THE (NEAR) FUTURE OF MOBILITY

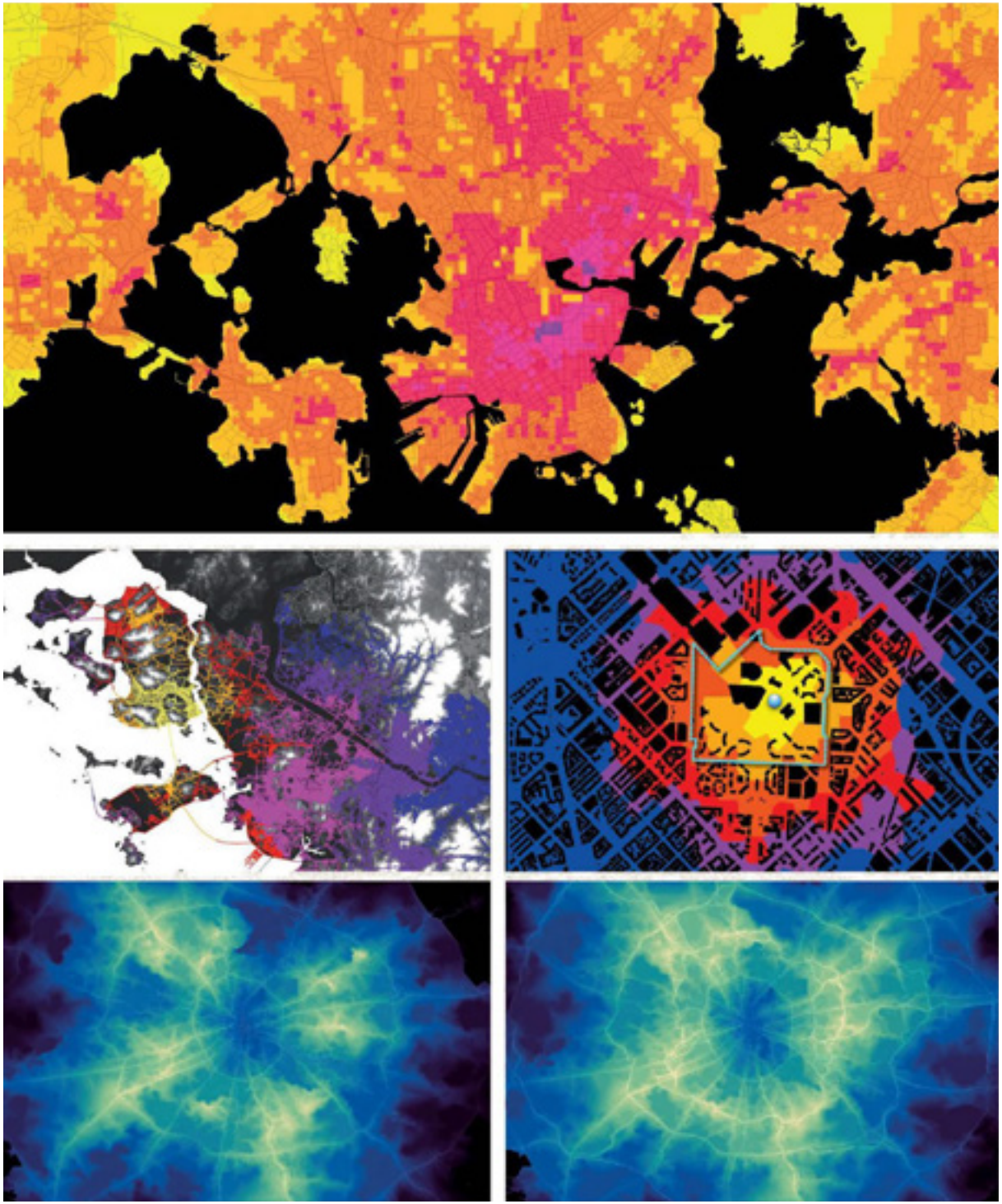
"Choice" as the paradigm of innovative mobility, Integration between static volumes and dynamic flows

Repubblica di San Marino

Smart Mobility Forum 2017

Arch. Federico Cassani

MIC
mobility in chain



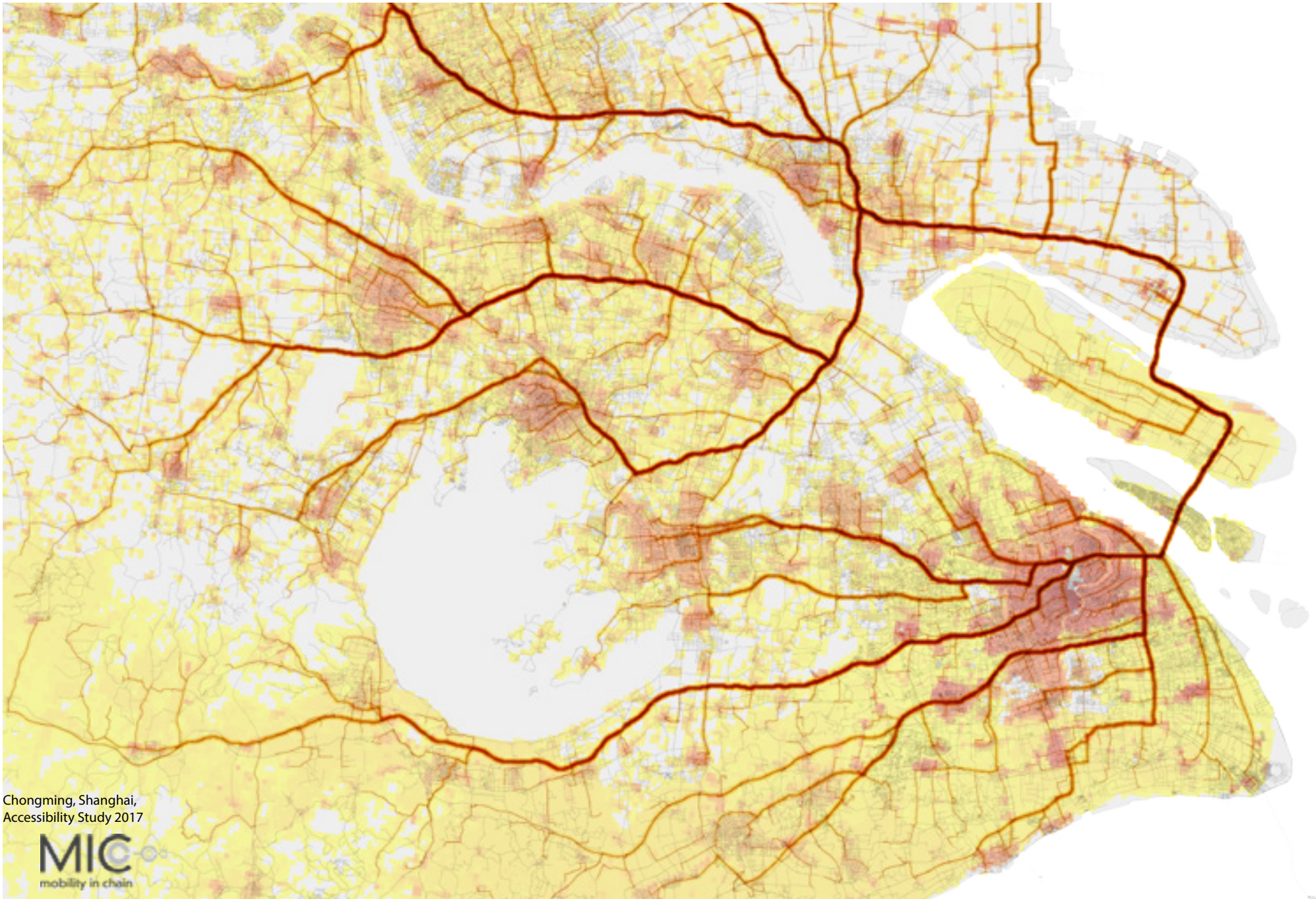
MIC | Mobility in Chain is a company founded in 2009 by Davide Boazzi, Federico Cassani and Federico Parolotto. The founders decided to open a new firm after 10 ears ina well-known transport planning firm where they were directors.

MIC was founded on the belief that mobility influences the way we live and the quality of our lives. Also, MIC was created with the ambition of improving the quality of our lives through a profound understanding of how we move about.
In line with their previous professional experience, MIC team is strongly focused on international work providing transport consultancy to developers, masterplanners and public bodies all over the world.

MIC embraces an innovative and sustainable vision for mobility based on the following principles.
The belief that town planning process should not be subject to the single minded pursuit of traffic-driven approaches, and
The new urbanism, which enhances compact, dense, mixed-use neighbourhoods that in addition set the right premises to enforce the original form of transport, walking, followed closely by cycling and public transport, as most favoured mode of movement.

MIC peculiarity lies in the combination of the principles above with the understanding of the needs of the client and with the requirements of the public bodies dealing with every kind of transport issue ranging from traffic-impact studies to civil engineering.

MOBILITY PATTERNS ARE MULTIPLYING



Chongming, Shanghai,
Accessibility Study 2017

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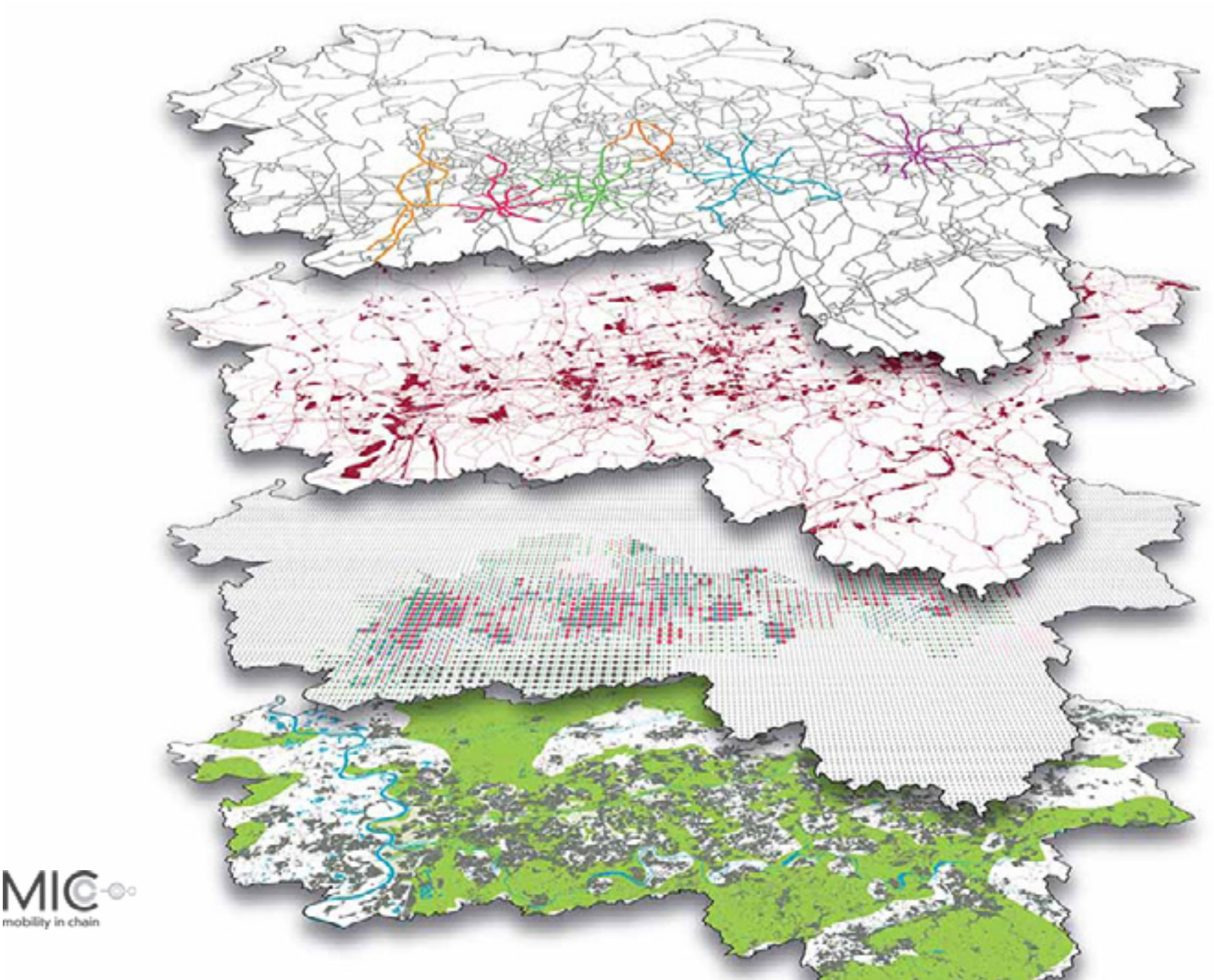

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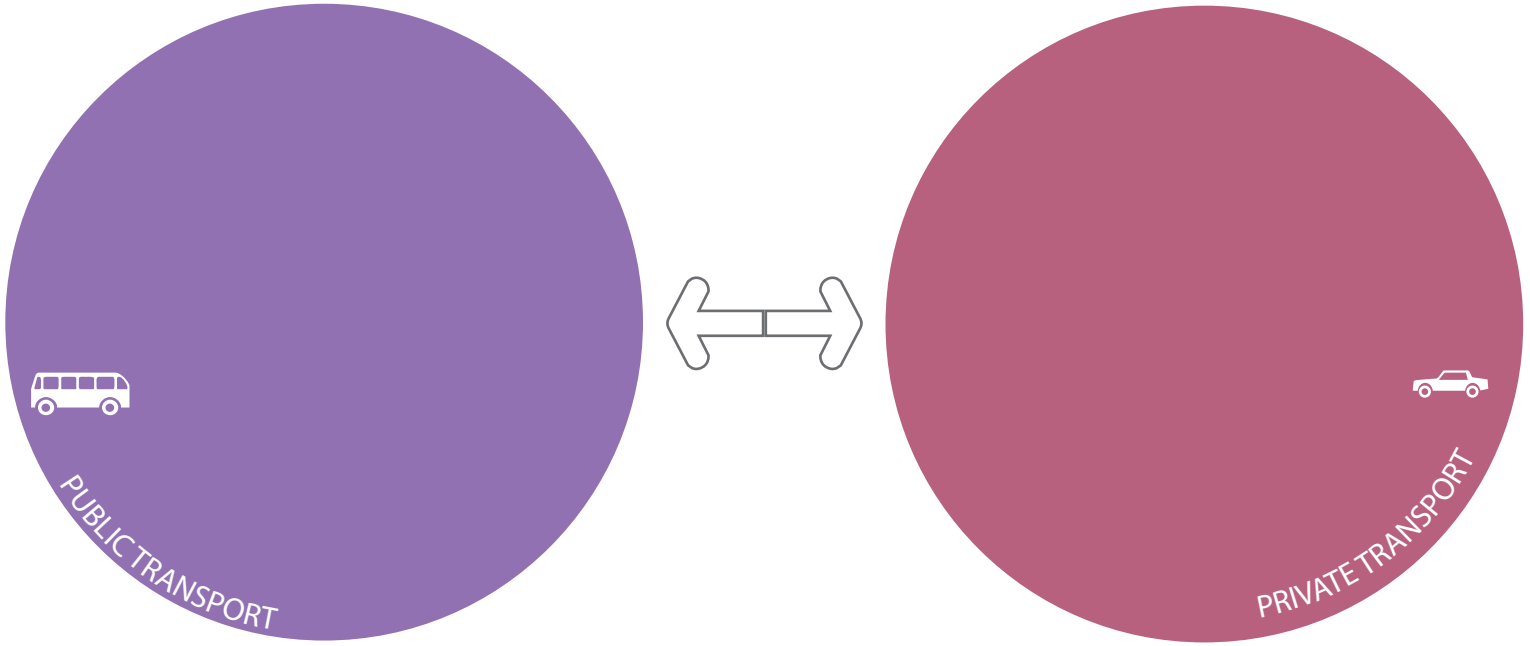
PUBLIC vs PRIVATE TRANSPORT



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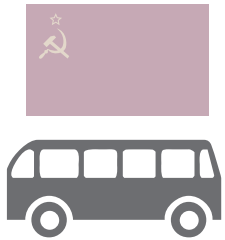
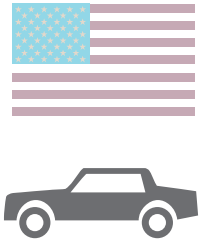


VS



PRO:

DEMOCRATIC

SUSTAINABLE

LESS CONGESTION

CONS:

NO FLEXIBILITY

NO FREEDOM

EXPENSIVE INFRASTRUCTURES

PRO:

FLEXIBILITY

FREEDOM

CONS:

CONGESTION

MANY INFRASTRUCTURES

POLLUTION

UNEFFICIENCY

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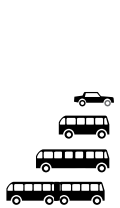
PROS

DEMOCRATIC ⇨  = 2€

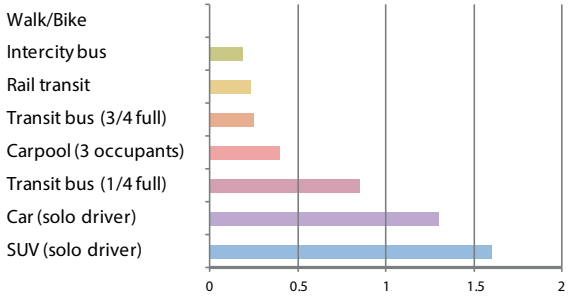
NO CONGESTION ⇨



	passengers	vehicles	space (m2)	fuel (lit)
	5	2000	24000	250
	25	400	8800	120
	100	100	3400	50
	175	50	2800	3

Demand/capacity transport 10’000 persons for 1km

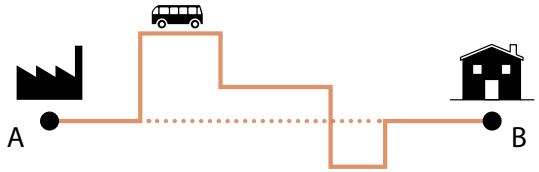
LESS POLLUTION ⇨



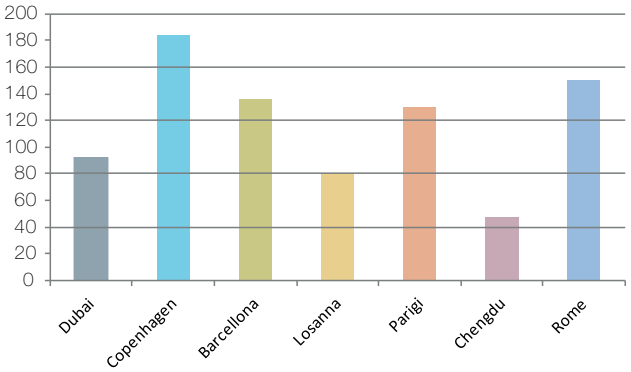
Pounds of CO2 (or equivalents) per passenger-mile

CONS

NO FLEXIBILITY ⇨



HIGH COSTS OF INFRASTRUCTURES ⇨



Underground cost - *millions€/Km*

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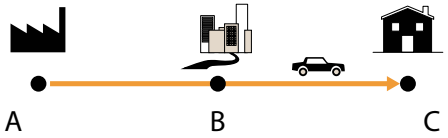
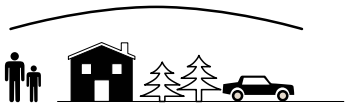
PROS

FLEXIBILITY

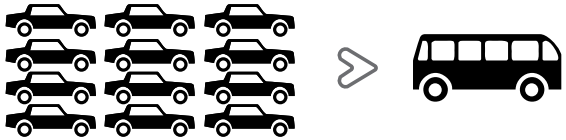


FREEDOM

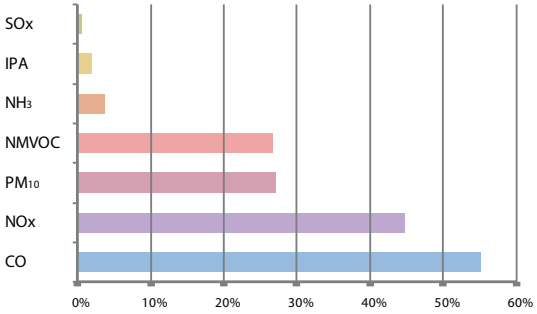


CONS

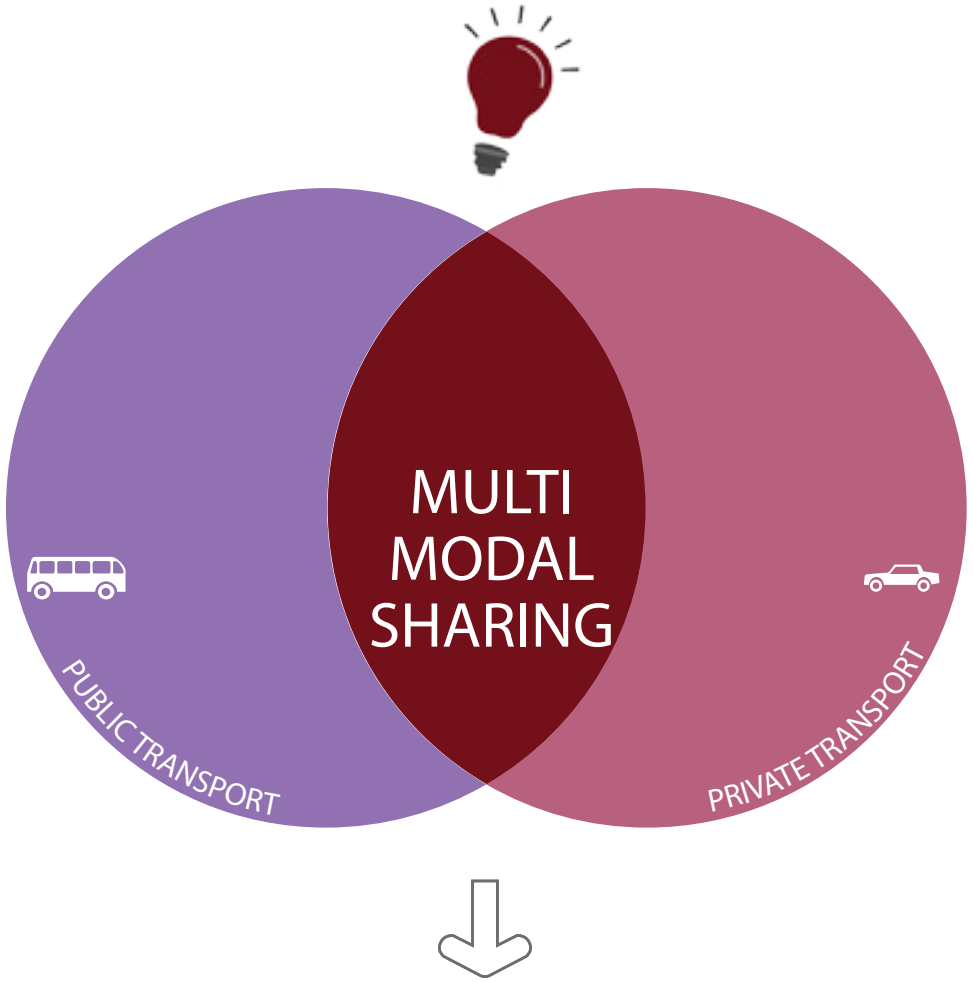
CONGESTION



POLLUTION



Impact of road transport on the total emissions



BENEFITS OF PRIVATE TRANSPORT
WITHOUT OWNERSHIP ISSUES

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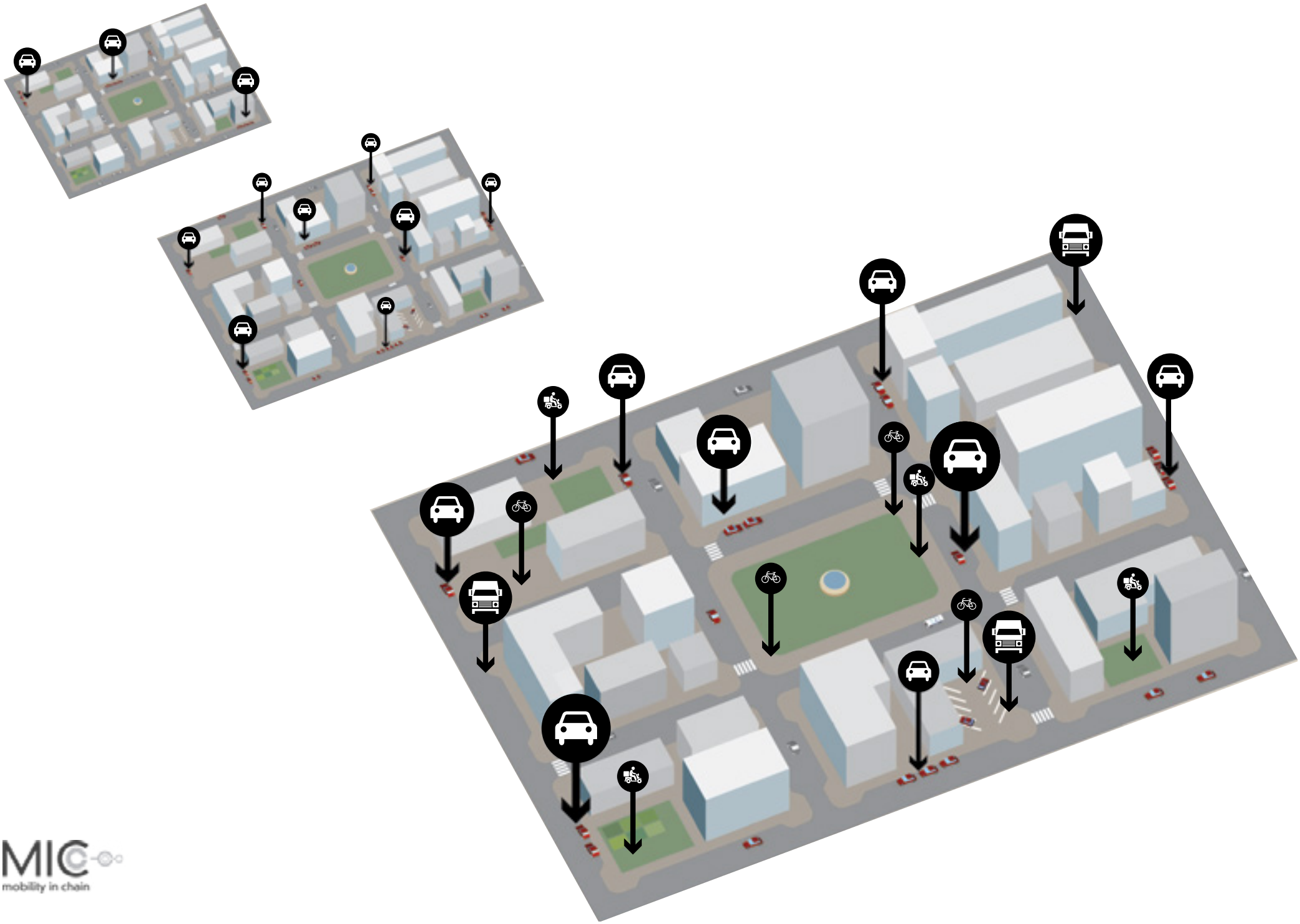

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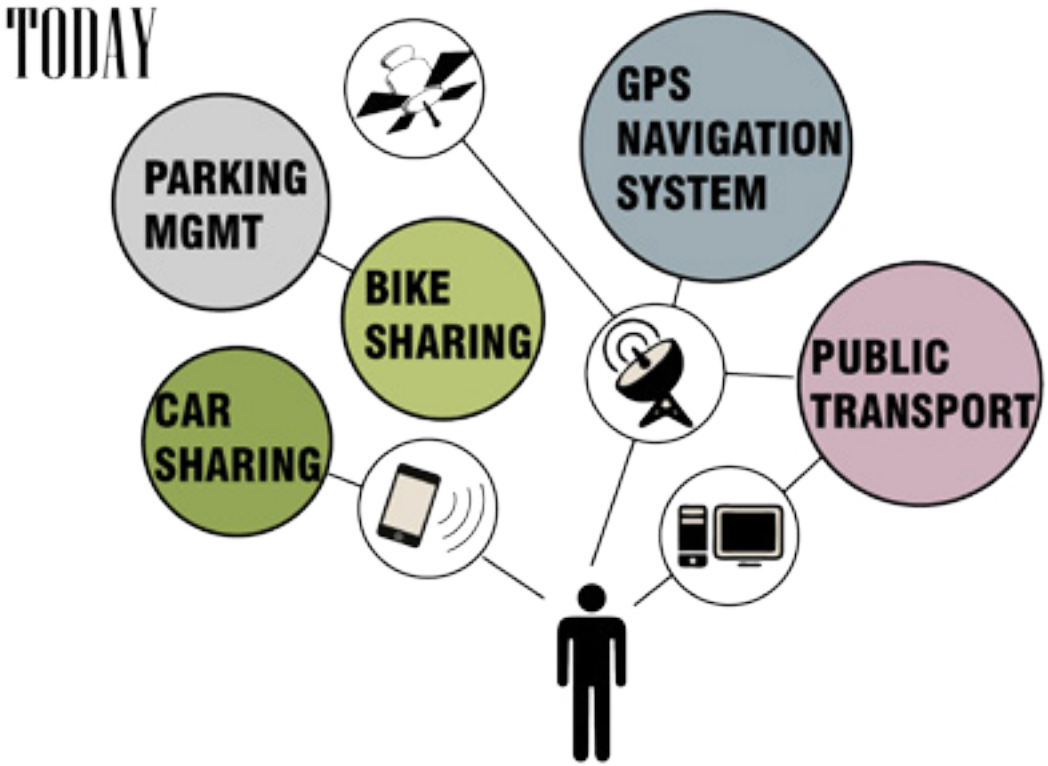
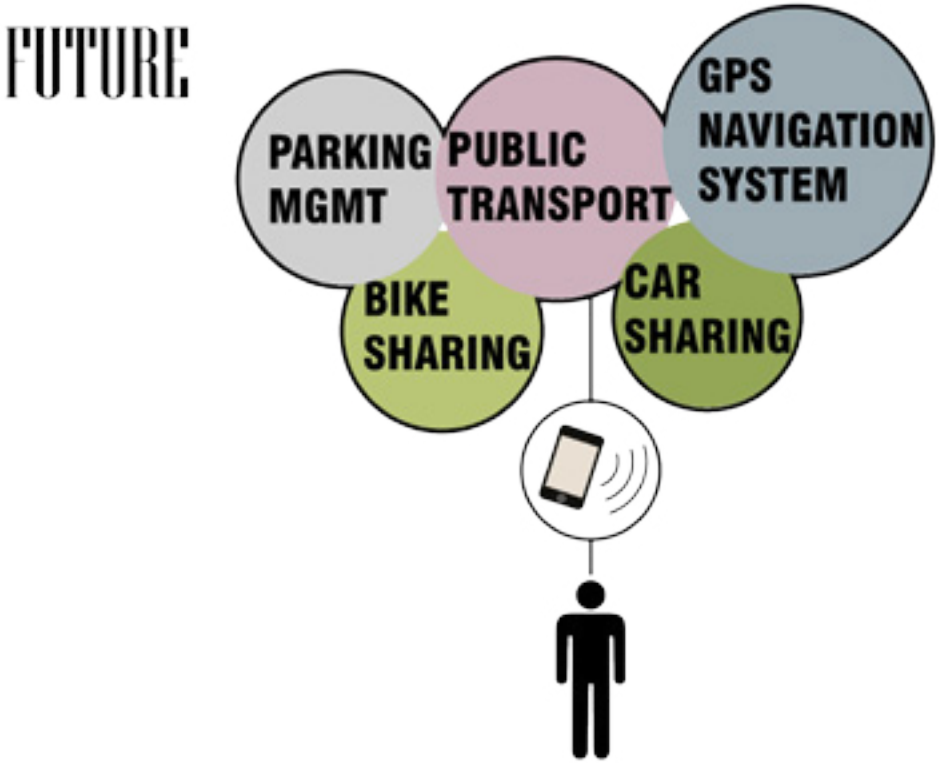
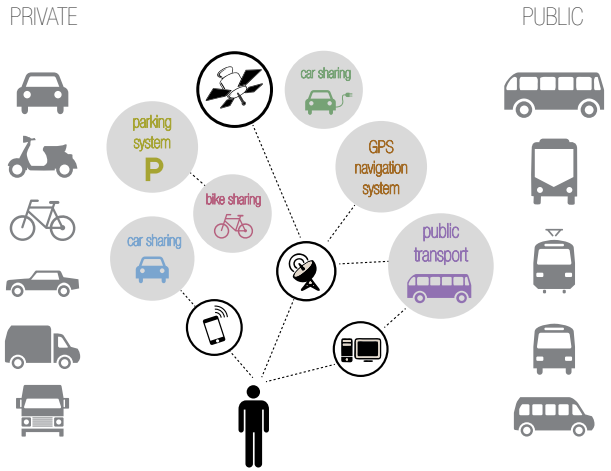
Oggi lo scenario di possibilità per scegliersi come spostarsi è variegato ma complesso / Today the scenario of possibilities to choose how to get around is diverse but complex

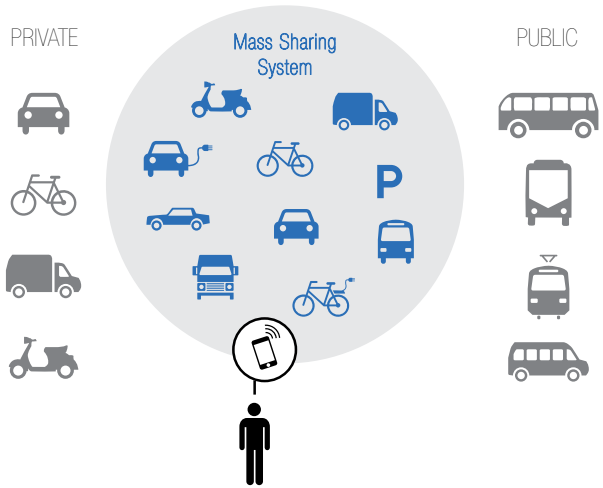




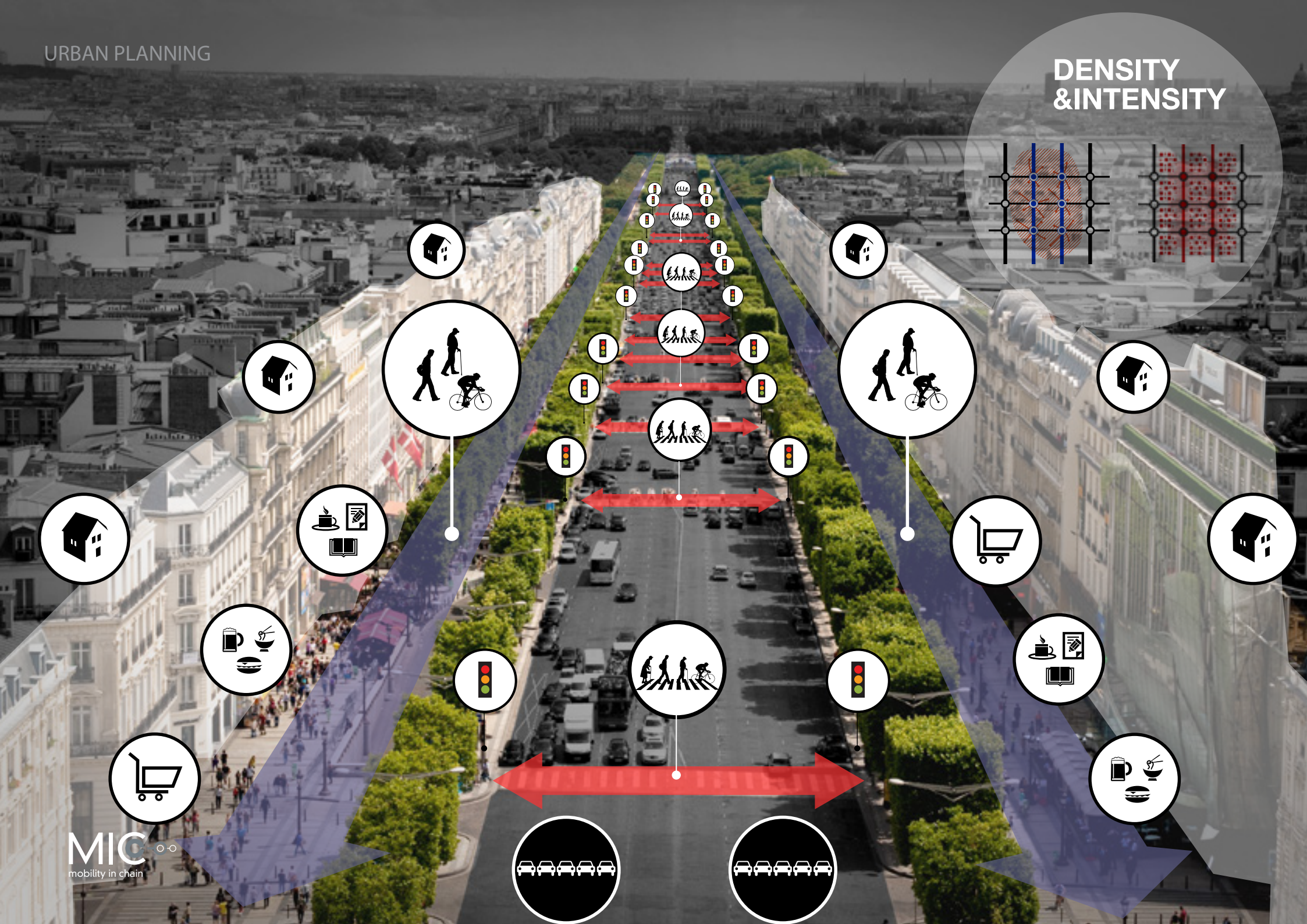
In futuro il processo diverrà sempre più immediato e facilmente legato all'utilizzo degli smartphone / In the future the process will become more immediate and easily linked to the use of smartphones

DIGITAL MOBILITY





ENERGY GRIDS


DENSITY
&INTENSITY
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1 TRAFFIC LIGHT

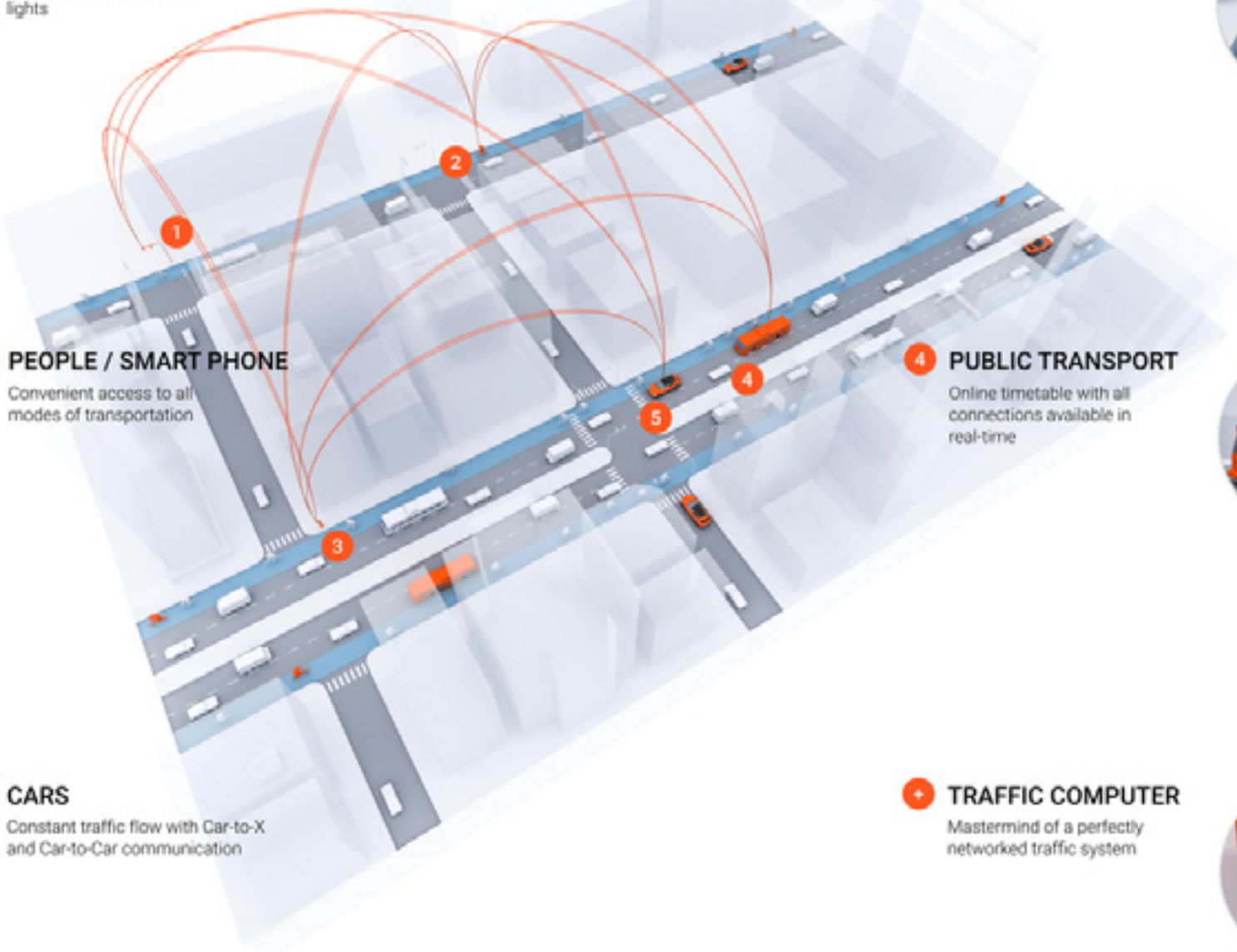
Audi Traffic Info Online – Cars communicate with traffic lights

2 BIKE

Safe and quick ride through the city

3 PEOPLE / SMART PHONE

Convenient access to all modes of transportation



4 PUBLIC TRANSPORT

Online timetable with all connections available in real-time

5 CARS

Constant traffic flow with Car-to-X and Car-to-Car communication

TRAFFIC COMPUTER

Mastermind of a perfectly networked traffic system

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1 **DROP-OFF SERVICE**

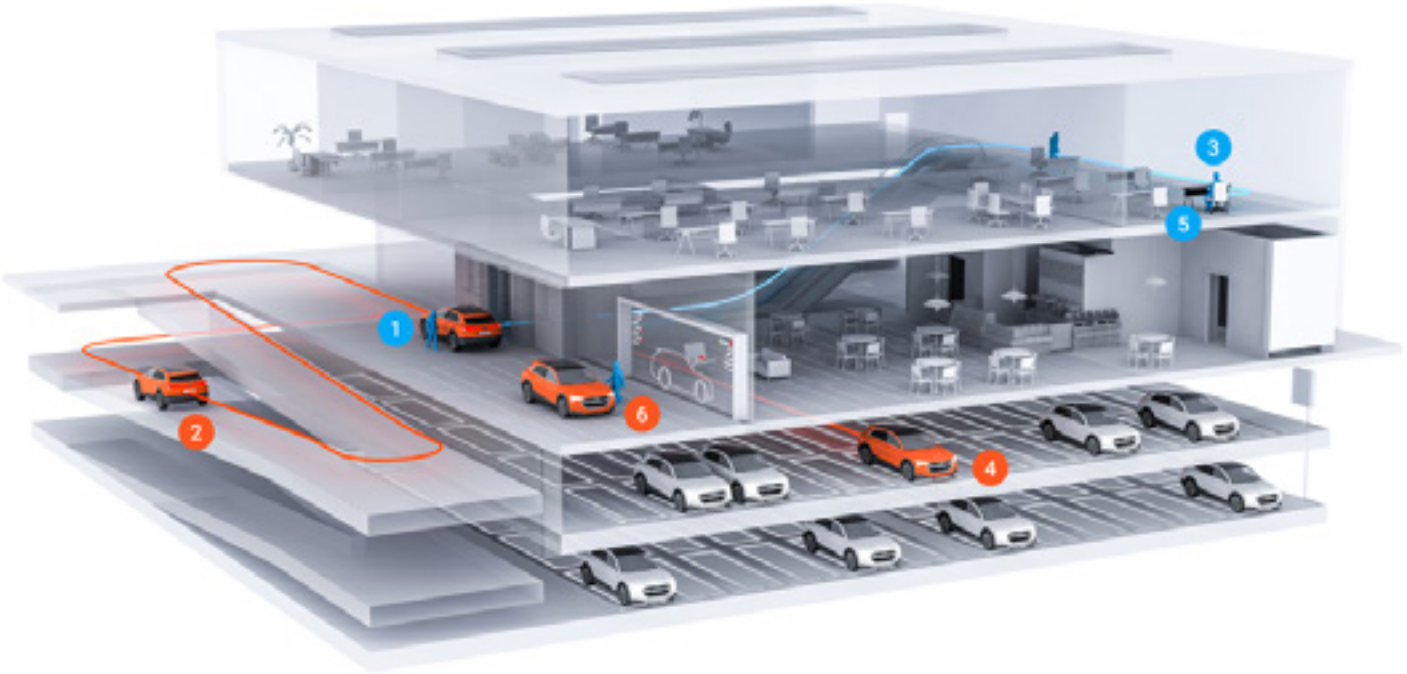
Instant access to urban life without any detours

3 **GAINING TIME**

More time – less hassle circling. Piloted parking frees up valuable leisure time

5 **CAR ON DEMAND**

Providing individualized premium mobility via service app



2 **CAR PARKS ITSELF**

Efficient parking - Courtesy of piloted car technology

4 **INDUCTIVE CHARGING**

Charging the car while parking and always ready to go

6 **PICK-UP SERVICE**

Meet your car in a stress-free lounge atmosphere

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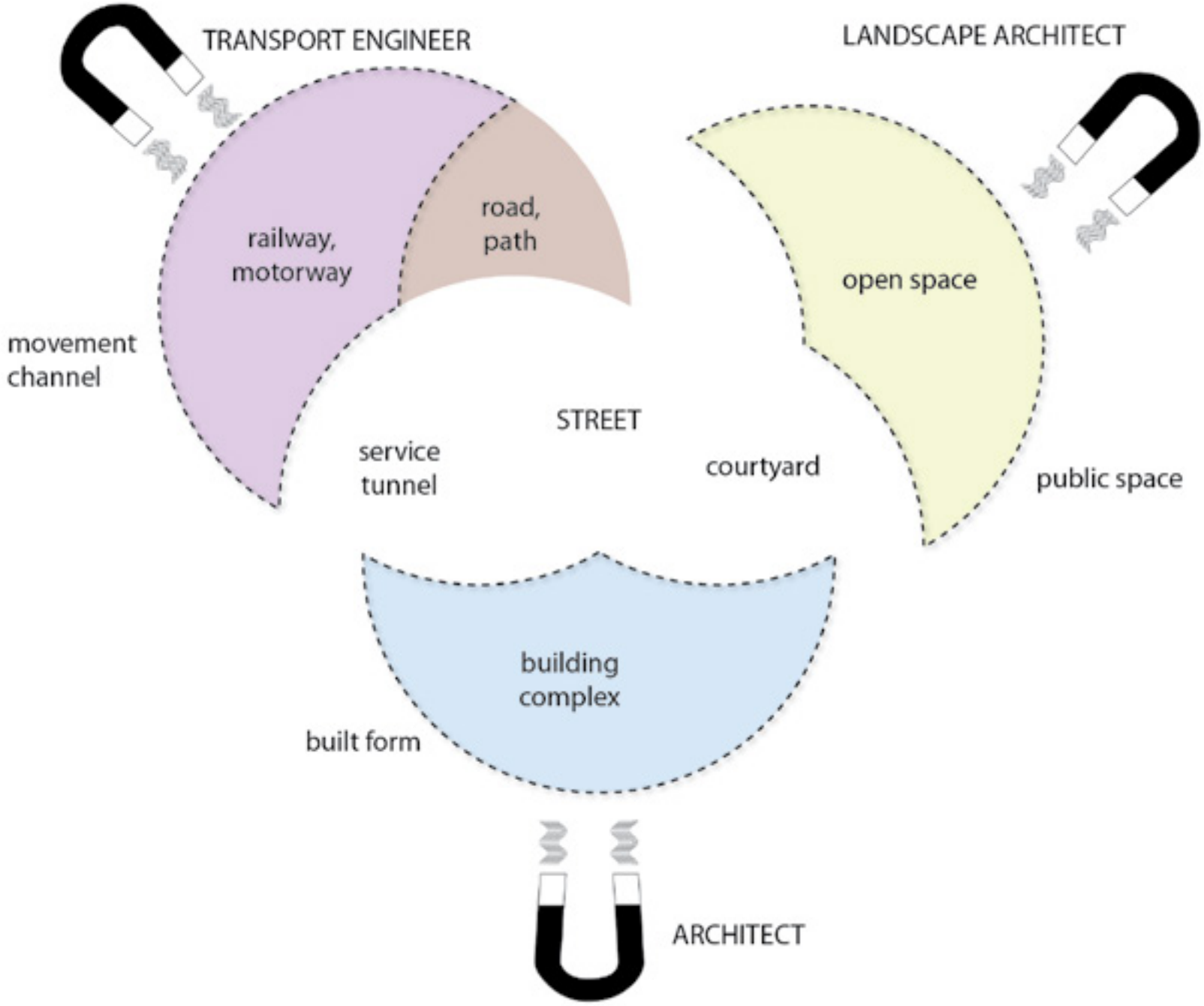
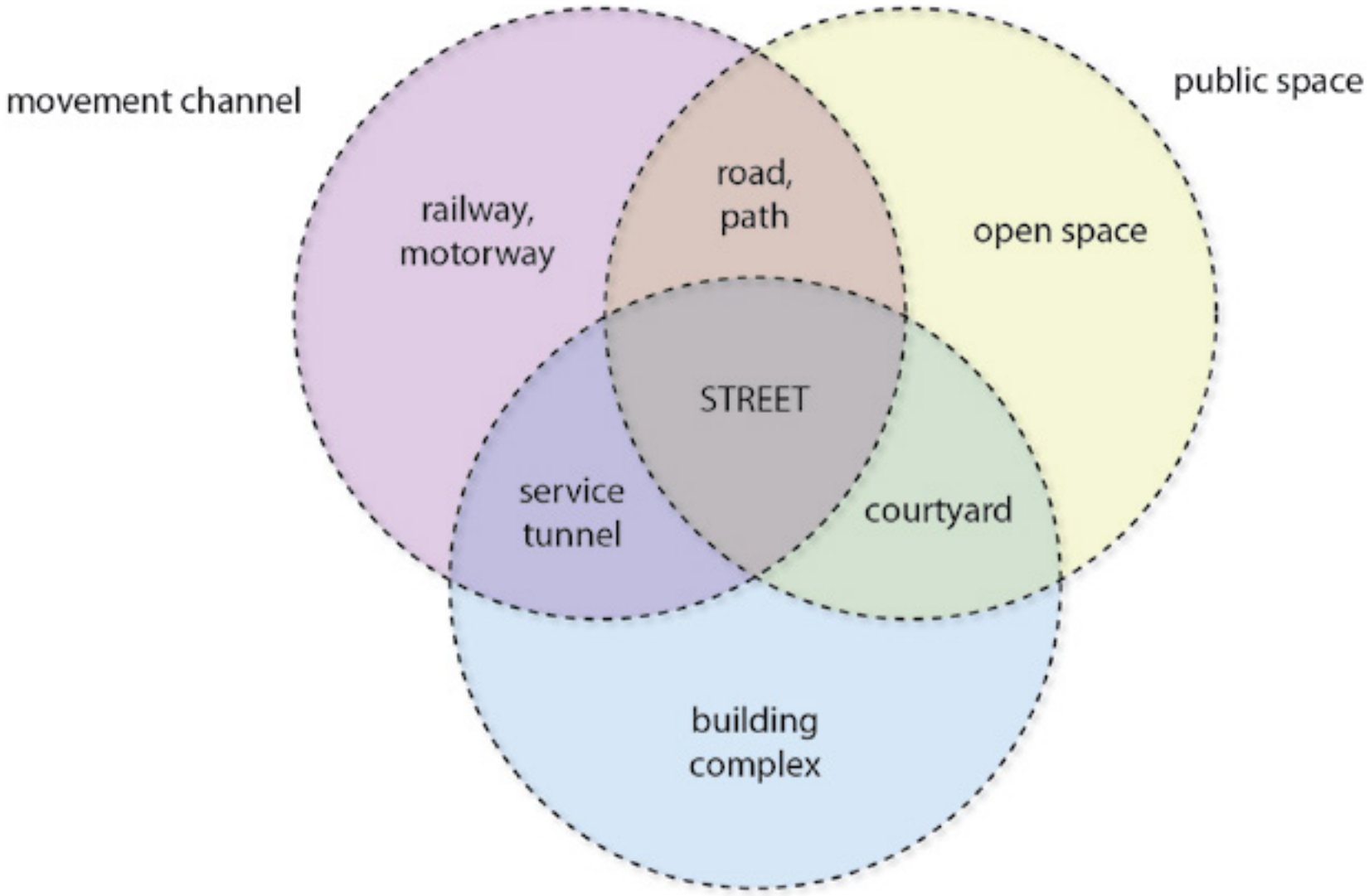
Audi Urban Future Initiative 2015
Union Square


TRANSPORT ENGINEER
LANDSCAPE ARCHITECT
railway,
motorway
road,
path
open space
movement
channel
STREET
service
tunnel
courtyard
public space
building
complex
built form
ARCHITECT


movement channel
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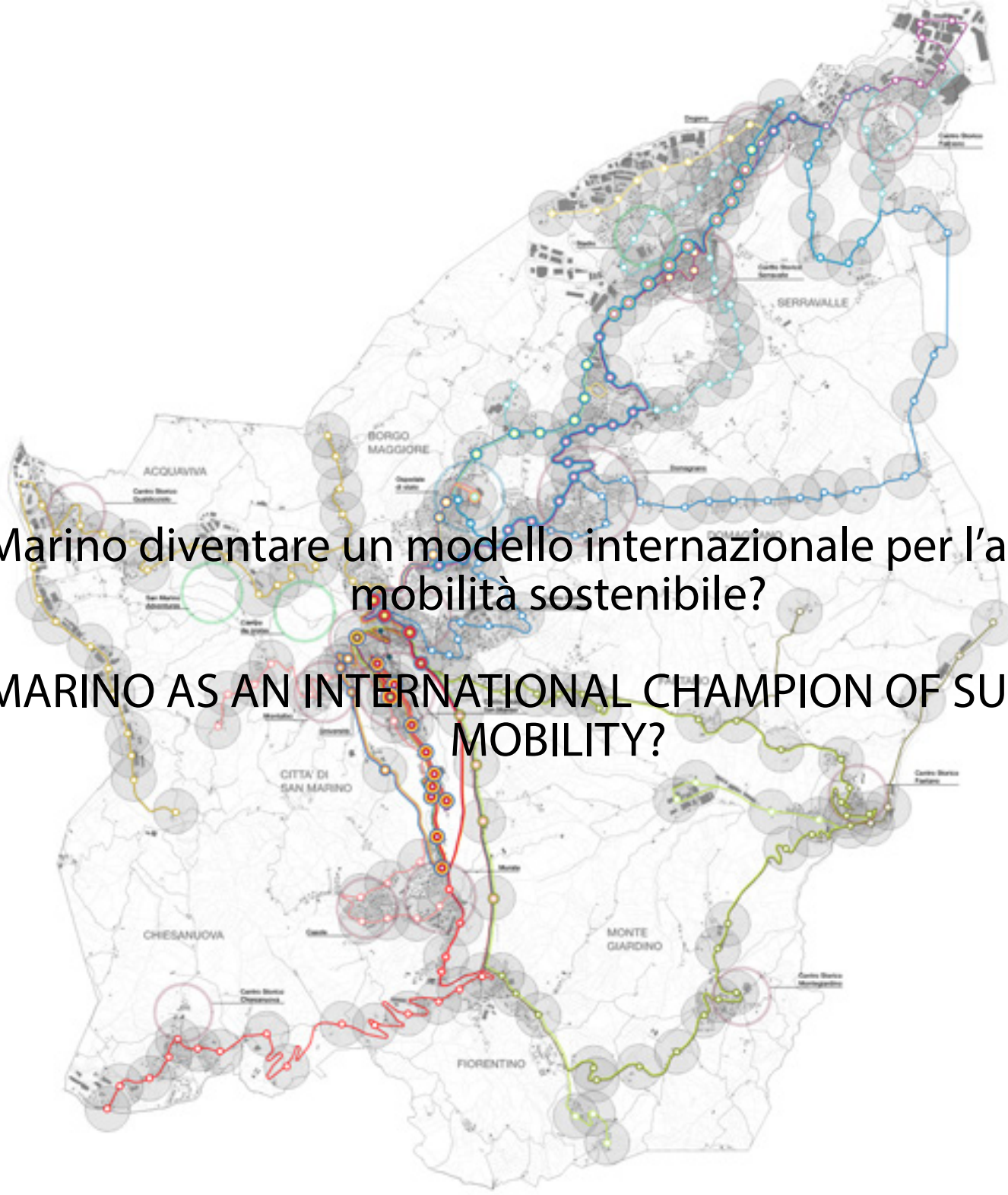

Può San Marino diventare un modello internazionale per l'accessibilità e la mobilità sostenibile?

SAN MARINO AS AN INTERNATIONAL CHAMPION OF SUSTAINABLE MOBILITY?

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