

Barcelona Parking Strategy

Curb management challenge

Mobility Department

Barcelona City Council

November 2023



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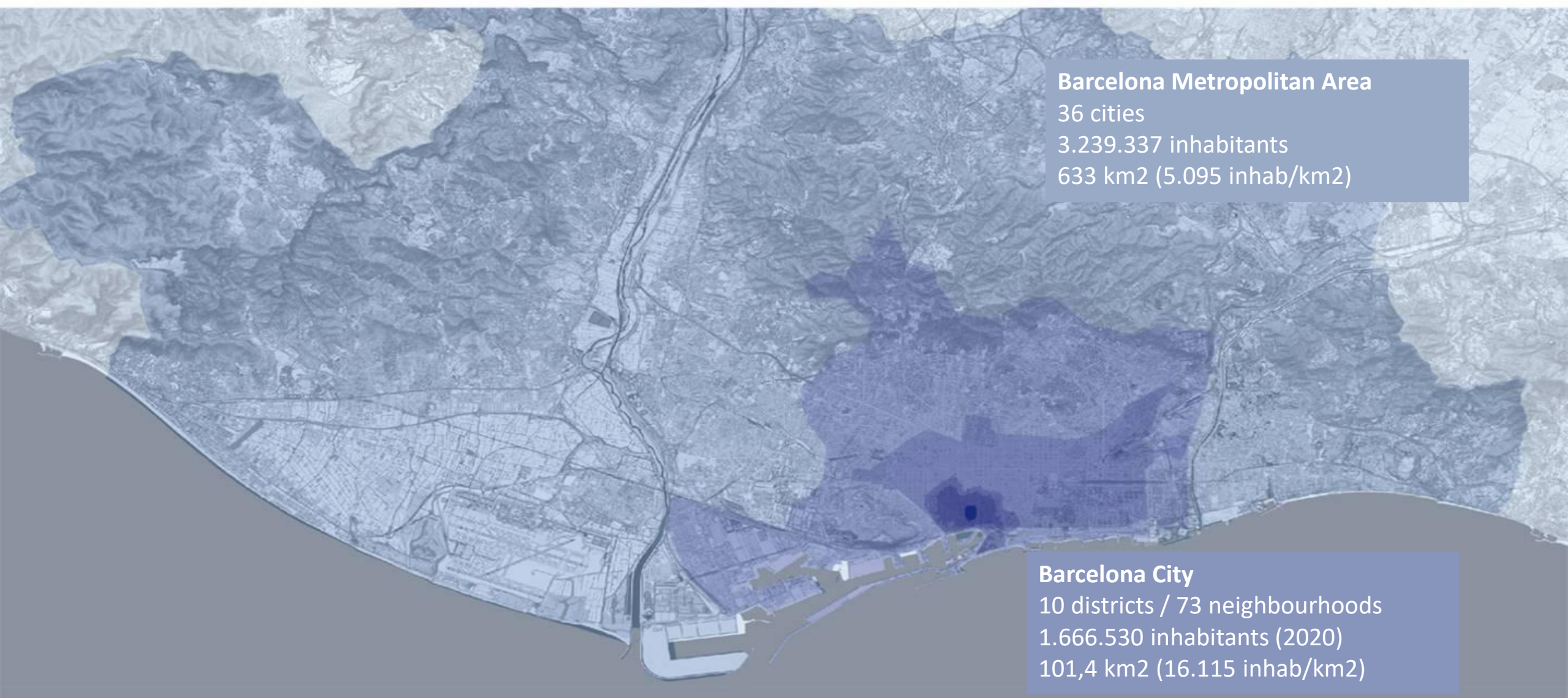


01

Barcelona parking data







Barcelona Metropolitan Area

36 cities
3.239.337 inhabitants
633 km2 (5.095 inhab/km2)

Barcelona City

10 districts / 73 neighbourhoods
1.666.530 inhabitants (2020)
101,4 km2 (16.115 inhab/km2)



RESIDENTS PARKING DEMAND

1. Tipologia del parc de vehicles. Any 2021

1.1. Per Barcelona

Tipologia	TOTAL
TOTAL	811.673
Turismes	471.145
Motos	220.656
Ciclomotors	49.341
Furgonetes	38.320
Camions	14.650
Remolcs i semiremolcs	7.237
Vehicles d'obres i serveis i altres	7.836
Autobusos	2.488

Font: Ajuntament de Barcelona. Departament d'Estadística i Difusió de Dades. Cens de Vehicles 2021



2. Índex de motorització del parc de vehicles per 1000 habitants. Any 2021

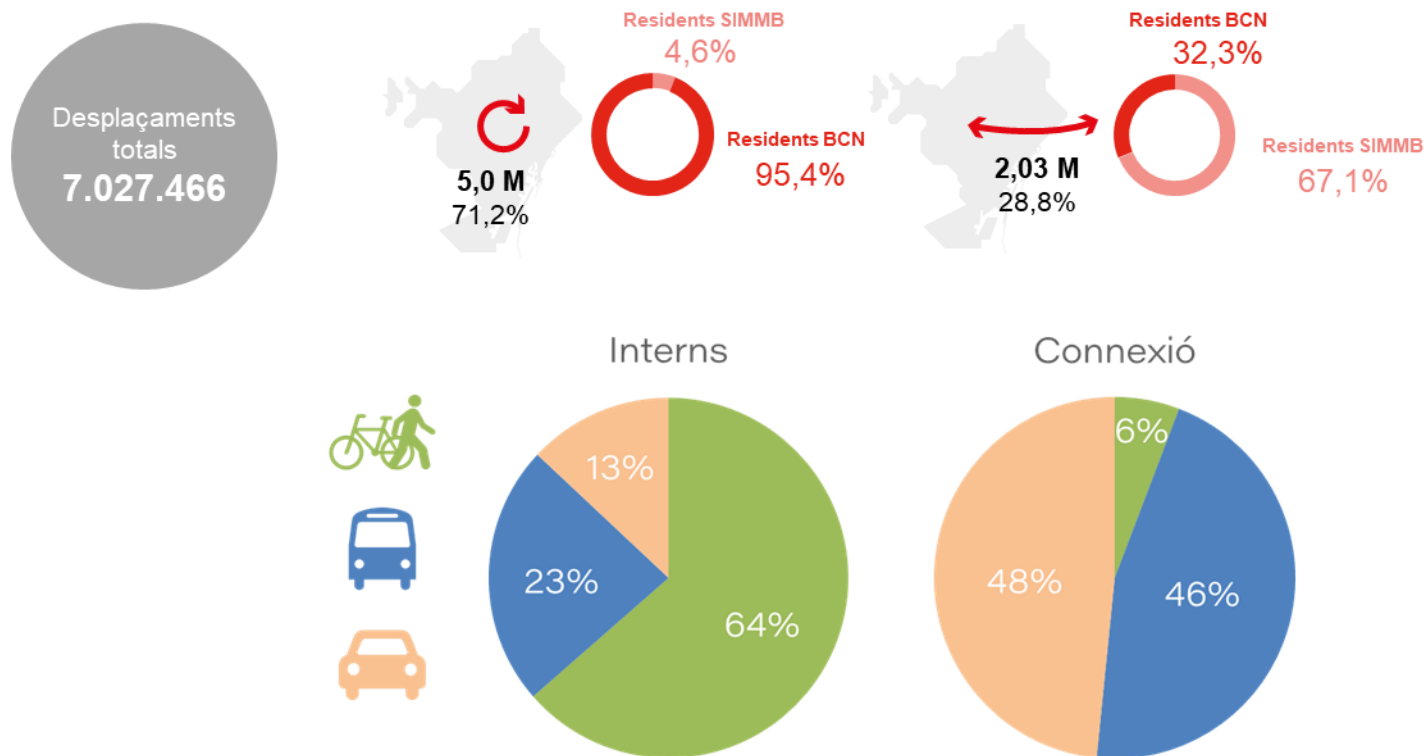
2.1. Per Barcelona

Tipologia	Vehicles/1000 habitants
TOTAL	488,9
Turismes	283,8
Motos	132,9
Ciclomotors	29,7
Furgonetes	23,1
Camions	8,8
Remolcs i semiremolcs	4,4
Vehicles d'obres i serveis i altres	4,7
Autobusos	1,5

Font: Ajuntament de Barcelona. Departament d'Estadística i Difusió de Dades. Cens de Vehicles 2021. Lectura del Padró Municipal d'Habitants a 1 gener 2021

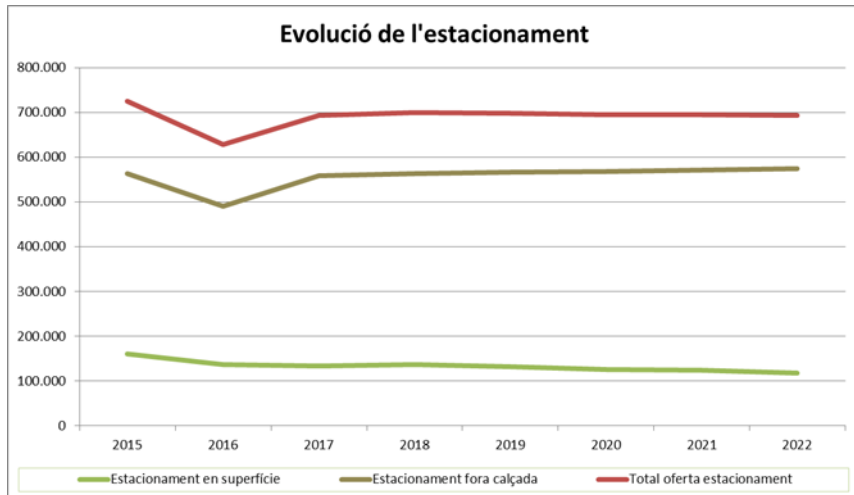
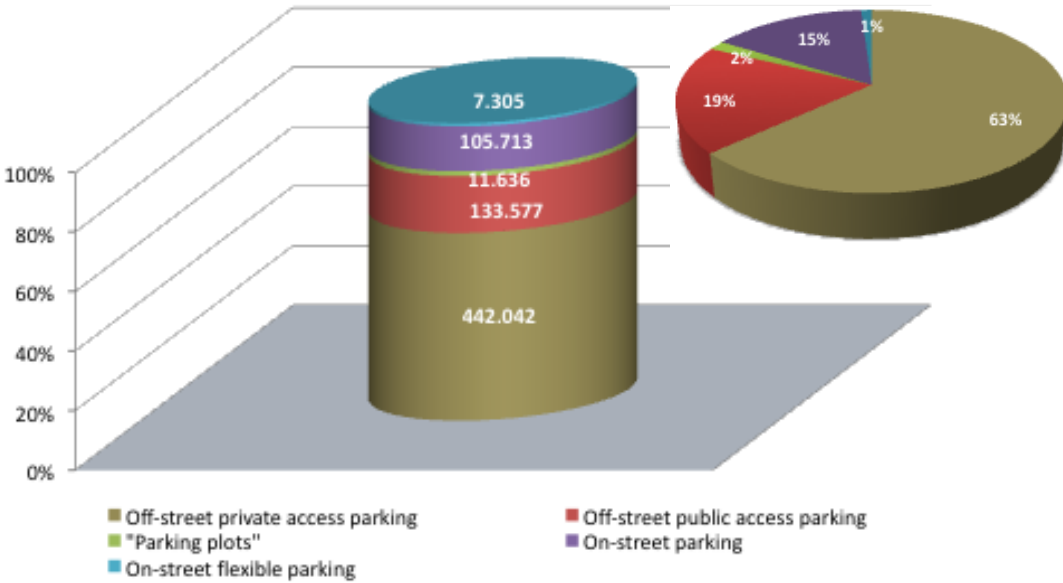


COMMUTERS PARKING DEMAND



250.000 motorized vehicles come into the city daily and require parking slots

TOTAL CAR PARKING OFFER



02

Barcelona SUMP 2024



PARKING STRATEGY – SUMP

■ 7 KEY OBJECTIVES

1. **Increase modal share of sustainable modes:** walking (+7,5%), public transport (+15,7%) and bicycle (+129%).
2. **Guarantee the right to mobility,** increasing and improving pedestrian areas **accessibility** and **safety**.
3. Increase and enhance **urban and metropolitan public transport network** and boost construction of new and pending infrastructures.
4. Increase and improve cycle **infrastructure as well as safety, parking, coexistence and intermodality of bicycles and scooters**.
5. **Conditioning use of motorized vehicles,** encouraging energy transition towards clean energies, parking regulation, efficiency and sharing.
6. **Extend logistics regulation** and improving sustainability, efficiency and territorial integration.
7. **Move from mobility to** safety, efficient and sustainable **mobility services** focused on clients and using ICT, Internet and data management.

Note: Barcelona is currently updating its SUMP



Reviewing and improving parking management



Goals

- Drive the modal shift and reduce pressure on the public highway to improve the quality of the public space.
- Minimise on-street parking at destination through measures that discourage journeys with a private vehicle to Barcelona.



Actions:

Adapting parking management and regulation tools to citizens' new requirements.

1. Developing and implementing the city's Parking Strategy.
2. Extending the regulation of the Area throughout the city, until achieving 90% of the regulated on-street spaces.
3. Promoting the use of off-street car parks.
4. Identifying the deficit of off-street residential parking and evaluating the possibility of building new off-street car parks for local residents.
5. Reducing the number of on-street parking places.
6. Minimising the increase of new off-street rotation places.
7. Promoting a network of car parks with more diversified mobility services (bicycles, motorcycles, UGD, e-vehicles and shared vehicles).
8. Improving accessibility to off-street car parks, especially for people with reduced mobility.



Improving management of motorbike parking



Goals

- Organise motorbike parking.
- Minimise and regulate parking on pavements to reduce the impact on pedestrian spaces.
- Create and regulate limited on-street parking in accordance with the increase in the number of off-street parking spaces.



Actions:

Motorbike parking must be planned so that its impact on the urban space is minimised and peaceful coexistence between motorcyclists and pedestrians is ensured.

1. Developing and implementing the city's Parking Strategy.
2. Creating new on-street parking places for motorbikes.
3. Increasing control on illegal parking on pavements.
4. Expanding the areas where motorcycle parking on pavements is prohibited.
5. Studying a flexible parking model for motorcycles.
6. Encouraging motorcycle parking in off-street car parks, by increasing the number of available places at competitive prices.
7. Studying the introduction of regulated parking for motorbikes (Green Area/Blue Area).

03

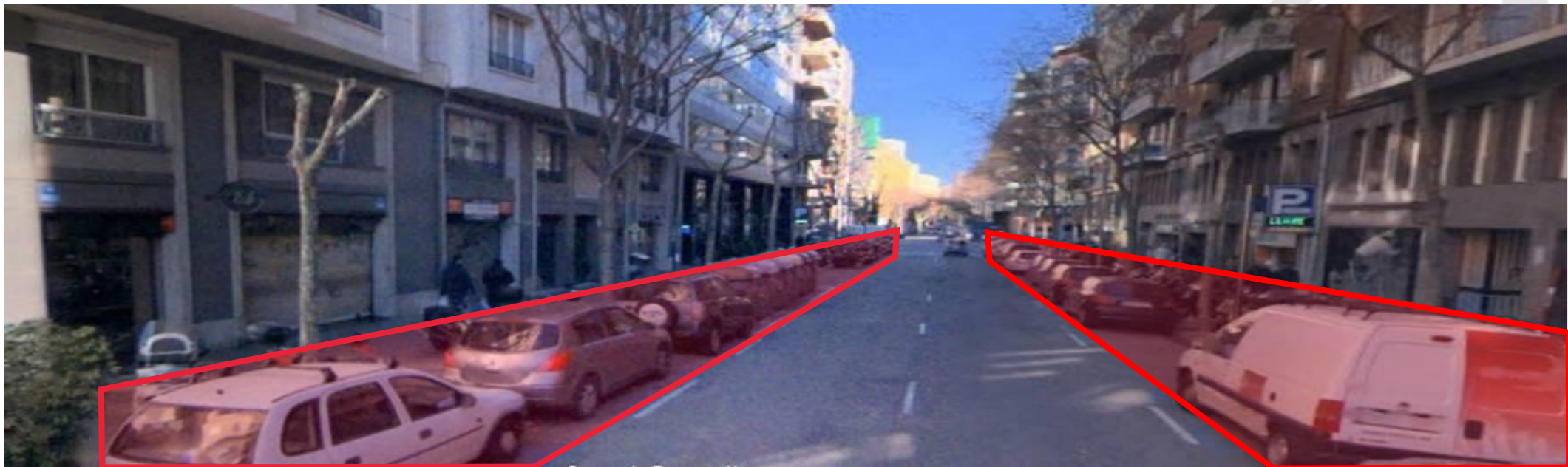
Parking strategy scope



PUBLIC SPACE PERSPECTIVE

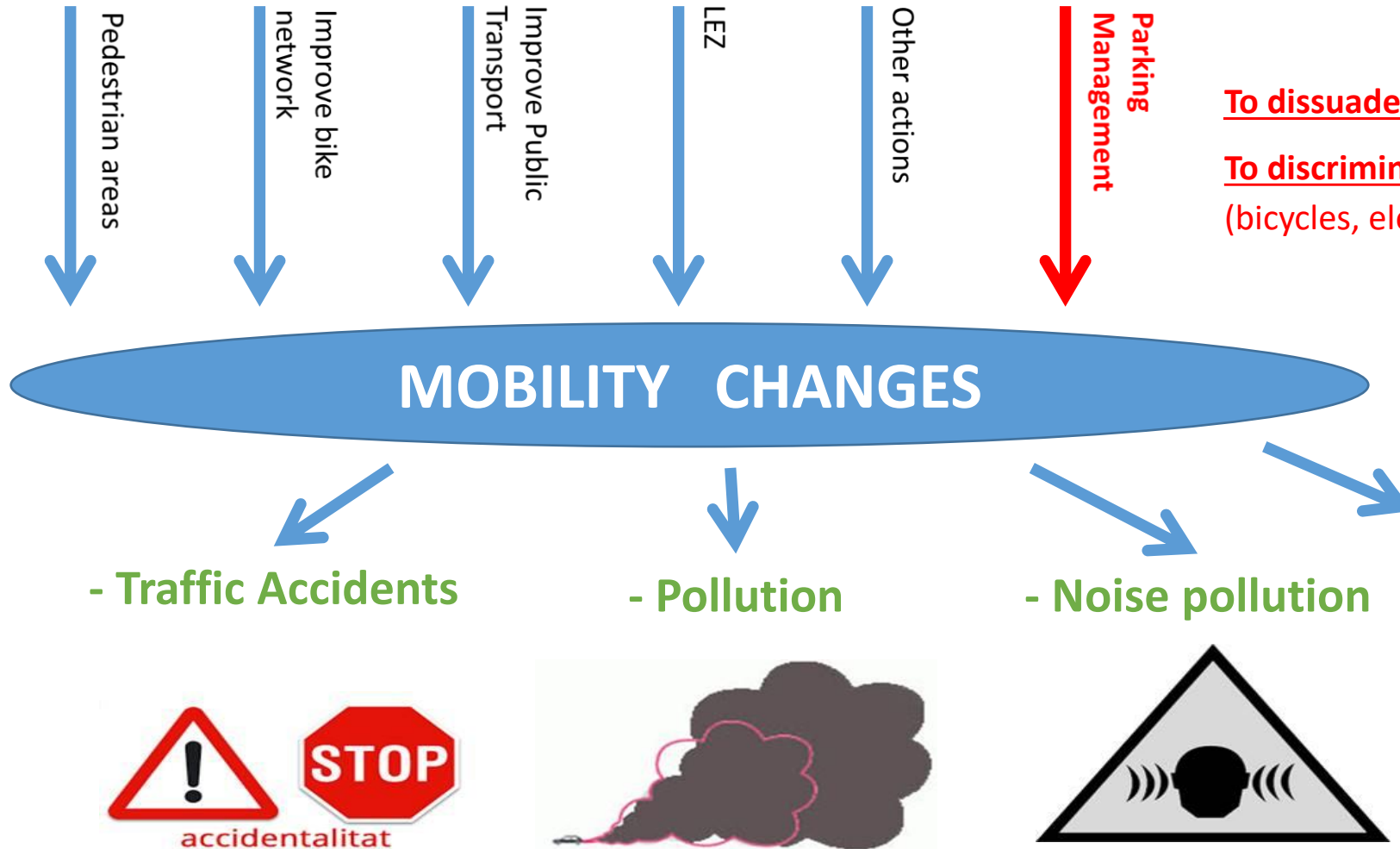
On-street parking management is a key factor to enhance **public space quality** as on-street parking has:

- A. High **occupancy of public space**.
- B. High **visual impact**.
- C. Impact on **pedestrian areas**, bicycles and public transport, which is even worse in case of **indiscipline** and it is specially critical due to **huge urban compactness** and **limited public space**.



MOBILITY PERSPECTIVE

Parking management is a **key factor** to boost the **transport modal change**.



To dissuade citizens to use private cars.

To discriminate positively the most sustainable vehicles (bicycles, electric cars, sharing...)

+ Health

Elts contaminants de l'aire dins el nostre cos

Elts contaminants de l'aire, partícules i gasos, els inhaled al respirar. Segons la seva mida, arriben més o menys endins del sistema respiratori. Les partícules més fines poden arribar a la sang i ser transportades als diferents òrgans.

- > Nas, gola
Partícules grans
- > Tràqueia, bronques, bronquiolos
Partícules PM₁₀, NO₂, O₃
- > Alveòles pulmonars
Partícules PM_{2.5}, NO₂, O₃
- > Circulació sanguínea
Partícules Ultrafines

Una partícula més fina penetra més la barana broncopulmonar i arriba al cervell.

Una partícula més fina penetra més la barana broncopulmonar i arriba al cervell.

Quina mida tenen aquestes partícules?

Partícules Ultrafines	Partícules PM _{2.5}	Partícules PM ₁₀
<0,3µm	<2,5 µm	<10µm

Més informació: www.aspb.cat

04

Parking criteria implementation



VEHICLE TYPE: CARS. ORIGIN

GOAL IN ORIGIN:

To minimize the deficit of off-street parking spaces for residents

ACTIONS IN ORIGIN:

- To identify the current deficit of residential off-street parking spaces per areas.
- To dimension the residential on-street parking offer only to compensate the current deficit of residential off-street parking.
- To transfer residential on-street parking to existing off-street parking.
- To improve off-street parking quality to encourage users to use them.
- To rebalance on-street and off-street parking rates to promote off-street parking.

CARS GENERAL GOAL

To boost a transport modal change and to reduce public space occupancy



VEHICLE TYPE: CARS. DESTINATION

GOAL IN DESTINATION:

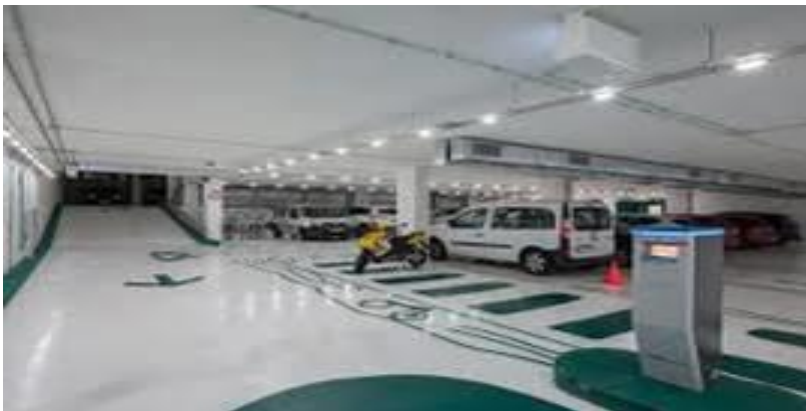
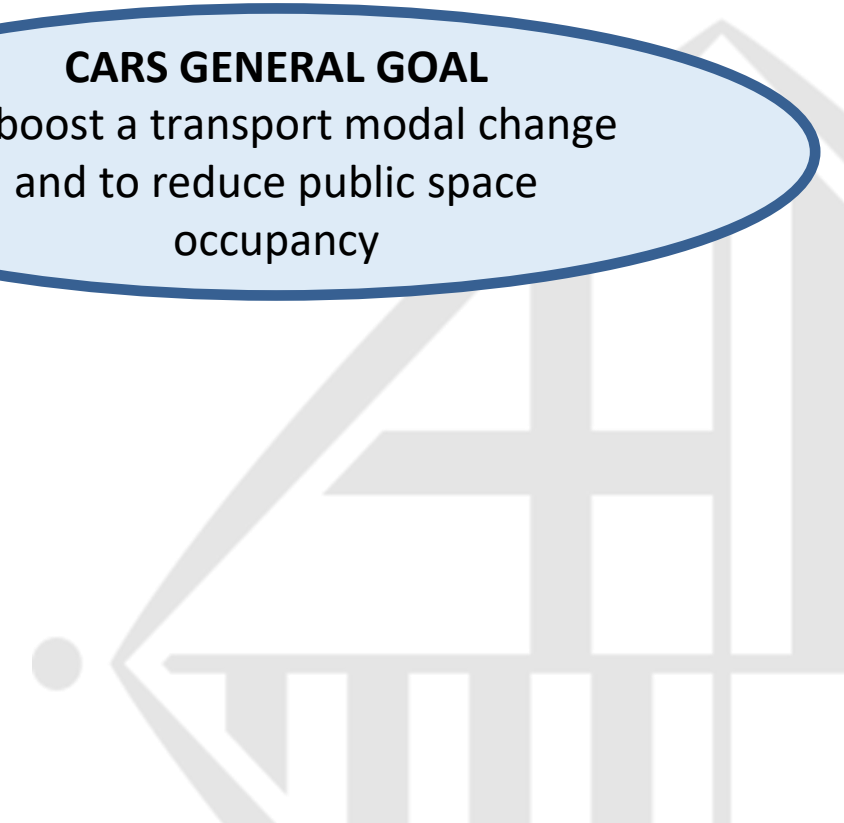
To minimize on-street parking in destination by implementing measures to dissuade the use of private cars inside Barcelona

ACTIONS IN DESTINATION:

- To improve more overcrowded destinations connectivity to public transport.
- To reduce and regulate on-street parking spaces.
- To encourage users to use off-street parking.
- To rebalance on-street and off-street parking rates to promote off-street parking.
- To minimize creation of new rotation off-street parking spaces.
- To boost new urban and metropolitan Park & Ride for cars and motorbikes.

CARS GENERAL GOAL

To boost a transport modal change and to reduce public space occupancy



VEHICLE TYPE: MOTO



GOAL
“Tidy up” motorbike
parking

To increase parking spaces and regulate on-street
parking



To minimize and regulate motorbike sidewalk parking to reduce its impact on
pedestrians



To increase off-street parking use by increasing
the offer of parking spaces and competitive rates



VEHICLE TYPE: BICYCLES

On-street

To increase number of on-street parking spaces as part of the bicycle network improvements.

Off-street

To increase number of off-street parking spaces and promote them.

Modal hubs

To promote intermodality by building high capacity parking near by main train stations and metropolitan bus stations.

Residential buildings

To boost bicycle parking spaces inside residential buildings

Work centres

To boost bicycle parking spaces inside work centres and schools as well as to promote active mobility

Malls

To boost bicycle parking spaces inside malls and enable specific parking areas for “riders”

Touristic, leisure and cultural areas

To promote the use of bicycles for touristic trips



05

Curb Management

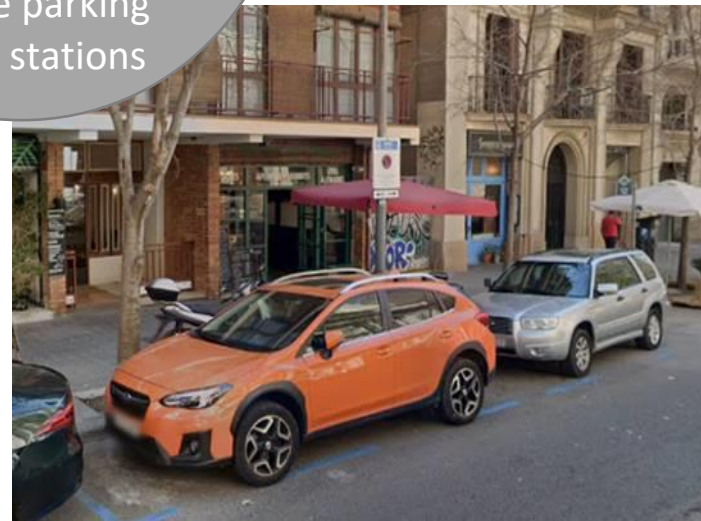


CURB MANAGEMENT. USES

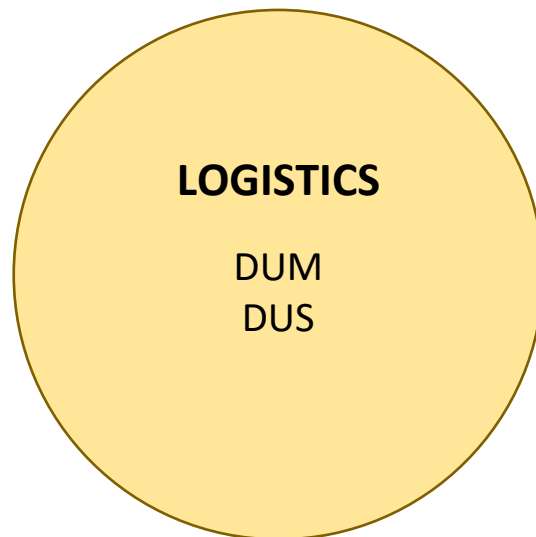


PARKING

Car parking
Reserves (PMR,
Hospitals, Hotels,
Police...)
Motorbike parking
Bicycle parking
Bicing stations



CURB MANAGEMENT. USES



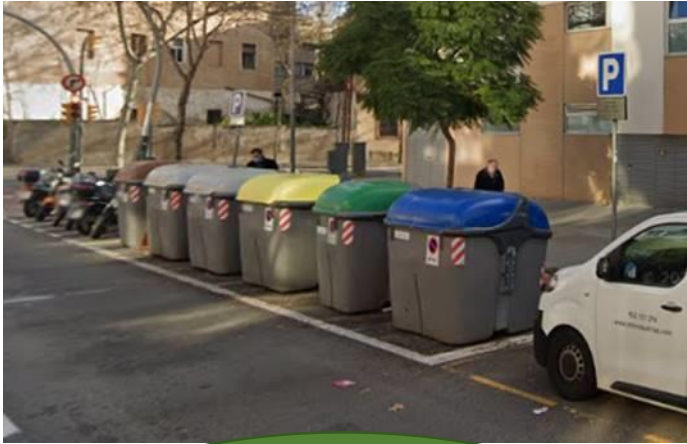
CURB MANAGEMENT. USES

PUBLIC TRANSPORT STOPS

Regular BUS
Discretionary buses (touristic,
metropolitan, school buses...)
Taxi



CURB MANAGEMENT. USES



OTHER SERVICES

Waste containers
Electric vehicles
(charging points)

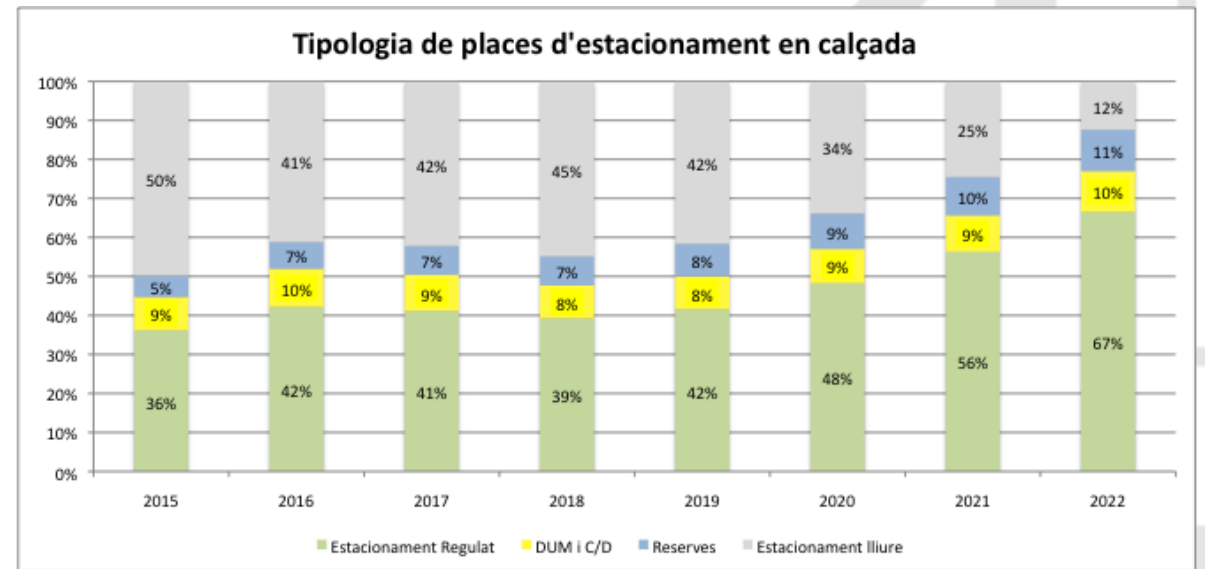
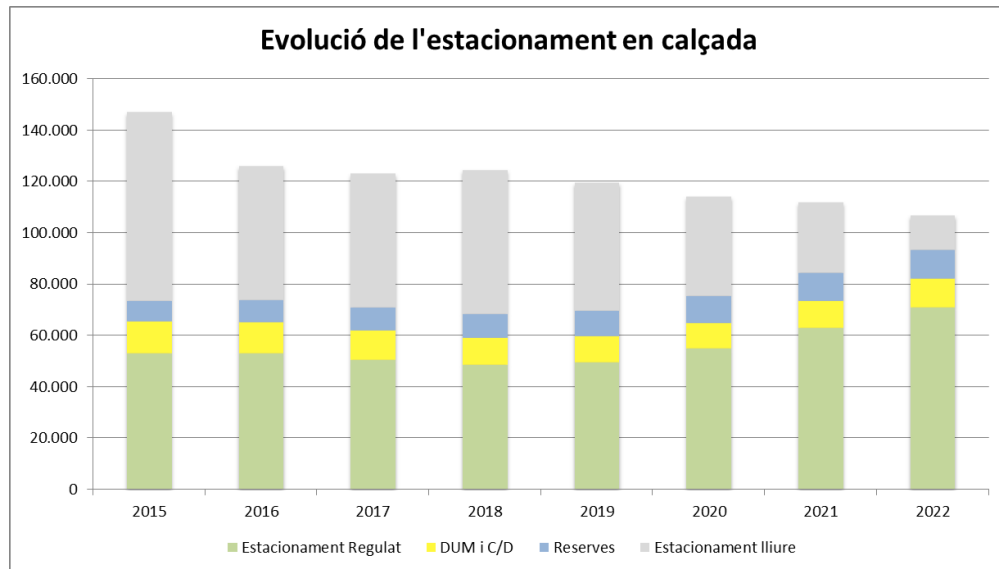


OTHER USES

Bar/Restaurant terraces
School protection areas



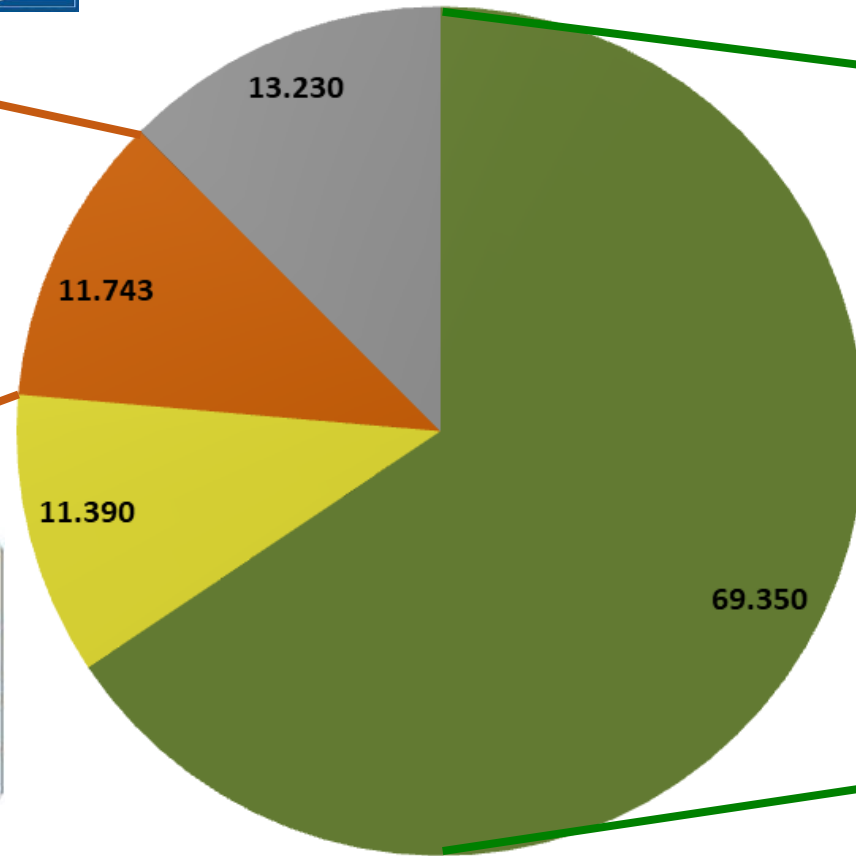
CURB MANAGEMENT. ON-STREET CAR PARKING



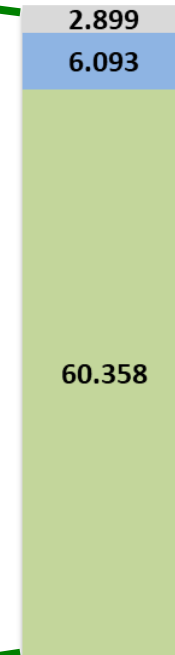
CURB MANAGEMENT. ON-STREET CAR PARKING



Altres reserves
Taxi
PMR

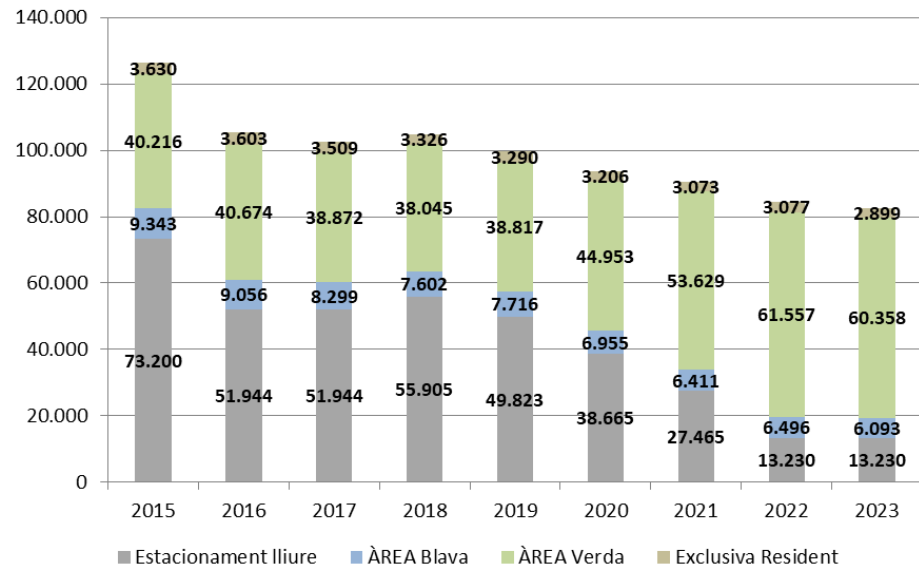
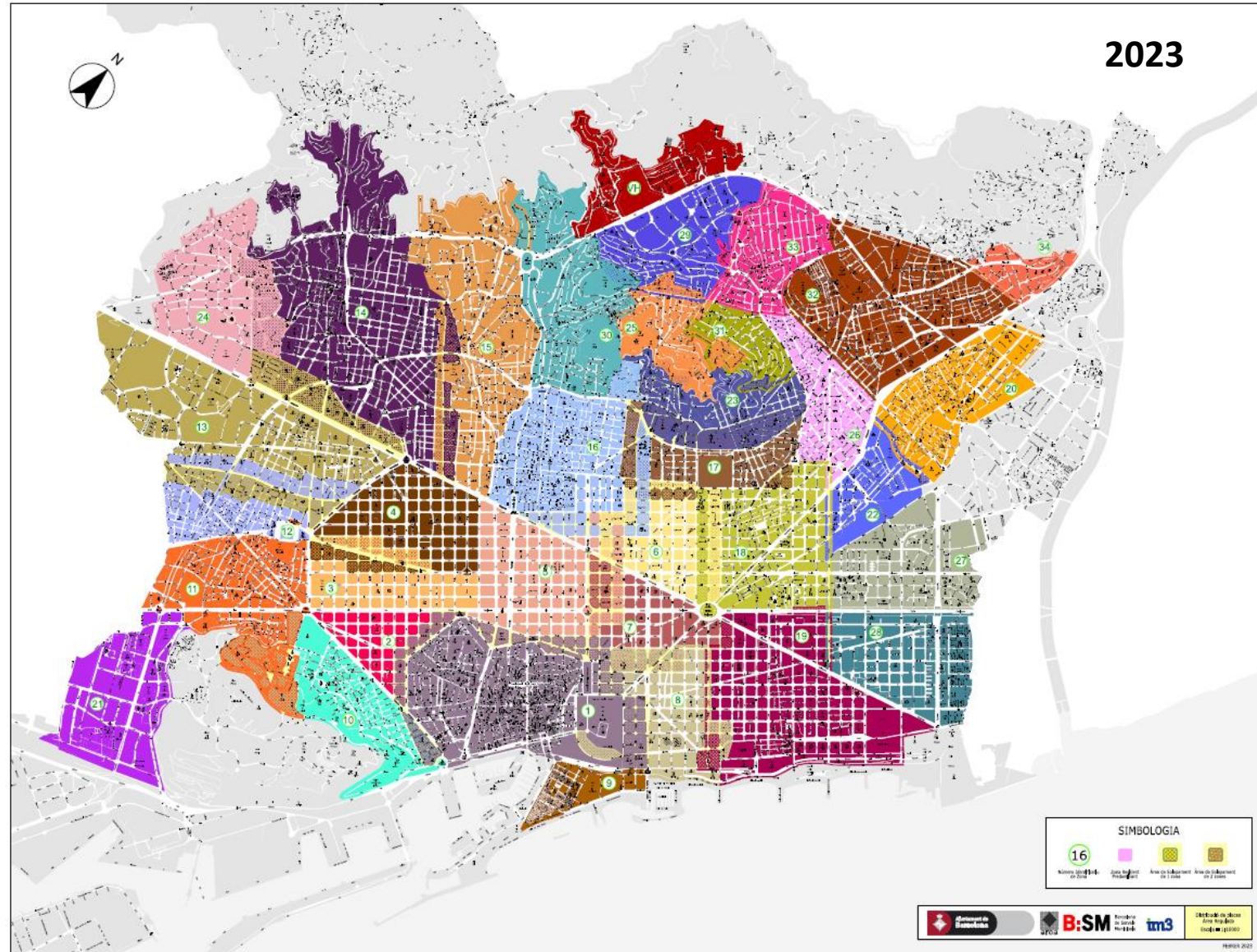
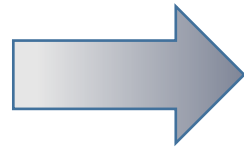
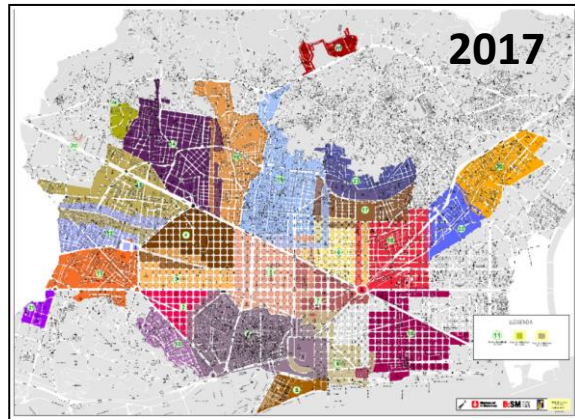


Estacionament Regulat DUM i C/D Reserves Estacionament lliure



Exclusiva Resident
ÀREA Blava
ÀREA Verda

CURB MANAGEMENT. ON-STREET REGULATED CAR PARKING AREA



CURB MANAGEMENT. ON-STREET REGULATED CAR PARKING AREA. RATES (2023)

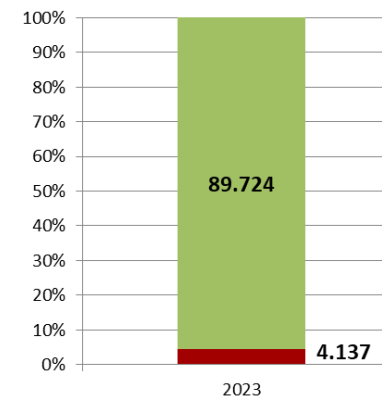
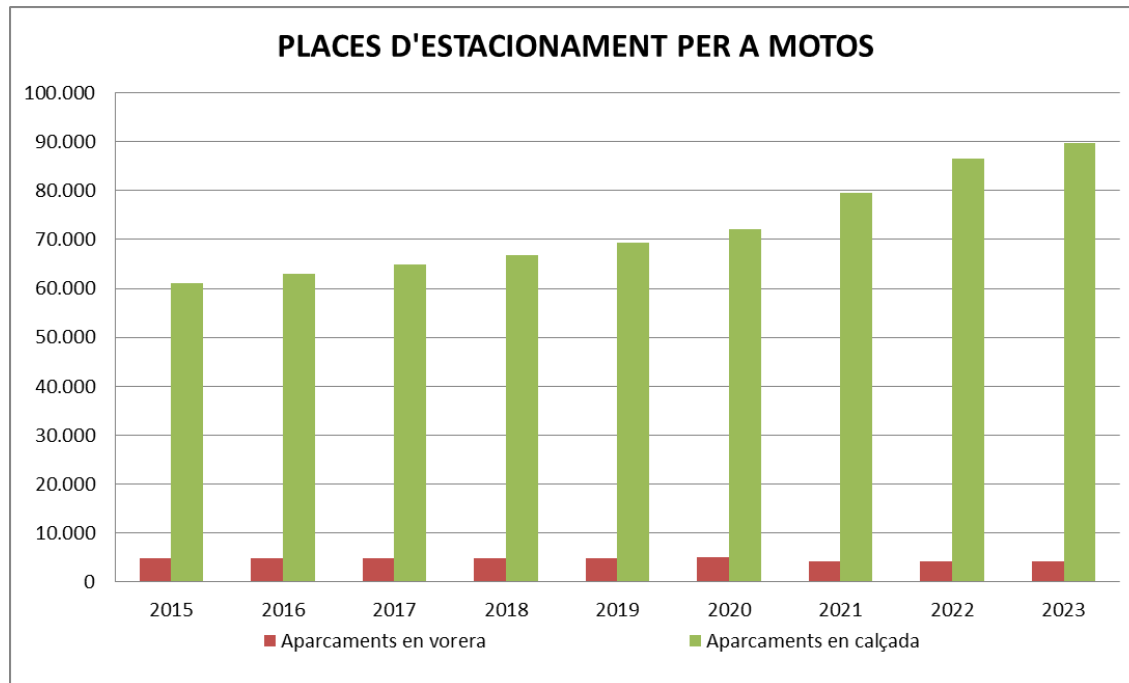
Classificació DGT	AREA Blava A €/h	AREA Blava B €/h	AREA Verda A €/h	AREA Verda B €/h	Residents €/dia
"Cero emisiones"	0,00€	0,00€	0,50€	0,50€	0,20€
ECO	2,50€	2,25€	3,00€	2,75€	0,20€
Etiqueta C	3,25€	3,00€	3,75€	3,50€	0,20€
Etiqueta B	3,50€	3,25€	4,00€	3,75€	0,20€
Resta vehicles	3,75€	3,50€	4,25€	4,00€	0,20€

In the event that an episode of pollution has been activated, the rate will be increased by the amount of 2.00 euros/hour in all cases, except for "Eco" and "zero emissions", in which it will exceptionally be 0,00 euros/hour.

CURB MANAGEMENT. CURB FLEXIBLE USE

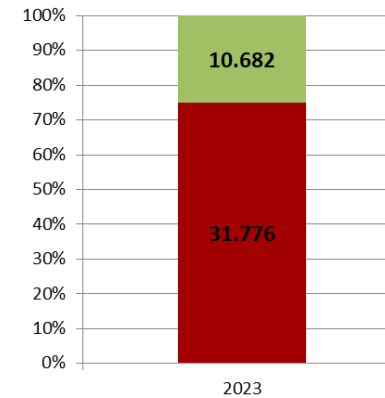
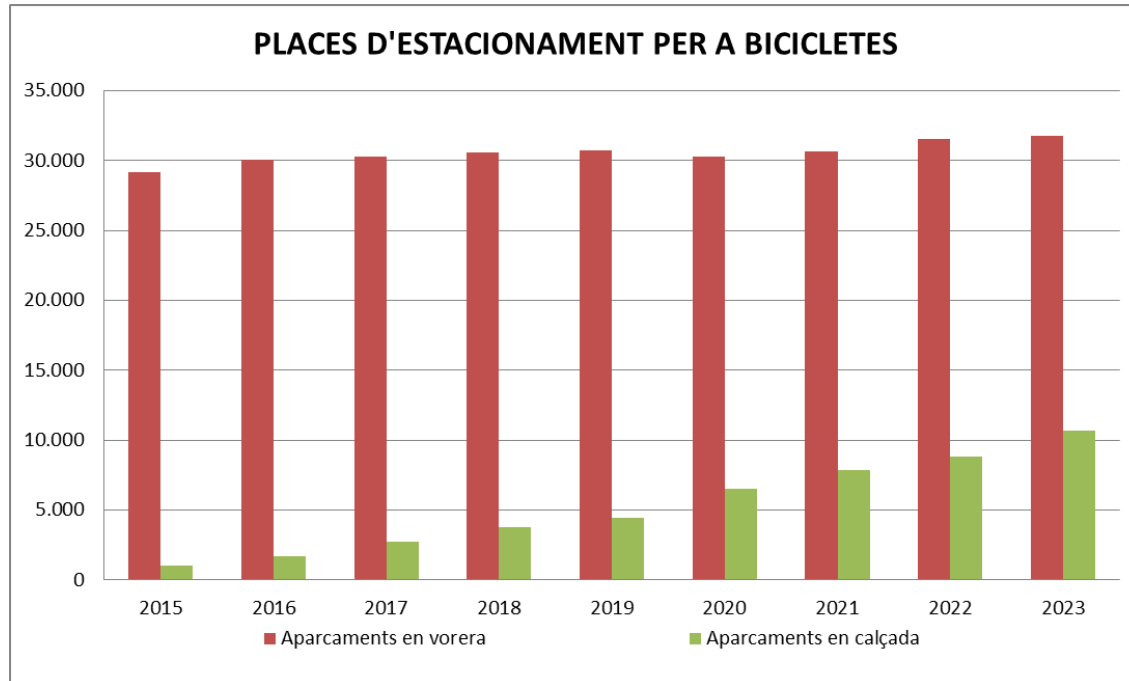


CURB MANAGEMENT. MOTORBIKE PARKING



MOTOCICLETES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Aparcaments en vorera	4.961	4.898	4.808	4.825	4.765	5.149	4.238	4.179	4.137
Aparcaments en calçada	61.104	62.918	64.891	66.875	69.299	72.200	79.453	86.536	89.724
Total aparcaments en superfície	66.065	67.816	69.699	71.700	74.064	77.349	83.691	90.715	93.861

CURB MANAGEMENT. BICYCLE PARKING



BICICLETES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Aparcaments en vorera	29.211	30.031	30.299	30.605	30.701	30.316	30.693	31.582	31.776
Aparcaments en calçada	1.037	1.719	2.717	3.812	4.434	6.539	7.893	8.852	10.682
Total aparcaments en superfície	30.248	31.750	33.016	34.417	35.135	36.855	38.586	40.434	42.458

Thank you

www.barcelona.cat

