INTEGRATING PUBLIC TRANSPORT AND SHARED MOBILITY

Session *"Vehicle Sharing in Cities: Italy and Europe"*

The case of Barcelona Metropolitan Area (Spain)

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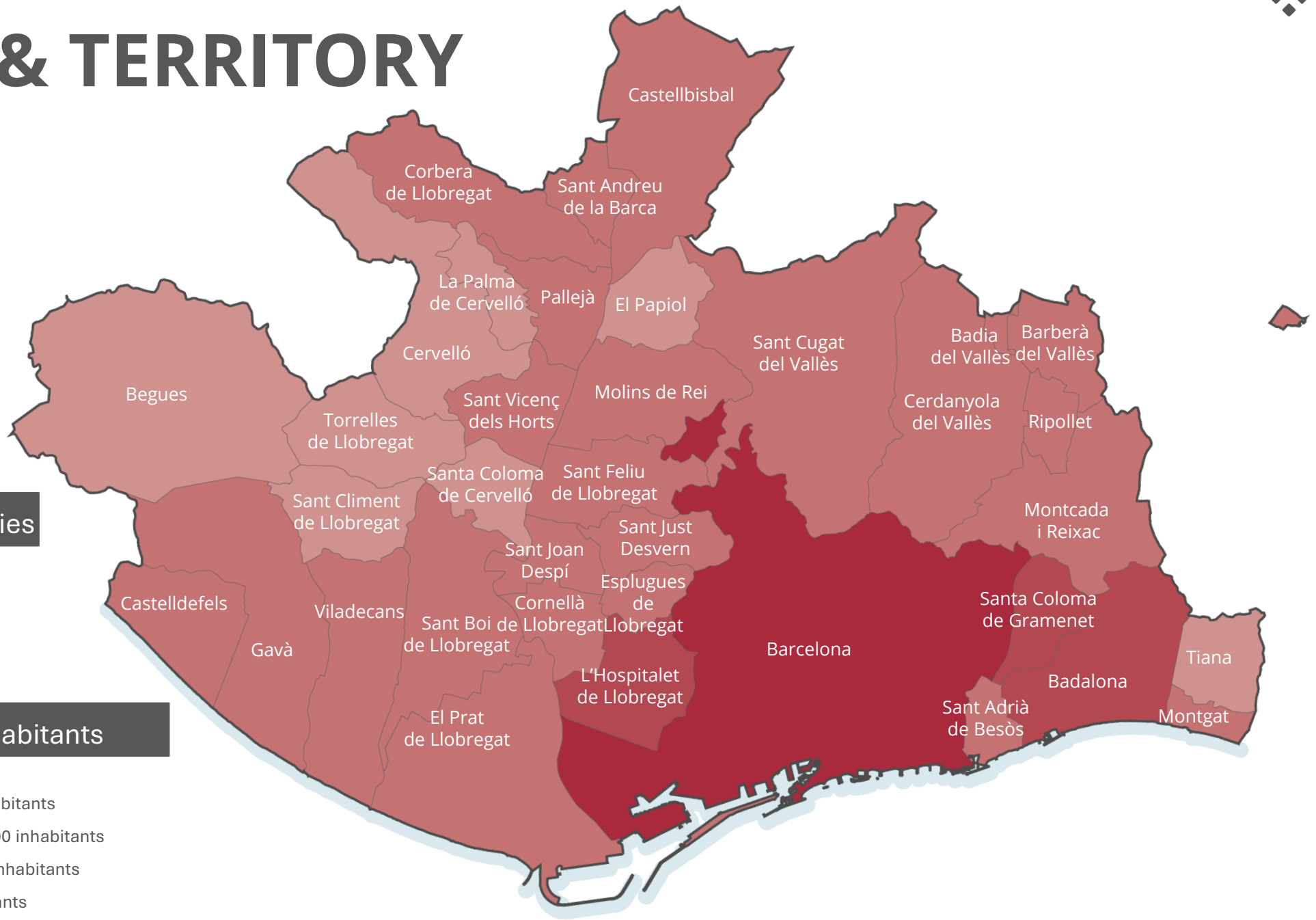
CONTENTS

- The Barcelona Metropolitan Area (AMB)
- Integrating public transport and shared mobility
- Key points and Challenges
- Work of the UITP Shared Mobility Committee

The Barcelona Metropolitan Area (AMB)



DATA & TERRITORY



36 municipalities

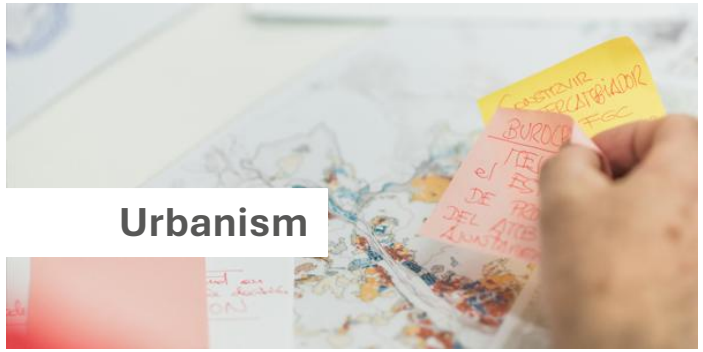
636 km²

3,4 million inhabitants

- More than 1,000,000 inhabitants
- From 100,000 to 1,000,000 inhabitants
- From 10,000 to 100,000 inhabitants
- Less than 10,000 inhabitants

COMPETENCES


Territory


Urbanism


Housing


Mobility and transport


Environment


Social and economic development

Innovation and digitalisation

Strategic planning

International action

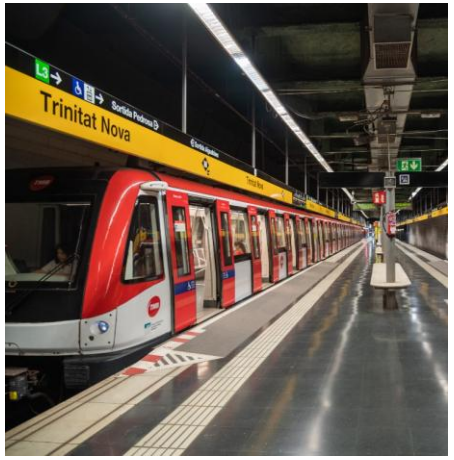
MAIN SERVICES AND POLICIES



Bus Metropolità (TMB)



Bus Metropolità (indirect management)



Metro



Taxi



Park and ride



Low emissions zones



Electric stations



Bicivia



Bicibox service



AMBici service

MAIN FIGURES

11,7 M
daily trips of metropolitan area of Barcelona's residents

833 M
metro and bus passengers

545 km
Bicivia network

75,9 %
sustainable mobility trips

5.425
bus stops

246
bus lines

8
metro lines

10.518
taxi licenses

Direct management
TMB Transports Metropolitans de Barcelona

Indirect management
avanza by MOBILITY ADO
DIREXIS TGO
moventis
MONBUS
TUSGSAL
Soler i Sauret

Direct management
TMB Transports Metropolitans de Barcelona

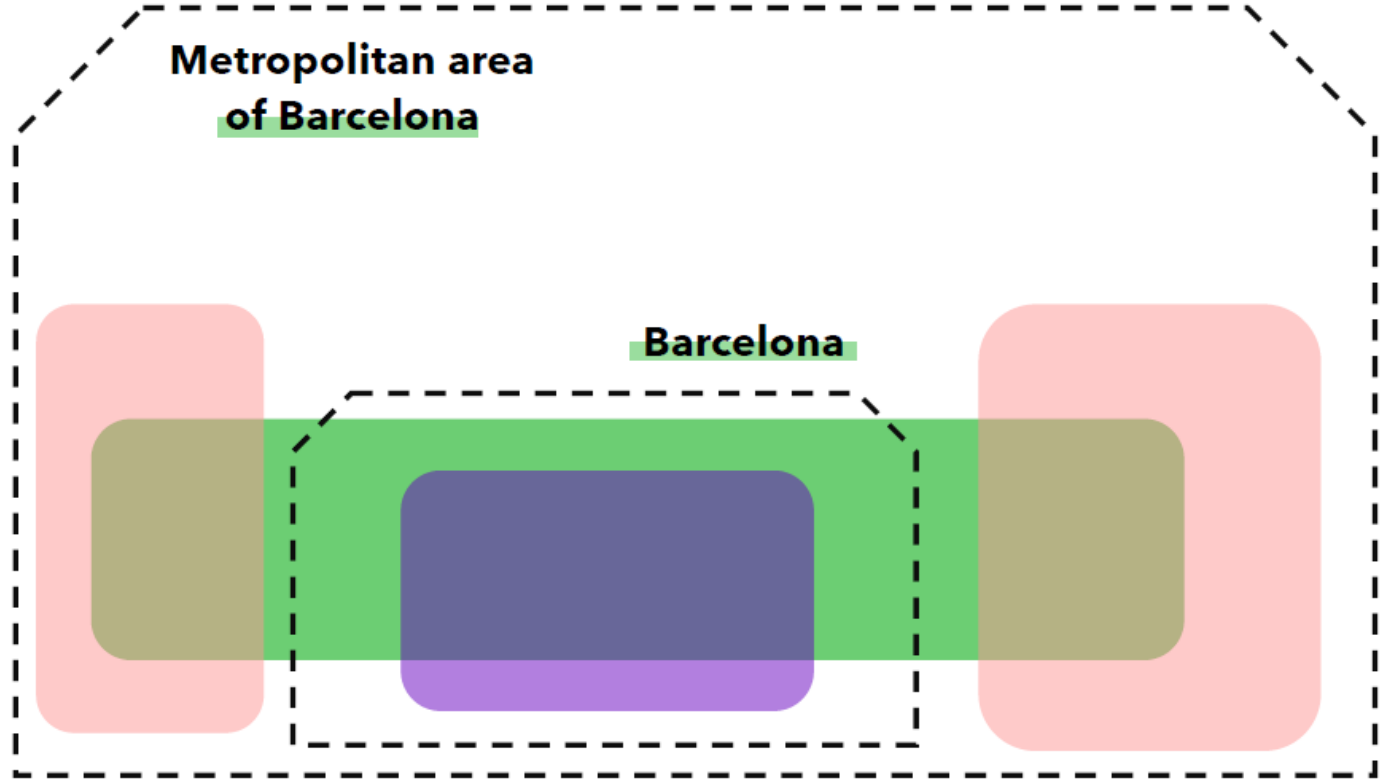
Administrative licenses
AMB Taxi

Data for the year 2025

SHARED SERVICES

Form of regulations

(Barcelona study case)





AMBici
Concession
(8,5 years)
inter-municipal cooperation frameworks for the rollout and management of the service



Motosharing
Licenses for special common us of the public domain
(2 + 1 + 1 years)
Competence delegation from municipalities

Free-floating bikesharing
Licenses for special common us of the public domain
(2 + 2 years)

Bicing
Concession
(10 + 2 years)

AMBICI – PUBLIC SHARED E-BIKE SYSTEM

From the 30th of January of 2023

235
stations at 15 municipalities

2.600
E-bikes

2M
Trips/year (6.000 trips/day)

10
Bicing transfer stations

14.500
Registered active users



Plan de Recuperación, Transformación y Resiliencia
GOBIERNO DE ESPAÑA
MINISTERIO DE TRANSPORTES, MOVILIDAD Y AGENDA URBANA
Financiado por la Unión Europea
NextGenerationEU

Metropolitan regulation of motosharing

Delegation Agreements for metropolitan licenses

8 municipalities

5.950 motorbikes
100% electric

+ 9.000
trips/day

6.1M trips since the metropolitan rollout began



cooltra

1.950 e-mopeds

AMB Moto compartida



acciona

1.950 motorbikes

YEGO urban mobility

2.050 e-mopeds

Biggest regulation of licences in Europe

INTEGRATING PT & SHARED MOBILITY



PLANIFICATION

Location of complementary services, connected to high-capacity public transport network

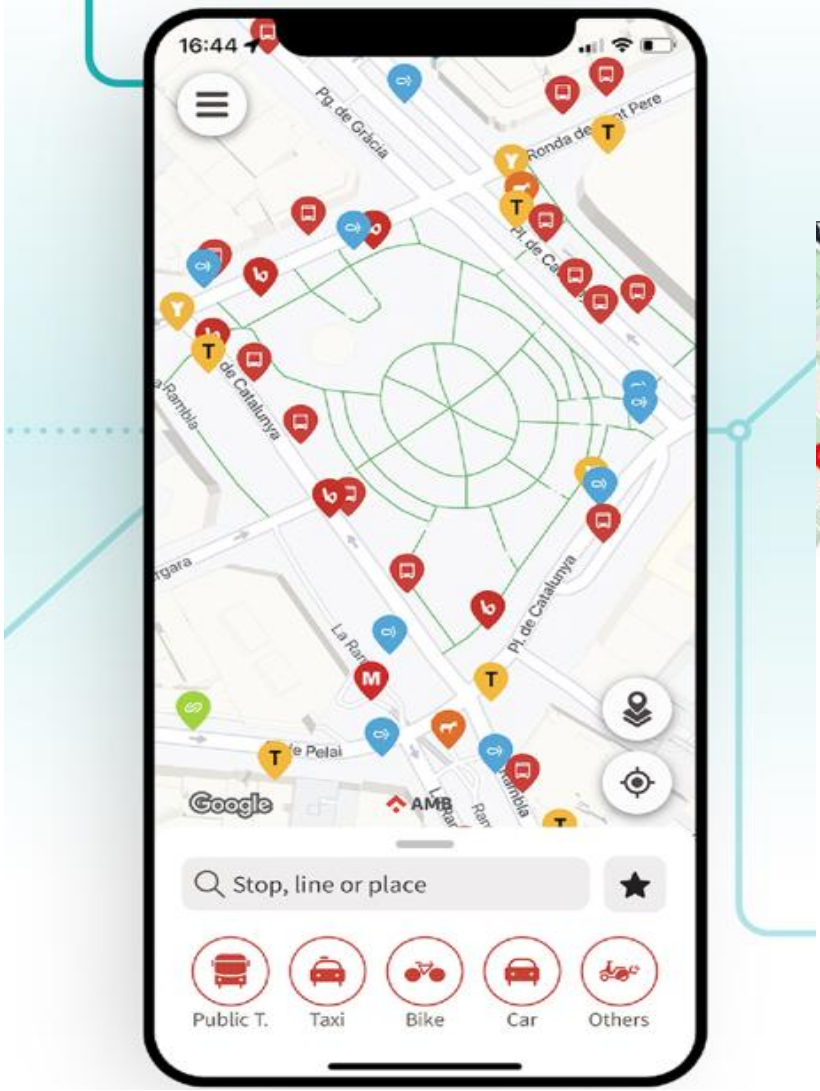


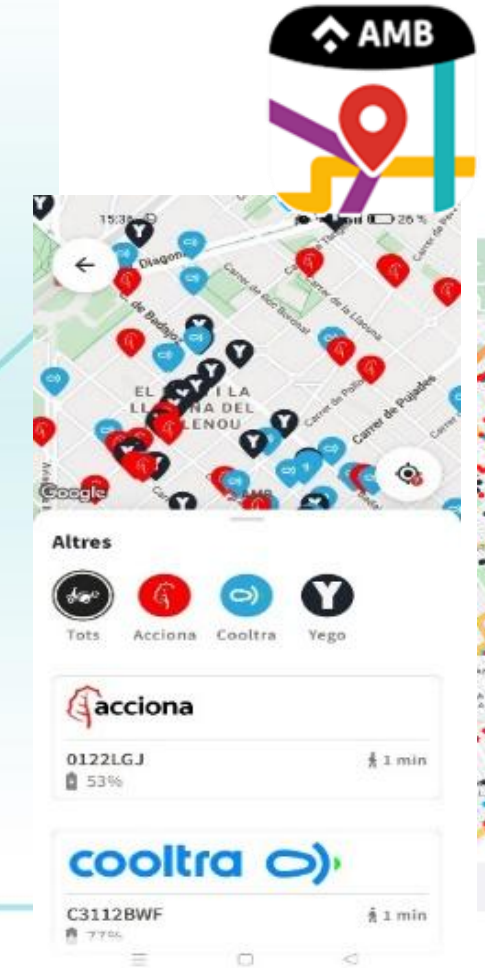
TECHNOLOGY

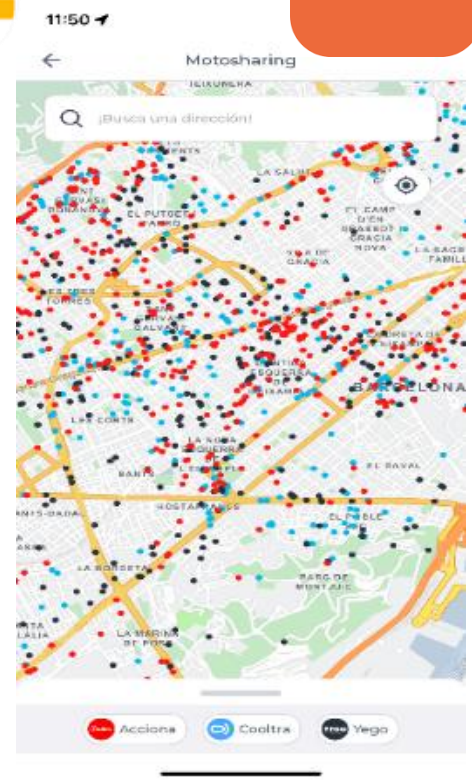
All the information
on metropolitan transport
on your mobile!

Connectivity between
all modes of transport









DATA & CAMPAIGNS

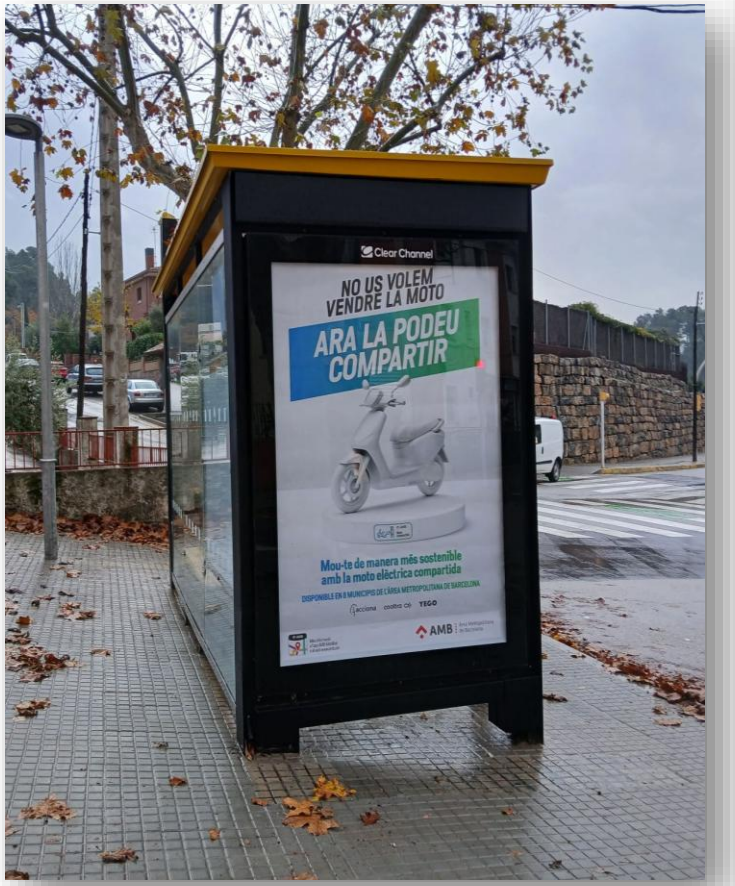
56.2% of users combine **AMBICI** with other public transport service









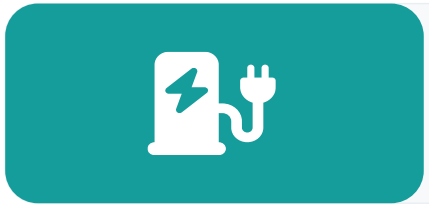




KEY POINTS & CHALLENGES



KEY POINTS



E-mobility as a priority

Accelerating the transition to electric mobility.



Shared mobility & intermodality

Coverage, strategic location, real-time information and technology are key to success.



Parking policies + LEZ

Coordinated measures to reduce car traffic and air pollutants.



Communication campaigns

A fundamental pillar for promoting sustainable mobility.



€40M in NextGenerationEU funding

Investment in AMBici, bus fleets, technology and infrastructure.

CHALLENGES



01

INCREASE ADOPTION

Boost the use of shared mobility services across the metropolitan area.



02

INTEGRATE INFORMATION

Show shared-mode availability in public transport information systems: bus, metro and tram.



03

COMBINED FARES

Develop integrated fares across public transport and shared mobility services.

UITP ADVANCING PUBLIC TRANSPORT

WORK OF THE UITP SHARED MOBILITY COMMITTEE

- SHARED VEHICLE INDICATORS
- SHARED VEHICLE REGULATION



SHARED VEHICLE INDICATORS

PURPOSE & CONTEXT

UITP WG1 ADDRESSES A GAP: **THERE IS NO CONSENSUS ON HOW TO MEASURE THE IMPACT OF SHARED VEHICLES**, LIMITING UNDERSTANDING OF THEIR ROLE IN MOBILITY SYSTEMS. **WG1 IS STRUCTURING A COHERENT SET OF EXISTING KPIS USABLE ACROSS CITIES AND REGIONS**.

“IMPACT” MEANS THE BROADER SOCIAL, ECONOMIC AND ENVIRONMENTAL EFFECTS OF MOBILITY, FRAMED AS CONTRIBUTION TO PUBLIC POLICY GOALS AND LONG-TERM URBAN SUSTAINABILITY.

Indicator Classification

IMPACT

IMPACT INDICATORS MEASURE SOCIAL OR ECONOMIC IMPACTS AT CITY OR REGIONAL LEVEL.

CITY/REGIONAL OUTCOMES

HABITS

HABITS INDICATORS CAPTURE CHANGES IN MOBILITY-RELATED BEHAVIOUR AND CITIZENS' USAGE PATTERNS.

BEHAVIOUR & USAGE

PERFORMANCE

PERFORMANCE INDICATORS DESCRIBE HOW MOBILITY SYSTEMS FUNCTION, THEIR EFFICIENCY, AND LEVEL OF USE.

SYSTEM EFFICIENCY

OFFER

OFFER INDICATORS DESCRIBE THE SCALE, STRUCTURE, DIVERSITY, AND SPATIAL DISTRIBUTION OF THE MOBILITY OFFER IN A GIVEN AREA.

SERVICE LANDSCAPE

From >150 indicators to 37 indicators

SHARED VEHICLE REGULATION

This benchmarking aims to **identify best practices at the national, regional, metropolitan, and city levels regarding legal and regulatory framework for shared mobility vehicles that most effectively promote spatial and social equity** in service accessibility, sustainability, and the appropriate use of public space, while also ensuring user safety and preserving the economic viability of operators.

The study focuses on **car-sharing services**, both station-based and free-floating, as well as **shared micromobility**, including free-floating e-scooter sharing, bike sharing (both station-based and free-floating), and moped-sharing. Peer-to-peer car-sharing services have not been considered.

Methodology



Survey of shared mobility services & 10 In-depth interviews

Snowball sampling based on well-justified criteria **>** 15 minutes **Survey >** 90 minutes Semi-structured **interviews**

Main results of the survey

Illustration 3. Offer. Number of active operators, by geography and mode

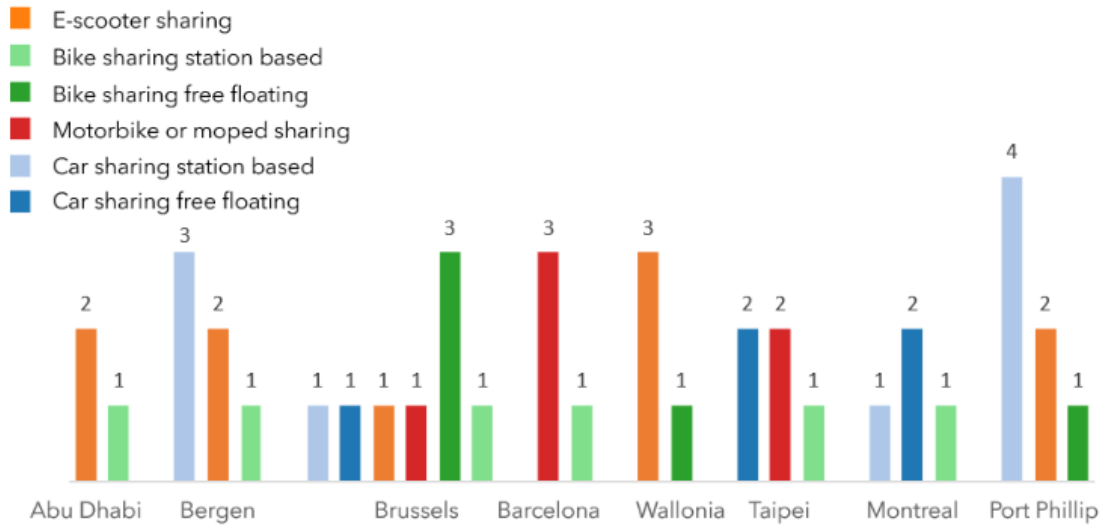
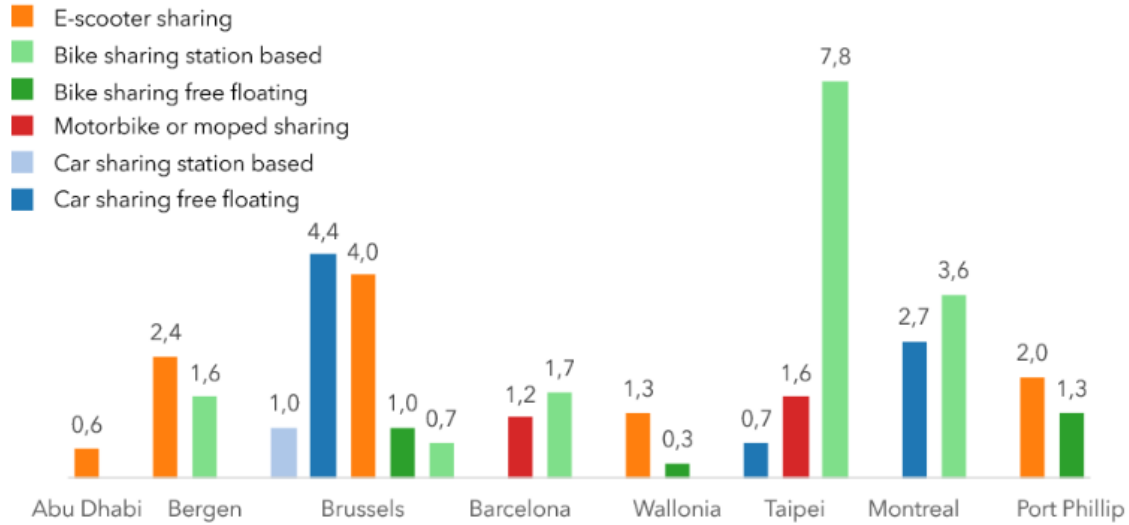


Illustration 4. Vehicle utilisation (trips/vehicle/day), by geography and mode



	Without regulation	Open License	Limited License	Single-Operator Partnership	Municipal Program
E-scooter free floating	(2) Barcelona, Taipei	(2) Wallonia, Portugal	(5) Abu Dhabi, Bergen, Brussels, Montreal, Port Phillip		
Bike sharing free floating	(2) Abu Dhabi, Montreal	(2) Wallonia, Portugal	(5) Bergen, Brussels, Barcelona, Port Phillip, Taipei		
Bike sharing station based	(2) Wallonia, Port Phillip	(2) Abu Dhabi, Portugal		(4) Bergen, Brussels, Barcelona, Taipei	(1) Montreal
Motorbike or moped sharing	(4) Abu Dhabi, Bergen, Montréal, Port Phillip	(2) Wallonie, Portugal	(3) Brussels, Barcelona, Taipei		
Car sharing station based	(5) Abu Dhabi, Barcelona, Bergen, Wallonia, Montreal	(2) Brussels, Portugal	(2) Port Phillip, Taipei		
Car sharing free floating	(4) Abu Dhabi, Barcelona, Bergen, Wallonia	(3) Brussels, Portugal, Montreal	(2) Port Phillip, Taipei		

Interviews

Change in habits



Environmental sustainability



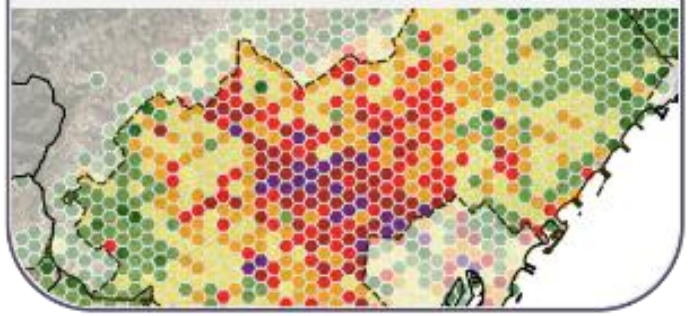
Accessibility and inclusion



Public space governance



Data governance



Customers rights



Main conclusions

Example: Comparative governance maturity in public space management

Dimension	Low maturity Model	Moderate Maturity Model	High Maturity Model
Parking rules	Same as private vehicles	Defined restrictions (no-parking zones, fleet caps)	Fully integrated into city parking policy and other curbside functions
Geofencing	Basic no-go zones	Structured zones (schools, parks)	Dynamic event-based relocation and speed control
Parking infrastructure	Digital/geofencing only	Designated bays in hotspots & geofencing	Network of shared, physically marked bays & geofencing
Use of data	Limited monitoring	Regular performance checks	Expansion linked to formal utilization thresholds
Fleet distribution	Reactive relocation	Street-level caps	Data-driven reallocation and adaptive control
Supervision	Complaint-based	Complaint + periodic checks	Audits + strict response-time obligations
Fees for space	Minimal or symbolic	Location-based variation	Politically calibrated fees reinforcing public value

Thank you!

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