

Government measure



LET'S FILL STREETS WITH LIFE

Establishing Superblocks in Barcelona



Commission for Ecology, Urban Planning and Mobility

May 2016

PRESENTATION

The municipal government measure presented here emphasises the change of management required for getting the running of the city into line with new environmental challenges and opportunities for improving the quality of its citizens' lives.

Given that its ultimate goal is to make **Barcelona a city for living in**, this is a government measure that tackles many of the city's problems and offers comprehensive and cross-cutting solutions among numerous players. It is to this end that the measure describes the organisational conceptual model, justification, background history, goals and methods of the implementation programme..

Today's streets need to be redefined as public spaces; as habitable places; as community spaces; as an extension of housing territory; as a space for games, greenery, history and local life of neighbourhoods. Rethinking the city through new ways of grouping, based on traditional blocks, allows us to reconsider the role played by streets and, also, to foster interaction and social groupings.

Streets have to go back to being guarantors of vitality throughout the entire urban fabric, to creating opportunities for the establishment of greenery and to promoting positive community life among local residents of all ages and origins. We need to fill the city's streets with life again.

Establishing Superblocks in Barcelona is the strategy we are employing for achieving this goal.

Superblocks are becoming a new concept of urban order, made up of an integrated network of relationships that highlights today's neighbourhoods, streets, buildings and activities; and which promotes the reclaiming of public space and a sustainable mobility system for connecting all these. Citizens' lives are also changing, through better access and the promotion of local social relations.

The prevailing criteria used here underscore what is already in existence: public spaces as a common asset; protecting neighbourhoods from through traffic; reducing pollution and accidents; strengthening pedestrian rights and social cohesion. On the other hand, re-naturalising new public spaces with planted elements and soft (permeable) surfaces is another important factor for the urban design of these new spaces. That would enable us to combat the excessive waterproofing in cities that has such a major impact on the environment.

The plan, which is not totally new, now incorporates and coordinates several mobility and public-space projects within the same city model. The alignment of proposals such as the public transport impetus (metro and tram), the orthogonal-grid bus lines, the pedestrianised roads, etc., and measures on the use of public spaces (terraces, for example), offer the possibility of understanding the city as an environmentally coordinated complex that aims to change the prevailing model, the model that fails to use street spaces to their full, that promotes travel by car and unrestricted commercial use of public space.

The Superblock model owes its value as an organisational model to its generic nature, in other words, it is an abstract, flexible and currently feasible benchmark. Its application also derives from the most recent conceptual reflections and experiences that together offer examples that allow us to improve the technical intervention criteria.

The establishment of Superblocks now being developed envisages a comprehensive city model as its main benchmark, whereby concepts are realised through coordinated and territorially distributed initiatives, plans and projects, where tools and concepts are adapted to the needs and proposals of local residents.

In dealing with a functional restructuring of the city and so a change in habits, it is crucial for city residents and the various players involved to take part in the several stages of the model's establishment, from diagnostics to the design of the proposals and implementation of the initiatives.

Establishing the model does not have to come with large physical changes. The Programme plans to improve how streets and other public spaces are managed and that can be done through one-off initiatives. That is why flexible physical changes, with small budgets, and reversible in some cases (we shall call them tactical), are appropriate for envisaging fast and easy changes. That way the public can experience and appreciate the effects of the change.

The initiatives will be cross-cutting and aimed at improving the habitability of public spaces, by ensuring the sustainability of the mobility model, balancing security with the many social uses that the spaces are to stimulate and with increased urban greenery and biodiversity.

For the purposes of evaluating the model's usefulness and any potential improvements to be introduced during its implementation, the Superblocks Programme provides for a system to monitor and evaluate the impact on the main public-health and urban-environment vectors.

Barcelona, May 2016

TABLE OF CONTENTS

- 1. INTRODUCTION**
- 2. A COMPACT CITY'S CHALLENGES**
- 3. SUPERBLOCKS: A CHANGE IN CITY MODEL**
- 4. LET'S FILL STREETS WITH LIFE. The establishment of the Superblock Model in Barcelona**
 - 4.1 STRATEGIC FRAMEWORK**
 - 4.2 AIMS**
 - 4.3 GENERALS GUIDELINES AND TECHNICAL CRITERIA**
 - 4.4 METHODS**
 - Territorial action areas
 - Players involved
 - Levels of change
 - Establishment process
 - 4.5 PUBLIC INVOLVEMENT: PARTICIPATORY SUPERBLOCK PROCESS**
 - 4.6 CALENDAR AND BUDGET**
 - 4.7 CONTINUOUS EVALUATION AND IMPROVEMENT**



1. INTRODUCTION

The Programme entitled *Let's fill streets with life, the establishment of Superblocks in Barcelona*, came about from the need to rise to the two-fold challenge of improving people's quality of life, by making the city healthier and more habitable, while reducing the impact of human activities and ensuring the environment's short- and long-term integrity.

Barcelona is a dense, compact city, with all the benefits this entails with regard to travel needs and efficiency in the use of natural resources. Of course, at the same time, we need to be aware of certain flaws that urgently have to be made good: air-pollution levels; traffic noise; road-accident rates; lack of greenery; quality of spaces for interacting, etc.

Compactness and mixture of uses favour urban vitality in the city's streets. In fact, the streets in our towns and cities have traditionally been the support for travel, while also the place *par excellence* for children's games, local resident gatherings, strolls, resting, financial exchanges, sport, culture and protests...



By contrast, over the last few decades, the urban functions, particularly relating to meetings and leisure, have been significantly eroded or have even disappeared from our streets, giving way almost exclusively to the function of travel. Such a context has made it important to reclaim the streets and ensure they also function as a means of disseminating and bringing vitality to the urban network complex, creating opportunities for establishing greenery and promoting positive community life between local residents of all ages and origins.

For all the efforts made over the last few decades, Barcelona remains a city with few green spaces. Urban greenery contributes essential ecological values for the city as well as social and cultural values relating to well-being and health, beauty, culture and possibilities for social relations.



We need to continue with these efforts, to reclaim the streets and fill them with life and, to achieve that end, we have to not only improve the habitability of public spaces but also reclaim them for local residents, by committing, among other things, to a safer and more sustainable mobility and to a reduction in the number of private vehicles.

The large numbers of private vehicles on Barcelona's roads is one of the problems that have to be tackled. Despite the fact that they only represent 25% of the journeys made by Barcelona's residents, cars and mopeds, whether in traffic or parked, take up between 50% and 70% of space in many roads.

Reclaiming public spaces, then, involves a reconsideration of mobility in the city. Organising the city into Superblocks, by integrating already existing systems and superimposing the various networks, opens the way to improving the quality of life of the city's residents.

Previous experiences

It could be said that the city's first large-scale planning was the Cerdà Plan. Cerdà planned a continuous grid of 113.3 m by 113.3 m blocks, from Besòs to Montjuïc, with streets ranging from 20 m, 30 m and 60 m in width. He had already been providing for an element in that grid which was larger than a block, so that the green spaces of each block could be added to and expanded.

The apparently isotropic grid was flexible enough to adapt to pre-existing ones and sufficiently open to allow various reinterpretations, according to the political vision and changing needs of society, as demonstrated over time, proving to be a success and becoming an international benchmark.

Later on, the city was reinterpreted and planned several times and under various visions, such as the County Plan of 1953, which strengthened the pre-existing paths and as such tipped the balance towards the radial model of the Jaussely Plan. This served as the basis for the drafting of the General Metropolitan Plan approved in 1977, which is the current framework of the plan we have today.

Reinterpreting the city in view of the challenges posed by present-day society involves, among other things, reflection on public spaces and mobility.

The model for organising the city through a street arrangement based on grouping blocks together is not a new model. The strategy, whose role is to tame the passage of cars through the inner streets of neighbourhoods and several areas of the city, has numerous models in urban-planning culture. Clear examples can be seen in the proposals for neighbourhood units, the environmental areas devised by the English engineer Colin Buchanan, the so-called woonerfs in the Netherlands and even GATPAC's proposals for the modern urban-planning sectors for Barcelona, among others.

Numerous experiences have been used for reclaiming space for pedestrians in Barcelona since the 1980s, based on the Street Plan of 1986. Initiatives aimed at turning the city's old quarter into an exclusively pedestrianised area were the first steps taken to that end.

The first re-developments of Portal de l'Àngel and Plaça de la Catedral were not without controversy, especially on the part of the commercial network that was worried it would see a drop in sales. Of course, once the initial concerns were overcome, the model was extended with several initiatives to remove private traffic from a large part of the Barri Gòtic.

This model has been repeatedly used in almost every old centre of the towns that were swallowed up by the city in the 19th and 20th centuries, through urban re-developments aimed at removing private traffic from networks with similar features: narrow streets with a high density of activities.

The Mobility Plan for Vila de Gràcia, in 2003, was the tool that helped to launch the first Superblock established as such in Barcelona. In that case, streets were identified that had to channel road traffic and public transport, with changes made in several sections of the other streets, changes of direction for traffic and the introduction of physical obstacles to access points to free them from private transport.



175 cars = 2 buses = 1 tram = 200 people

Source PTP (Platform for the Promotion of Public Transport)

Following these first initiatives a debate was started on whether specialising streets throughout the city could bring about more efficient running or whether, by contrast, it would be desirable to continue with the isotropic grid model, that is, with vehicle traffic through every street. The reality shows that not all streets are equal and that initial physical conditions,

continuity, connectivity, width and present functions change. Even the streets in Eixample differ from one another, as not all of them have the same degree of connectivity or the same characteristics.

Finally, with initiatives such as the establishment of 30-km limit areas and the new orthogonal-grid bus routes, and given their success, the debate has been moving towards road prioritisation; and it was under this philosophy that approval was given to the city's Urban Mobility Plan, where the city's mobility is organised according to Superblocks.

It is now time for action and Barcelona City Council, in keeping with this principle, is launching its *Let's fill streets with life* programme, which aims to establish the Superblock Model throughout the city, as a means of improving the habitability of public spaces, by putting pedestrians and sustainable mobility at the centre of planning.

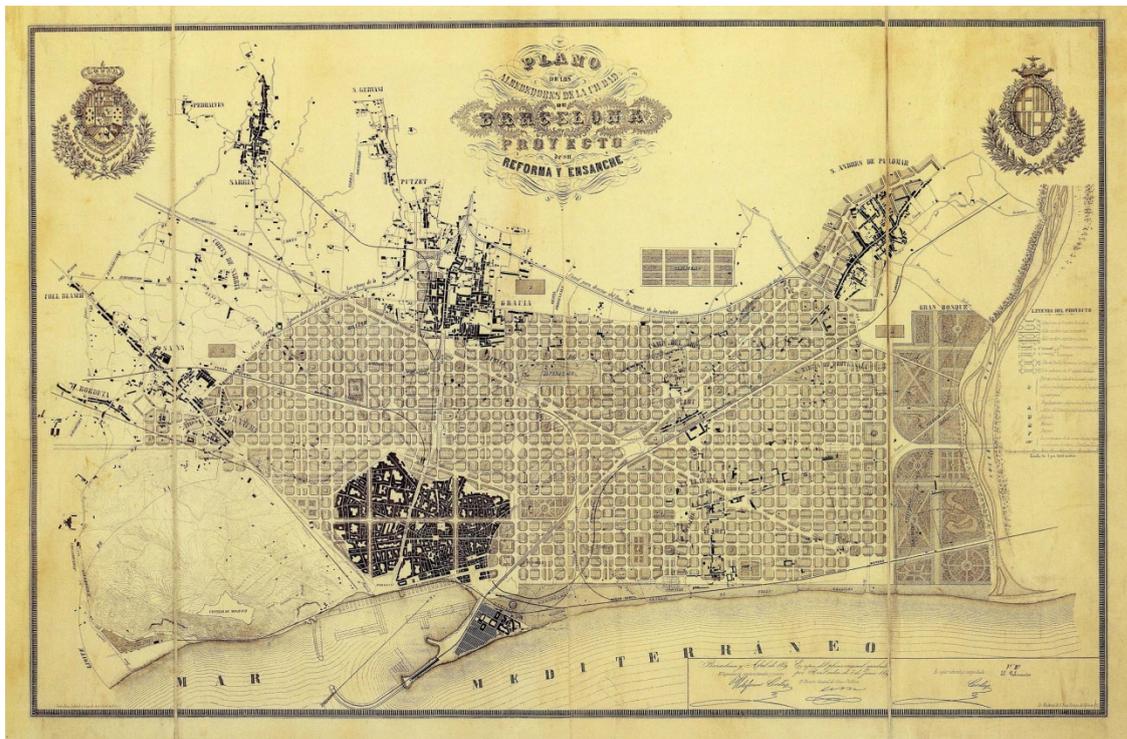


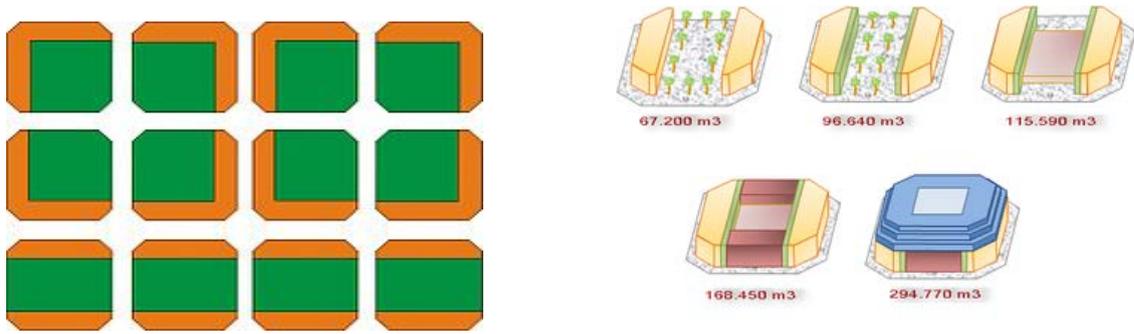
2. A COMPACT CITY'S CHALLENGES



The reason for the proposal for establishing the Superblock model in our city stems from the following factors, necessitating a functional change in our environment: climate change; high density; scarcity of green areas; high levels of air and noise pollution; road accident rates; the tendency towards individualisation and sedentarism among young children, teenagers and young adults and the social isolation and lack of independence of elderly people. These are all aspects where there are opportunities for improving the quality of people's lives through action on public spaces.

Barcelona is one of the highest density cities in Europe, having grown continuously in the last century, as did most other European cities. Of course, given the territory's morphological features, it was unable to grow outwards and has become increasingly dense, becoming a compact city with little free space.





Barcelona's urban form is strongly shaped by the Cerdà Plan, which takes up the central part of the city today. **Ildefons Cerdà** sketched a Barcelona, following pioneering 19th century hygienism concepts, based on an orthogonal grid of streets that served as mixed-use blocks. He also envisaged large public spaces, however, which never came to fruition, and a few less dense blocks with free domestic spaces that were very unlike the blocks we see today in Eixample.

The flexibility of the grid system designed by Cerdà has enabled the city to absorb a growing population and consequent rise in traffic levels, as well as the various user requirements that have been changing over time. Barcelona has therefore become an example of a compact, mixed-use city structured around public spaces that were clearly innovative in their day (second half of the 19th century), seeing as, even now, it can provide the basic and functional support for tackling this change of model through the establishment of Superblocks.

A change of model that deals with the environmental, social and economic problems of today, almost two centuries after the Cerdà Plan. Cornerstones of present-day Urban Planning which will serve as the foundation of the new model for the Barcelona Metropolitan Master Plan, now in preparation, resulting in the new Barcelona Metropolitan Urban-Development Plan, which is what will ultimately have to integrate this new model with the creation of urban planning tools and replace the current PGM-76, which is clearly out of date.

Compact cities have numerous indisputable social and environment advantages: local approaches; minimal use of the territory; economies of scale in services, public transport and inter-activity relations; less energy waste etc. But there has to be a limit to such compactness and we need to know the optimal point for the city residents' quality of life and the city's quality of public spaces.

Barcelona is a city with a lack of green spaces in its urban environment. We have almost 7m² of green space per inhabitant, without including the Collserola natural park. In some districts the figure is well below the standards: 1.85 m² in Eixample and 3.15 m² in Gràcia¹, so creating more green spaces has to be one of our priority goals.

Despite the tendency toward improvements, **air-quality measurements over the last few years show that pollution levels** in Barcelona and its neighbouring municipalities **are still too high**, sometimes exceeding the maximum thresholds established by current legislation and the World Health Organisation . PM10 pollution alone is estimated to cause some 3,500 premature deaths every year in the Metropolitan area and leads to a reduction of life expectancy in the

¹ Barcelona City Council. *Barcelona Green and Biodiversity Plan for 2020*. April 2013

whole of society². Likewise, recent studies have shown the significant negative effects that Barcelona's air pollution has on brain connectivity among school-age children³.

The environmental noise index is one of the indicators that is directly linked to the quality of people's lives. As in most cities, the main sources of noise in Barcelona are traffic during the day and leisure activities at night. During the day, 40.25% of the population is exposed to noise levels above 65 dBA. Both WHO and the European Union have established 65 dBA as the upper outdoor limit during the day⁴.

Other research has shown that exposure to chronic noise increases arterial pressure, making it hard for children to learn to read and interfering with their ability to concentrate and their oral communication. So, besides being a nuisance, traffic noise poses a serious public health problem and is a risk factor for respiratory and cardiac diseases, affecting children in particular⁵.

As for road safety, 2015 saw 9,095 accidents with injured victims, and 27 fatalities. The Local Road Safety Plan aims to reduce the number of serious injuries by 20% and fatalities by 30% during the 2012-2018 period⁶.

As for sedentarism, note that close to 1 out of every 5 children and teenagers in Barcelona is obese or at risk of being overweight and that this problem is unevenly spread throughout the city: the percentage for children living in the poorest neighbourhoods (31.4%) is twice that of those in more affluent areas (15.6% respectively)⁷.

There are two characteristic aspects of present-day lifestyles that have a decisive influence on the appearance of overweight and obesity: an unbalanced diet and a lack of physical activity. As for the latter, and according to several paediatricians, what children need is to burn their energy, with full freedom of movement, as happens when they play in the streets. Many professionals believe that if children went to school everyday on foot or by bike this would have a significant impact on the problem of child sedentarism. What is more, if such good habits were complemented with outdoor games and physical exercise, the number of cases of obesity and overweight associated with sedentary lifestyles would drop significantly.

Finally, there are other urban problems worth mentioning which, while not covered in the regulations, have to be dealt with. These include **promoting independence among people**, especially children and the elderly, given the fear caused by traffic; **fostering intergenerational relations** through suitable public meeting and leisure spaces; **boosting people's affective links** to their environment; **increasing public safety** by bringing greater vitality to streets and so on.

Besides the social and public-health aspects described, for the sake of the city's long-term sustainability, we will have to **cut down on our energy consumption** and climate-change causing **greenhouse gas emissions**, issues where mobility has very serious direct effects.

² CREAL (Centre for Environmental Epidemiology) (2007): *The public health benefits of reducing atmospheric pollution in the Barcelona Metropolitan Area*.

³ Pujol J, Martinez-Vilavella G, Macia D, Fenoll R, Alvarez-Pedrerol M, Rivas I, Forn J, Blanco-Hinojo L, Capellades J, Querol X, Deus J, Sunyer J. *Traffic pollution exposure is associated with altered brain connectivity in school children*. *NeuroImage* 2016;129:175-184.

⁴ Barcelona City Council (2013): *Barcelona, ciutat compromesa amb el medi ambient* [Barcelona, a city committed to the environment].

⁵ Tobías A, Recio A, Díaz J. *Does traffic noise influence respiratory mortality?* *European Respiratory Journal*. 2014b. DOI: 10.1183/09031936.00176213

⁶ Barcelona Public Health Agency (2014). *La salut a Barcelona* 2014 [Health in Barcelona 2014]

⁷ Children's Institute (2015) *Baròmetre de la infància i les famílies de Barcelona* (2014) [Barcelona children and family barometer (2014)]

All these indicators reveal a scenario that has reached its limits, where action is needed. Barcelona is a city with lots of potential as it is founded on a rational structure that can admit various and new interpretations. The Superblock Programme can improve most of these indicators, defining a new panorama and moving towards a healthier, more egalitarian, more sustainable and green city.



3. SUPERBLOCKS: A CHANGE IN CITY MODEL



The Superblocks model is a way of organising the city based on reversing the distribution of public space among vehicles and people, giving priority to the citizen, to improve environmental conditions and people's quality of life.



It can now be said that most streets are planned according to traffic needs and to transporting people and goods from one place to another. The Superblock Model highlights the need to make public spaces habitable and plans the city on the basis of this approach.

To achieve these goals it is based on a diversification of streets with regard to their habitability, uses and connective capacity. Superblocks are spread throughout the urban landscape like a network of "tartan". Green spaces, attraction points and facilities, pedestrian hubs, streets and various mobility networks make up the systems superimposed on each other and which interlink the districts, neighbourhoods and neighbourhood units (housing).

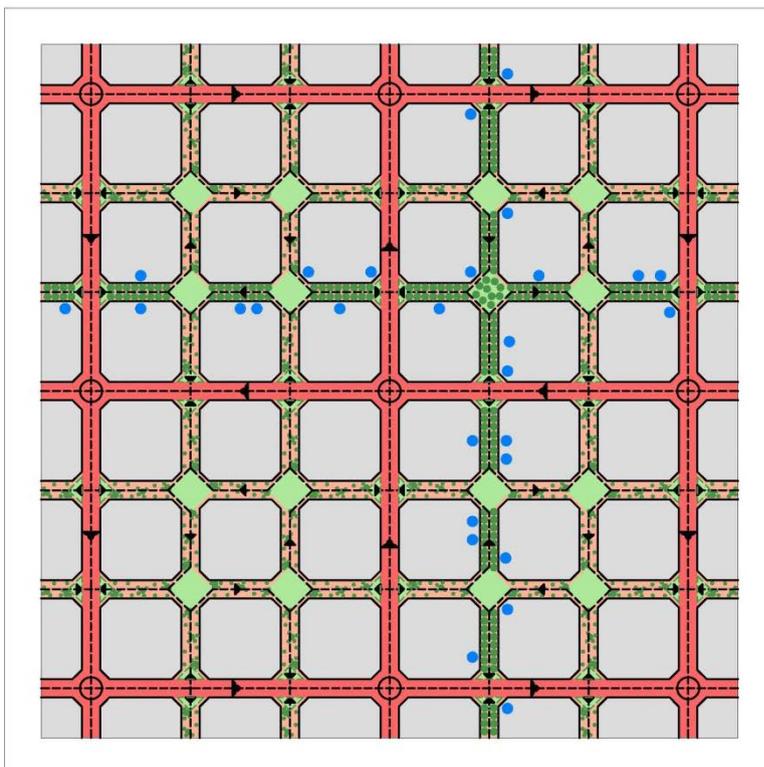
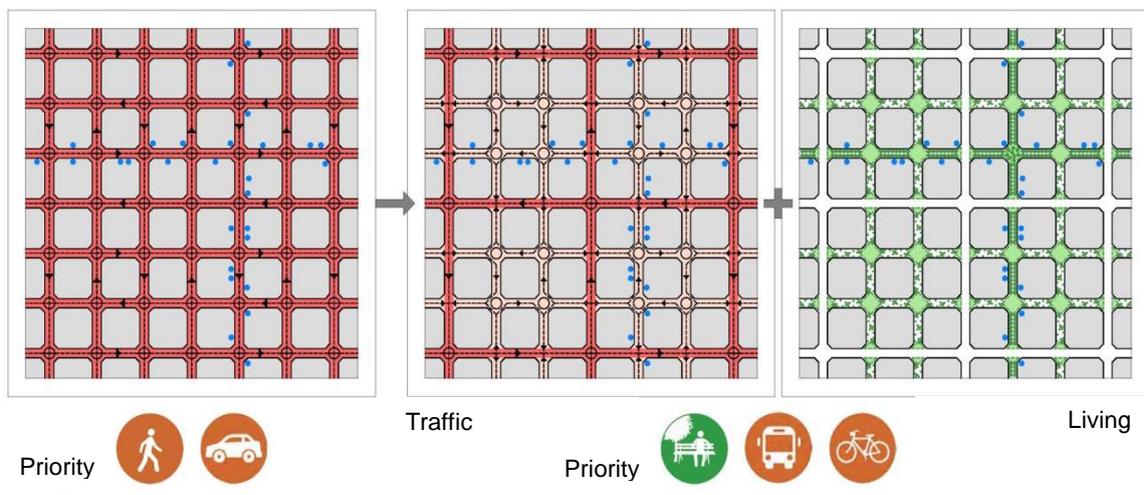
Each system and network has its own value and benefits everyone in its range of influence, (there are no type A or type B streets). The integration of all the systems and networks makes up an urban fabric where urban quality is extended and distributed more or less homogeneously.

This is not about delimiting various units, neighbourhoods are a changing social concept that depend on many factors and which are difficult to identify in specific terms. This is not about understanding Superblocks as an isolated cell, bounded by street hubs along their perimeter. This is about a diversification of streets which is based on recognising and boosting their earlier features and adding the various networks to them. There are hubs that are important for their continuity, functionality, spatial hierarchy (section), capacity to link places or buildings or their personal history which define urban systems that cover and connect places and activities.

Some streets are tasked with channelling vehicle traffic, others are pedestrianised and green and connect green spaces, neighbourhoods and points of interest while others are free for public functions, linked to living and neighbourhood life.

Current model

Superblock model



DESCRIPTIVE LEGEND

-  Point of public interest
-  Basic network street
-  Green/civic hub
-  Local network street
-  Street direction
-  Junction between basic network streets
-  Junction square between green/civic hubs
-  Junction square between local network streets
-  Junction square between basic and local network streets

In all these hubs, it is crucial to improve the habitability of the public space, introduce greenery and put pedestrians and sustainable mobility at the heart of the planning.

This opens up the possibility of public spaces being put to other uses: such as children and teenagers exercising their right to play games, practise sport, engage in cultural or financial exchanges, expressive actions and protests, with streets becoming a meeting space between several generations of people and groups.

The model's goal is for people to reclaim their citizen status, today relegated to the function of pedestrians, and to encourage local residents to re-appropriate public spaces, by improving their habitability and the presence of greenery in streets.

If these two basic functions -traffic and living - are to be balanced, the **Superblock Model's** implementation **will have to be accompanied by a 21% reduction in private-vehicle traffic in the city**, favouring a change of mode towards more sustainable means of transport. In this regard, boosting the networks - public transport and cycle and pedestrian lanes - will help to achieve a good degree of accessibility throughout the city.

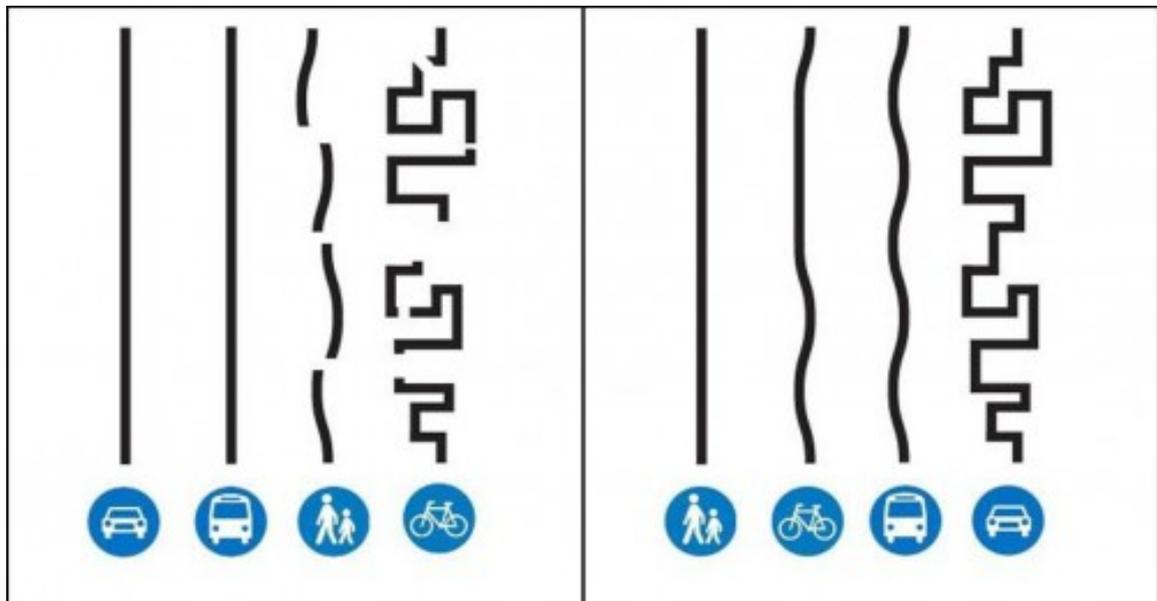


Source: Urban Mobility Plan. Basic (vehicle traffic) street map

Approved in 2015, the Urban Mobility Plan lists the initiatives to be carried out to ensure this reduction in private traffic and provides the first organisation of the various mobility networks that will have to intersect with the various existing systems.

All these networks applied to Barcelona, bearing in mind the historical and pedestrianised hubs, the green corridors and the city's various networks, will provide a sketch of the Superblocks in the city.

This model turns on its head the way most cities have been organised since the second half of the 20th century: there, streets have been designed under criteria that give priority to private traffic, seeking maximum motorised-traffic fluidity and capacity and providing the shortest and straightest route for cars, by taking up the central part of streets and ensuring continuity at junctions. The new proposal, in contrast, prioritises the use of roads by people in most cases, by relegating cars to their role as a means of individual transport, behind public transport.



Source: www.copenhagenize.com

This new model has to be one of the basic elements to be integrated into the current opportunities we have with the new Barcelona Metropolitan Urban-Development Master Plan, now in preparation, and its realisation as set out in the urban-development planning of all urban land within the Barcelona Metropolitan Area. The current Barcelona Metropolitan Area Act (2010) and the new Act under preparation on Territory in Catalonia are tools that can play a decisive role in this change of model we are proposing, where the priority of urban-development planning has to be based on improving and recycling our consolidated urban land.

Barcelona, the capital and nerve centre of the metropolitan area, has to lead the way in 21st century Urban Planning, under the framework of a comprehensive urban sustainability, based on renovating, improving and recycling the consolidated city, as a strategic environmental paradigm. The Superblock Model decisively tackles this environmental challenge, based on a new urban mobility, a new urban-service structure and a notable growth in the number of green spaces in the city. This entire basic structure must be accompanied by a planning of uses in the city that is consistent with the Superblock Plan, and, above all, housing as a cornerstone to this basic activity of living in a neighbourhood, by integrating improvements to residents' quality of life as a priority goal.

Urban-development planning in large cities such as Barcelona starts with a plan conceived at a certain time, while its development, application and consolidation as a reality may take years, decades and centuries, as is currently the case, where even now new alignments of the Cerdà

area are opening up, sketched almost two centuries ago. The strategy for integrating this new model that we are presenting into the new metropolitan plan now being started is as simple and clear as using present-day urban-development tools to classify the new green areas within the superblocks' inner junctions, as a benchmark and challenge for consolidating this new urban model over the years to come. A model that is supported by the Cerdà area itself and which can be extrapolated to the new, later neighbourhoods of 1950s Barcelona and, as a result of which, we will be able to come up with an innovative and revolutionary plan to permanently replace the current PGM-76 during the first half of the 21st century.



4. LET'S FILL STREETS WITH LIFE



For the purpose of moving on to action and establishing the Superblock Model throughout the city, the City Council is launching a programme entitled *Let's fill streets with life. The establishment of the Superblock Model in Barcelona.*

This is an impetus programme that sets out the goals, methods and evaluation tools that are to be used for carrying out the first initiatives, though we must not lose sight of the fact that a new city model is being proposed and that, as such, all municipal plans and projects have to come together in this direction, to achieve the final goal, which is to reclaim streets and fill them with life.

The first Superblock was established in 2003, in Vila de Gràcia, since when the theory of the advantages implicit in reorganising the city has been perfected, though little progress has been made in its implementation.

The *Let's fill the streets with life. The implementation of the Superblock Model in Barcelona* Programme includes the work carried out in four areas of the city under the Superblock Programme for 2012-2015, giving priority to initiatives where it is more important, in other words, the Cerdà area, and opening the process up to several territorial areas from a district level.

These first initiatives are intended to be carried out under two major lines of work: citizen empowerment and tactical urban planning.

A participatory process has been designed that is intended to accompany the entire deployment of the measures to be implemented, seeking at all times the involvement and joint responsibility of the social fabric of each area.

All that, without planning any major physical changes at the start. The first initiatives will involve commitment to flexible physical changes, with budgets that are small and, in some cases, reversible, as well as tactical urban planning. That way city residents can quickly reclaim streets and see for themselves whether or not the model is working.

4.1 STRATEGIC FRAMEWORK

The *Let's fill the streets with life* programme. The establishment of the Superblock Model in Barcelona bases its guidelines and criteria mainly on several municipal sector plans and commitments (Barcelona Commitment to Climate, Urban Mobility Plan, Green and Biodiversity Plan etc.) and on the previous Superblock Programme for 2011-15, creating synergies, coordinating them in a cross-cutting way and giving them a vision of a comprehensive change in order to develop the strategic lines set out in this legislation.

The Barcelona Commitment to Climate



The Barcelona Commitment to Climate features the priorities, challenges and projects selected by over 800 citizen associations and the City Council to combat the effects of climate change, which are listed in a road map to be implemented in the next two years.

The Commitment to Climate calls on the various economic and social groups, the authorities, businesses, players and social organisations and the public to promote, boost and take the lead - each according to its own possibilities, on initiatives that help to reduce climate change and adapt our city to protect it from its impact.

The Barcelona Urban Mobility Plan (PMU) for 2013-2018

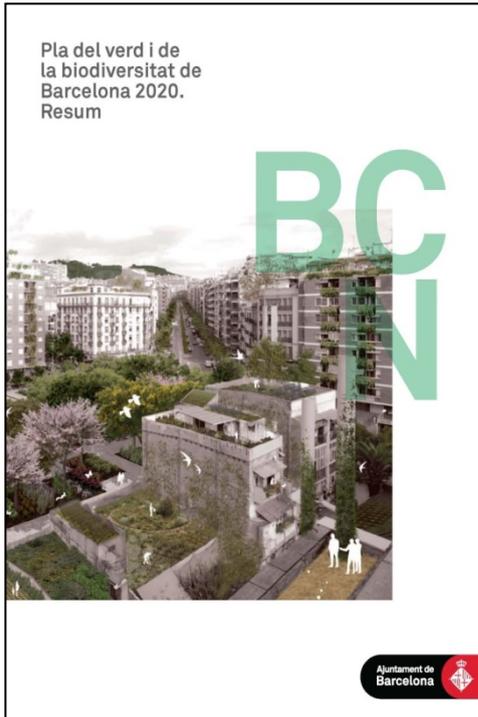


As explained above, the Urban Mobility Plan works on several lines of action that come together to organise the urban area into Superblocks.

It therefore considers pedestrian networks, the deployment of bike-lane networks, the establishment of the new orthogonal bus-line network and improvements in public transport, as well as prioritisation and improvements in managing the street network for private vehicles.

The pooling of defined networks (plus the action lines aimed at promoting high-occupancy vehicles, regulated street parking, improvements to the urban distribution of goods, etc.) is ultimately aimed at achieving a switch from private-vehicle mobility to other means of more sustainable transport, and at **reducing car and moped use by 21%**.

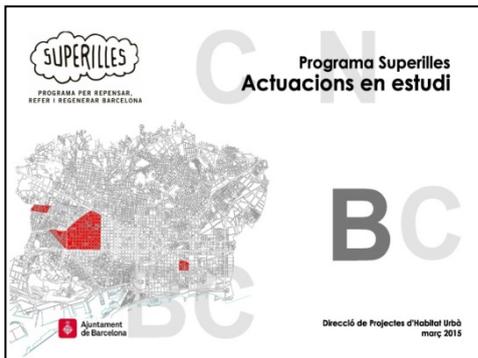
The Barcelona Green and Biodiversity Plan for 2020



The Barcelona Green Infrastructure and Biodiversity Plan is a strategic tool that defines the challenges, goals and commitments of the municipal government when it comes to conserving green areas and biological diversity and how the population understands, enjoys and looks after them. It plans long-term initiatives to achieve an ecological infrastructure.

The aims of this Plan are: conserving and improving the city's natural heritage; preventing the loss of species and habitats; achieving the maximum provision of green surface area and its connectivity; obtaining the maximum environmental and social services for greenery and biodiversity; increasing the value that society assigns to greenery and biodiversity and making the city more resilient in the face of emerging challenges such as climate change.

The Superblock Programme for 2012–2015



While the PMU was being drafted, the first stage of the Superblock Programme for 2012-2015 began with four pilot areas in the city. These four areas were: La Maternitat i Sant Ramón, in Les Corts; Sants-Hostrafrcans, in Sants-Montjuïc; Diagonal-Poblenou, in Sant Martí, and Esquerra de l'Eixample, in Eixample.

The first part of the programme was carried out, consisting of several public participatory meetings in which the diagnoses of the areas were analysed and the road map established for the initiatives which, after their technical evaluation, had to be implemented to bring about the change. Several of these initiatives were implemented in the area of the Les Corts Superblocks. The current government measure is actually a continuation and development of the programme launched under the previous municipal government, considering that its deployment and needs are all the more relevant today.

PAM (Municipal Action Plan) strategic lines

The Municipal Action Plan 2016-2019, now in preparation, provides for the promotion of Superblocks in concept 3 *A more human Barcelona in ecological transition*, and expresses the need to “create new superblocks in various areas of the city, in order to rethink and redefine public space for daily life, with more spaces where children and older people can enjoy themselves, more sustainable mobility, with local people playing a major role, and as an opportunity to promote greenery and biodiversity”.

4.2 THE PROGRAMME'S STRATEGIC GOALS

The strategic goals that characterise the *Let's fill the streets with life programme*. The establishment of the *Superblock Model in Barcelona Programme* can be summarised in the following four points, with their corresponding application measures:



Boosting the uses of public spaces for children's games, meeting up, taking strolls, resting etc., while reclaiming streets for the people. The initiatives have to focus on:

- Increasing traffic-calmed spaces, giving priority to pedestrians
- Promoting new uses in public spaces that encourage connections between the main attraction elements
- Improving habitability variables (attraction and comfort).



Moving towards more sustainable mobility

A sustainable mobility model is a healthy, low-carbon model that prioritises the quality of urban life and collective well-being, as well as the creation of comfortable urban spaces that promote coexistence among citizens.

For years, motor vehicle traffic has been the main source of pollution in the city, particularly contaminants such as nitrogen oxides and particulates, as well as being the main source of noise.

Therefore, the main lines of action on which work will continue in order to improve Barcelona's environmental quality and meet the goals set out under European regulations are:

- Facilitating the switch to more efficient means of transport
- Reducing the use of vehicles, introducing new mobility-management technologies
- Promoting alternative energies in vehicles



Increasing and improving urban greenery and biodiversity

Increasing the green infrastructure in public spaces, to ensure the presence of greenery and biodiversity and its contribution of environmental and social services.

- Improving plant conditions on streets, to create micro-habitats favourable to birds and other species

- Ensuring the presence of all strata of plants (trees, shrubs, climbers and creepers)
- Making the ground permeable to ensure water is available to plants in public spaces
- Promoting new green community management spaces and public participation in greenery maintenance



Promoting public participation and joint responsibility

Working jointly with the public on designing, implementing and evaluating the Superblock Programme.

- Promoting maximum openness of the process and ensuring the inclusion of the views of the specific groups involved.
- Combining city and territory approaches and working on the two scales through participation.



4.3 GENERAL GUIDELINES AND TECHNICAL CRITERIA

The **general guidelines** that are to govern the implementation of the *Let's fill the streets with life. The establishment of the Superblock Model in Barcelona Programme* are:

- Maximum participation in diagnoses, proposals and implementation.
- Prioritising functional changes over physical changes. **Tactical urban planning**
- Deployment throughout the city, giving priority to the **Cerdà area** (Eixample, Gràcia and Sant Martí)
- Ensuring maximum consideration of cross-sectoral issues. Integrating all views.
- Implementing at **several speeds**: flexibility according to the stage and complexity of the programme for each area in each district.
- **Two intervening scales**: initiatives with a city-wide impact and initiatives with a local impact.
- **Establishment of measurable indicators** to monitor the development of the change.
- Start of a **continuous improvement process** for public spaces. The Programme is not an isolated event but rather the start of a process of change.

Technical criteria are to be established that will affect the action lines that shape the nature of public spaces: habitability, greenery and biodiversity and mobility.

- The **habitability** of a public space refers to the capacity of a specific street or square to host life. Technical criteria and parameters for distribution, uses, furniture etc.



- o **Urban greenery and biodiversity** refer to the environmental and physical comfort of the public space. Technical criteria and parameters for type, species, etc.



- o **Mobility** means improvements in the functionalities for the journeys made in the city: on foot, cycling routes; public-transport accessibility; urban distribution of goods and parking places, which implicitly involve improvements to the environment and quality of life. Therefore, technical criteria and parameters will be defined for the various means of transports, coexistence and priorities.



4.4 METHODS

The methodology proposed for establishing the *Let's fill the streets with life. The establishment of the Superblock Model in Barcelona* Programme includes four sections that define the way the general strategic goals will be applied to the city's territory and which answer the following questions:

- Where is it to be established?
- Who will be accompanying the process?
- What will be the nature of the initiatives?
- What will the initiative-defining process be like?

WHERE IS IT TO BE ESTABLISHED?

Defining the territorial areas of action

Barcelona aims to promote the extension of the Superblock management model throughout the city. However, measures need to begin to be implemented in specific areas, so that the first initiatives can serve as an example, clear up any doubts and serve to appeal to local residents.

Territorial areas of action are areas of various sizes that cover zones with common formal and/or functional features and where various Superblocks can be set up in relation to the basic streets they cross.

Three types of territorial establishment areas have been defined:

1. **Cerdà Area**, which covers all the Eixample district, part of Sant Martí and the Camp del Grassot neighbourhood in Gràcia.

Priority will be given to the initiatives in the Cerdà area, that is, where it is more important. The mobility systems and networks will be planned for the entire area and bounded areas will be defined for where the first initiatives are to start.

The centrality and uniqueness of the Cerdà area make it impossible to implement even part of the Programme without comprehensive planning for the entire area.

2. Areas **already started** under the Superblock Programme for 2012–2015, which would be the areas from La Maternitat Sant Ramon in Les Corts, and Sants-Hostafranchs, in Sants.

In these two cases, the proposals gathered in the participatory process will be taken up again and their feasibility studied. The proposals will be prioritised and some of them will be implemented, depending on budgetary availability.

3. **New territorial areas.**

Several areas have been selected from the districts, distributed throughout the territory, for the purposes of extending the deployment of the Programme to other areas of the city. The areas have been selected, in some cases for ease of establishment, and in others for the substantial changes that the Programme's application involves.

The selection of the various Superblock areas corresponds to in-depth knowledge of the territory and social groups of which they are comprised from each District and will be ratified at each zone's participatory process.

These new territorial areas are: part of the Sant Gervasi neighbourhood, in Sarrià–Sant Gervasi; the old quarter of Horta, in Horta Guinardó; the La Prosperitat neighbourhood in Nou Barris and the Sant Andreu neighbourhood in Sant Andreu.

In any case, the Superblock Programme is not closed in time but intended for promoting the continuous development of its goals throughout the territory.



- TERRITORIAL AREAS WHERE THE PROGRAMME IS UNDER WAY
- COMPLETELY NEW TERRITORIAL AREAS
- CITY AREA. CERDÀ AREA

WHO WILL BE ACCOMPANYING THE DEVELOPMENT?

Players involved

If we are to bring about the functional change proposed for the *Let's fill the streets with life. The establishment of the Superblock Model in Barcelona Programme*, the participation and coordination of various players is required:

- **The territory's local residents, associations and specific groups:** these provide the contextual expertise (problems, needs, demands etc.,) of the people living in the area of the superblocks
- **City associations:** these contribute specialist expertise and the various visions on superblock-related aspects (sustainable mobility, greenery and public spaces)

- The **Districts**: these contribute comprehensive expertise on the specific, physical and social territory
- **Area of Ecology, Urban Planning and Mobility**: this contributes specific expertise on the planning, designing, infrastructure, mobility and maintenance of public spaces
- **Experts**: these contribute research, innovation and comparisons with other experiences around the world.

The process is run by a Technical Secretariat that provides professional support and is made up of representatives from the Area of Urban Ecology of Barcelona City Council

WHAT WILL BE THE NATURE OF THE INITIATIVES?

Levels of change

Given that the city and its territory are not homogeneous and that each district has its own specific morphology, the view is that the level of achievement of the Superblock Programme's goals will have to be adapted to each situation and offer flexibility with regard to proposals and initiatives.

That is why the most appropriate level for achieving goals in each district will be determined before the Programme's development, according to the area's social and morphological conditions and considering the fact that the Superblock Model's application is an ongoing public-space improvement process that does not end in the first stage of implementation for 2015-2019, so that the various levels can be achieved over time.

Basic level: a basic level of achievement occurs when the area is expected to be able to consolidate a change in the functionality of the area's mobility.

Tactical level: a halfway level of achievement occurs when tactical improvement initiatives can be planned for the habitability of public space in the area, once the basic level has been reached

Structuring level: this occurs when the two above-mentioned levels have been reached, and structuring-level initiatives are expected to be able to be planned in the area with now finalised urban redevelopment projects that consolidate the functional change, habitability and establishment of greenery and biodiversity in the public spaces of the whole area.

Types of action according to level of intervention

The Superblock Programme provides for three types of action according to the level of intervention in the public space: tactical initiatives and structuring initiatives.

Basic initiatives

These are initiatives aimed at bringing about functional changes to streets, basically focused on traffic prioritisation, using several methods: vertical and horizontal signage; changes in traffic direction; traffic bans depending on type of vehicle; streamlined parking and goods-distribution regulation.

Tactical initiatives

These are opportunity initiatives: low budget, temporary and reversible which are used for demonstrating the models' application

Tactical initiatives are in step with the Superblock Programme's aim to provide a different way of managing the inherited city, major physical changes are not essential at the start. One of the programme's challenges is to change the uses that people make of streets, based on the current situation, by taking subtle actions on existing road surfaces and pavements.

It is in this regard that tactical changes are of great interest for the programme, seeing that they consist of initiatives with great potential for transforming the uses of public spaces without the need for carrying out large-scale work. To be more specific, they involve initiatives for change through measures for management, urban furniture and painting.



Passatge Felipe de Paz. La Maternitat i Sant Ram3n. Les Corts

These types of initiatives are economic and quickly implemented - especially when compared to urban redevelopment projects - and come with various advantages which they turn into opportunities. On the one hand, they allow changes to start as pilot tests, which are later evaluated so that a decision can be taken on their continuation, improvement or, where appropriate, cancellation. Tactical initiatives therefore allow changes as a process of trial and error, as a means of finding a consensus between the various players involved - in contrast to public works where consensus has to be reached at the planning stage, before the start of any change.

On the other hand, the reversible nature of these initiatives allows for the experience of reluctance to change that always arises, especially when the changes question the *status quo* of cars. Planning a temporary test ensures that resistance levels are not comparable to the reluctance caused by structural initiatives with a useful life of 30 or 50 years. In fact, the possibility of introducing temporary experiences helps to ensure that the subsequent debates and evaluations are based not on opinions or fears but on what people have personally experienced.

Finally, the flexible nature of tactical initiatives and the fact that once they are carried out they can be easily changed and improved, enables public involvement and participation in changes even when the test has already been performed. In fact, far from being the be-all and end-all - as happens with urban redevelopment projects - the implementation of such measures signals the start of an open process for bringing in more citizens keen to express their opinions. More specifically, tactical initiatives help, above all, to involve citizens who do not feel motivated to debate at the drawing-board stage but who do wish to have their say on the changes being realised and under way, making it possible for a final project to enjoy an extremely broad consensus.



Ciutat de València. Source: EFGarquitectura

Structuring initiatives

These are initiatives that enjoy large consensus and which are stable over time, able to involve more substantial budgets and apply corroborated models.

Structuring initiatives refer to urban redevelopment projects in public spaces, consisting of changes and processes involving regular work. Such initiatives are not deemed essential for achieving the programme's goals at the initial stage. Of course, notwithstanding the above, such initiatives may be considered either because they are provided for in the municipal authority's other plans and programmes or because they are deemed necessary, as an exception, under the Superblock Programme itself. (For example: the urban development of C/ Pere IV; the urban development of Av Roma, etc.)

Note that the freeing-up of these spaces presently taken up by vehicles will result in new spaces to be that will have to be developed to the standards that Barcelona has been developing over the last few years. So then, the city with its long history will continue to launch such initiatives, which will always been in line with the city's change of model set out under the Superblock Programme.

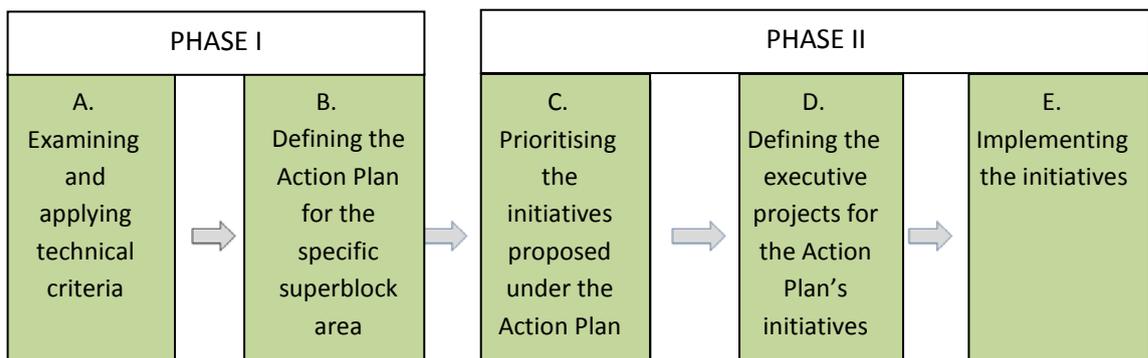


Passeig de Sant Joan. Eixample

WHAT WILL THE INITIATIVE-DEFINING PROCESS BE LIKE?

The establishment process

The process for defining the initiatives in public spaces required to implement the Superblock Model consists of five successive work stages, divided into two phases, the first for defining and drafting (PHASE I. From an examination to the Action Plan) and the second for implementing the model (PHASE II. Projects and implementations):



PHASE I

A. Examining and applying technical criteria

The areas of the territories selected for the application of the *Let's fill the streets with life* Programme in each District will be examined from every point of view that has a bearing on the aspects of the public spaces to be improved.

The examination helps to provide detailed knowledge of the current features of public spaces, to enable changes to be made there through the initiatives that are to be proposed under the *Let's fill the streets with life* Programme.

The examination files will be structured into three parts:

- Description of the area's public spaces
- Calculation of sustainability indicators in the current situation.
- Comprehensive evaluation of the indicators

At the same time the previously defined technical criteria will apply to the implementation of the *Let's fill the streets with life* Programme, which will affect each of the three action lines, according to each of the types of public space:

- Habitability
- Greenery and biodiversity
- Mobility and transport

These technical criteria will be applied flexibly to each Superblock area according to its physical and social morphology.

B. Action Plan for the area

The Superblock Area Action Plan is the document that sets out all the initiatives proposed for each district; proposals that have come from the participatory process and which must be given priority according to technical, economic and temporary availability.

Depending on the speed of implementing the *Let's fill the streets with life* Programme in every area of each district (local or city-wide impact), the Action Plan will have to take prior considerations into account to a greater or lesser extent.

PHASE II

C. Prioritising the initiatives proposed under the Action Plan

Evaluating the feasibility of the initiatives proposed according to their degree of necessity, capacity for change, model role, social gain, level of available investment etc., with the participatory process with citizens and districts, to reach a consensus on their execution and time schedule.

D. Defining the executive projects for priority initiatives

Developing the executive projects for prioritised proposals, differentiating between: basic, tactical and structuring initiatives.

The projects for the various initiatives will have development processes that are independent from one another and will involve the participation of local residents who are directly affected.

E. Implementation

Depending on the budget availability and time schedule, the initiatives provided for under the Action Plan will be gradually carried out for each territorial area.

4.5 PUBLIC INVOLVEMENT: PARTICIPATORY SUPERBLOCK PROCESS

One of the programme's strategic objectives is to promote the general public's participation and co-responsibility. The challenge here is to involve the neighbourhood associations and local residents in determining and applying the criteria in each Superblock area, by gathering their expertise and experience in the territory and getting them to take part in the project.

The Programme will see participation throughout its various work stages and temporary phases, from examination to the implementation of the initiatives. It will be adapted to the features of each territory and will also have to comply with the technical participatory criteria that we have defined for ensuring their methodological quality.

Participation criteria

- **City-wide and local approaches:** Superblocks require work on a twofold scale that also needs to be transferred to the participatory process. Initiatives cannot be defined in a Superblock without taking account of its relationship with the other Superblocks and the impact on the city as a whole, though work cannot only be done on the city level without understanding the social reality and the needs, aspirations, demands and contextual knowledge of the local residents in each of the territories.
- **Openness and inclusion:** open and inclusive participation will be promoted, encouraging the involvement of associations, people on an individual level, facilities and the various groups involved in each of the territories: the elderly; children and youth; retailers etc.
- **Monitoring and accountability:** the proposal is for a **promoter group** to be set up in each territory, made up of the neighbourhood's representative individuals and/or associations, for special involvement in the project from its design up to its evaluation. The promoter group will act as a link between the technical group and local residents, monitoring the Programme and validating its various stages; by helping to define the participatory spaces as well as the results of the various participatory and technical workshops held.
- **Transparency and traceability:** the monitoring of the participatory process and the entire development of the plan will be guaranteed through the **ajuntament.barcelona.at/superilles** website and the **decidim.barcelona** platform, which will open up the project to all the public, enabling it to reach residents who might not take part in participatory spaces in person and to offer contributions at every stage.

Participatory process stages

The participatory process will be structured into a preliminary stage prior to the development of the programme and two stages corresponding to the first two temporary phases (A and B) of the implementation process. Although a general structure is presented, the process will be adapted to the reality of each territory, to the work carried out up to now, to the demands of its social fabric and at the pace they wish to go at.

Preliminary stage. Presentation of the Programme: city and neighbourhoods

Stage 1. Definition and drafting: from examination to Action Plan

Stage 2. Projects and implementations: implementation of the *Let's fill the streets with life* Programme. *The establishment of the Superblock Model in Barcelona*

- **Preliminary stage. Presentation of the model: city and neighbourhoods**

To present, enrich and validate the goals and criteria of the *Let's fill the streets with life. The establishment of the Superblock Model in Barcelona* Programme, workshops and work sessions will be organised with city associations (such as the signatories to the Citizen Commitment to Sustainability or members of the Mobility Pact, to name a few), experts and territory associations as well.

Taking advantage of the participatory process of the Municipal District Action Plan (PAD), the Programme has already been presented and compared at territorial meetings, above all on the basis of an examination of the Superblock Model's opportunities and challenges.

- **Stage 1. Definition and drafting: from examination to Action Plan**

The aim is to gather together all the proposals, initiatives and interventions that are to define the future Superblocks of a specific area, based on the knowledge and diagnosis of local neighbours and groups. The stage is divided into two parts, one for collecting information or examining and the other for making specific proposals. This stage **will be designed in conjunction with each district** so it can be adapted to each reality, by opening the participation up to the territory's groups and collectives.

Initial **examining workshops** will be held, to gather the contextual information that each of the Superblocks' local residents have, which includes demands, perceived problems, habits etc., for the sake of completing and enriching the technical examinations made for each territory. Once the diagnosis workshops have finished, the team at the Superblock Programme's Technical Secretariat will prepare an initial proposal for initiatives in the area (**Action Plan**) by collecting the requirements stated in the workshops and comparing them with the technical examination.

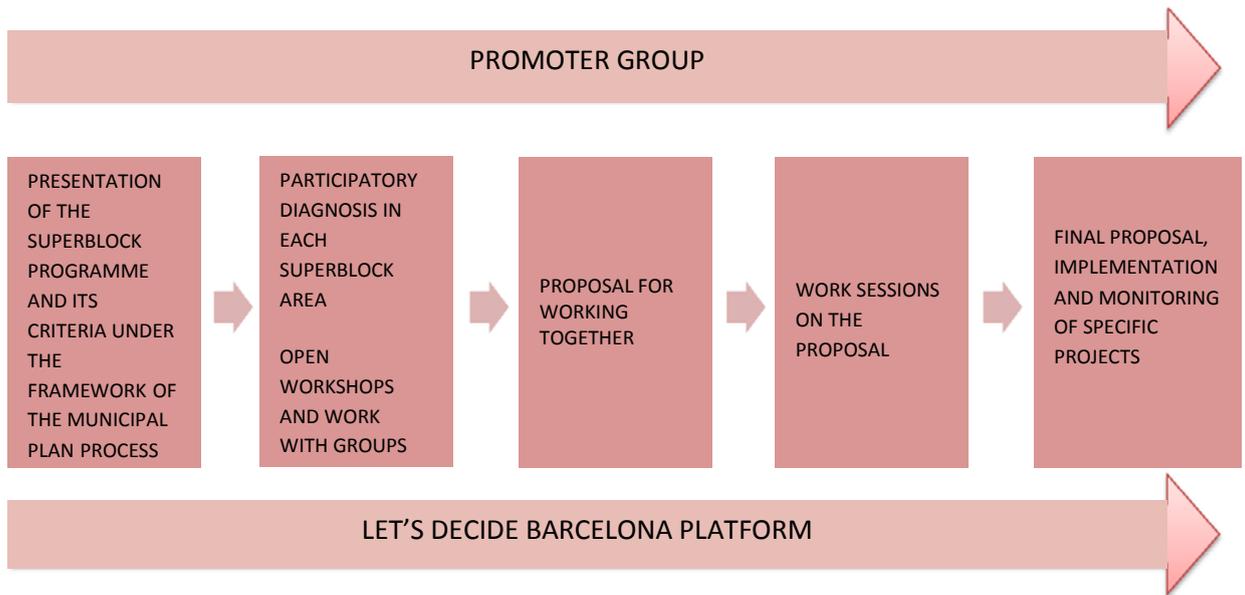
This Action Plan will be presented at a second **proposals workshop**, where the proposed initiatives will be worked on in conjunction with local residents. The information garnered from that workshop will have to be used for developing and improving the output proposal and defining the final proposal, which will be the framework for developing the projects for the specific initiatives and which will be presented to the public once a consensus has been reached with the Promoter Group, District, Sectors and Technical Secretariat.

- **Stage 2. Projects and implementations: implementation of the Programme**

This stage aims to deploy the final proposal by defining the prioritised initiatives in detail, thereby enabling its implementation.

Depending on the type of intervention, **specific participatory processes** will be carried out **to spell out and define** the details of the projects to be implemented. The promoter group and information from the digital platform will be involved throughout the process.

PARTICIPATORY PROCESS. SCHEME



4.6 CALENDAR AND BUDGET

The aim during this term of office is to define the plan for all the city-level networks and to implement initiatives in a balanced way throughout the territory.

However, the priority is to act within the Cerdà area, in other words, where the establishment of Superblocks can have a greater impact and visibility.

To that end, the first stage for defining the networks' design criteria and planning is expected to be completed by the end of 2016. So any initiatives planned in this area, even if they are outside the programme's budget, will come under this planning.

For the purposes of reaching these landmarks, broadly speaking, the *Let's fill the streets with life* Programme will be implemented in two temporary phases that will be adapted to the speed of each territory.

- A. First phase: which will be implemented in 2016. Defining design criteria, examining each area, defining the Action Plan.
- B. Second phase: prioritising initiatives and drafting executive projects, as provided for during the 2016-2018 period, and work implementation, to be carried out during the 2017-2019 period.

Given that it is an impetus programme, the Programme has its own budget, which comes to around 11 million euros. This funding is expected to provide an impetus to the first initiatives. However, as it concerns a city model, based on the planning carried out under the programme, all the initiatives planned in the city will go towards establishing Superblocks throughout the city.

4.7 CONTINUOUS EVALUATION AND IMPROVEMENT

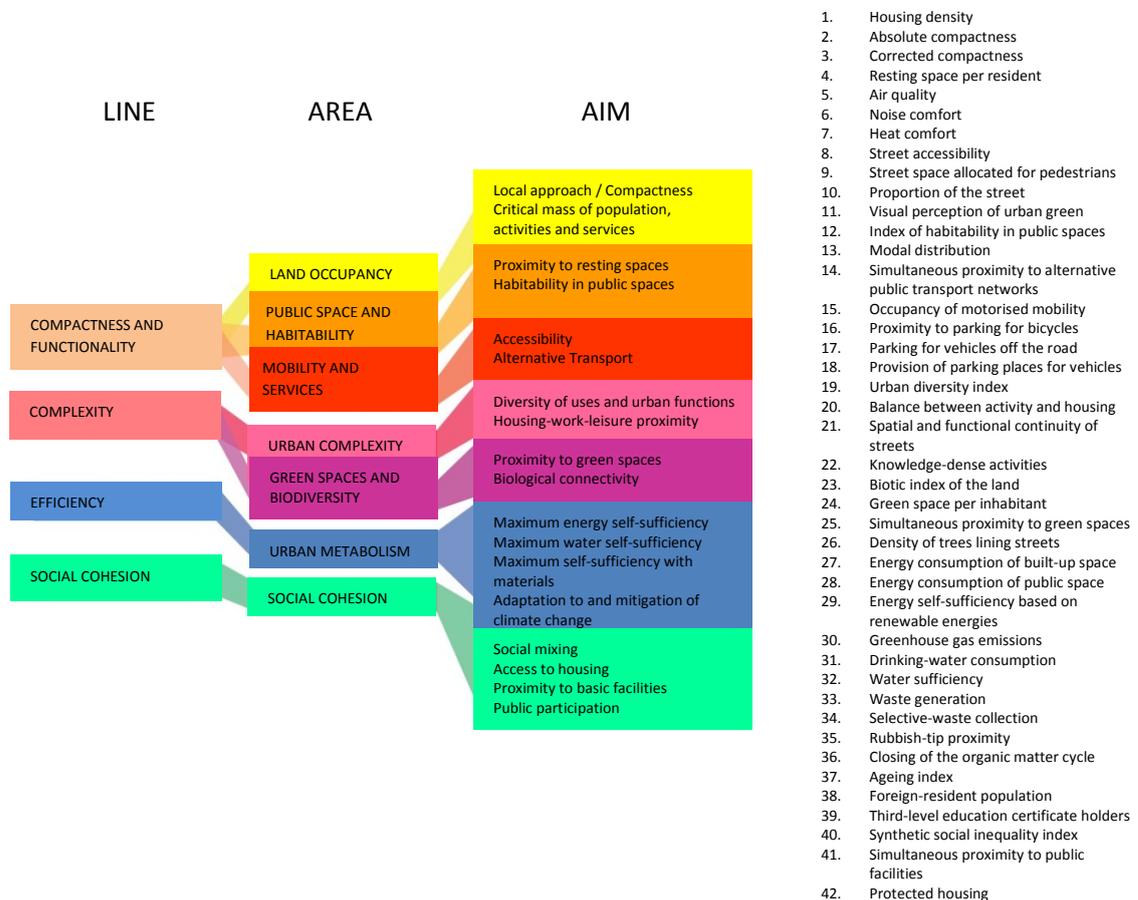
The Superblock Programme defines the steps to be taken for establishing the Superblock Model throughout the city, and not just in the initial areas of action. That is why one of the basic guidelines is to establish an evaluation system that allows us to discover the degree of achievement of the goals we wish to reach through the initiatives that are carried out, and to have the opportunity to introduce improvements as all the Superblocks are established.

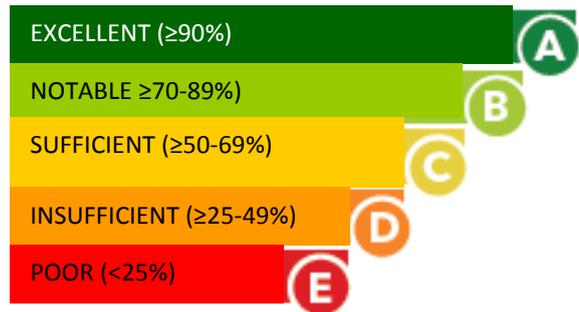
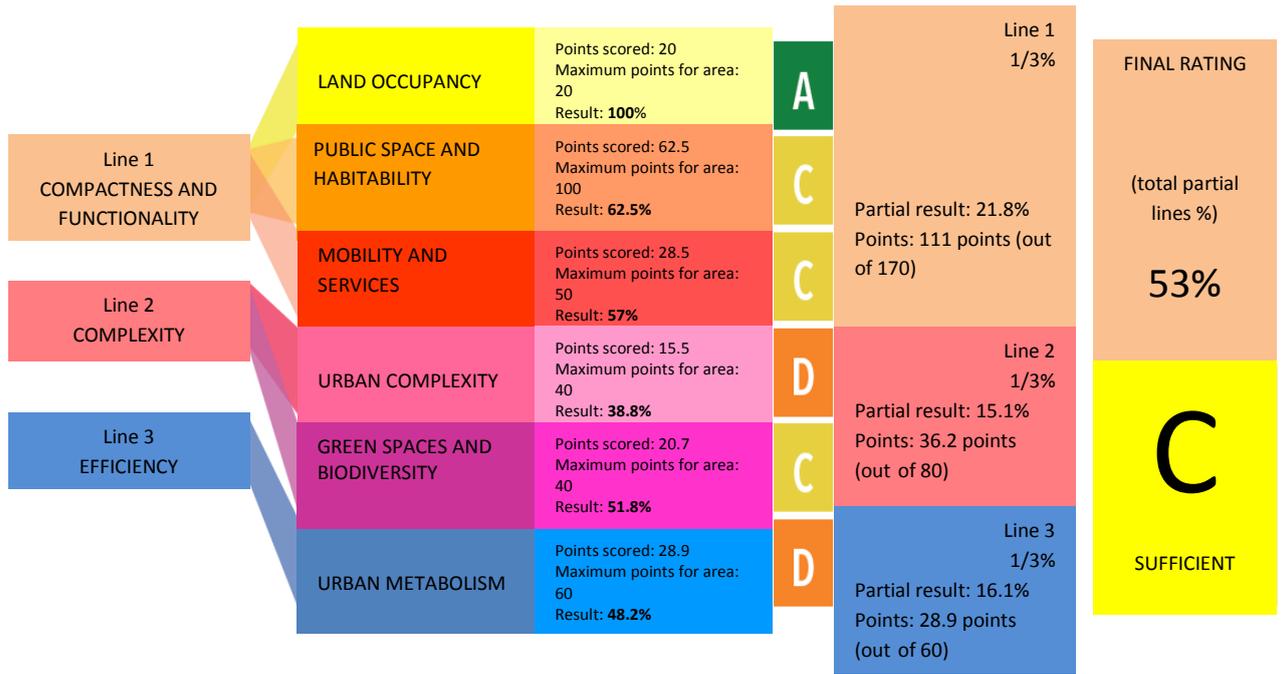
One of the objectives of the diagnosis conducted during Stage A for implementing the Superblock Programme is the comparative evaluation of the degree of sustainability of the current state of the areas and the estimated impact that the series of initiatives linked to the Project may have. All this will be coordinated through a system of sustainability indicators.

These indicators, which are in the process of being defined, are conceived as a tool-help guide for the plan's players to improve and measure sustainability in the implementation of the Superblock Programme, by transferring its strategic goals to specific parameters. The indicators as a whole, have to constitute an accreditation (they can be incorporated into an urban certificate for sustainability quality) which ensures compliance with the sustainability criteria adapted to our reality.

The evaluation should serve to minimise any possible economic impact on commerce, house prices etc.

The final score is the result of the degree of compliance with the appropriate or satisfactory level of each indicator.





Barcelona, 20 May 2016