SMART CITY NOW
CONFERENCE & EXPO

SMART MOBILITY

Pianificare la mobilità per non gestire le emergenze

TITO STEFANELLI

TRT TRASPORTI E TERRITORIO

Milano-MIND – 20 giugno 2023

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ABBIAMO EVIDENTEMENTE UNA SERIE DI PROBLEMI

- CONGESTIONE
- SICUREZZA STRADALE
- INQUINAMENTO ATMOSFERICO
- EMISSIONI CLIMALTERANTI
- INQUINAMENTO ACUSTICO

CONGESTIONE

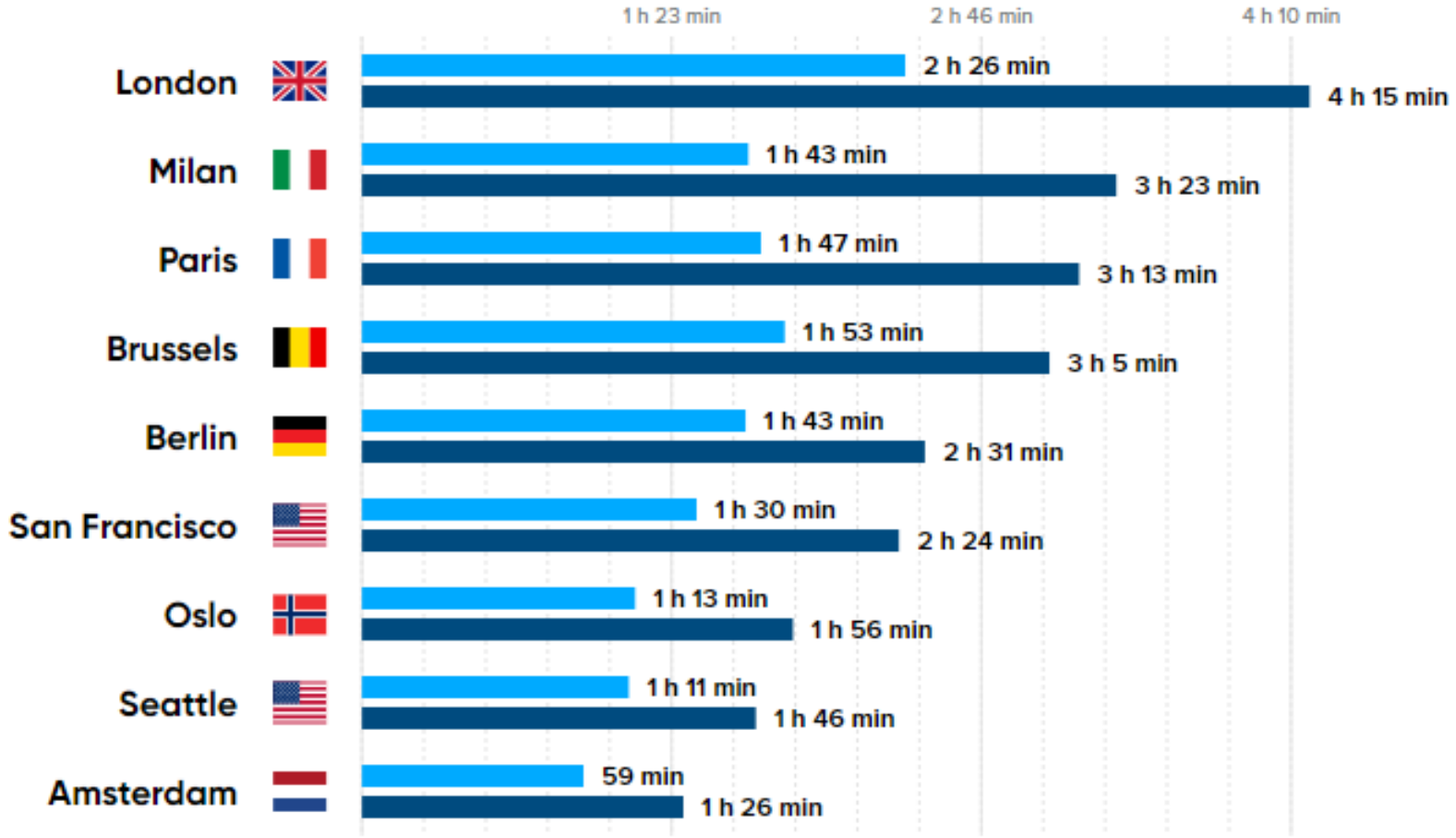
Rank by filter	World rank ▼	City	Average travel time per 10 km ▼	Change from 2021 ▼	Average speed in rush hour
1	1	London United Kingdom	36 min 20 s	+ 1 min 50 s	14 km/h
2	2	Bengaluru India	29 min 10 s	+ 40 s	18 km/h
3	3	Dublin Ireland	28 min 30 s	+ 1 min 40 s	17 km/h
4	4	Sapporo Japan	27 min 40 s	+ 50 s	19 km/h
5	5	Milan Italy	27 min 30 s	- 20 s	18 km/h
6	6	Pune India	27 min 20 s	+ 1 min 10 s	19 km/h
7	7	Bucharest Romania	27 min 20 s	- 10 s	17 km/h
8	8	Lima Peru	27 min 10 s	+ 2 min	18 km/h
9	9	Manila Philippines	27 min	+ 40 s	20 km/h
10	10	Bogota Colombia	26 min 20 s	+ 50 s	19 km/h
11	11	Paris France	26 min 10 s	- 30 s	19 km/h

FONTE: TOMTOM INDEX – RANKING 2022

CONGESTIONE

Rush-hour travel time vs optimal travel time

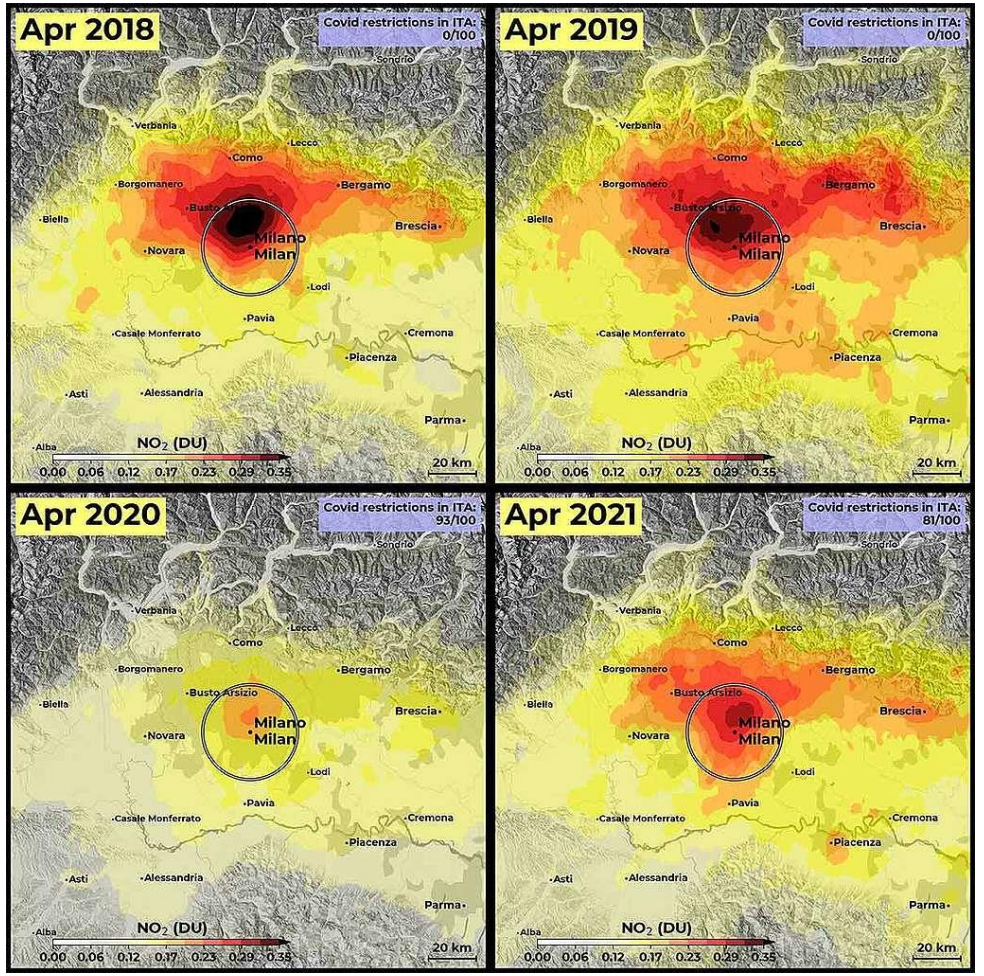
On an average weekday, how did driving during rush hour compare to driving during the optimal travel time (when traffic was at its lowest)?



FONTE: TOMTOM INDEX – RANKING 2022

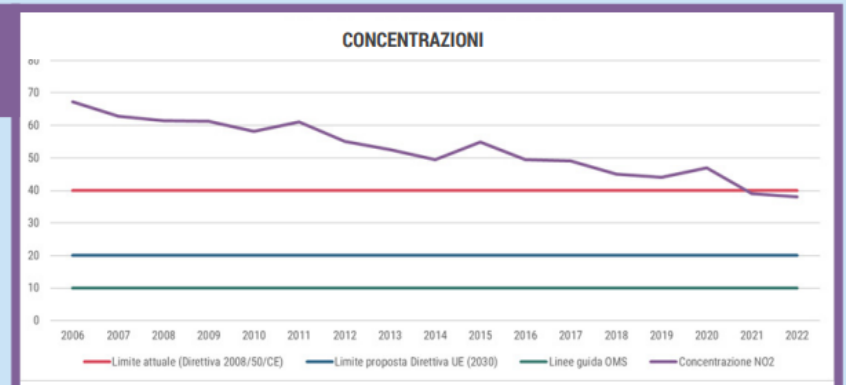
SICUREZZA STRADALE

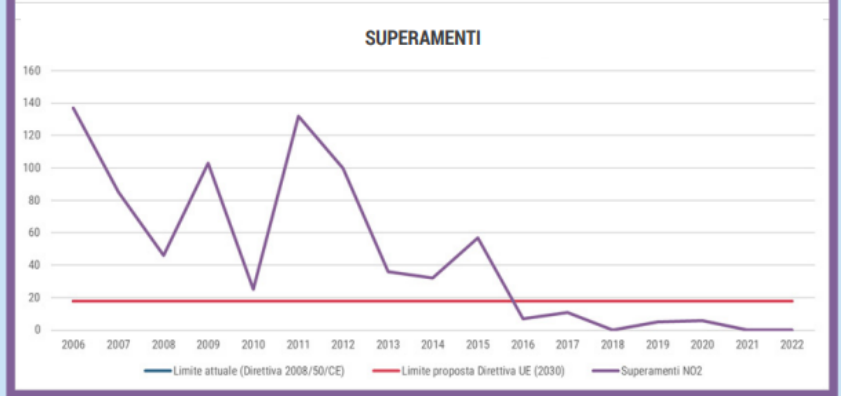
INQUINAMENTO ATMOSFERICO



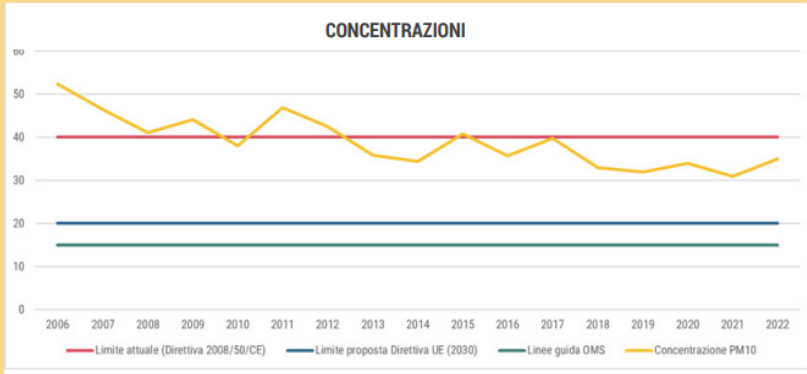
INQUINAMENTO ATMOSFERICO

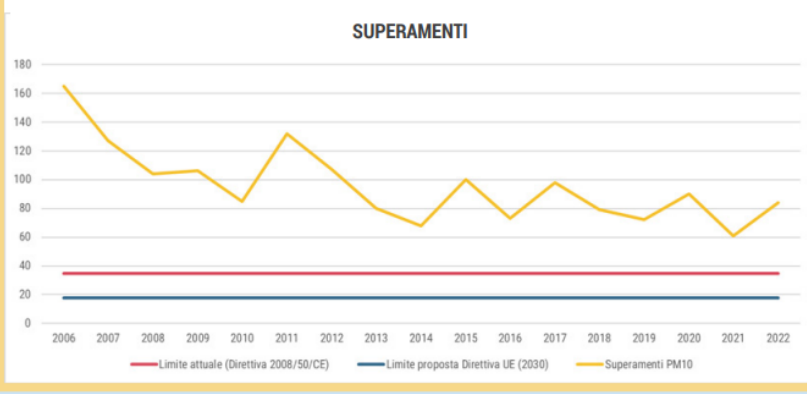
NO_2



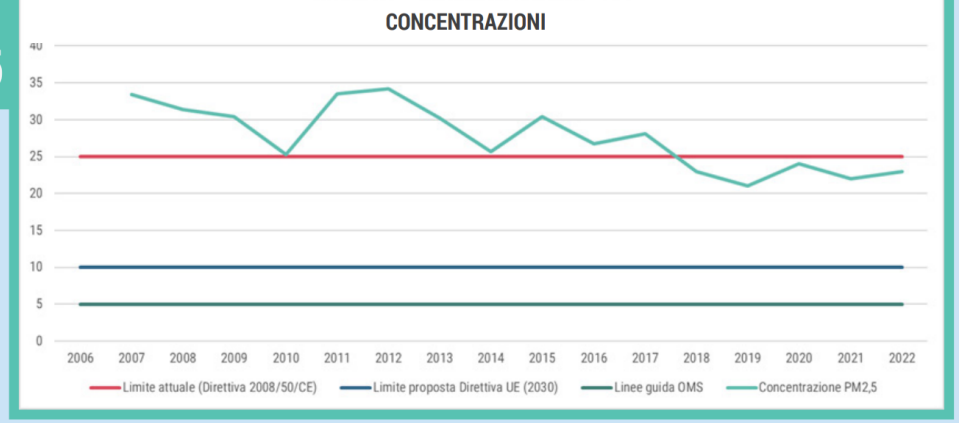


PM_{10}





$PM_{2,5}$



FONTE: KYOTO CLUB - CNR-IIA
6° RAPPORTO MOBILITARIA 2023

INQUINAMENTO ACUSTICO

INQUINAMENTO ACUSTICO

PLOS MEDICINE

BROWSE PUBLISH ABOUT SEARCH

advanced search

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Exposure to road traffic noise and cognitive development in schoolchildren in Barcelona, Spain: A population-based cohort study

Maria Foraster, Mikel Esnaola, Mónica López-Vicente, Ioar Rivas, Mar Álvarez-Pedrerol, Cecilia Persavento, Nuria Sebastian-Galles, Jesus Pujol, Payam Dadvand, Jordi Sunyer

Published: June 2, 2022 • https://doi.org/10.1371/journal.pmed.1004001

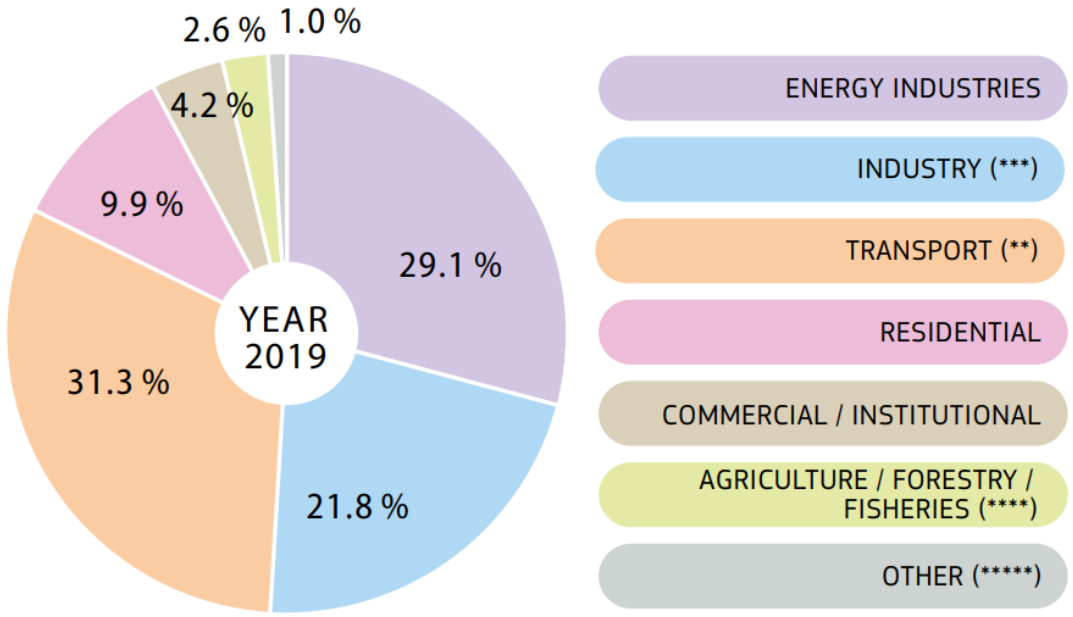
Abstract

Abstract

EMISSIONI CLIMALTERANTI

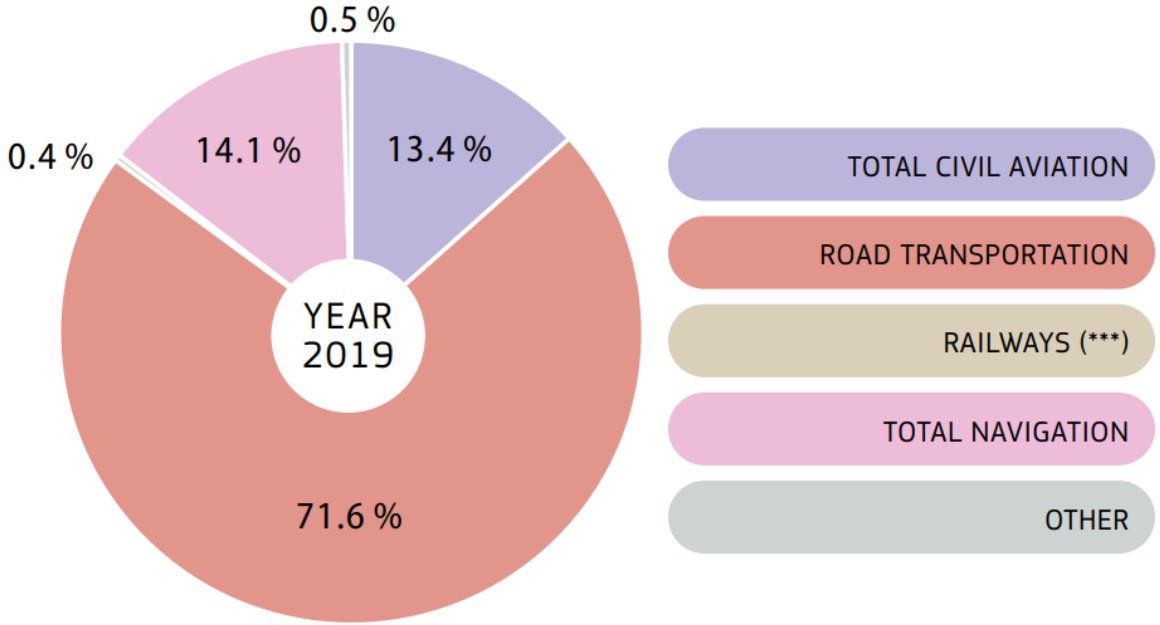
EMISSIONI CLIMALTERANTI

CO_2 emissions (*) EU-27
BY SECTOR (MILLION TONNES)



NB:
(*) Excluding LULUCF (land use, land-use change and forestry) emissions and international maritime, including international aviation and indirect CO_2.
(**) Excluding international maritime (international traffic departing from the EU), including international aviation.
(***) Emissions from manufacturing and construction, industrial processes and product use.
(****) Emissions from fuel combustion and other emissions from agriculture.
(*****) Emissions from other (not elsewhere specified), fugitive emissions from fuels, waste, indirect CO_2 and other.

CO_2 emissions from transport EU-27 – BY MODE (SHARES %)



NB:
(*) Excluding international bunkers (international traffic departing from the EU).
(**) Including international bunkers and indirect CO_2 but excluding LULUCF (land use, land-use change and forestry).
(***) Excluding indirect emissions from electricity consumption.
(****) Combustion emissions from all remaining transport activities including pipeline transportation, ground activities in airports and harbours, and off-road activities.
(*****) Total transport share in total emissions.

FONTE: EU TRANSPORT IN FIGURES STATISTICAL POCKETBOOK 2020

IL PRESENTE

TANTI SERVIZI INNOVATIVI DI MOBILITÀ URBANA

BIKE SHARING

STATION BASED

bikeMi

FREE FLOATING

ridemovi

Lime

dott

TIER

BIKE SHARING

17.930

N° MEZZI IN FLOTTA & TREND 2021/2022

5

OPERATORI & TREND 2021/2022

MONOPATTINO SHARING

FREE FLOATING

BIRD

Bolt

dott

HELBIZ

Lime

voi.

TIER

MICROMOBILITÀ

5.250

N° MEZZI IN FLOTTA & TREND 2021/2022

7

OPERATORI & TREND 2021/2022

CAR SHARING

(e·vai>
FNMGROUP

e·GO! DRIVALIA

SHARENOW

enjoy

ZITY

ubeeqo

CAR SHARING

2.731

N° MEZZI IN FLOTTA & TREND 2021/2022

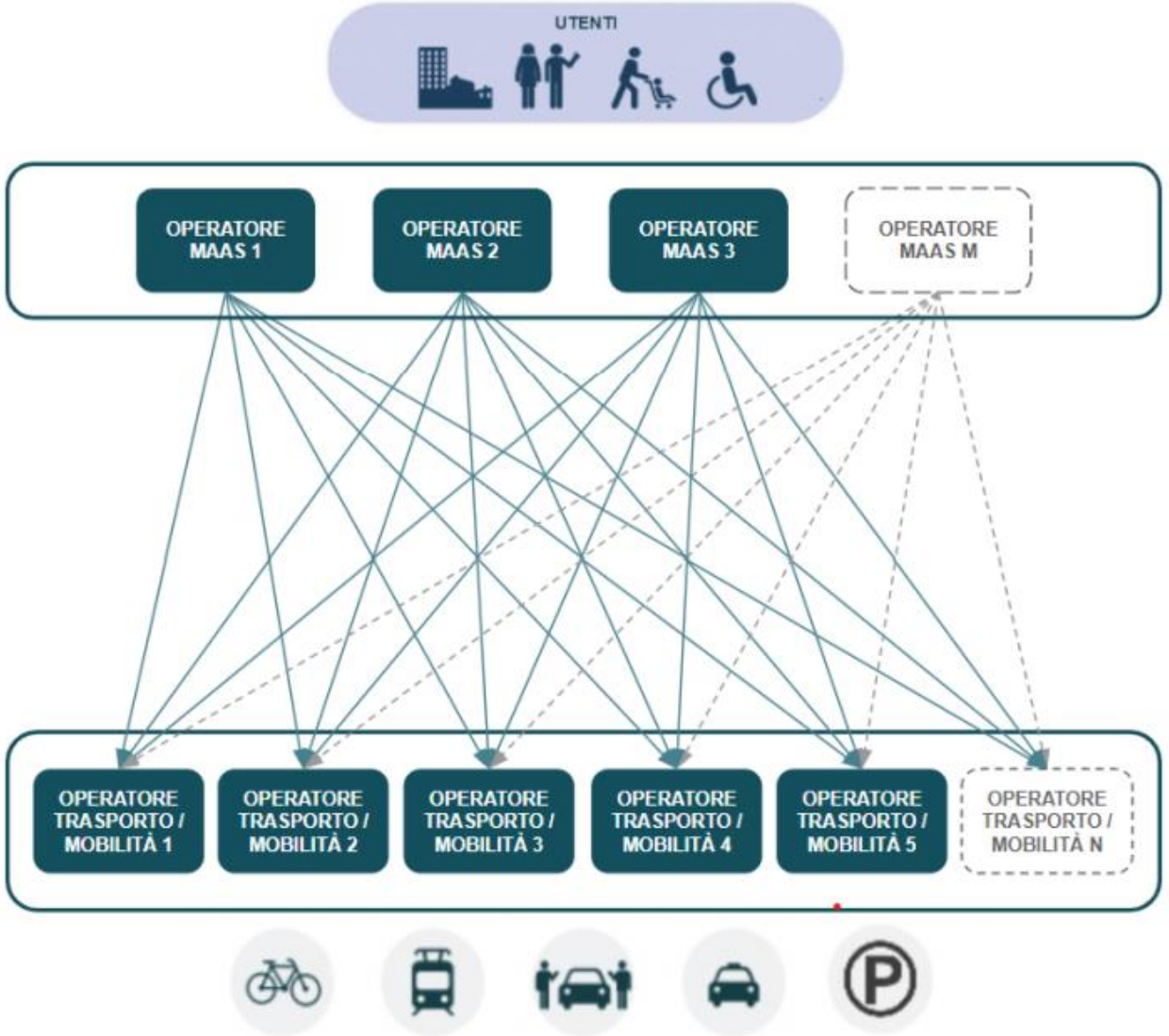
5

OPERATORI & TREND 2021/2022

CAR POOLING

BePooler
car together

MOBILITY AS A SERVICE

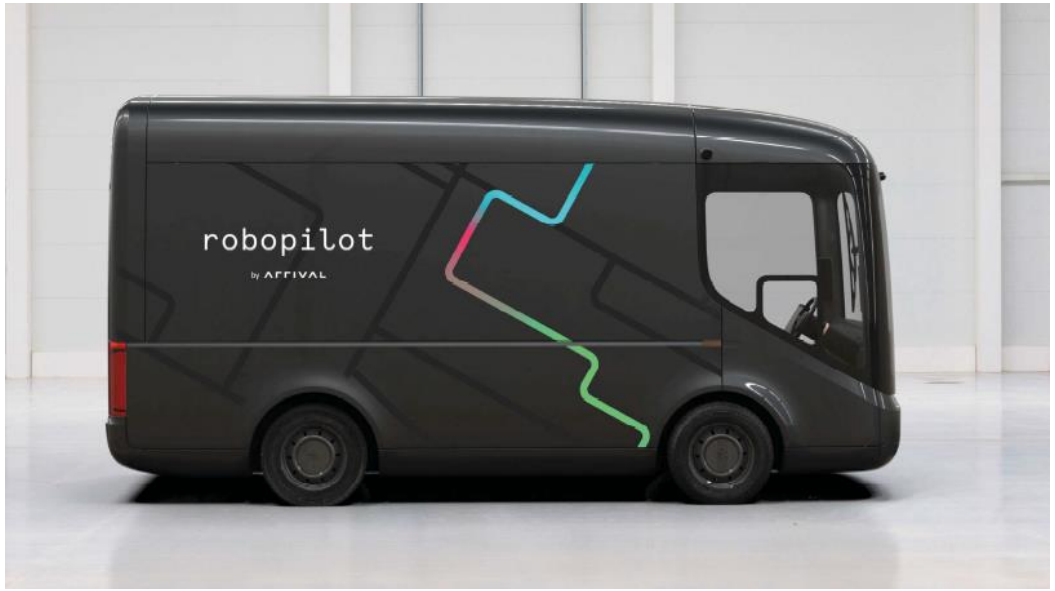


IL FUTURO

NUOVI SERVIZI DI MOBILITÀ

NUOVE TECNOLOGIE E SERVIZI DI MOBILITÀ PER I PASSEGGERI

NUOVE TECNOLOGIE E SERVIZI DI MOBILITÀ PER LE MERCI



SERVIZI FUTURI E GUIDA AUTONOMA

Passenger Transport

Privately-owned AVs
AVs available for private purchase

On-demand mobility service
AVs offering single or shared rides from one point to another

Public transport services
Automated passenger minibuses offering transit rides

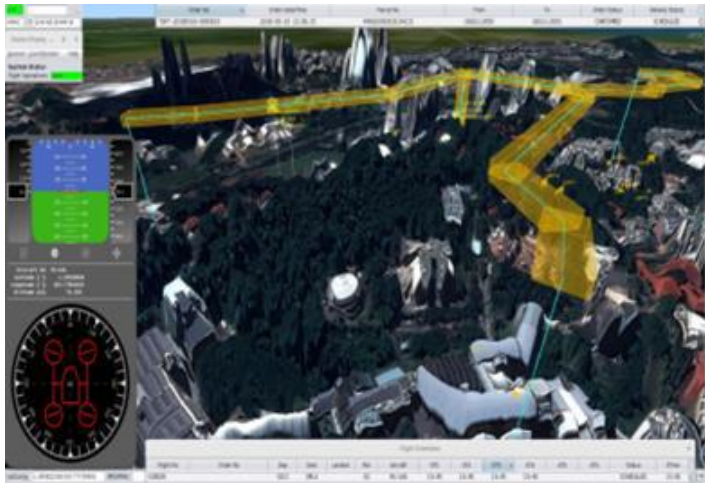
Freight Transport

Autonomous vans
Vans which provide urban distribution services

Autonomous trucks/ Platooning
Truck platoons at dedicated lanes of specific transport corridors

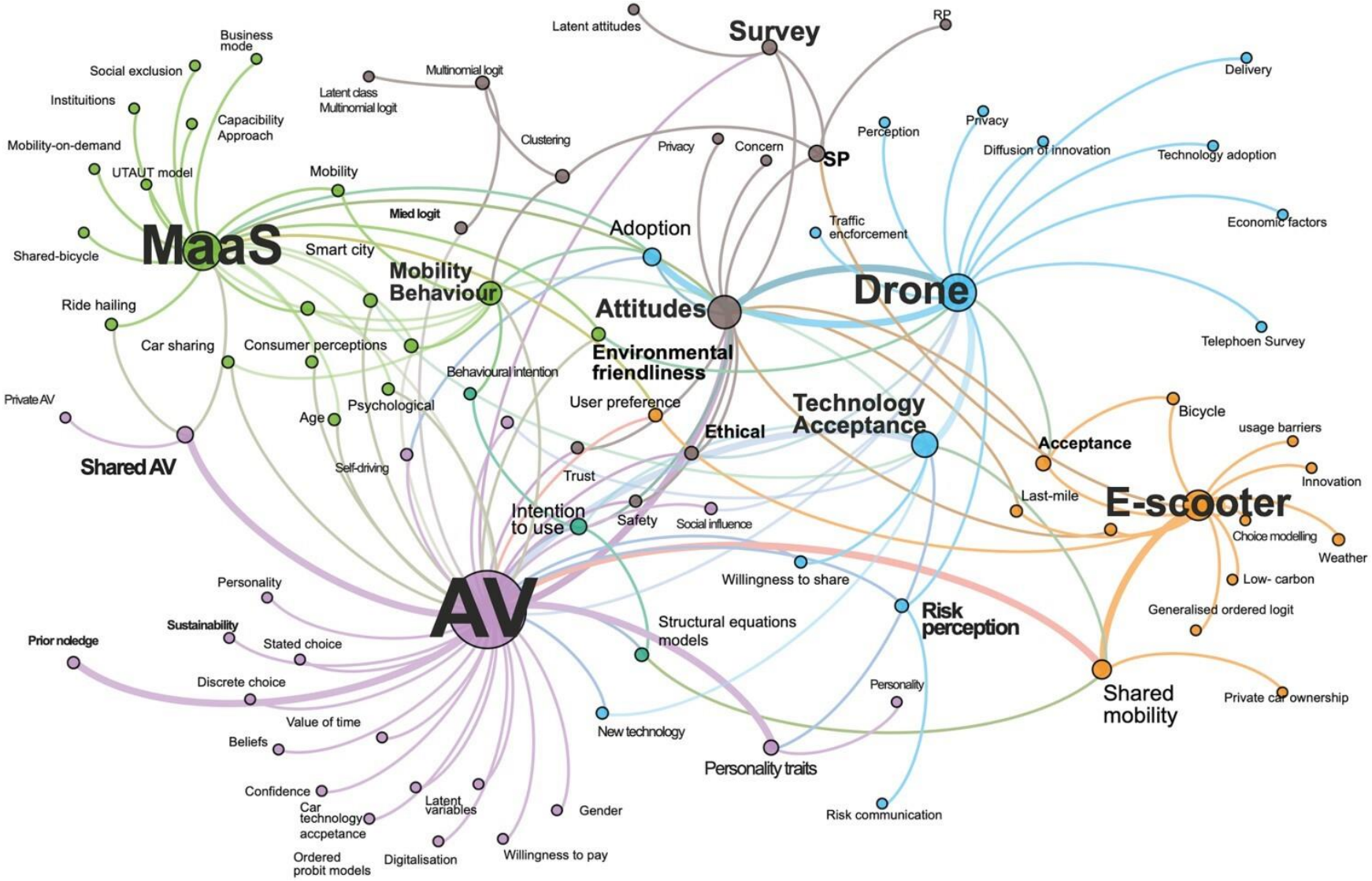
Delivery bots
Autonomous bots to make last-mile deliveries (small parcels within a limited distance range)

AIR MOBILITY



INFRASTRUTTURE PER L'AIR MOBILITY

OLTRE IL MAAS



PIANIFICARE LA MOBILITÀ PER NON GESTIRE LE EMERGENZE

- Promuovere la mobilità attiva e il trasporto pubblico, intervenendo anche sulla struttura della città, ovvero su come determinate parti debbano essere ripensate e riprogettate.

- Gestire e regolamentare lo spazio cittadino al fine di usarlo al meglio delle sue potenzialità (per esempio ottimizzando l'utilizzo delle strade o dei parcheggi).

- Integrare le nuove soluzioni di mobilità per renderle più efficienti (MaaS).

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GRAZIE PER L'ATTENZIONE

TRT

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