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USING URBAN DESIGN FOR HEALTH

BARCELONA, SPAIN

World Health Organization

In 2016, Barcelona turned heads when the city introduced its first *Superilla*, or 'Superblock.' The term refers to a local urban design initiative that seeks to redefine the public space of a city by placing people and communities at the heart of its design. To do this, spaces are reimagined primarily for pedestrians, followed by bicycles and public transport. The aim was to reduce pollution from vehicles, reduce noise pollution, and create more open green spaces for citizens to meet, talk, exercise and engage in activities together.

Each superblock initially restricts traffic around a neighbourhood of at least nine blocks and vehicles are limited to major roads around the outside of the superblock, opening up large numbers of streets to pedestrians and cyclists. Over the years, the intervention has adapted to surrounding urban structures while keeping the same objectives. The approach allowed a gradual model of change, using three kinds of action: 'Basic' actions focus on small functional changes such as changing street directions, prohibiting certain kinds of vehicle or introducing parking restrictions; 'Tactical' changes are low-cost, temporary actions that allow new ideas to be piloted for a short period of time, such as painting new road spaces or adding new urban furniture such as benches or planters; 'Structural' changes are more permanent transformations of street space such as redevelopment or infrastructural additions.

The concept of the Superblocks in Barcelona has existed since the 1980s, proposed by Salvador Rueda, but struggled to gain enough support to be implemented as a program within the city since it was also considered a fairly radical idea. However, in May 2016, thanks to a local government measure, the "*Omplim de vida els carrers,*" the Superblocks finally received enough support to start becoming a reality. This measure established the implementation of several superblocks throughout the city, as a starting point to assess their feasibility.

In September 2021, a report from the city's Public Health Agency (ASPB), developed with support from the Partnership for Healthy Cities, showed that the superblock project paid off. The 'Salut als Carrers' project (Health in the Streets) evaluated the health and environmental benefits of three of the city's Superblocks. ASPB conducted the assessment over the last three years, analyzing results from surveys with local residents in Sant Antoni, Poblenou and Horta to understand health benefits, changes in physical activity, and community use of the newly designated public spaces in three of the superblocks created by the city. Air quality assessments were also used to measure quantitative environmental benefits.

The results showed a reduction in air pollution in the Superblock around Barcelona's central Sant Antoni market. Specifically, there was a 25% decrease in NO2 levels and a 17% decrease

in PM10 particle levels, both of which are known to be harmful to human health. More than 60% of people surveyed in the Horta neighborhood Superblock were more comfortable walking in the interior, narrower streets, and thought that accessibility for strollers and people with reduced mobility had improved. The reduced noise pollution within the Poblenou Superblock was also considered to have led to an improvement in mental wellbeing for survey respondents. If implemented more widely across the city, it is estimated that the health benefits of the Barcelona Superblocks could prevent almost 700 deaths each year.[1]

Residents and workers in the evaluated Superblocks reported a perceived gain in well-being, tranquility and quality of sleep; a reduction in noise and pollution, and an increase in social interaction. The built environment of the Superblocks clearly influences walkability and creates more opportunities for physical activity. The reduced vehicle traffic has led to improved air quality measures in these zones.

The results of the evaluation will provide stronger support for decisions-makers to push for similar evidence-based public health interventions for their city in the future.[2] As Barcelona looks to create a safer, healthier and more sustainable environment for its citizens, the Superblocks could be an effective way to help deliver this vision.

One of the repurposed Superblock streets. Photo credit: Ajuntament de Barcelona

[1] https://www.sciencedirect.com/science/article/pii/S0160412019315223

[2] Study results and manual available at: https://www.aspb.cat/documents/salutalscarrers/