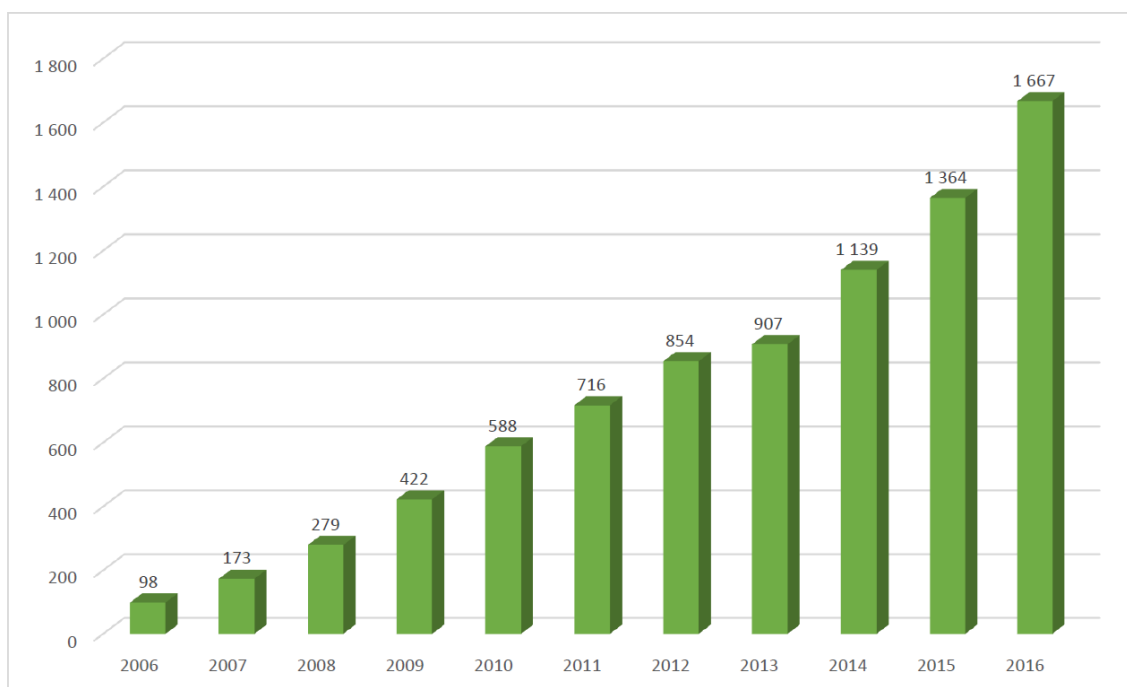


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5.2.4

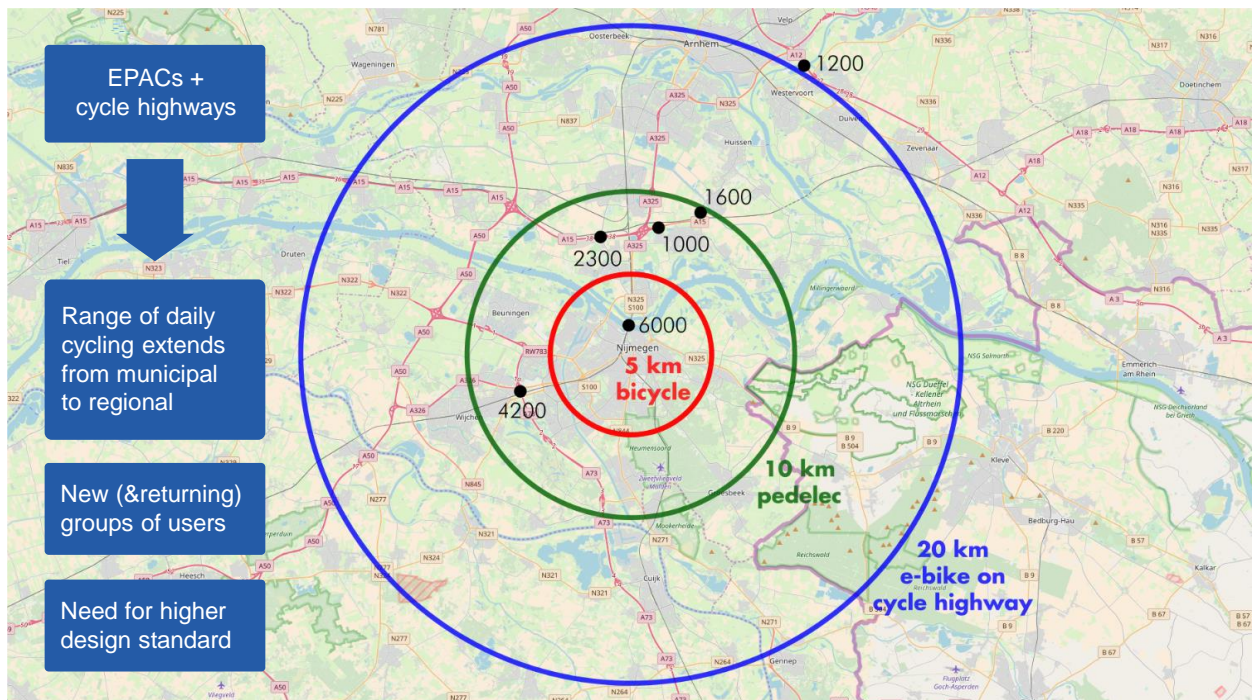
EUROPEAN EPAC SALES¹⁵ (EU 28) (1,000 units) 2009 – 2016



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5.2.5

1.

safety

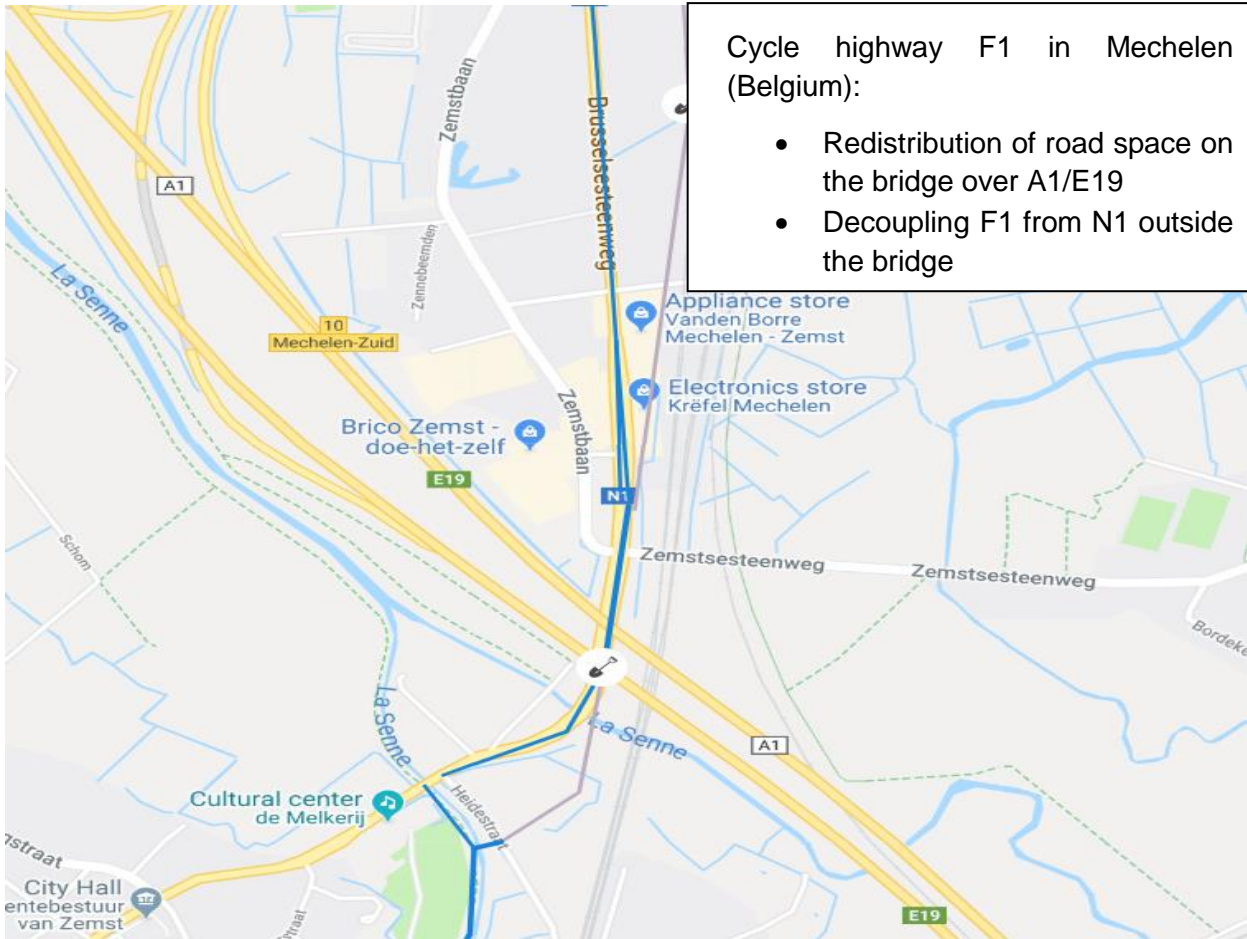
directness

coherence

2.

safety

attractiveness



⁴⁴ A potential conflict point in the new corridor would be a crossing with local street Geerdegemstraat, with limited visibility as a safety hazard. Solutions for the crossing were analysed and camera counts showed that 80% of traffic in the street had no destination in the street. The local inhabitants convinced the municipality to cut the street to eliminate the through traffic (application of filtered permeability, a principle further discussed in the Copenhagen case study). This is a win-win solution: safe cycle route and improved quality of life for local inhabitants.

5.3

5.3.1

5.3.2

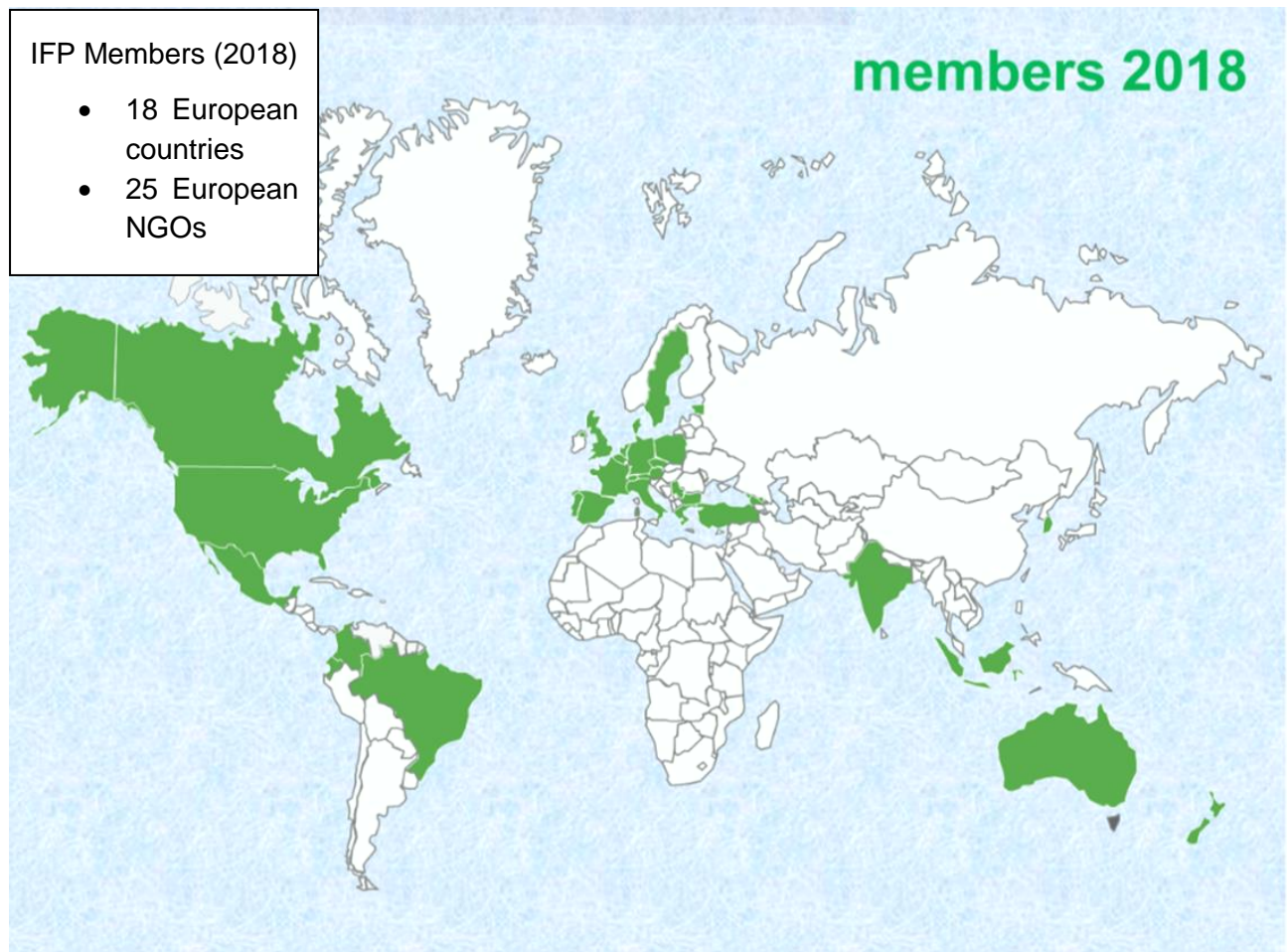
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5.3.3

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5.3.4

international 20

Urban design

Journal of Urbanism 2

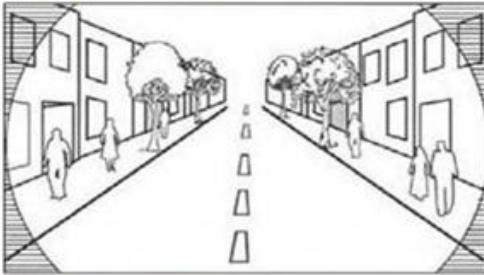
Economic value of walkability

Medicine & Science in

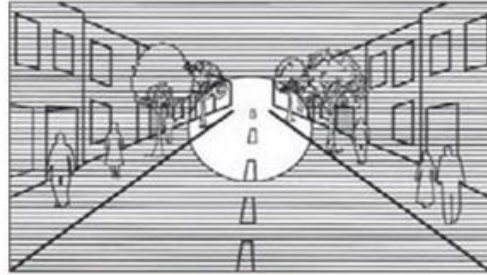
Sports & Exercise 40

Literature review on vehicle travel speeds and pedestrian injuries

WHY SPEED MATTERS

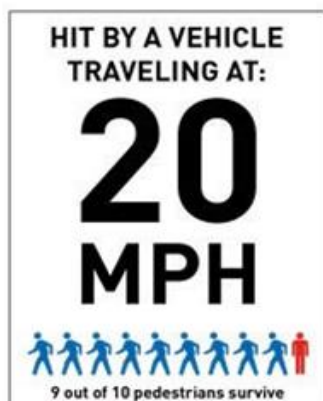


Field of vision at 15 MPH



Field of vision at 30 to 40 MPH

A driver's field of vision increases as speed decreases. At lower speeds, drivers can see more of their surroundings and have more time to see and react to potential hazards.



Speed is especially lethal for vulnerable users like pedestrians and people biking. The risk of injury and death increases as speed increases.

5.3.5

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Life between buildings: using public space

research in the United States and abroad

A review of pedestrian safety

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5.3.6

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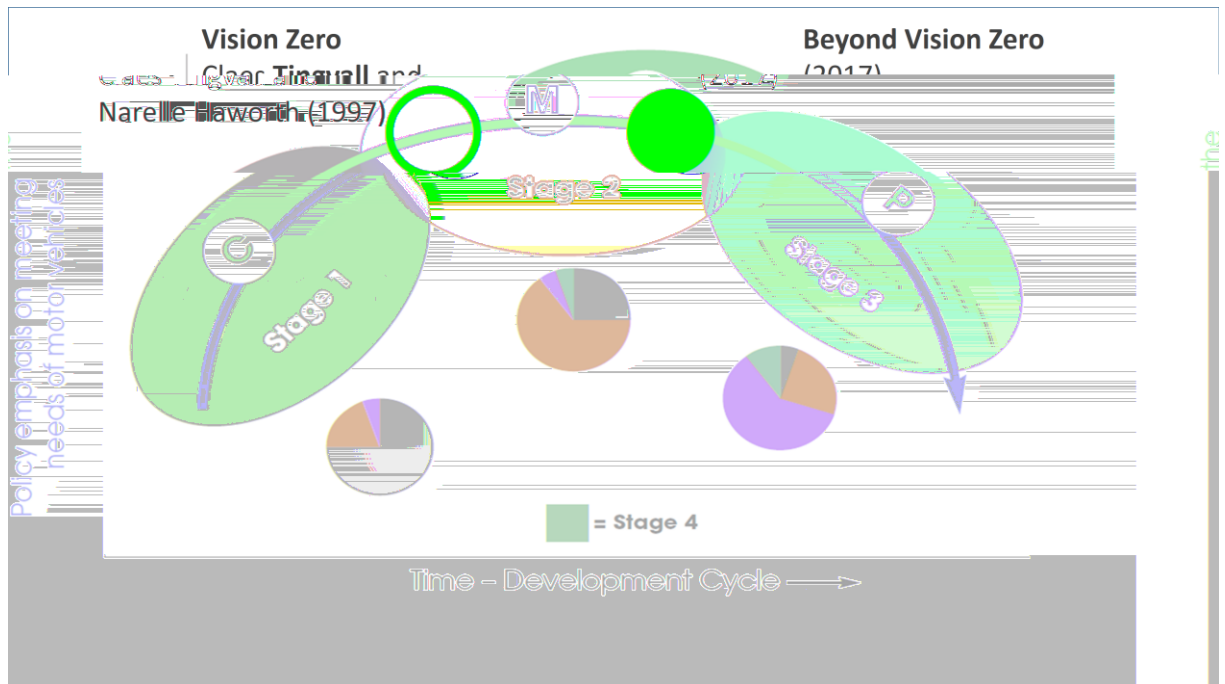
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5.3.7

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Atmospheric Environment 98

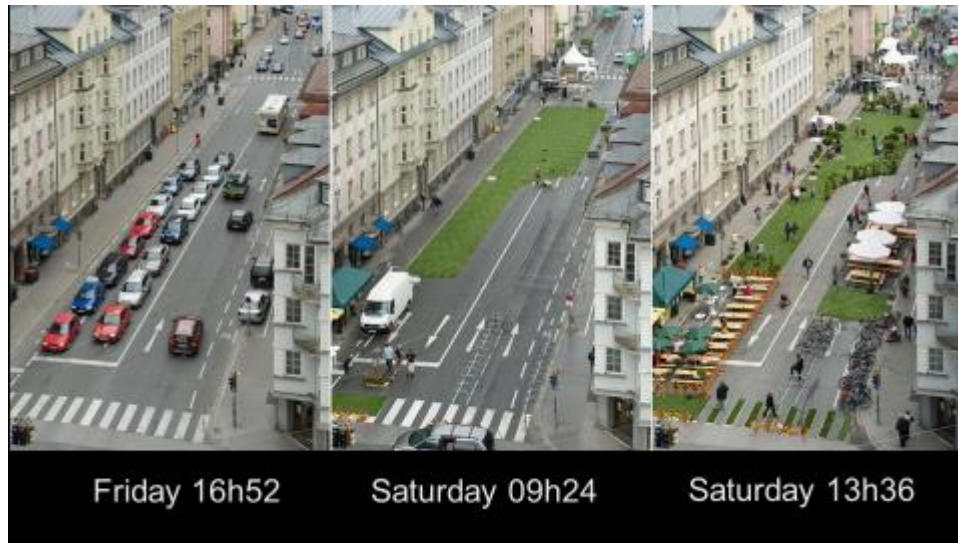
International journal of environmental research and public health 8



5.3.8

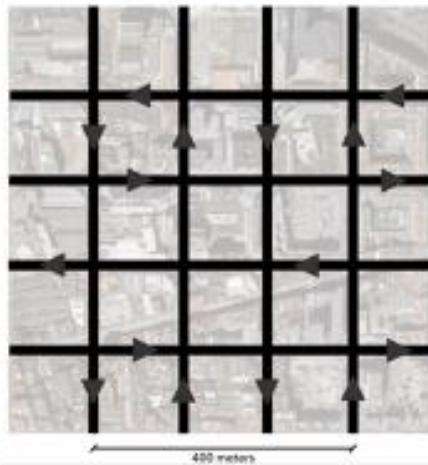
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what if

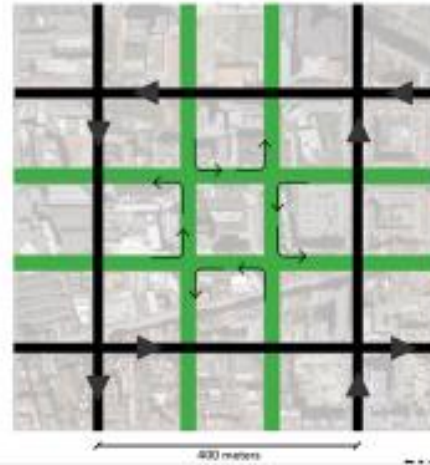


Superblocks (Barcelona)

CURRENT SITUATION

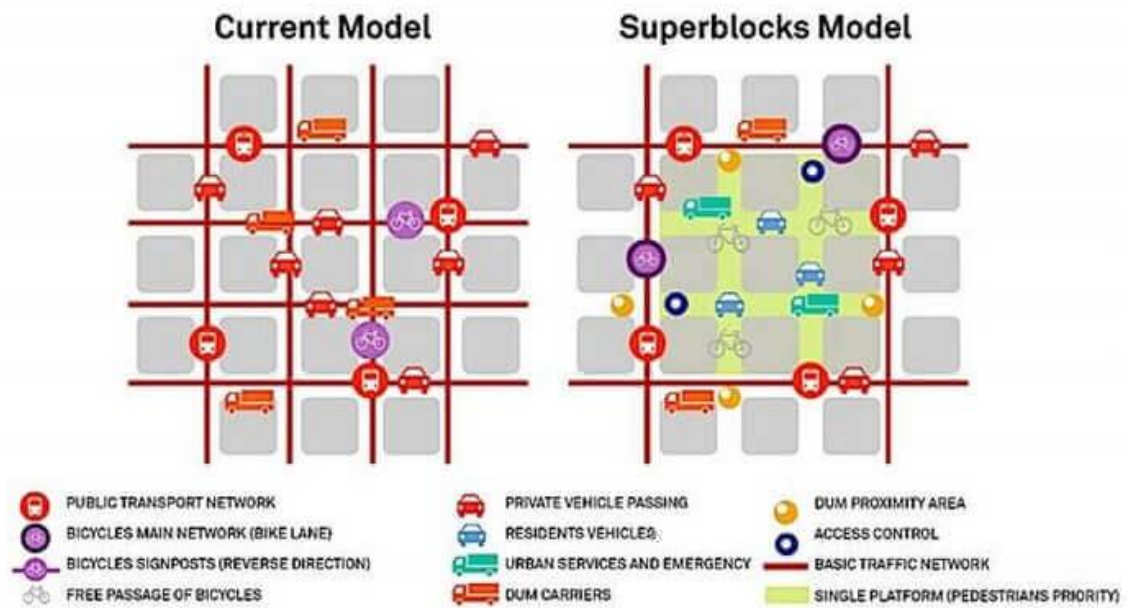


SUPERBLOCK



⁵⁹ Buchanan, C. (2015). *Traffic in Towns: A study of the long term problems of traffic in urban areas*. Routledge.

SUPERBLOCKS MODEL





5.3.9

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5.4

5.4.2

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7.1

7.2

	<i>Anne Reynaud, IRU Projects</i>
	<i>Oleh Shchuryk, IRU Projects</i>
	<i>Lucia Cristea, European Integrated Projects</i>
	<i>Mario Alves, International Federation of Pedestrians</i>
	<i>Remi Lebeda, IRU</i>
	<i>Aleksander Buczyński, European Cyclists' Federation</i>
	<i>Giacomo Lozzi, POLIS</i>
	<i>Oleh Shchuryk, IRU Projects</i>