



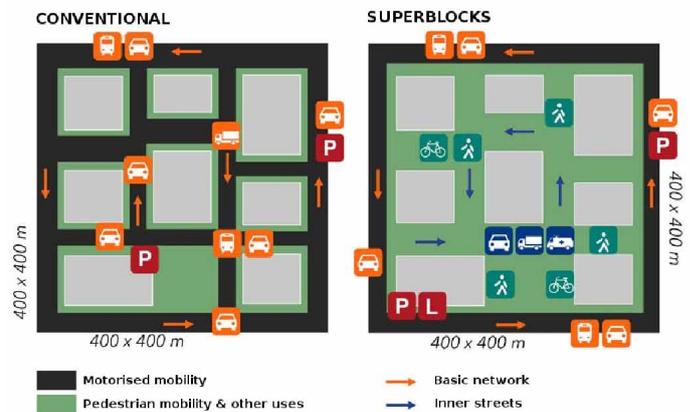
SUPERBLOCKS represent an innovative urban planning scheme to reduce the amount of public space taken by private cars in the streets and give it back to the people. Superblocks foster social life in neighbourhoods by allowing different uses of public space, not just mobility.

## Problem description

Before the recent phase of urban growth and development that started at the beginning of the 21st century, Vitoria-Gasteiz (Basque Country, Spain) was characterised by a strong pedestrian mobility culture. The relatively small, compact and flat urban fabric offered an ideal setting for non-motorised transport. However, this culture is now threatened by the rise of the private car in the modal split as a result of the growth in the size of the city that makes walking less competitive in terms of travel time.

Because of this, the majority of public space in Vitoria-Gasteiz is currently devoted to private cars (transport lanes, parking spaces, etc). When the first analysis of public space was completed, in preparation for a new Sustainable Urban Mobility and Public Space Plan (SUMPSP), figures showed that > 70 % was reserved for the exclusive use of private cars, despite nearly 70 % of a typical working day's trips in Vitoria-Gasteiz being carried out on foot. As a result, the SUMPSP was designed to drastically extend space for pedestrians.

Moreover, it was noticed that more than one third of the population experienced noise levels over those recommended by the World Health Organization (WHO), and that this was largely attributable to private cars. Apart from this, cars represented one of the main sources of the global and local emissions measured within the city.



## How does it work

The superblock model represents the master piece of the SUMPSP of Vitoria-Gasteiz, developed in 2009. A superblock is a geographical space that covers several city blocks (Upper Figure). The superblock model reserves the space inside the superblock for pedestrians and cyclists. Private cars and public transport are restricted to the streets surrounding these blocks (the so-called main roads).

Following this scheme, Vitoria-Gasteiz identified a new mobility and urban space framework of 77 superblocks, to be implemented progressively. This preliminary study provides the tools to assess and plan the final design and implementation of each of the superblocks, allowing to integrate the works with other measures proposed to improve the mobility in the city such as the new public transport network, city centre access restrictions, new traffic signal priority for the new public transport network, new pedestrian and bicycle network implementation, urban freight logistics, and so on.

In this regard, all street refurbishment carried out in the last years has followed the aforementioned framework.



*An example of an implemented superblock in Vitoria-Gasteiz; Prado Street.*

## Benefits - and for whom they are

The main objectives of the superblock model were the recovery of public space for pedestrians (reducing occupancy of the space by private cars), the reduction of both noise pollution and harmful gas emissions, to allow a greater diversity of activities and better accessibility in the intervened area, to promote public transport and, finally, to improve road safety.

Surface area devoted to pedestrians in the pilot superblock increased from 45 % of the total surface before the action to 74 % after it, something which required considerable public works. Moreover, noise levels measured in the demonstration area reduced from 66,50 dBA to 61,00 dBA after superblock implementation. These results are directly related to the reduction of the number of motorized vehicles in the zone. In this regard, there was a 42 % reduction in CO<sub>2</sub> levels, 42% reduction in NO<sub>x</sub> levels and a 38 % reduction in PM10 particles



*An example of an implemented superblock in Vitoria-Gasteiz; Sancho el Sabio Street.*

## Disadvantages, dangers

The high cost of such schemes could be seen as a Barrier but due to financial constraints after 2008 the municipality adapted the plans to implement all superblocks in the city centre in a relatively low cost way. This plan was made possible by the definition and signing of slow-speed streets, so as to force the motorised vehicles to adapt their speed to that of pedestrians and cyclists. Likewise, the installation of several low cost elements on the street (bollards, large flower boxes and so on) contributed to the desired reduction in speeds. Superblock plans for a total of 47 streets were modified according to these criteria.

## Stakeholder analysis - who are drivers, who are opponents

Since September 2008 a permanent working group had a weekly meeting with technicians and politicians in order to ensure agreement regarding the measures to be implemented.

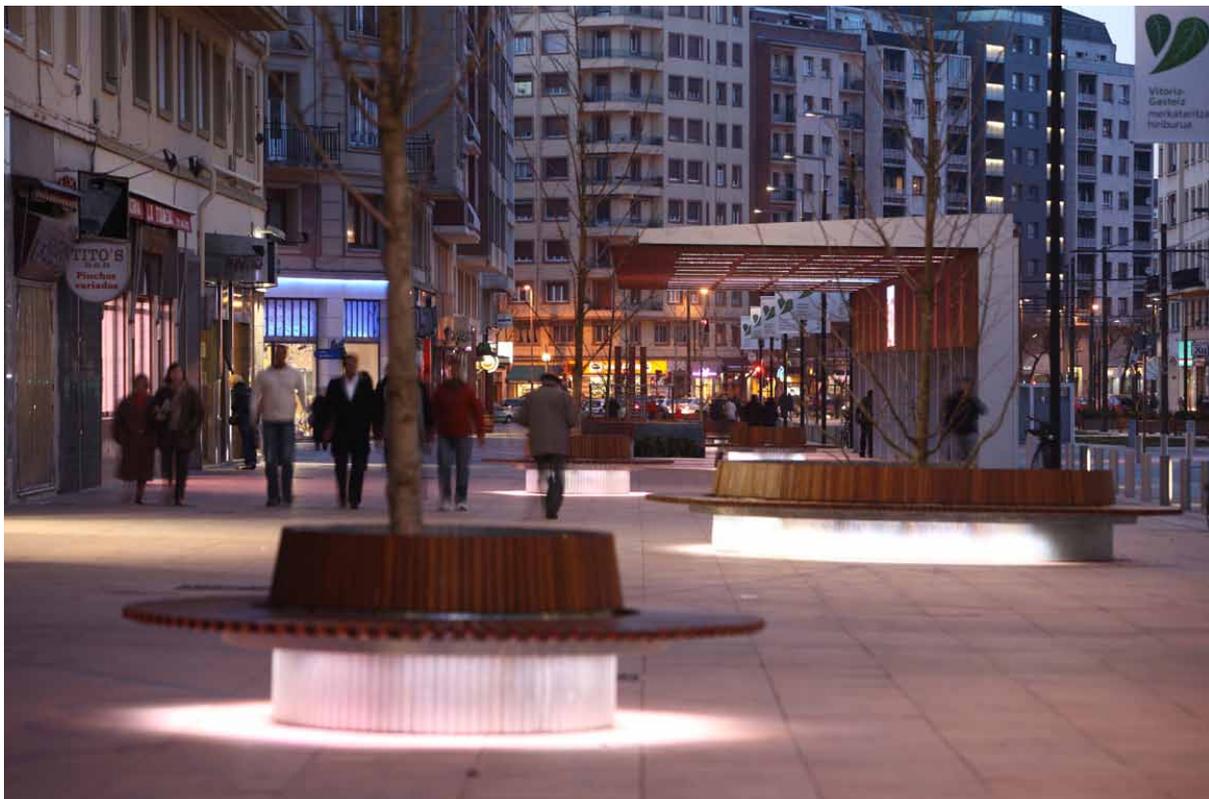
Development of a whole new public transport network following the superblock model raised

concerns among the citizens directly affected by the change. For this reason, the municipality kept in constant contact and consultation with residents' and citizens' associations.

The reduction of the number of on-street parking places and the expansion of the regulated paid parking space in the city centre was another source of concern. Citizens and some shopkeeper associations criticised such actions.

A global communication and awareness campaign for the SUMPSP was designed and launched to help to foster a favourable perception among the city's citizens towards a new culture of sustainable mobility. The campaign included advertising in newspapers, bus shelters, outdoor advertising, radio and Internet, etc.

We also found some opposition to the concept among the municipality's own technical staff and political stakeholders,. However, after intensive working sessions, most of the agents involved in the urban mobility of Vitoria-Gasteiz agreed on the superblock model and signed a Pact to reinforce and support it.



*An example of an implemented superblock in Vitoria-Gasteiz; Sancho el Sabio Street.*

## Legal framework

The superblock model is the main element of the SUMPSP of Vitoria-Gasteiz, and it will be integrated into the City's Urban Master Plan, and therefore has full support of and alignment with local laws and regulations.

Due to the complex power structure in the Basque Country, there are some aspects of the

model and the Plan that must be agreed with other administrations. Specifically, roads and mobility outside of the city core are managed by the province; tram facilities are in the hands of the regional government; and big infrastructure, such as the intercity train lines and national roads, are controlled by the Spanish government.



*Implemented superblock in Vitoria-Gasteiz; Sancho el Sabio Street. Before and after.*

## Policy options for cities

The superblock model reduces the space for private cars and changes the structure of public space dramatically, and is also a major investment, so it is greatly influenced by political decisions.

First of all, local politicians must agree with the model and get the support of other political parties, to reach a consensus about its implementation.

The model can be tailored to fit the current state: policy makers can decide to apply radical changes, but if the opposition is strong and the budget is small, a transitional method can be used to make quicker, smaller and cheaper changes (for instance, using signalling and painting) without losing sight of the main objective.

## Who (in the city administration) has to deal with it

The city has a permanent working group composed of technical staff from the various departments involved in transport and mobility in the city. The working group is coordinated by the Environmental Studies Centre (CEA) of Vitoria-Gasteiz, an entity that is part of the municipal structure but that has its own powers.

Participants in the working group are: Urban Planning Department, Environment Department, Traffic Service, Local Police and the local pub

lic transport company (TUVISA). Political representatives of those municipal structures also take part in the meetings.

Aspects related to the competence of higher levels of government are discussed outside of the municipality, at either provincial or regional forum levels.



*Implemented superblocks in Vitoria-Gasteiz. Before and after.*

## Good/bad practice (short examples)

Integration of cycling into the superblock scheme (segregated bike lanes in the outer main streets, integration and traffic calming in the inner streets) boosts the use of the bicycle and helps cyclists to leave the pavements. However,

infrastructural changes, on their own, do not entirely solve pedestrian-cyclist conflict, and both regulatory (police) and educational measures are needed.

The new public transport network resulting from the superblock scheme was optimised reducing the number of lines whilst, at the same time, offering both more frequent and direct lines; as a consequence, the number of passengers is still increasing. However, currently, this does not solve the problem of transport links to some of the industrial estates located in the urban periphery (where the private car remains the preferred mode).

## Time frame

The development of the superblock scheme is a long term effort. It must be integrated into a SUMP and its implementation will last several years. In Vitoria-Gasteiz, its implementation began in 2008 and it will last until at least 2023.



*An example of an implemented superblock in Vitoria-Gasteiz; Fermin Lasuen Street.*

## Costs

If a radical approach is taken, costs are very high because the actions affect the city's whole structure. Streets must be entirely refurbished, the public transport network must be redesigned, underground parking lots must be created, etc.

In this regard, in Vitoria-Gasteiz, within the context of the current economic crisis, in recent years it has not been possible to imple

ment these kinds of measures in the same way as those that were done at the outset of the city's SUMPSP. Further works in the superblock framework will have to be accomplished with less heavily engineered (and cheaper) actions.

## Open questions

As the city extends its size and average trip distances become longer, it is not clear how to apply the superblock model in the new neighbourhoods located in the periphery.

Mobility needs are the result of accessibility issues (people need to move and choose a certain mode of transport depending on where they work, socialize, go shopping, etc), so it becomes evident that the segregation of activities acts against the desired promotion of active mobility and helps keeping the private car as a main transport mode. Therefore, urban planning represents the key factor that must be tackled when dealing with mobility.

## Possible future developments

As the superblocks should be at the core of a SUMP, their development depends on the political will to improve the mobility in a sustainable way in the cities.

## How and where does it fit in a SUMP

The superblock model is the main concept (the backbone) behind the SUMP of Vitoria-Gasteiz.

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