Ajuntament de Barcelona

Traffic calming

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Barcelona Municipality

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VI CONGRÉS INTERNACIONAL SOBRE POLÍTIQUES EUROPEES DE TRÀNSIT

1.

The city

1.1. Barcelona, the city

POPULATION

1,611,822 inhabitants
(3.2M in the Metropolitan Area)

IMMIGRATION

17.4% immigration
(36% from Latin America)

WEALTH

€ 64,521 M de GDP
(30% from Catalonia)

TOURISTS

7.5 M visitors / year
2.4 M cruise passengers
16.2 M overnight stays

1.2. Barcelona, the city

SURFACE

102 km2
(628 km2 BMA, 36 municipalities)

MOTOR VEHICLES

968,332 vehicles
(296,618 motorcycles and mopeds)

SURVEY ON COMMUTES

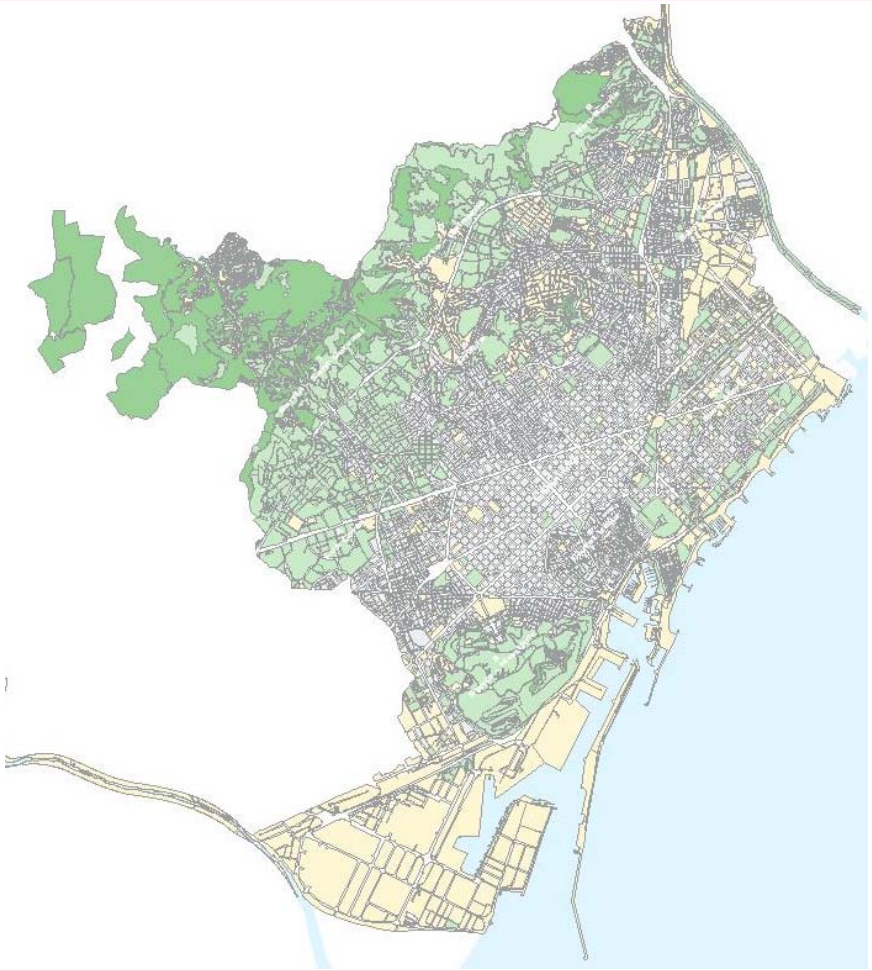
6.6 M commutes daily

TRIPS COMBINING TRANSPORT MODES

7.6 M d'etapes de desplaçaments diaris

AIR QUALITY

PM10: 25
(-21.9% 2012-13)



2.

Mobility

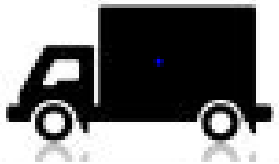
B

2.1. Vehicles

31,962

584,848

296,618



54,094

2.2. Parking places

ON THE STREET: 201,470 places

9,290

39,988

11,252

5,781

59,723

75,446

PARKING: 646,107 places

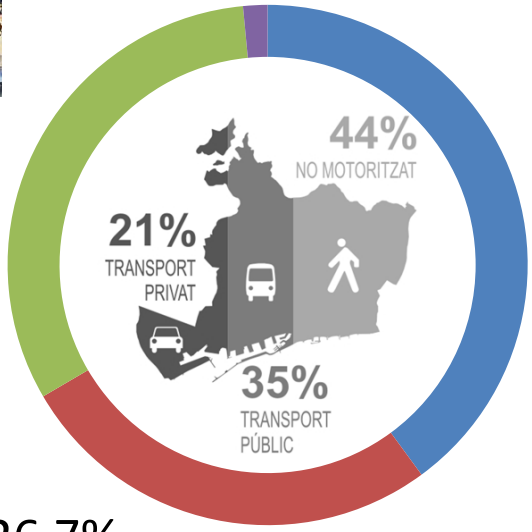
142,863

503,244

2.3. Modal Sharing

31.9%

.1,5%



TP

VP

A PEU

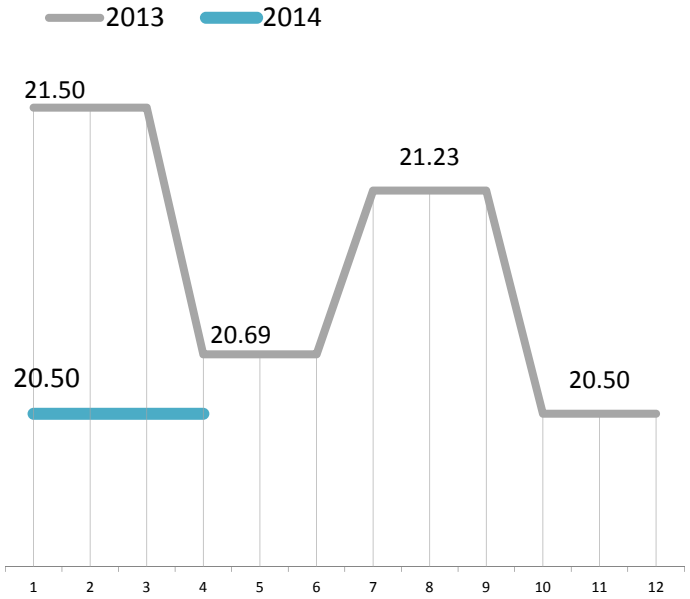
BICICLETA

39.9%

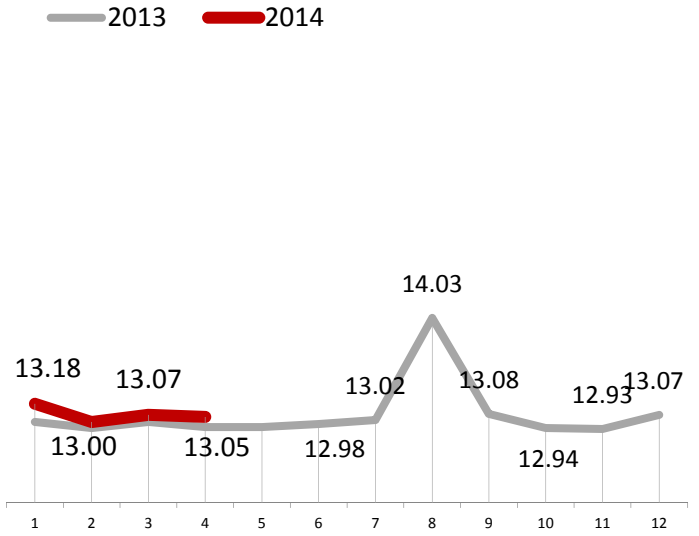
26.7%

2.4. Daily commutes (no. of trips)

2.4. Driving speed



Traffic speed



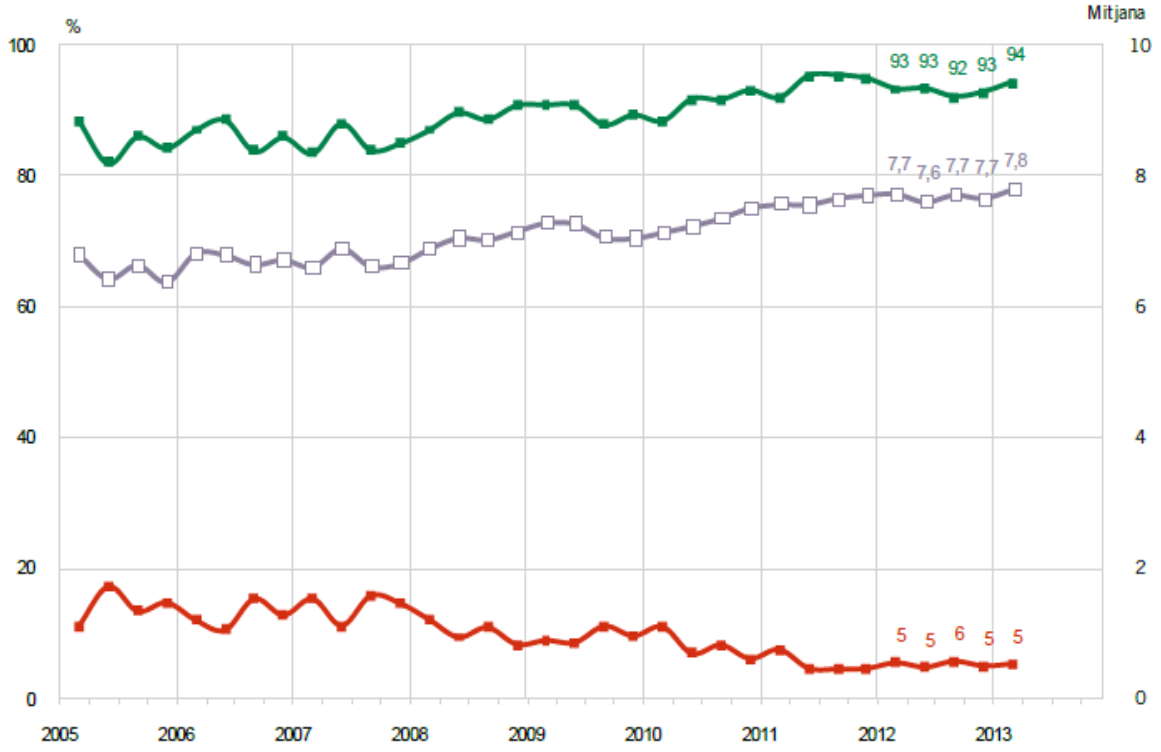
Speed of commercial bus

2.5. Ease for commuting in the city

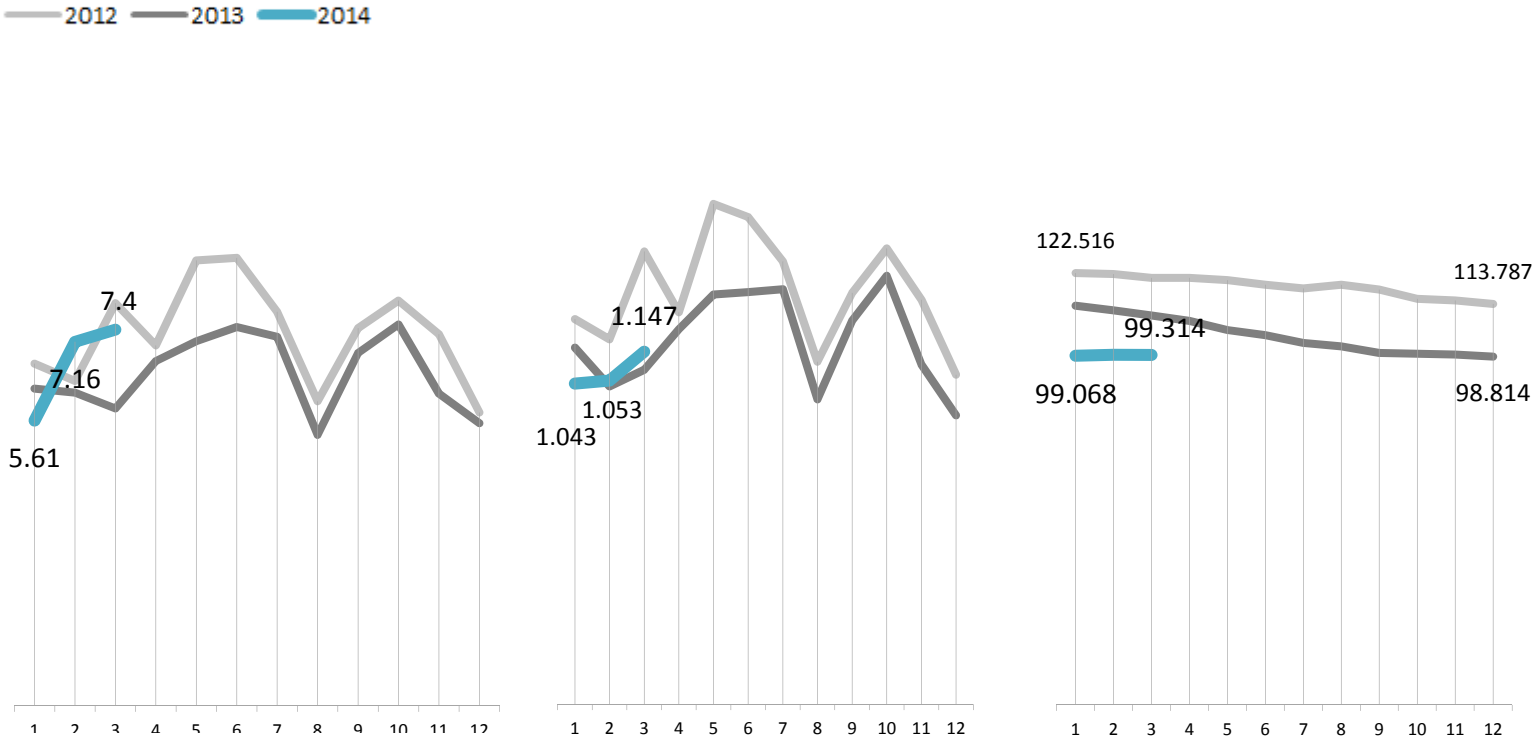
OMNIBUS SURVEY

Barcelona citizens rate 7.8 (0-10) the ease or convenience for commuting or getting around the city of Barcelona.

78.9% consider that mobility in the city is very or quite easy.



2.6. Bicing (Public Bicycle Service)



Trips per bike/day | Users (thausand) | Subscribers

3.

Impact of mobility

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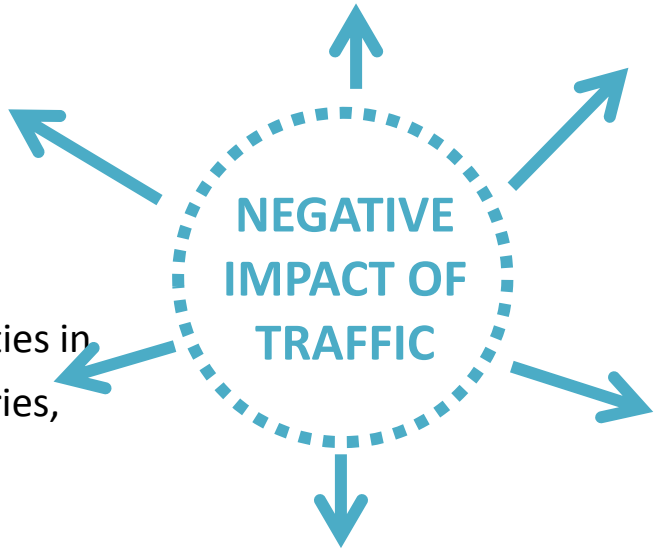
3.1. Negative impact

Congestion and loss of hours.
Commuting in congestion poses a high loss of hours

Noise and vibration.
80% of urban noise is caused by traffic



Loss of urban living space.
65% of urban space is occupied by transit and parking spaces

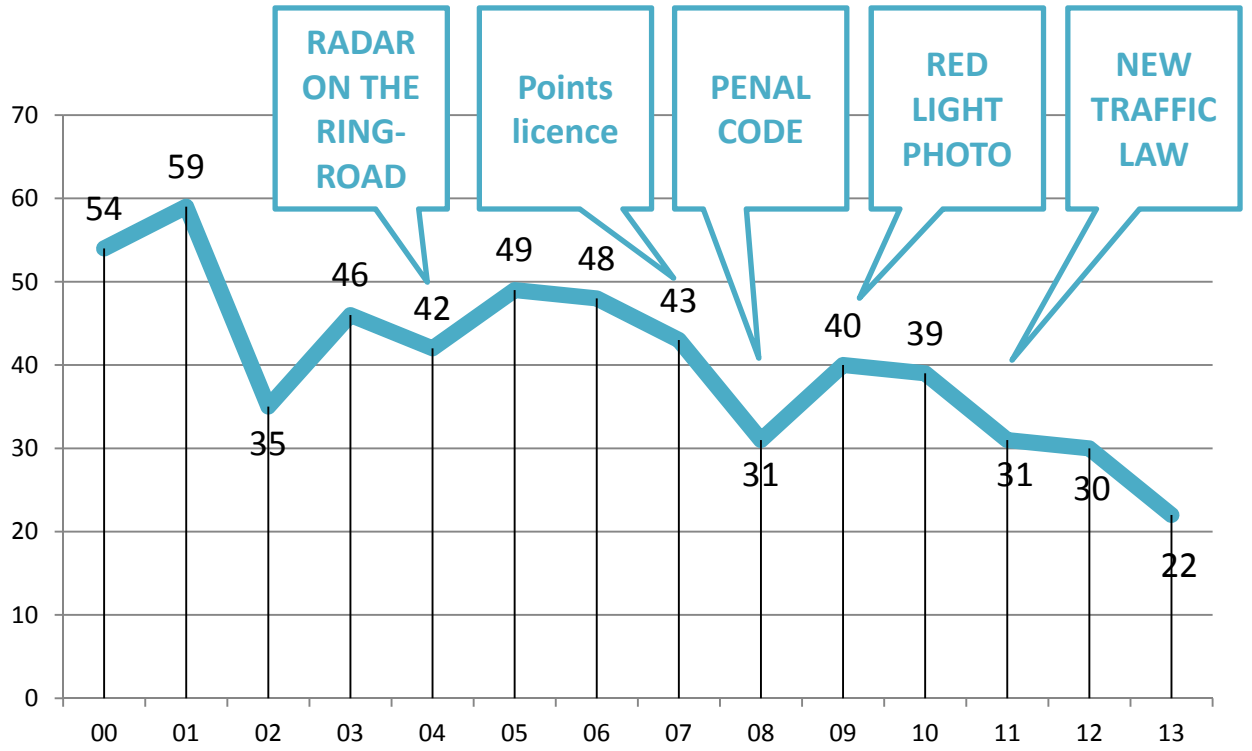
Accidents.
22 road accident fatalities in 2013 (259 serious injuries, 11.098 minor injuries)

Energy consumption.
Transport consumes 42.8% of energy consumed in Barcelona

Air pollution
Global warming, health problems and effect on buildings

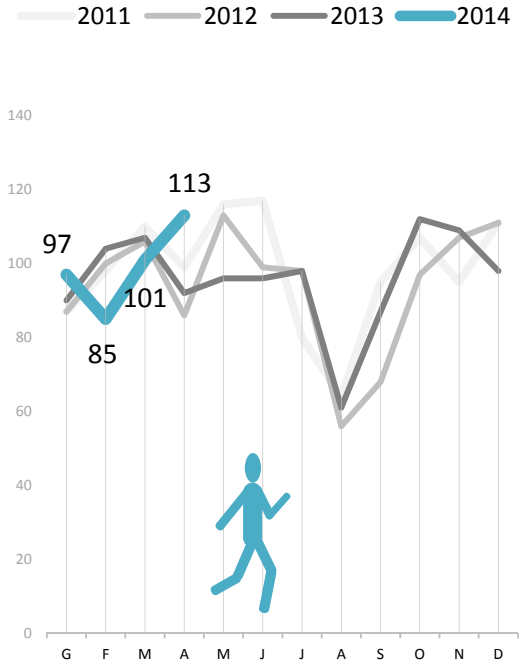
3.2. Accident rate

Road fatalities in the city:

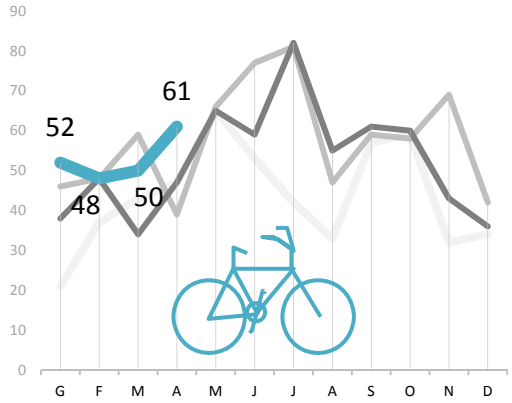


3.3. Accident rate

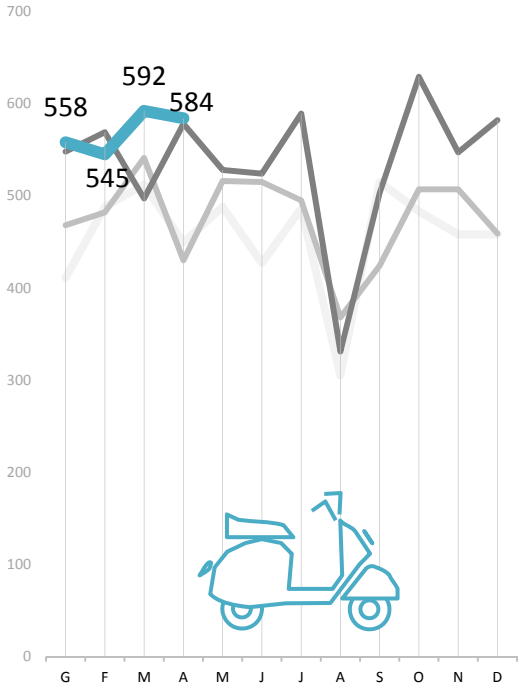
Most vulnerable modes (No. of accidents):



Run-overs



Bicycle



Motorcycle

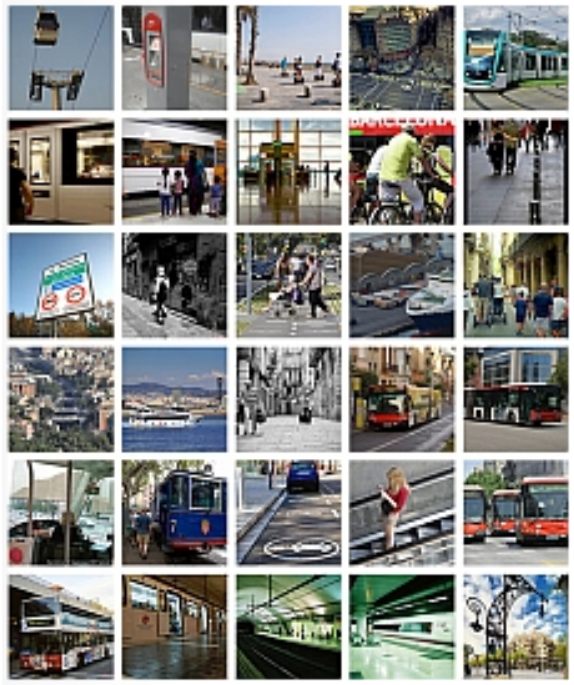
4.

Strategic plans for improvement

4. Urban Mobility Plan 2013-2018

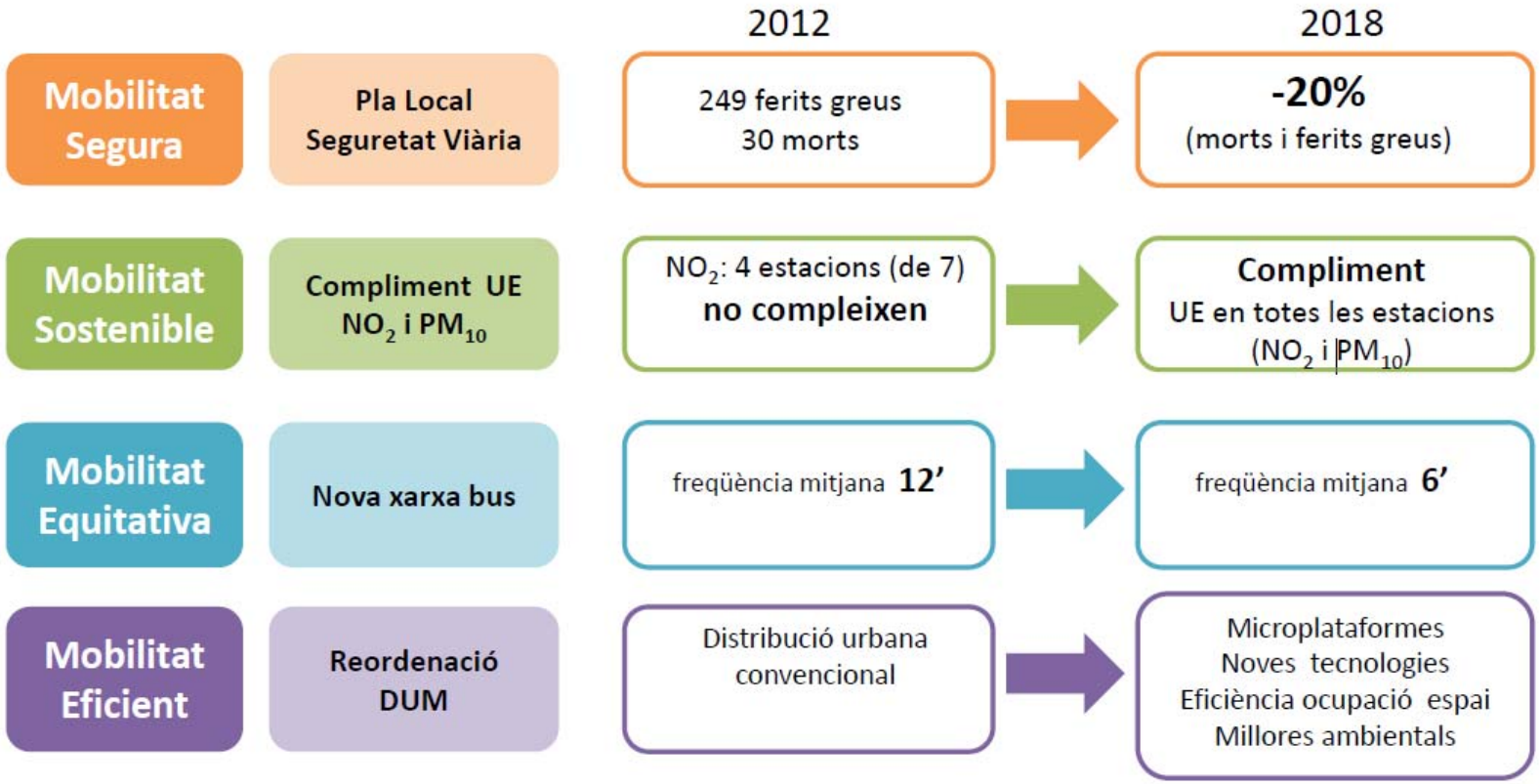
The Urban Mobility Plan, based on the diagnosis of mobility in the city and the definition of a scenario to be achieved, develops actions that pursue the strategic goals in relation to a safe, sustainable, equitable and efficient mobility.

The document includes proposals from the entities that are part of the Mobility Pact, as a result of the participatory process carried out.



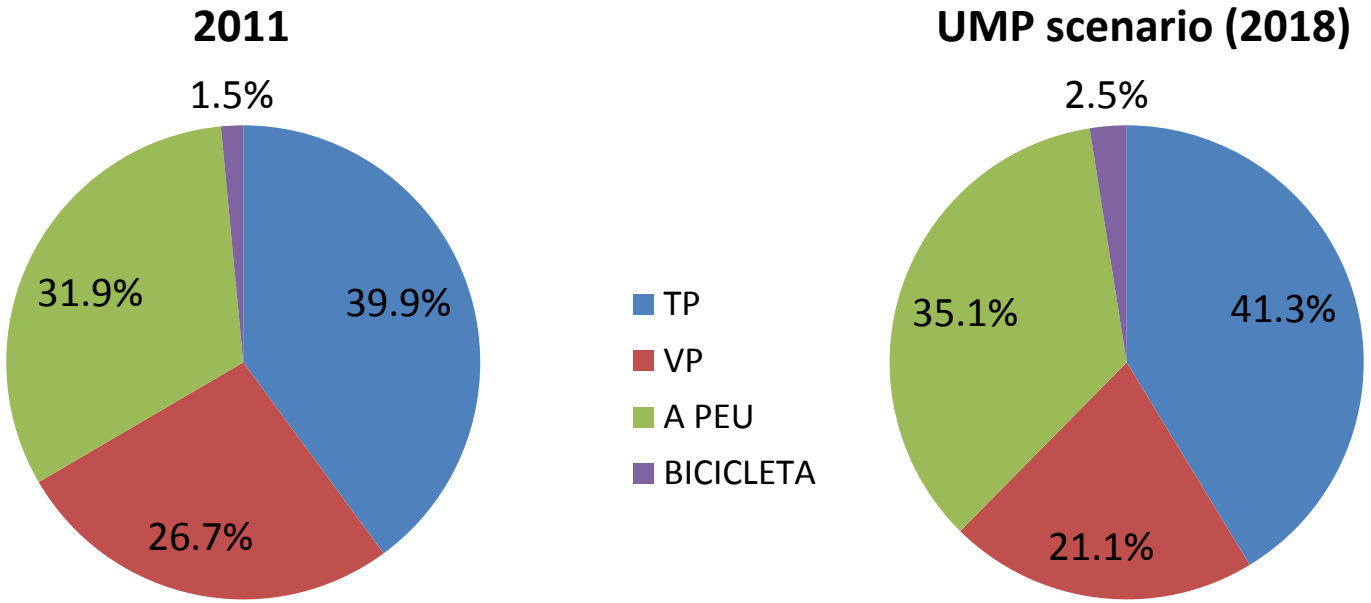
4.1. Urban Mobility Plan 2013-2018

4 areas, 4 strategic goals:



4.2. Urban Mobility Plan (UMP) 2013-2018

The challenge of modal split shift:



Scenario 2018	PT	PV	ON FOOT	BIKES
	+ 3,5 %	- 21 %	+10 %	+ 67 %

4.3 Local Road Safety Plan (LRSP) 2013-2018

1. Reduce victimization.
Reduce by 20% deaths and serious injuries by 2018 compared to 2012.

3. Traffic calming.
Superblocks, 30 km/h Zones, sole platforms, speed control...

2. Analysis of accident rates.
Control of areas of accident concentration. Interventions on crosswalks with deficiencies on terms of road safety.

4. Promoting responsible and safe cycling.
Intervention on the bike lane network to make it safer, off the sidewalk.

4.4 Traffic calming: goal, principle

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5.

Traffic calming

5.1 Traffic calming: goal, principle

- **Ensuring mobility for all modes, also private modes.**
- **Passing [by private car] without affecting other users of public space.**
- **Ensure compatibility of different uses.**
- **Preserve and promote the protection and safety of the weakest modes versus those that pose a threat or are more inefficient.**

5.2 Goals of traffic calming

- **NOT try to do away with cars.**
- **Containment of speed: harmonizing uses.**
- **Maximizing attention and awareness in the traffic calming zones.**
- **Clear identification of 'calming' zone.**

5.3 Current traffic calming measures

Until now:

- **30km/h Zones with signposted access and segregated roads and sidewalks.**
- **Reverse priority zones (20km/h, only park if parking is marked.**
- **High restriction zones (10km/h)**

5.4 New traffic calming measures

30 km/h zones

- Initial signposting (colour, pictogram and sign) and coherent urban design.
- Same level access to sidewalk and street to guarantee speed reduction to the access.
- New streets with no surface difference between sidewalk and street.
- Build a network of similar perception between interstices of the basic network.
- Keep a constant speed reduction and attention throughout the zone.

Speed reduction

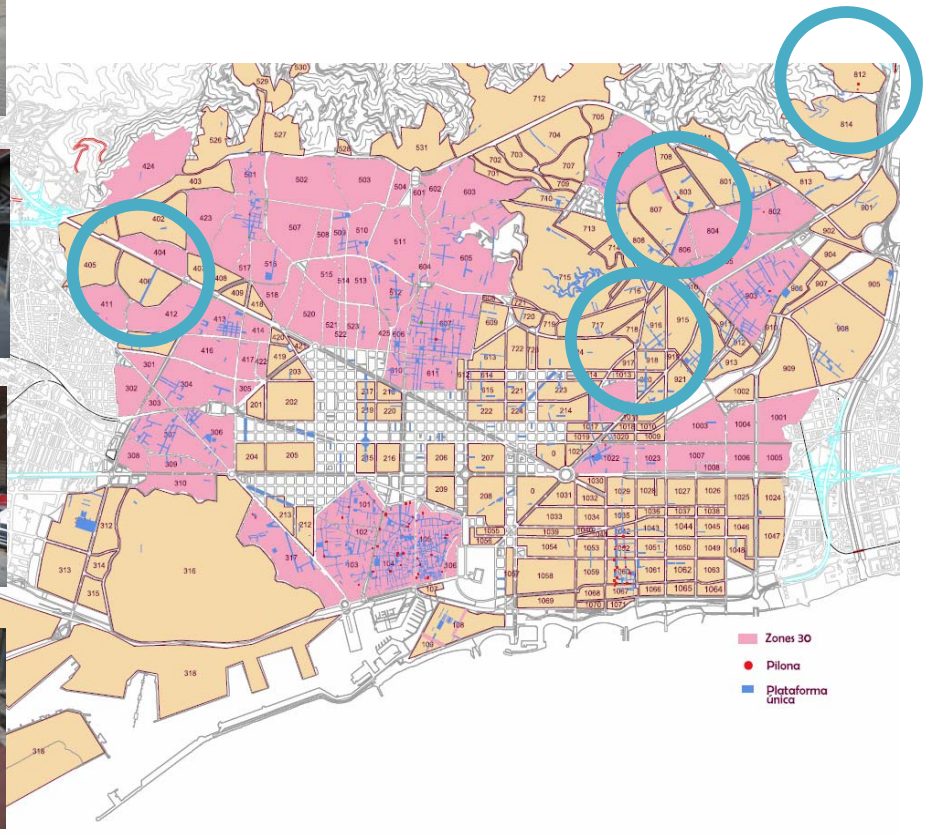
5.5 30 areas

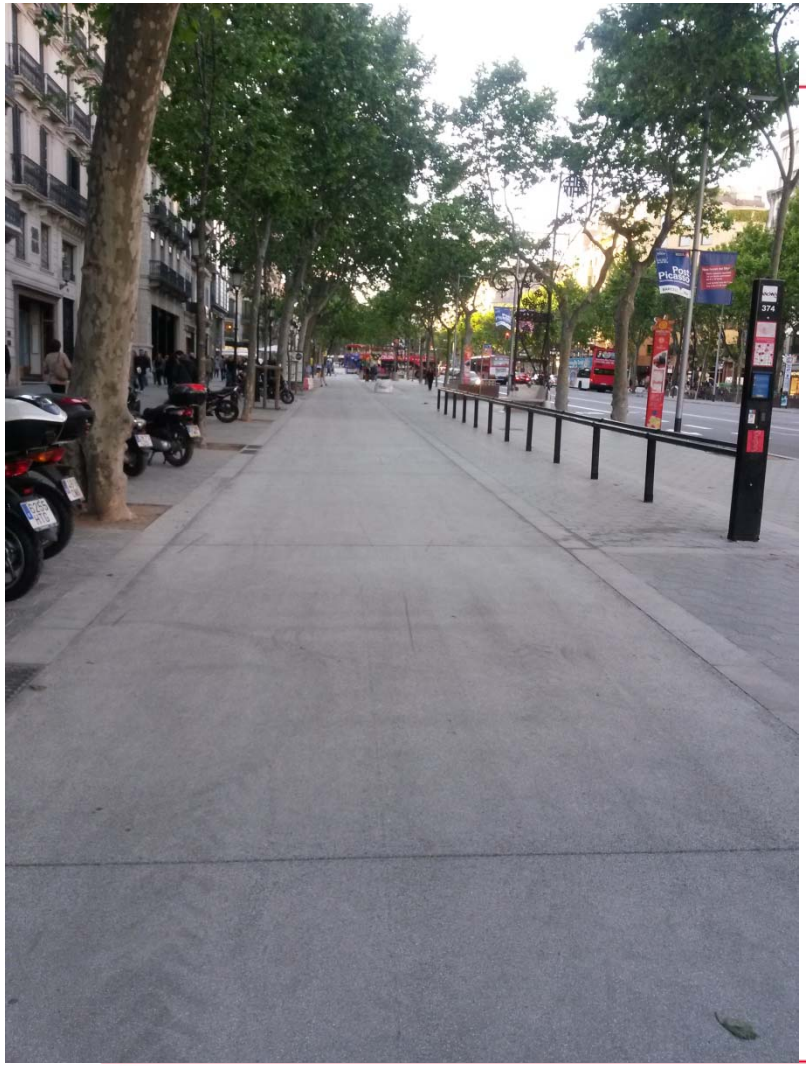
CONCEPT

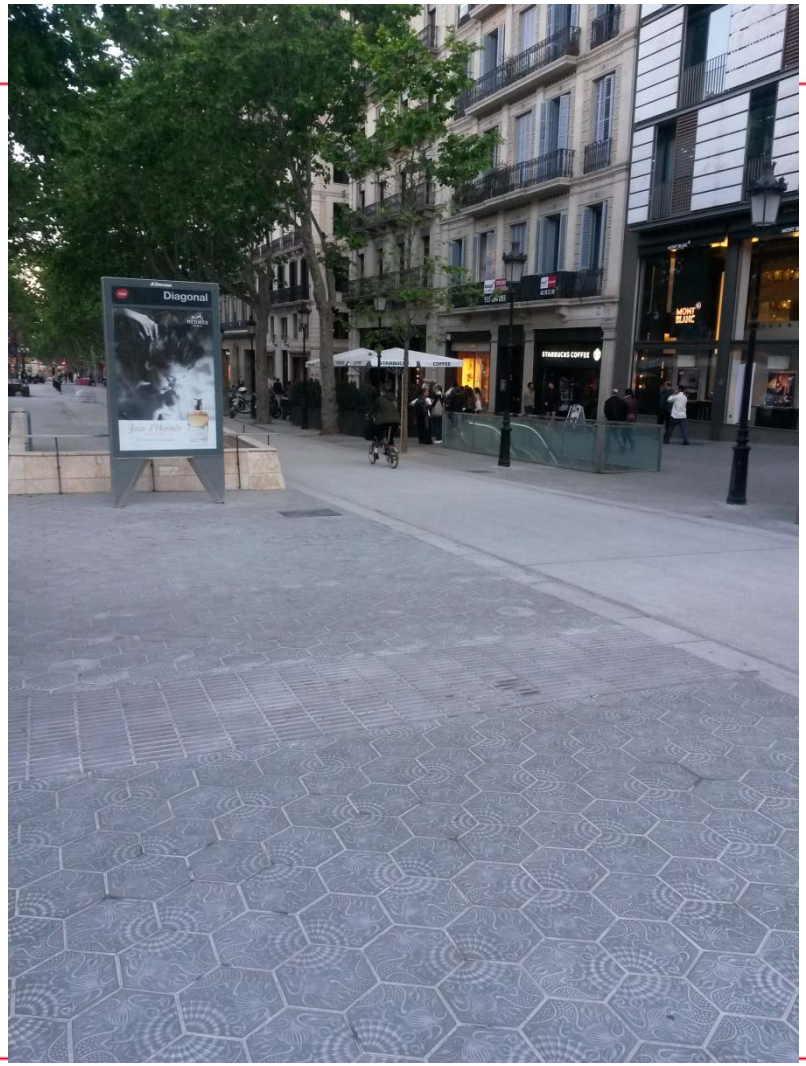
These are street (with maximum speed of 30 km/h) that distinguishes the street from the sidewalk, the street is shared with bicycles (that have priority and will only go in the same direction as the traffic) and motor vehicles, and sidewalks (on which bicycles may not be allowed) scaled to give more space to pedestrians.

There are currently 436 km of 30 km/h zones (45.3% more than in 2010).

Planning 2014-2015






Diagonal
STARBUCKS COFFEE

5.6.1 Superblocks

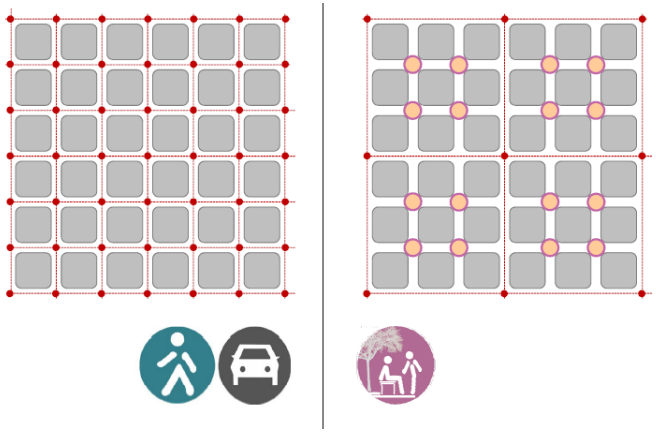
CONCEPT

Superblocks are a **grid of basic roads forming a polygon or inner area** (called intervia) **that contains within it several blocks of the current urban fabric**.

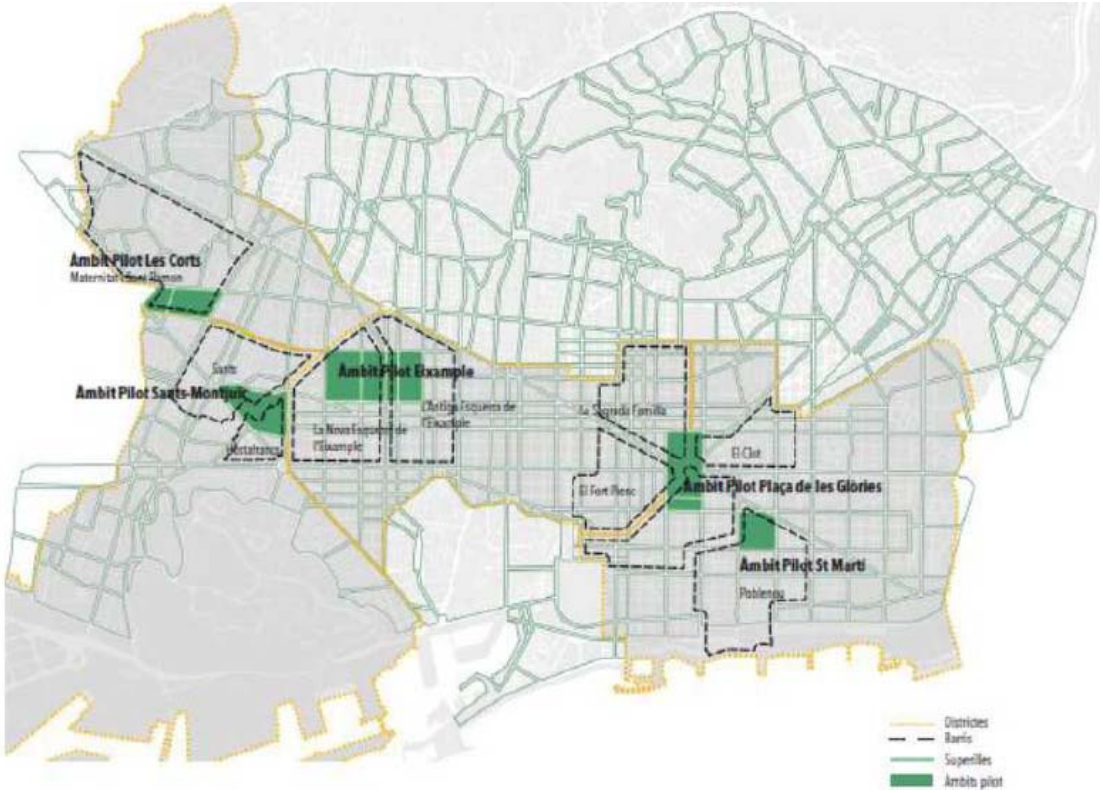
This new urban cell is approximately 400 metres wide for use by motorized vehicles and frees its interior space for other uses.

ROLE OF SUPERBLOCKS

Superblocks are to **regain space for citizens**, so traffic is reorganized in some streets (restricting vehicle traffic is not ruled out at times of low traffic volume, such as on weekends).



5.6.2. Superblocks



THE 5 PROPOSALS

5 superblocks will be launched in the city in the next 4 years:

- **Poblenou**
- **Plaça de les Glòries**
- **Old and new left side of l'Eixample**
- **Hostafrancs**
- **Maternity and Sant Ramon.**

6.

Good Practices

B

6.1. Enhanced convenience, accessibility and safety for pedestrians

PLAÇA DE LES GLÒRIES

New mobility mdoel, regaining a large green space for pedestrians

AVINGUDA DIAGONAL

Widening sidewalks, creating a side traffic lane for vehicles and a segregated bicycle lane.

BALMES (GRAN VIA-ARAGÓ)

Sidewalks and street corners are widened, paving is renewed, new LED lighting is installed

PASSEIG DE SANT JOAN (GRAN VIA – DIAGONAL)

Sidewalks will be widened for pedestrians, children's areas and green spaces.

BORN

Creation of a new large pedestrian area around the Cultural Centre of Born

AVINGUDA DEL PARAL.LEL

Regaining space for pedestrians, relocating the bike lane in the centre of the road and turning the islands on the Eixample side into small squares

6.2. Good Practices for Traffic Calming

SCHOOLS AREAS

Educational programs to improve safety and risk awareness of students on the move

EDUCATIONAL RADAR

Pilot test on pedestrian crossings without traffic lights, in areas with school paths. There is proof that this causes 10% speed reduction.

30 KM/H ZONES – BIKE ZONES

Increasing bike lanes and improving the existing ones (correcting gaps, deficiencies, points of higher accident rates. 30 km/h zone signage).

SURVEY ON PEDESTRIAN CROSSINGS

Review of the 15,000 pedestrian crossings in the city. Suggestions for improvement: visibility, lighting and signage

LOGISTICS FOR DISTRIBUTION OF GOODS

SMILE PROJECT (pilot project in the Old Town) to improve mobility and clear the occupation of public roads.

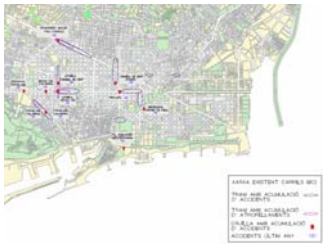
TRAFFIC POLICE AT THE SCHOOLS

Educational programs to improve safety and risk awareness of students on the move.

6.3.1. Promoting Bicycle Use

REDUCING ACCIDENTS

Improving the conditions of the bike network and avoiding conflicts with pedestrians and other modes of transport



PARKING

Increasing bike parking on public streets.

REGULATING SPACE

Regulating the use of public space with regard to bicycle riding and other vehicles for personal mobility.

PUBLIC BIKE SERVICE

Improving the efficiency of public bicycle service in the city.

E-BIKE

Promoting the use of electric bikes

PUBLIC TRANSPORT

Promoting the improvement of public transport adaptation to bicycle acces.

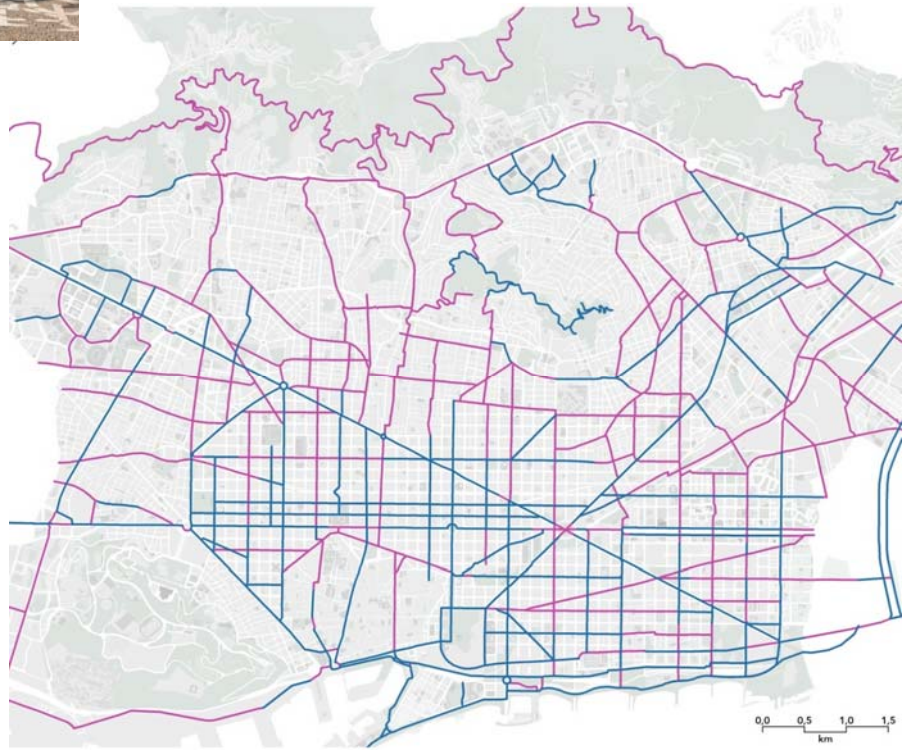
6.3.2. Bike Lanes

CONCEPT

Currently, the city has a network of 104.9 km of bike lanes (8.1% more than last year).

BICYCLE NETWORK PROPOSAL

Proposal network existing in 2013
Main network proposed



Thank you!

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