

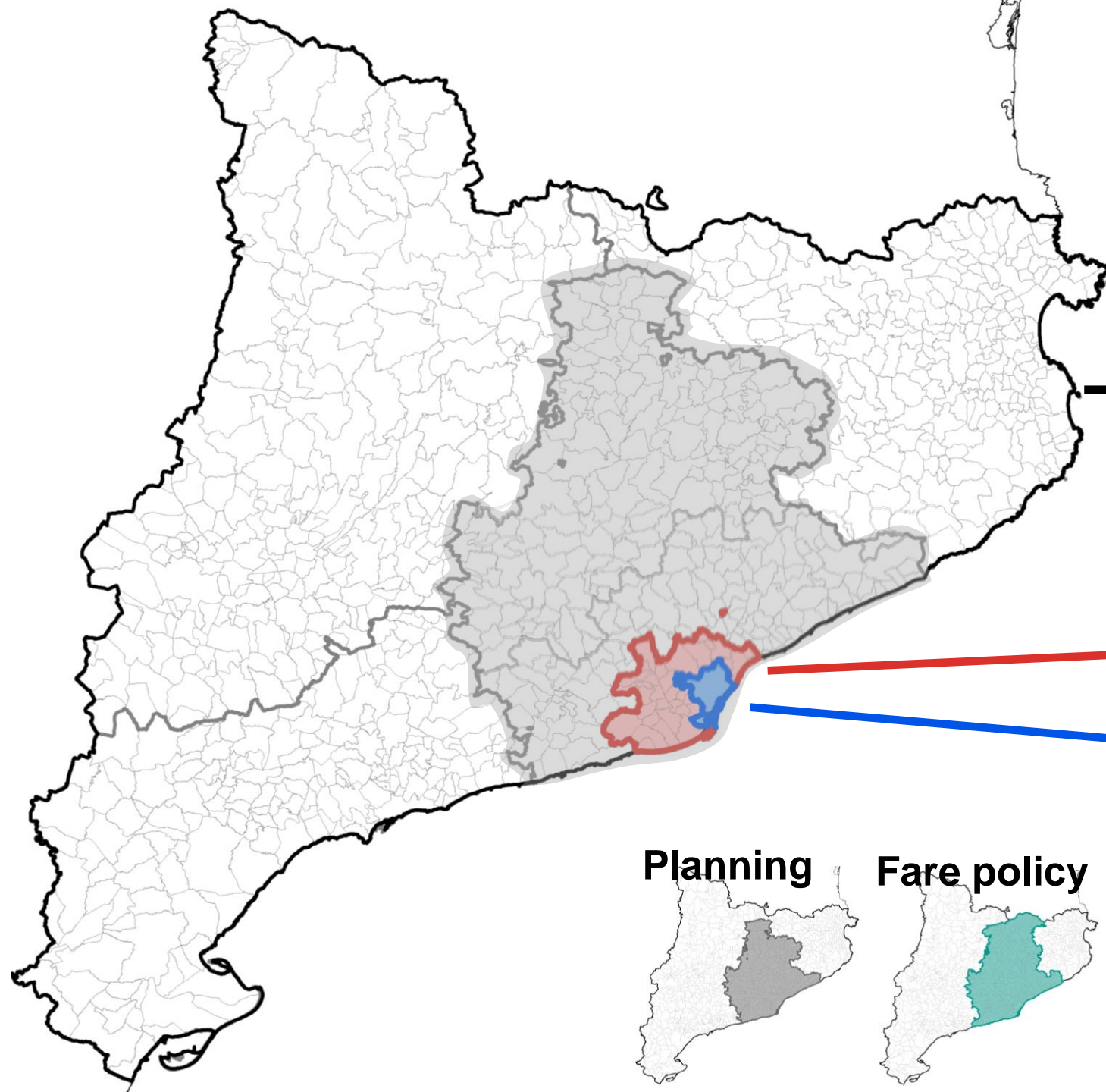


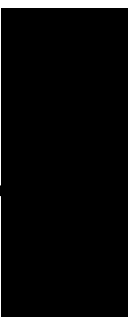



Àrea de Barcelona
Autoritat del Transport
Metropolità

ATM Presentation

June 2023

Territorial scope



	Catalonia 7,7 Mhab 947 municipalities
	Metropolitan Area of Barcelona 2,65 Mhab - 36 municipalities
	Barcelona (Main city) 1,67 Mhab - 1 city
	ATM 5,8 Mhab 346 municipalities 7.726 km ²



ATM's Organisation



A consortium

The President is Minister of the Vice Presidency and Digital policies and Territory of the Catalan government

Board of Directors is the Rector body of the ATM. 18 full right members.

Executive Committee is the executive body of the ATM. 6 representation members:



Staff: 36 people

Budget 2018: 1.433 M€

ATM's Main functions

Planning

- Planning of infrastructures: Infrastructure Master Plan
- Planning and management of metropolitan mobility: Mobility Master Plan

Management

- Delegated management of the Metropolitan Tram network
- Government financing of the public transport system
- Program contracts with public transport operators

Fare policy

- Fare integration and subsequent fare policy
- Promotion of integrated communication of the fare System
- New fare digital platform: T-mobility



Master Mobility Plan

planning mobility, keeping in mind all modes of transport, passengers and goods.



Healthy and
sustainable
mobility



Efficient and
productive
mobility



Safe and
reliable
mobility



Inclusive and
equitable
mobility



Intelligent
and digital
mobility

pd **M**

Pla Director de Mobilitat



Megachanges in mobility

Environmental

pollution and climate emergency



Social

ageing, social media



New mobility modes

scooters, shared cars, ...



Megachanges in mobility

Digitalisation

through smartphones



Data

as a key element for managing trips



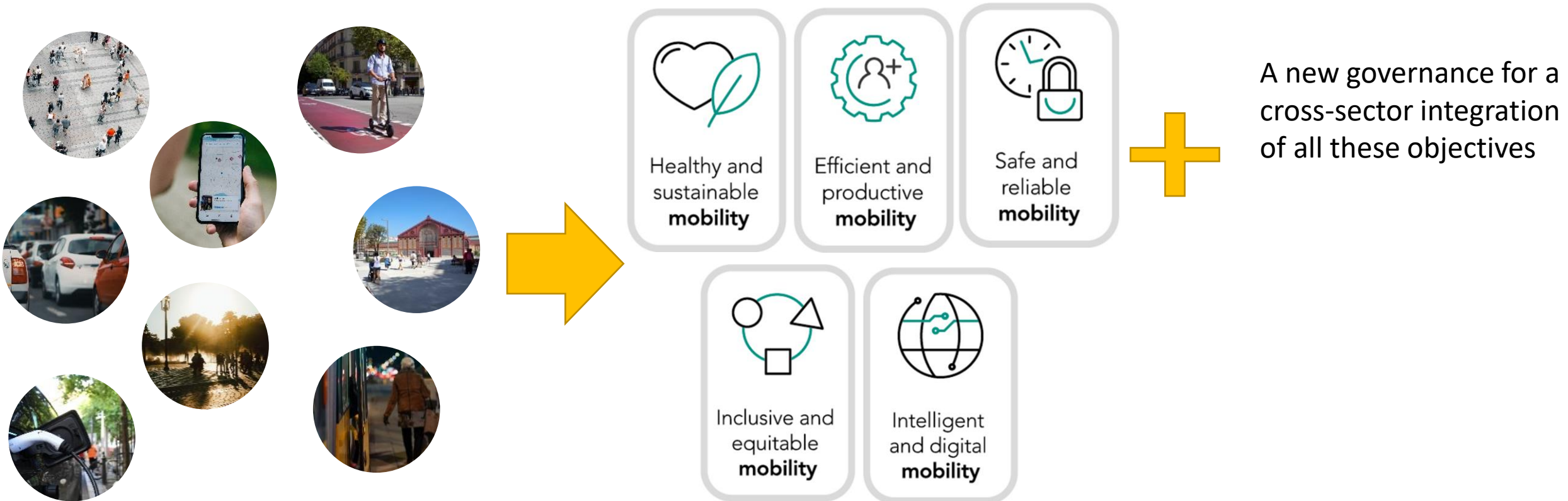
Technological transformation

automation and robotics







Master mobility plan (pdm)

- It seeks to respond to the “megachallenges” that BCN faces, keeping in mind all modes of transport, passengers and goods



Master mobility plan (pdm)

- Meeting different Sustainable Development Goals:

		<p>Affordable and accessible transport</p>			<p>Decarbonisation. Avoid negative externalities in terms of health and the environment</p>
		<p>Active means of transport towards a healthy and safe mobility model</p>			<p>New logistic model. Mobility as an innovative industry and generator of economic activity</p>
		<p>Incorporating sustainable mobility in all areas of education</p>			<p>Promotion of traffic-calmed spaces and efficient, sustainable modes of transport.</p>
		<p>Incorporating the gender perspective</p>			<p>Meeting changes in trends in commuter and consumer mobility flows</p>

The PDM'20-25: The Plan Proposal

EA00.

Governance, planning and digitalization of mobility

Regulatory aspects (planning, data management and digitalization of mobility)

EA01.

Tools for healthy mobility

Reduce GHG emissions and pollutants

EA02.

Accessible and secure mobility networks

Exchangers between transport modes and presence of electric and sustainable modes

EA03.

Inclusive and quality public transport service

Increase the use of public transport and reduce the effects of climate change

EA04.

Other forms of responsible and efficient mobility

Taxis, VTC, VMP, discretionary services...

EA05.

New management of DUM and logistics

Use of sustainable modes, efficiency in existing systems and new technologies

EA06.

Sustainable access in areas of economic activity and mobility dust

Modal transfer to sustainable modes

EA07.

Energy transition and circular economy

Introduction of technology in vehicles and infrastructure

EA08.

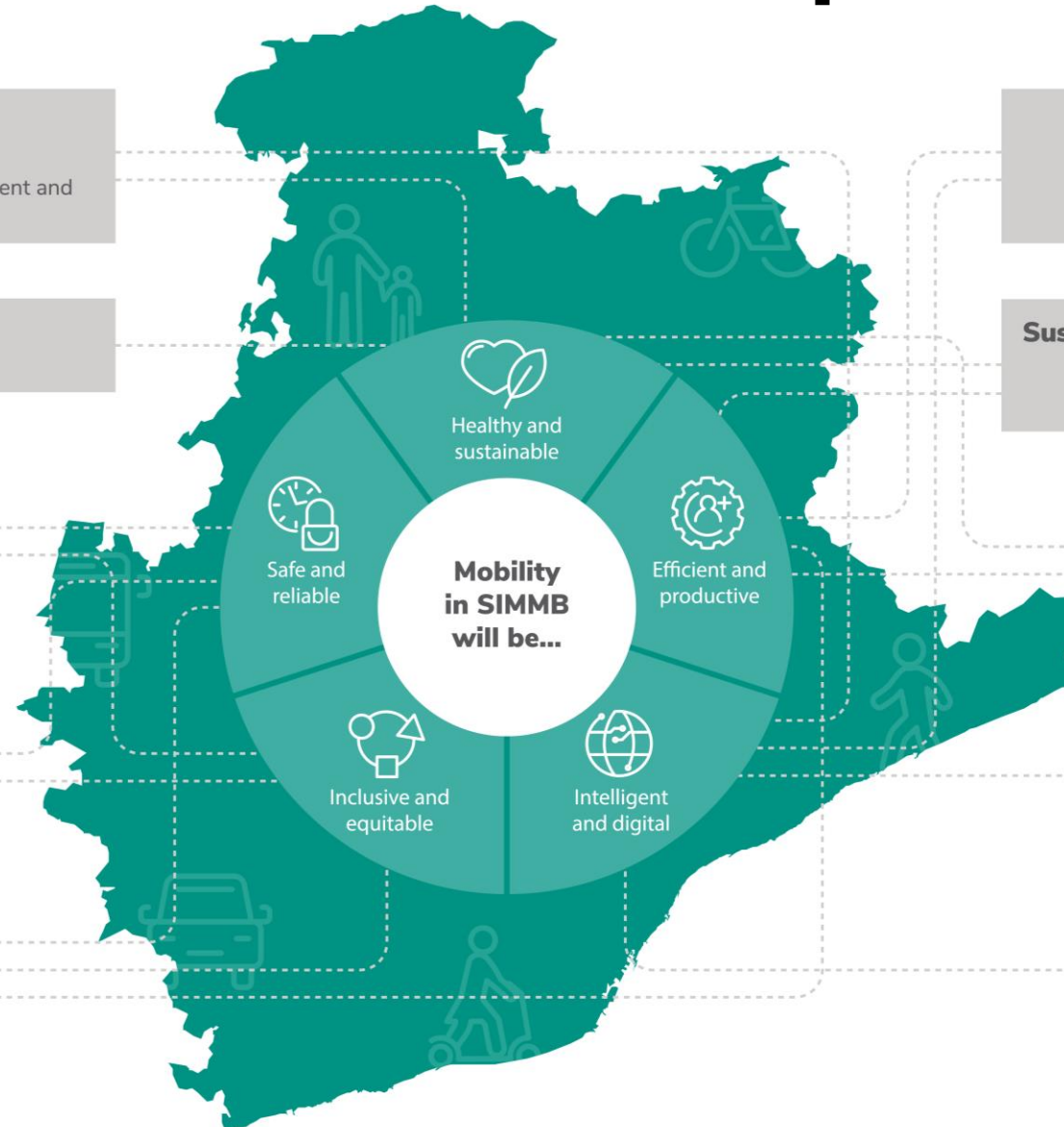
Tools for continuous improvement of mobility

Co-responsibility of the population, knowledge, education and communication

EA09.

Mobility innovation

New energies, new mobility models and new vehicles



Barcelona's ATM promotes digitalisation

The Mobility Master Plan incorporates innovation and digitalisation in all mobility modes

- T-Mobilitat Project
- P&R digital information
- Mobility digitalisation agenda
- Mobility observatory
- MaaS project & Strategy



Mobilitat
intel·ligent
i digital



Low Emissions zones

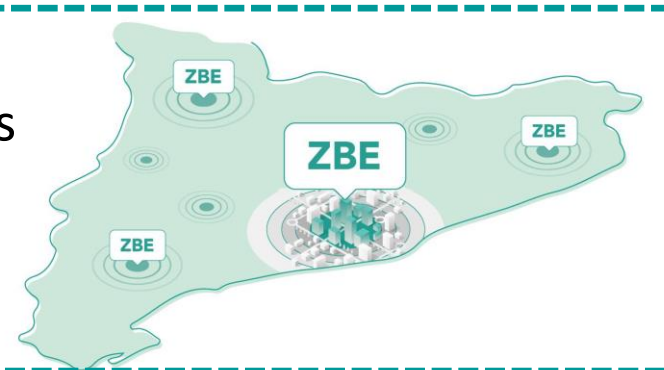
- Projects to support municipalities to design and implement Low Emission Zones:



- Support instruments for municipalities with more than 20,000 inhabitants: digital platform to facilitate the implementation of LEZs.



It is expected that 43 municipalities will have working LEZs within the term of the Master Plan

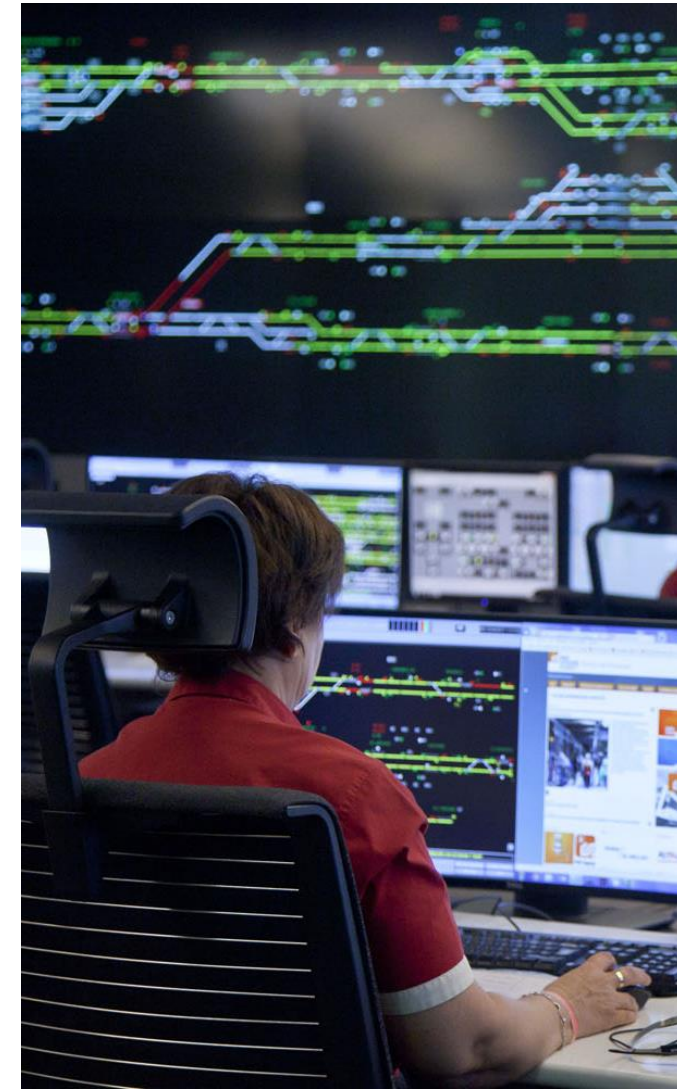
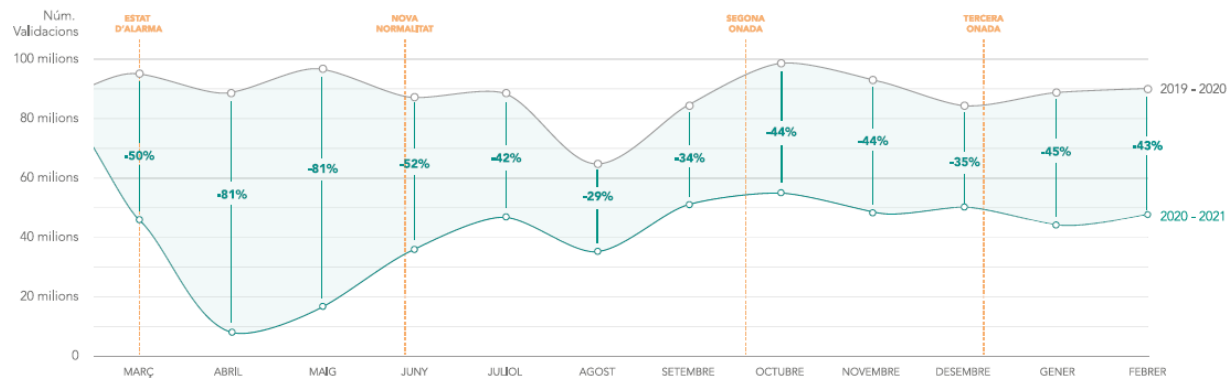


Crisis management

- Integrated response to periods of crisis or emergency

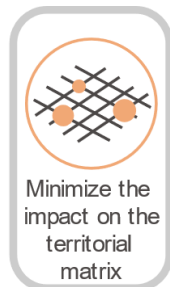


- governance model and design of a protocol for future crises in the public transport system
- Contingency plans to adapt the public transport system to different crisis scenarios



Master Infrastructure Plan

planning infrastructures, keeping in mind public transport, environmental challenges and social inclusion.



pd **I**

Pla Director d'Infraestructures



Action programs

The proposed actions are divided into five action programs:

- Network expansion (Metro, Bus, and Tram)
- State Railway Network
- Exchangers. P&R
- Surface Public Transport. e-bus
- Modernization and improvement

The Plan defines two groups of actions: type A (expected to start the execution within this decade, good economic and social profitability with $IRR > 3\%$, and good environmental impact, with Life cycle > 40) and **type B** (unscheduled actions with lower profitability, with $IRR < 3\%$ or Life cycle < 40)



Phase A. Scheduled actions

Investment
8.888,2 M€



	Length (km)	Trains (network expansion)	Stations	Demand (benefited passage)
AX, XT i XE				
Phase A	96,7	66	64	591.510

PdI emission reduction target expected:

- **C02 Emissions: -9,3%**
- **NOx Emissions: -31,5%**
- **PM10: -26,6%**



Resilience to climate change

- Specific projects to ensure the resilience and adaptation of transport infrastructures to climate change:

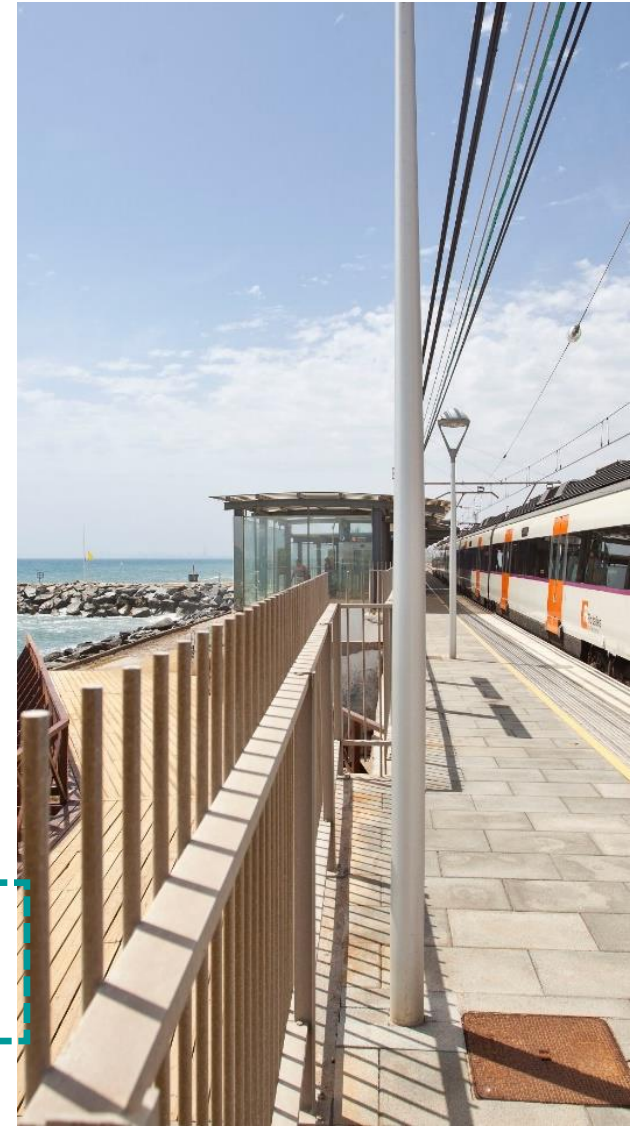


Risks

Effects

Solutions

247 M€ approved in the master Infrastructures Plan



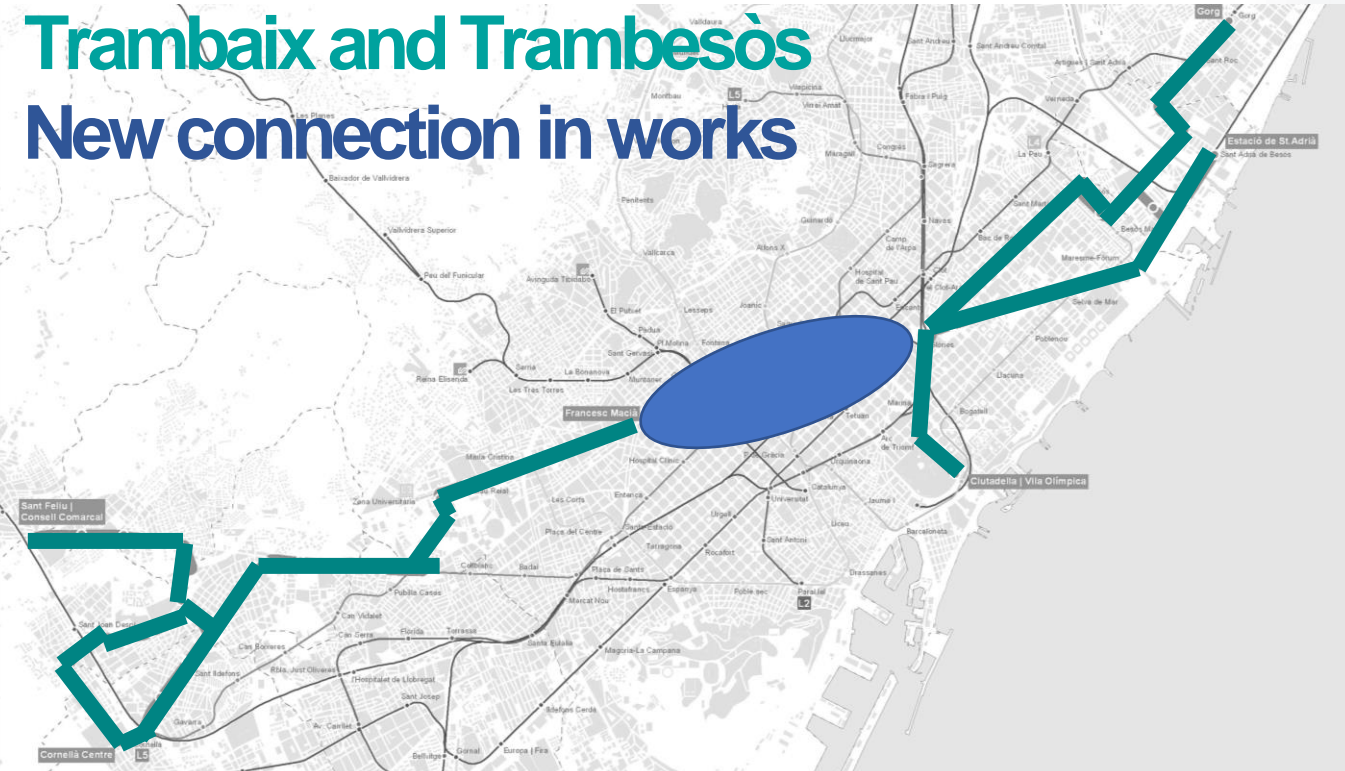
The TRAM network

To satisfy the need for a new medium-capacity transport mode, using an environmentally, friendly and new transport system.

The transport service most highly rated by citizens in recent years, with rates of satisfaction of 7,4

Network 2

Trambaix and Trambesòs
New connection in works



The TRAM network

Runs across 9 municipalities

Total length 29,1km

Trams 41

Passengers 29,1M

New connection

Lenght 4 Km

Trams 18

Passengers 29,0 M

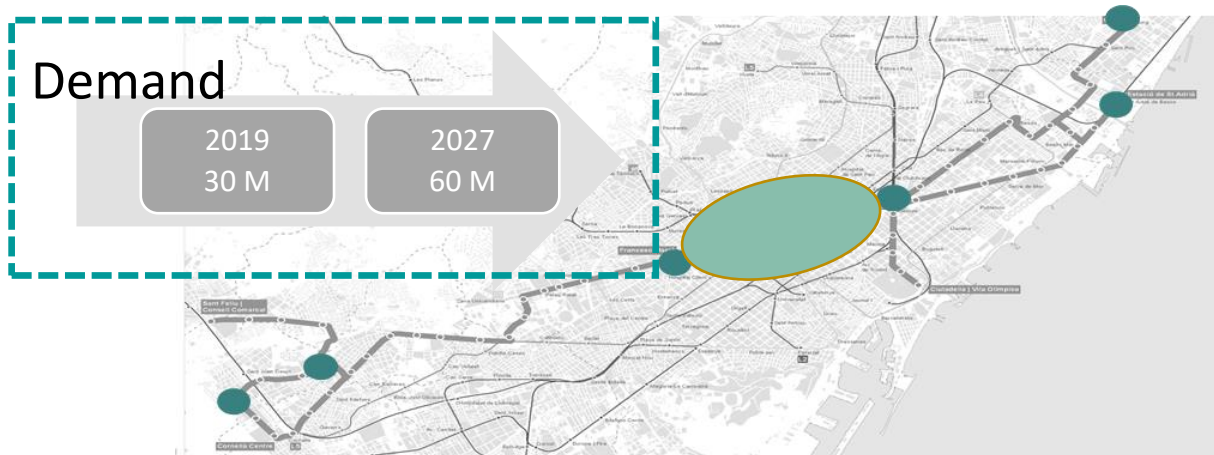


Urban integration

- Infrastructures integrated in the urban space



- Link-up of the two current networks along the Diagonal
- New urban design where pedestrian, bicycles and PT take over the private car



Public transport system

BUS OPERATORS

Metropolitan Transports of Barcelona (TMB, Public Operator): Urban bus of Barcelona. It is the principal operator of the System. Administrated by the AMB.

746 lines
15.805 km network

Other transport operators There are other 50 private operators (metropolitan, intercity or urban) that offer services in a concessional regime or other modalities, administrated by the Generalitat of Catalonia, the Metropolitan Area of Barcelona or the City Councils.



Public transport system

RAILWAY OPERATORS



Metropolitan Railway of Barcelona (TMB, Public Operator): Metro of Barcelona. Administrated by the AMB.



Generalitat of Catalonia Railway (FGC, Public Operator): Metro and commuter trains. Public company owned by the Generalitat of Catalonia



Metropolitan Tram, (private operator, concessional system): Administrated by ATM.

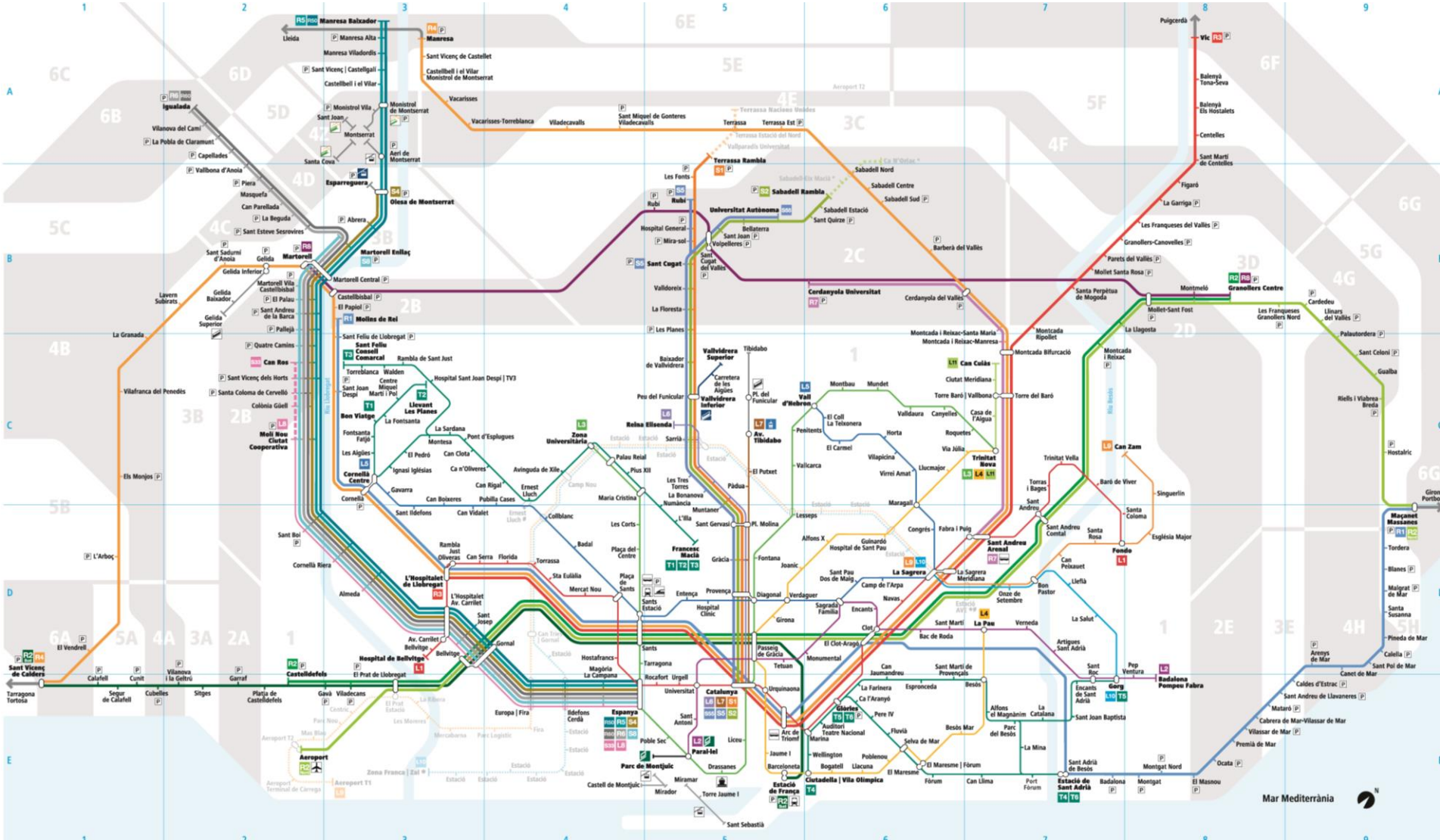


Rodalies of Catalonia (Renfe, Public Operator): Commuter train network. Public company of the General State Administration, the ownership of the service was passed to the Generalitat of Catalonia in 2010.

Public transport system

RAILWAY NETWORK

23 railway lines
811 km



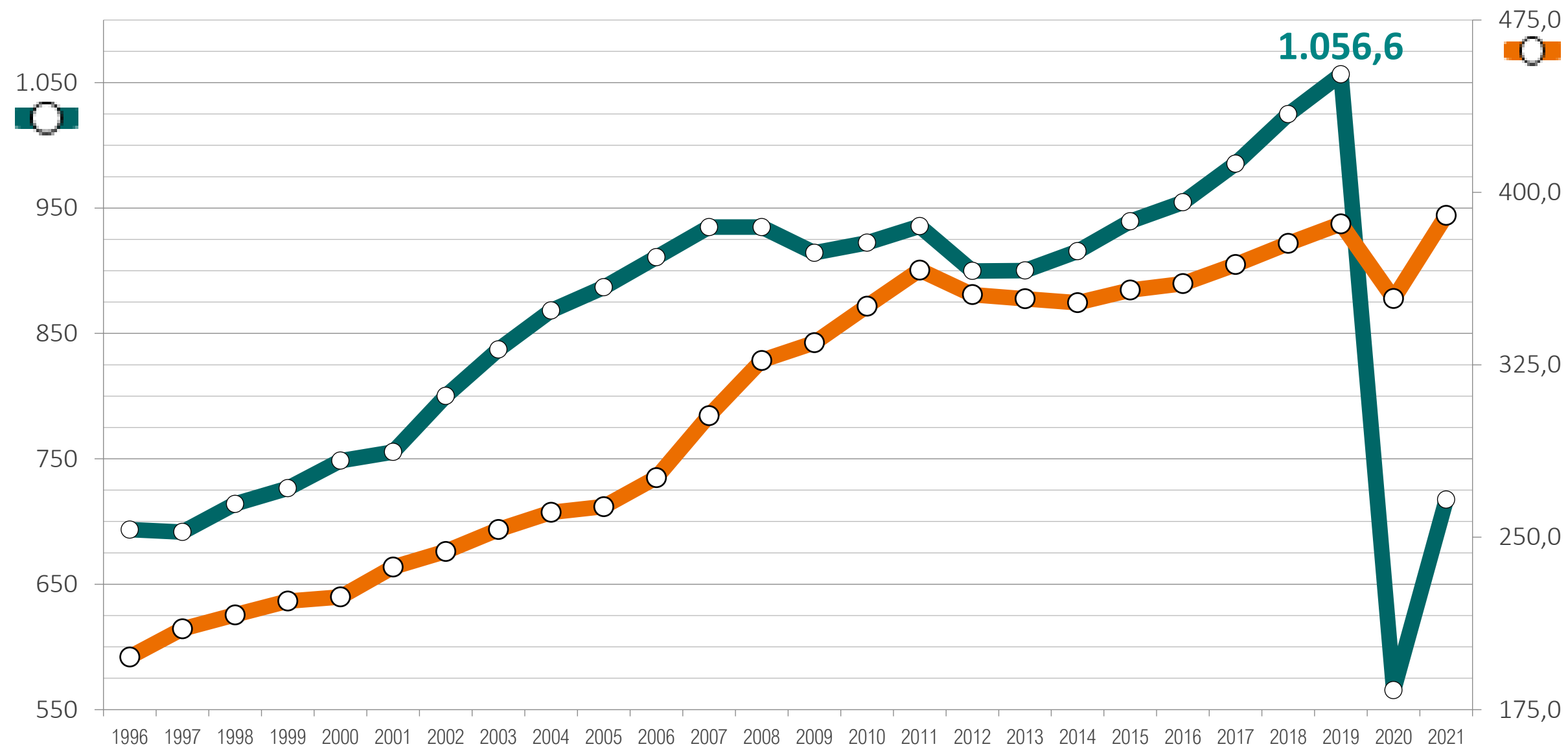
Public transport supply

	Routes	Network (km)	Trains km.10 ⁶	Trains / HP
Urban (Metro TMB)	8	123	92,9	146
Suburban (FGC+Renfe)	23	666	123,1	85
Tramway	6	29	2,4	23
SUBTOTAL 2020	37	718	218,3	254
	Routes	Network (km)	Buses on service	Age
Urban TMB	101	830	903	8,5
Suburban (Metropolitan buses)	115	1.452	652	9,2
Suburban (Other buses)	417	12.278	686	6,8
Other services	147	1.045	275	9,6
SUBTOTAL 2020	780	15.603	2.515	8,6



Public transport

Supply (milions veh·km) vs. Demand



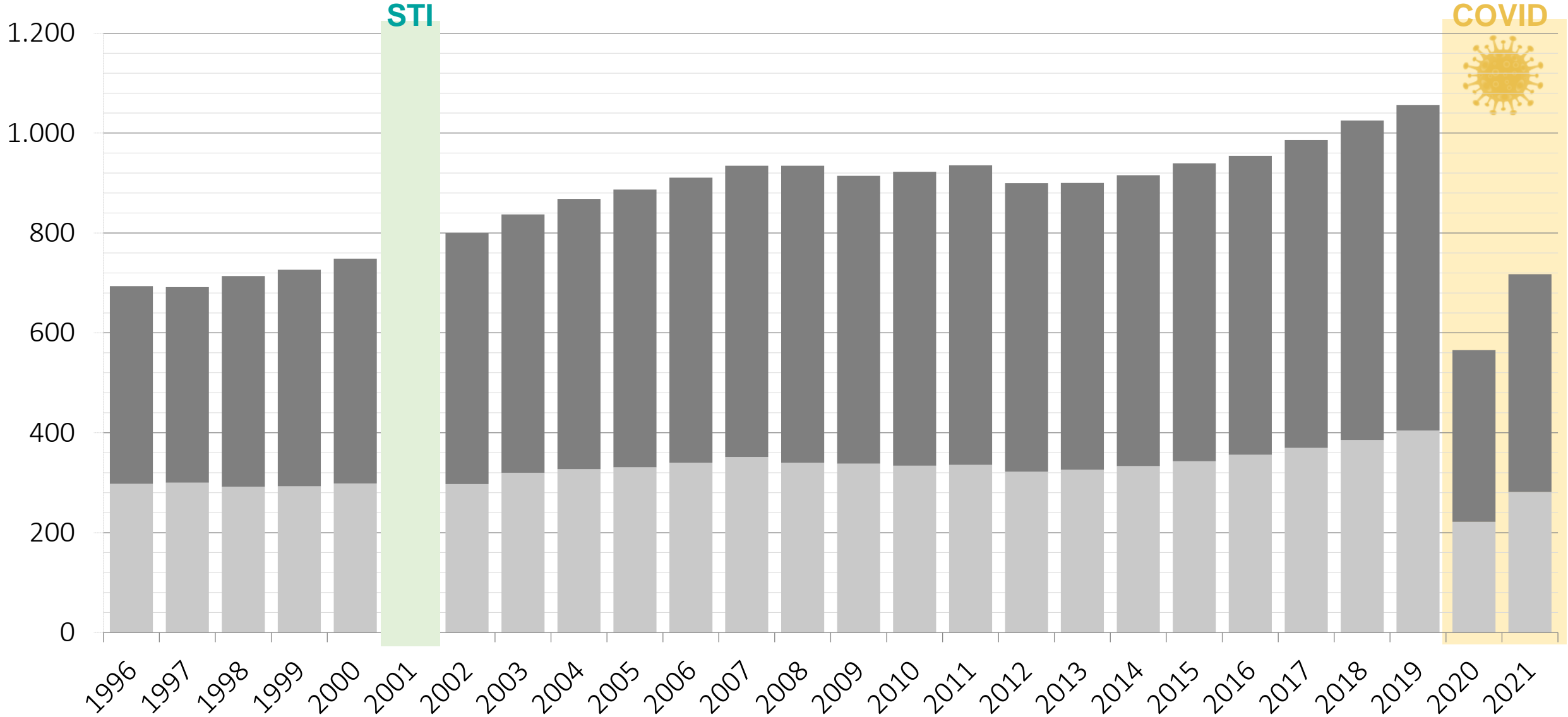
Demand



TRAIN: URBAN & SUBURBAN
(Metro: 64% | TRAM: 4,5% | Suburban: 31,5%)



BUS: URBAN & SUBURBAN
(TMB: 52%)



decarbonization

• Decarbonisation of public road transport



- It is estimated that 645 urban and interurban bus lines could be electrified (annual consumption 217 million kw/h)
- Agreement to decarbonise the entire public transport system by 2035



2017
5

2030
500

2035
4140

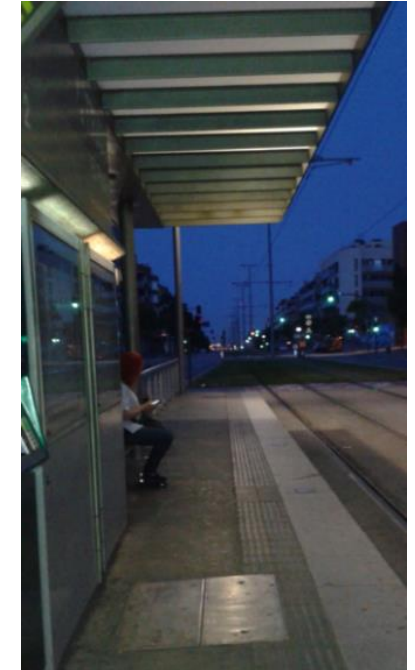
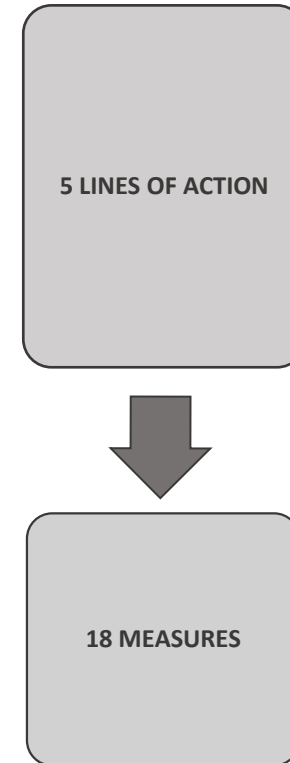


Gender policy

- Plan of measures against sexual harassment in public transport:



- BENCHMARK
- FIELDWORK
- FOCUS GROUP
- INTERNAL WORK

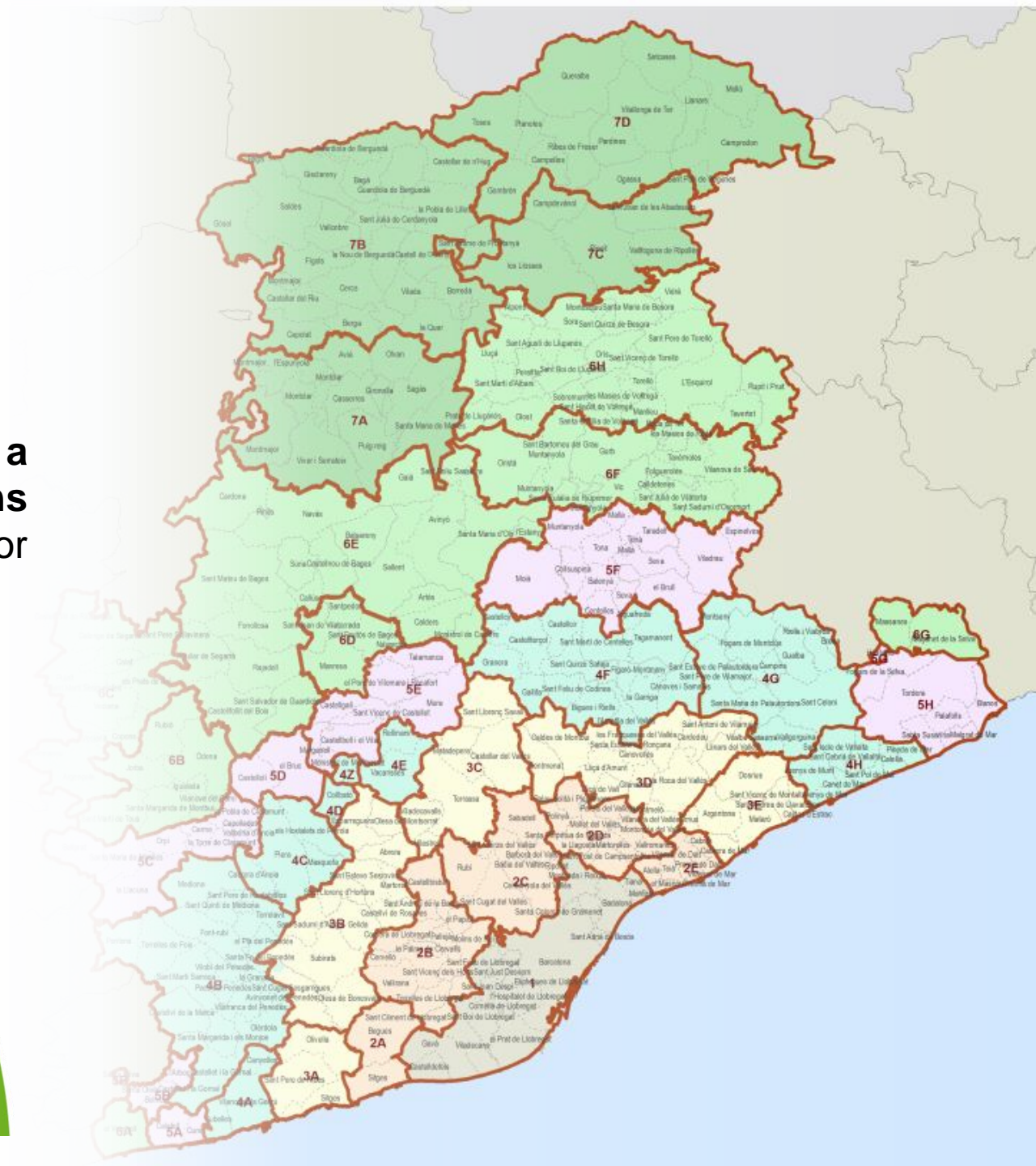
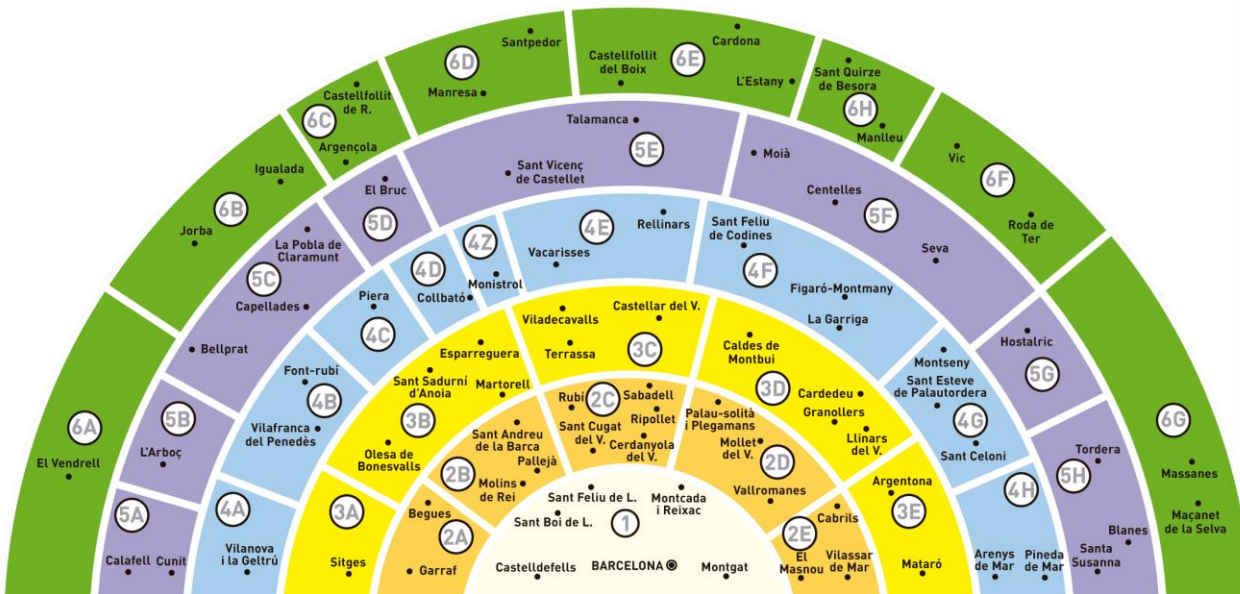


Increase the number of audits carried out on the mobility system from a gender perspective

Integrated Fare System

- **346** municipalities
- **5,7** M inhabitants

The **integrated fare** enables passengers to **pay for a single journey and make transfers on different means of transport**. This translates to considerable savings for all users.



Ticketing and information digitalisation

T-Mobilitat Project

Opportunities for innovation

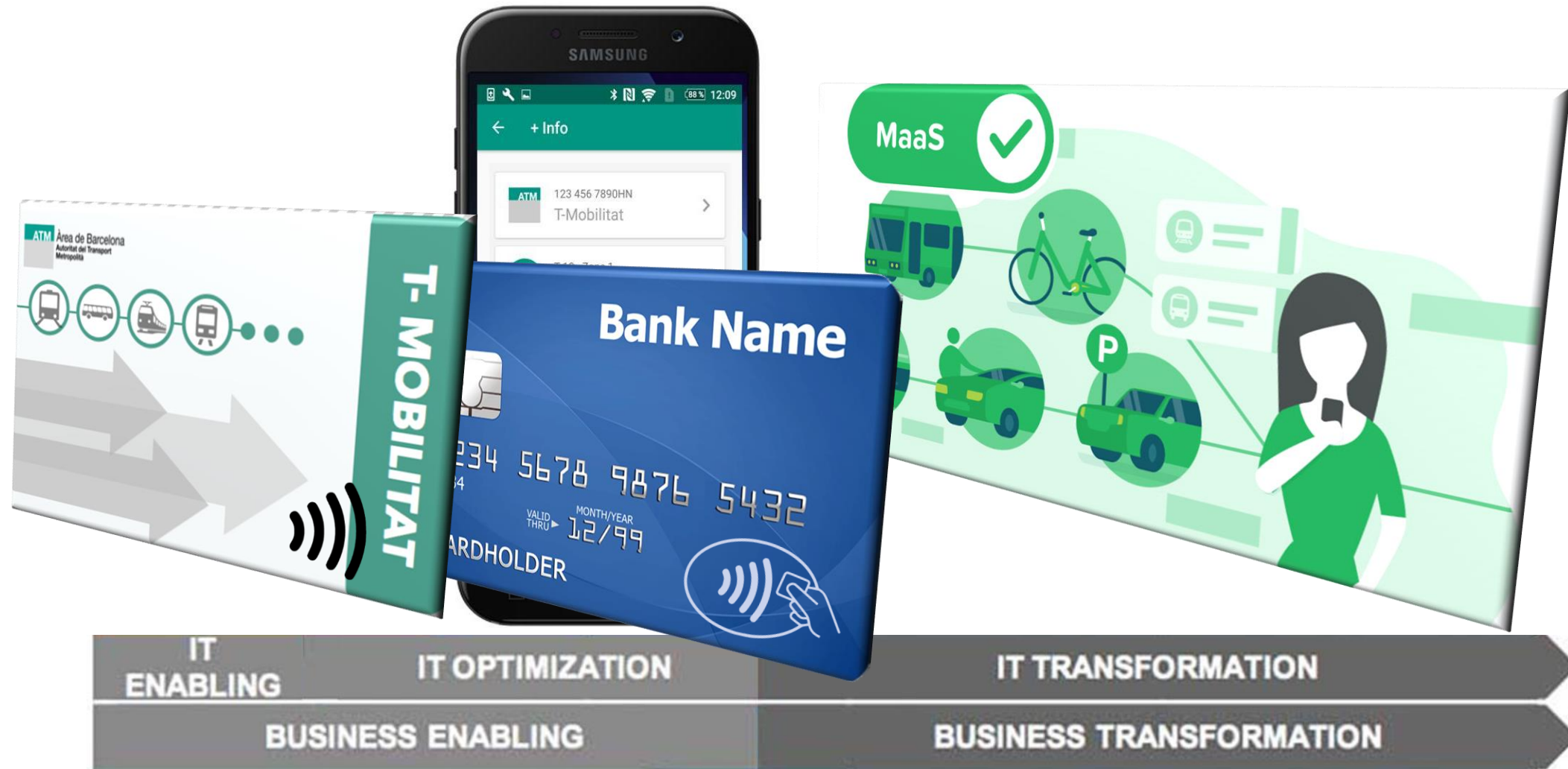
- Fare integration and promotion of exchange with other modes:
- New marketing and sales systems (mobile, internet, etc.).
- Precise control of the time of use, km of service, etc., and characterisation of the needs of the users.
- Dynamic pricing: “Pay as you go”.
- Optimisation of access systems to the public transport network.
- New mobility data platform

The proposal

- Tariff adapted to use
- Mobility card adapted to the user
- Reduction of card types (trend towards a single card).

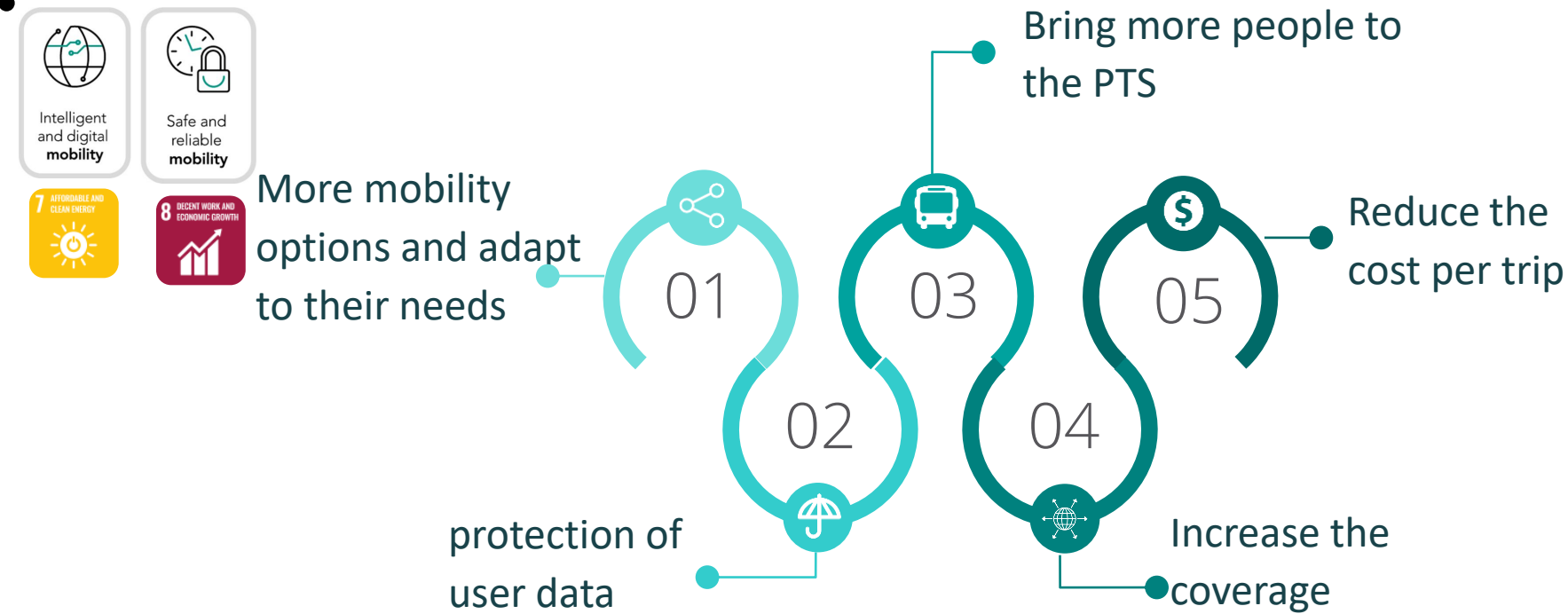


Unleashing transport transformation through digital and mobile



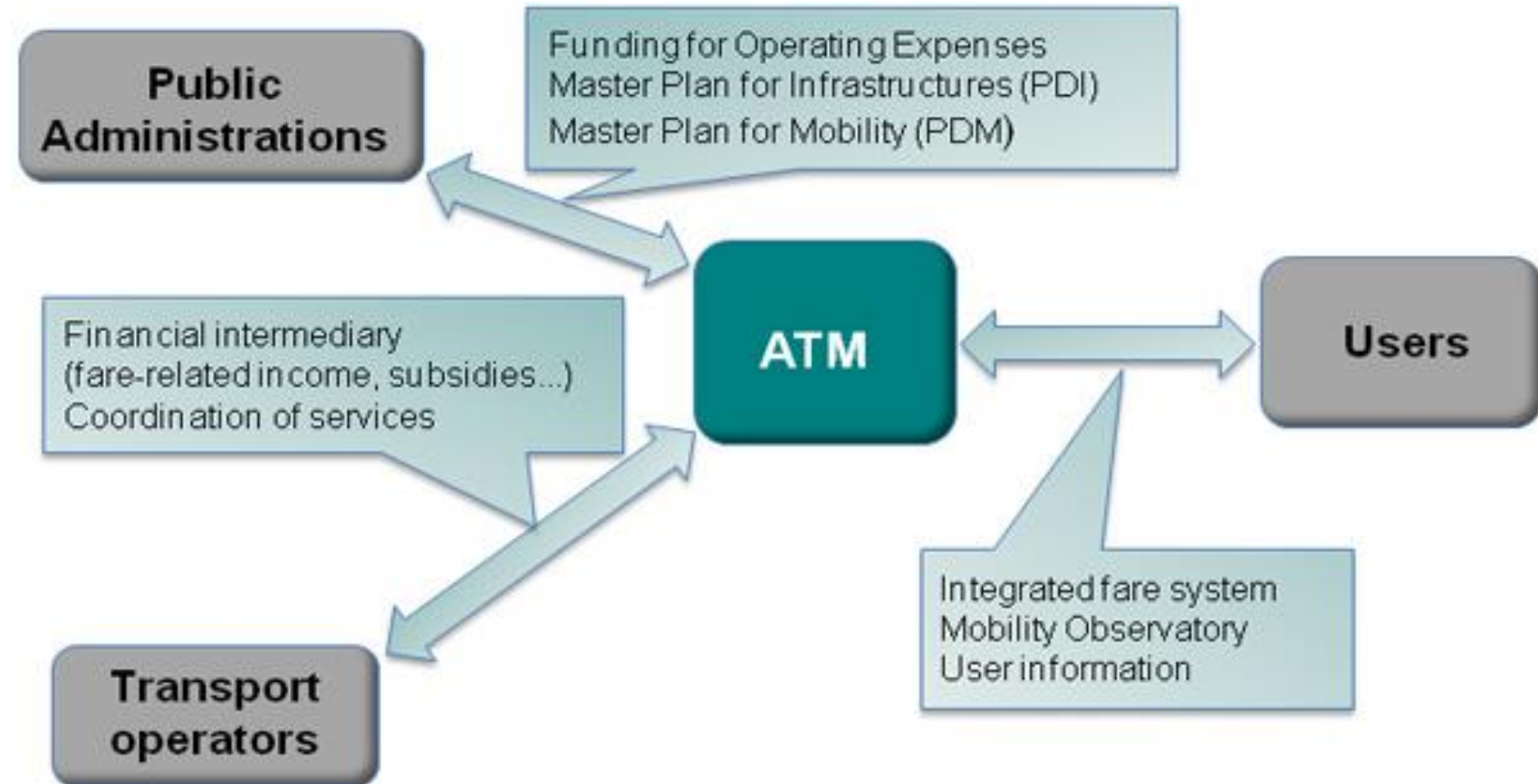
Mobility as a service

- Maas Project: A door-to-door trip with several modes and a single contract

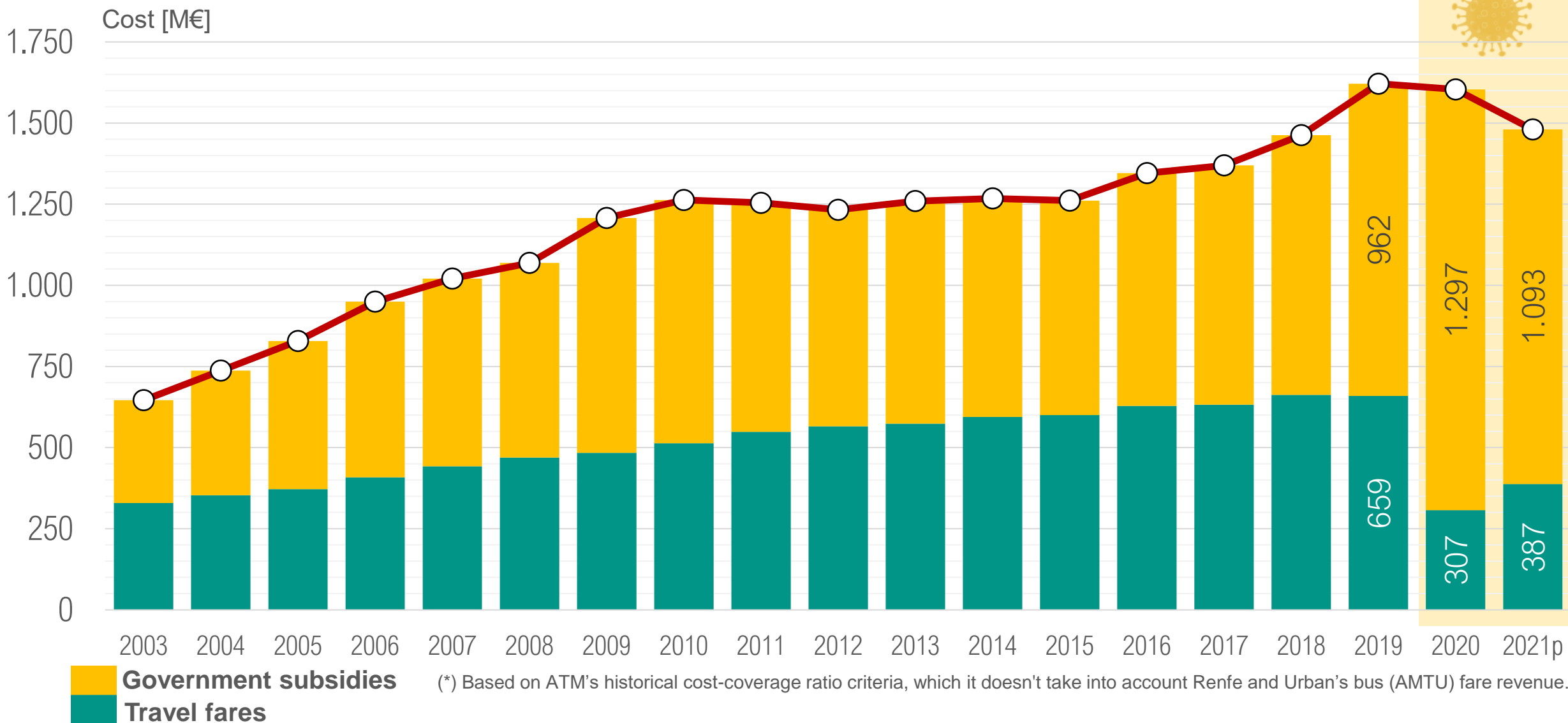


Financing the transport system

One of the primary duties of the ATM (Metropolitan Transport Authority) is to act as a **financial hub for the entire metropolitan collective public transport system**. This guarantees that there are sufficient economic resources to carry out an ongoing improvement programme in the public transport within the Metropolitan Region of Barcelona.



Financing the transport system



From local to global: ATM's involvement and active participation at EU level and beyond.

Building a
common and
interoperable
ground for the
future of
mobility



The EU Green Deal

The European Green Deal is about **improving the well-being of people**. Making Europe climate-neutral and protecting our natural habitat will be good for people, planet and economy. No one will be left behind.

The EU will:



Become climate-neutral by 2050



Protect human life, animals and plants, by cutting pollution



Help companies become world leaders in clean products and technologies



Help ensure a just and inclusive transition

SUSTAINABLE DEVELOPMENT GOALS





Thanks!
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