

DESIGNING SAFER PUBLIC SPACES

A PACTESUR GUIDE BY ERIC VALERIO, ARCHITECT, PACTESUR EXPERT ADVISORY COMMITTEE

How can we design safer public spaces? An architect working at the Direction Sécurité locale intégrale du Service Public Fédéral Intérieur (Ministry of the Interior) of the Belgium Government, Eric Valerio is a member of the PACTESUR Expert Advisory Committee. This PACTESUR guide explores key principles of urban planning and design to create public spaces that are safe, open and accessible to all.

Introduction : Security, feelings of insecurity and public spaces

Numerous studies and experiments have shown that the design and management of public spaces have an impact on security and feelings of insecurity among citizens¹. Public spaces are not only vulnerable to incivilities, petty and serious crimes, but also threats, including terrorism. Similarly, a well-designed public space matches the multiple needs of everyday and one-time users.

Cities play a central role in promoting a shared culture of security issues in public spaces². For cities, it is therefore crucial to take into account the influence of urban development on citizens' feelings of insecurity. If crime can be prevented primarily through social and educational programmes, an interesting approach is also to act on the physical environment itself. Architectural measures, even if they are not sufficient to curb the phenomenon of crime, can make an

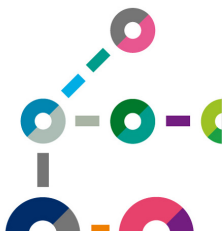
important contribution. A clear and open space, and the rational use of the built environment (sufficient lighting, trimmed bushes, etc.) can limit both the risk of harm and the fear of being a victim of crime. This is what emerges from different research studies conducted independently.

This guide will help you understand key principles for designing safe public spaces through environmental measures.

I. Key principles for designing safe public spaces through environmental measures

Designing safe public space is based on key principles of urban planning and design. When implementing an urban development project, it is important to bear the following principles in mind: the footfall, the space's diversity, penetrability, clarity and visibility, lighting and unique character.

The theoretical concept behind these principles is Crime Prevention Through Environmental Design (CPTED). The CPTED model is based on a crime prevention approach based on the theory of criminal opportunity³. The premise of this concept is that crime and insecurity can be managed through environmentally oriented measures. With this in mind, special attention is paid to the design, planning and management of the environment.



1. Attendance

The number of people using the public space appears to be the most important factor, even before the degree of clarity and visibility. In fact, the presence of individuals in several places at different times has a strong impact on the users' safety perception. "Using" the public space at different times of the day and night creates a back and forth movement that will reinforce social control⁴.

Moreover, this phenomenon strengthens not only the objective but also the subjective security of citizens in a given public space.

It is therefore important to create a friendly, attractive space that arises the interest of the various users.



A monofunctional space is only occupied at certain times of the day and is deserted at others. On the contrary, a multifunctional space has a higher probability of being used, deterring the offender and reassuring the user. Control can take different forms:

- formal (police, peacekeepers, security guards, ...)
- semi-formal (caretakers, guards or any other person whose supervision is not the main task)
- informal (neighbours, passers-by). The extent of informal control depends on the human presence and activities taking place at a specific location.

Technological tools, such as CCTV, can complement this control (the idea being that the simple fact of feeling observed changes our behaviour). These devices must respect different rules in order not to infringe on the privacy of the citizens being filmed.

2. Diversity

In order to encourage the use of a public space, it is important to promote a space bringing together various activities. Shops, restaurants, schools, museums and other recreational points should be within walking distance of each other. It is therefore this conviviality that attracts citizens: lively public places are thus created.

How to improve diversity in a given area?

When designing and developing an urban space, the concentration of varied activities (housing, employment, recreation) in a defined area should be encouraged in order to attract different kinds of public at different times of day and night. Paths connecting the various centres

of activity are thus formed, because the distances between them can be walked by the citizen (see 2.3 The penetrability of a space). It is recommended to avoid a strict separation between residential and recreational areas. For example, housing above shops or public buildings such as swimming pools or cultural centres in residential areas are advisable. It is also important to create rest areas, where residents can stop and chat. Small fountains are valuable elements for creating "dynamics" in a space, but special attention must be paid to their shape and materials, as these elements require important and regular maintenance.



Such a functional mix must also be extended to the population: the fact that older residents and younger families live in the same neighbourhood can reduce the feeling of insecurity experienced by older people. Indeed, this intergenerational diversity in neighbourhoods facilitates encounters between these two types of population that would not happen otherwise. These exchanges can, in turn, reduce the prejudices and fears that some older people may have towards younger people. At the same time, young people have the opportunity to get to know older people.

[Beware! Not everyone wants to live in a lively

neighbourhood. Some people prefer a more peaceful environment, such as a village.]

3. The penetrability of a space

The penetrability of an area depends on the number of paths leading to the destination. A city is characterised by a high level of penetration if its layout allows users to go anywhere without many detours. The options offered by penetrability are multiple. On the one hand, it allows the citizen to avoid dark alleys or a noisy bar by taking a different route, creating a positive sense of security. It also creates more escape routes, another benefit for residents. However, the likelihood of arresting perpetrators also decreases.

How can the penetrability of a public space be improved?

Smaller buildings create more easily accessible spaces. However, it is not possible to change the real distance between two points. We can then act on the "subjective distance", i.e. the distance that depends on the individual experiencing it. The objective is therefore to make the journey as pleasant as possible:

- by providing secondary functions along the route (reinforcing activity, attractiveness, but also social control)
- by having a clear definition and structure of the area being travelled through
- by providing lighting.

It is essential to keep this principle in mind: as a whole, a less penetrable environment will result in less social

control, which will have an impact on the safety and feelings of insecurity among its inhabitants and users.

4. Clarity and visibility

The clarity of an area reinforces the degree of its signage, which in turn has an impact on the feeling of security of its users. In a structured public space with clear signage, people will feel safer and more secure.

Visibility refers to "seeing and being seen". The inhabitants of a neighbourhood want to know and want to see everything that is happening, and will feel reassured that other citizens are being informed about what is happening. The concept of "seeing and being seen" should be interpreted broadly. This means that a sufficient number of people must be present in a given space to see and hear everything, while there must be a certain contiguity whereby the inhabitants of a district will quickly get to know their neighbours and the nearby environment. Visibility is therefore determined by clarity, sight and lighting, but also by human presence and social control (see 1.1 attendance).

It is also important to include vegetation in public spaces, but also be mindful about its volume and growth to ensure it can be properly maintained and doesn't obscure the space. The objective is to "see and be seen" thanks to visual clearances and unobstructed perspectives, eliminating hidden areas.

5. Sufficient lighting

A well-lit neighbourhood influences the well-being, comfort and therefore the feeling of security of its inhabitants. In particular, it helps reduce crime. Good street lighting not only reduces the number of road

accidents, but also vandalism, burglary and bicycle, moped and car thefts. Street lighting therefore remains a key point in the process of making a place safe, being an important deterrent for a good number of petty crimes.



How to improve the lighting of a public space?

Lighting is an effective way to improve the visibility of a place, to arrange the environment in such a way as to create a sense of ownership among residents, to facilitate natural surveillance and to give a positive image of a space. In order for lighting to play its full role, its resistance to acts of vandalism must be checked, as well as its location, particularly in relation to vegetation. For example, if luminaires are installed near trees, the growth of the trees must be taken into account.

As a general rule, lighting should only be installed where necessary. At the end of the day, the site should not be illuminated blindingly but evenly. The human eye adapts to light intensity, so a low level of lighting distributed over the entire area will be sufficient. In addition, dimming between brightly lit and darker areas is unpleasant, making the surroundings less visible and defined. Inhabitants and passers-by must be able to recognise each other at a minimum distance of 4 metres.

- Paths, such as those through parks or playgrounds, must be illuminated.
- The lighting must be well placed, pointing downwards and properly fixed.
- Protect luminaires against vandalism with suitable materials or designs.
- Avoid placing lighting in an isolated area or along a path leading to dark places. It is advisable to mark out these paths with a fence and not to light them so as not to create a false sense of security or encourage frequent passage.
- To ensure visibility, lighting must be maintained. It is advisable to remove or trim any vegetation that obstructs the light. Lighting fixtures should be placed at a height where they can be easily maintained and replaced. They should be kept clean and replaced quickly in the event of damage or failure. A telephone number to call in such situations should be provided.
- Aesthetics. Citizens appreciate different shapes, sizes and textures. However, universal values apply: for example, nature attracts (greenery, water, warmth, sunshine). On the other hand, wide areas are less attractive: they create a feeling of smallness and, therefore, insecurity.
- Maintenance and management largely determine the attractiveness of an area. A clean place is more attractive than a blighted, smelly or abandoned neighbourhood. Visible signs of destruction, rubbish and unoccupied dwellings in a given area will cause its decline. However, the aim is not to create a perfectly maintained neighbourhood either.
- Legibility and cleanliness appear to be elements that contribute to the feelings of security. Neighbourhoods, blighted public spaces, rundown pavements on which to walk are akin to an obstacle course and create feelings of insecurity amongst its users. All the elements that could suggest that the space is deteriorated or abandoned directly affect the quality of public space. It is therefore essential to quickly repair damaged property, erase graffiti, or remove illegal littering.
- Technical sustainability. The design of urban furniture (benches, rubbish bins, etc.) must be sufficiently solid (resistant materials) to withstand not only its intensive use but also acts of vandalism. Indeed, urban furniture is often the target of destruction, vandalism and graffiti. In short, street furniture shall be selected according to its user-friendliness, robustness and ease of maintenance.



6. Attractiveness

Diversity, penetrability, clarity, visibility and lighting are key requirements for an attractive district. However, there are other elements of urban design that can

- Social sustainability. Social cohesion in a neighbourhood largely determines the feelings of security of its inhabitants. If residents are willing to assist one another and get to know each other, the feeling of security will be strengthened. Residents do not need to have particularly strong bonds, but they should be able to rely on each other. For this reason, their involvement in their neighbourhood should be encouraged. Roles should not be the same, and some people have more time to devote to the community. A sign of recognition, such as offering plants for the garden, is usually enough to encourage people to take care of green spaces or the cleanliness of their neighbourhood.

II. The role of citizens

Securing public space is a common challenge for everyone. It also requires its appropriation by the inhabitants-users. The higher the quality of a public space is, the more the user perceives it as a “common good” that they appropriate and respect. The commitment of citizens (as users) but also of neighbourhood associations or shopkeepers is higher in neighbourhoods that give the impression of being properly maintained.

Not only citizens, but also site managers, municipal services, the police and the fire brigade play an essential role in the management, control and maintenance of the environment. In order to create a cleaner and safer space, a series of arrangements need to be made for the division of tasks and responsibilities.

Street and wall cleaning, repairs to urban equipment, public lighting and other public goods, must be carried out by the city services or the municipality as soon as

possible after they have been reported. It must be made clear that citizens themselves have a role to play: they also ensure that repairs and cleaning have been carried out. The competent authorities, such as the mayor, must take into account the requirements and wishes of the inhabitants. This will have a positive impact on the sense of responsibility of the inhabitants and will strengthen their direct involvement.

Conclusion: Linking urban security and urban planning

Urban security (or public safety) through urban planning and design is a relatively recent concept. The aim is to make competent authorities aware of its importance when designing their urban projects. The quality of urban planning does not only influence feelings of insecurity among its users, but also has an effect on real (actual) security by encouraging more or less civilised behaviour. This is an important challenge for cities, because in engaging in this process additional human and financial resources will be required.

This publication has been edited and condensed for clarity and length. The opinions expressed in this publication are those of the authors. They do not purport to reflect the opinions or views of the European Commission or the PACTESUR consortium.



FOOTNOTES

¹We can define feelings of insecurity as a fear syndrome focused on crime and offenders. Fear of crime seems to act in two ways : (1) in a diffuse (or social) manner, the fear comes from a distant and unclear threat or from a concern about crime in its dimension of “social danger”; and (2) in a concrete way, whether well-founded or not, the fear is experienced as a probability of being personally affected by a serious criminal act.

²European Forum for Urban Security (2017). Manifesto “Security, Democracy and Cities - Co-producing Urban Security Policies” <https://issuu.com/efus/docs/manifeste-vang-web>

³ Cohen, L.E., & Felson, M. (1979). Social change and crime rate trends: A routine activities approach, American Sociological Review, Vol. 44, 588–608. Generally speaking, the routine activity approach is based on the convergence of three factors that may explain why an individual ends up carrying out a predatory criminal act: 1) likely offenders ; 2) suitable targets ; 3) environmental conditions. According to this theory, the absence of one of these three factors would significantly reduce crime rates.

⁴ Social control is described as a certain set of rules and processes through which a society succeeds in enforcing its norms. It is a process by which the members of a group or community influence individuals in respecting and mimicking behaviour shaped by prevailing norms and values.

ABOUT THE AUTHOR

ERIC VALERIO is an architect and expert working for the Direction Sécurité locale intégrale du Service Public Fédéral Intérieur (Ministry of the Interior) of the Belgium government. He has participated in the development of several projects on the relationship between environment, architecture and insecurity, as well as in security audits on public buildings, sensitive sites and public spaces. Since 2019, he is a member of the PACTESUR Expert Advisory Committee.

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Marta Pellón Brussosa
Programme Manager, Efus
PellonBrussosa@efus.eu

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pactesur@ville-nice.fr



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