# 8 Keys to Effective Natural Surveillance

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This article describes how and why it is important to look beyond 'eyes on the street' to effectively use **natural surveillance** to reduce crime.

The classic traditional approach to natural surveillance has a singular focus - to increase the number of 'eyes on the street'.

Evidence indicates that, in some cases, increasing 'eyes on the street' can be relatively ineffective, and in a small number of cases may actually increase crime rates.

There are obviously more aspects to **natural surveillance** than 'eyes on the street'.

This article describes **eight** aspects to natural surveillance that need to be addressed for effective crime prevention.

An example:

At first glance, the site above appears to be well covered by natural surveillance as it offers 'eyes on the street' from multiple sources:

- From the apartment occupants
- From people walking to and from the apartments
- From the car parking area between the apartments and the street
- From pedestrians and drivers on the street itself.

From a criminal's point of view, however, the site is attractive because of **poor** natural surveillance, and because some of the above offer increased criminal opportunities.

## 8 Key aspects of designing Natural Surveillance to reduce crime

There appear to be at least eight key design aspects to effective design of **natural surveillance** to reduce crime. it is necessary to ensure:

1. Law-abiding people can passively observe illegal activities ('eyes on the street').
2. Natural surveillance cannot act in reverse to increase the ability for potential criminals to identify opportunities for crime.
3. Natural surveillance does not compromise privacy.
4. Design for natural surveillance does not compromise local design considerations.
5. Natural surveillance supports ease of action of observers and reduces ease of actions and escape of criminals.
6. Observers of criminal activity cannot easily be identified and threatened.
7. Natural surveillance is not compromised by routine activities.
8. The effectiveness of natural surveillance is supported by, and not compromised by, geographical juxtaposition factors.

## Ensure law abiding people can passively observe illegal activities

A common view of **natural surveillance** derives from Oscar Newman's CPTED based on **defensible space** theories. The underlying assumption is that if criminal activities can be seen by others crime can be reduced by the observers intervening and acting as 'defenders' or 'guardians'.

 Evidence indicates it is a challenge to support observers to undertake that role. Experience shows observers are happy to observe crime and do nothing in the knowledge that it isn't happening to them.

When increases in 'eyes on the street' are from increased people on the street this can increases crime rates because there is an increase in crime targets. In some cases, this can lead to the location becomes a 'crime attractor'.

Reducing crime overall depends on getting other factors right as well as increasing the number of eyes on the street.

## Ensure natural surveillance doesn't enable potential criminals to identify opportunities for crime

**Natural surveillance** works **both ways**.

Early natural surveillance advice was simply to always maintain clear lines of sight between the street and buildings.

Examples include: trimming vegetation to give a clear line of sight between 60cm and 2m off the ground, and using fencing that enables people on the street to see through it and vice versa.

This was based on the idea that crime is reduced because observers in buildings can see what is going on 'on the street' and defend against criminal behaviours. Additionally, law abiding people on the street could also see if criminals were doing illegal things in and around buildings and intervene or report them to the police.

In short, early **natural surveillance** guidelines simplistically argued for a clear line of sight between possible observers and possible criminals.

However, such clear lines of sight ALSO offer a way for criminals, in their *routine activities*, to observe crime opportunities and the routine activities of others that can facilitate crime.

This second and crucially important dimension of **natural surveillance** is the way natural surveillance **facilitates crime** by enabling criminals to have better surveillance of crime targets and opportunities.

The two-way line of sight of natural surveillance can enable criminals to effortlessly identify:

- Opportunities for crime (valuables in buildings, goods left in cars, expensive bicycles and tools, etc....)
- Routine behaviours of others (when they go to work, go shopping, go to bed....) to identify best times for crime
- Places to stand to surveil possible crimes (places to access at night time etc)
- Resources that provide support for criminal activities (places to stash stolen goods, entrapment points, vehicle access, 'natural ladders', escape routes...)
- The location of, and how to neutralise, security and safety measures (CCTV, security and target hardening etc...)

Planning for the use of **natural surveillance** in CPTED involves also **BLOCKING** the ability for criminals to take advantage of lines of sight for the above purposes.

That **natural surveillance** has 2 directions is a major change in understanding of the use of natural surveillance in CPTED and crime prevention.

There are multiple strategies in working with **natural surveillance** to reduce its adverse effects:

1. *Obscuration* - blocking aspects of sight lines so that criminals cannot see crime opportunities, security methods, access routes etc.
2. *Removal from sight* of valuable items, crime opportunities etc
3. *Removal to a different location* items offering crime opportunities and crime supporting aspects of the environment
4. *Counter surveillance* of activity at locations that offer criminals the best opportunities for criminal surveillance
5. *Increasing stand off distance* by increasing the size and difficulty of access of semi-private space

## Ensure natural surveillance does not compromise privacy

Maximising natural surveillance can result in compromise of privacy for those intended to be protected.

Five problems occur:

1. Reduction of quality of life, which goes counter to the primary intention of CPTED and natural surveillance to reduce crime to improve quality of life.
2. Those intended to be protected by natural surveillance take steps to improve their privacy including reducing natural surveillance, which reduces the crime prevention
3. Reduced privacy leads to offenders being able to see more crime opportunities and reduce the likely costs of crime by observing and takingadvantage of victims' security weaknesses and routine activities.
4. The location becomes a crime attractor due to the lack of privacy and potential for observing criminal opportunities and having reduced crime risks
5. When crime occurs, repeat victimisation is more likely because the lack of privacy supports it.

Natural surveillance privacy issues are typically less of a problem in commercial environments.

By implication, mixed-use environments require a more sophisticated and nuanced strategy when **natural surveillance** is used.

To repeat, in terms of **privacy** it is important that when natural surveillance is used it is arranged so that it acts one way only.

That is, natural surveillance must support defenders being able to safely observe criminal activity in ways that potentially increases criminals' risks and costs and reduce the potential benefits. In contrast, natural surveillance must also be designed to protect the privacy of residents.

Examples where natural surveillance may be problematic in privacy terms include:

- When residences are lower than public pathways.
- At interfaces between residential areas and parks or other public open spaces (POS). In theory, these are ideal CPTED locations for natural surveillance of POS from residences. However, if residents' privacy is compromised then residents are

likely to use curtains, plants, trees, shutters and other means to increase their privacy and reduce their ability to see and be seen.

In contrast, when residences and other private spaces are above public space, the problems of privacy from natural surveillance are reduced.

## Ensure design for natural surveillance does not compromise important local design considerations

CPTED **adds to** existing design features that are intended to achieve particular outcomes.

It is important that CPTED design features do not compromise the functionality of existing building designs.

An example: The design of a Post Office created to support the activities and functions of those working in and using the Post Office. In this case, it is important that CPTED design changes are implemented to reduce crime without compromising the original Post Office design.

Similarly, the design of a residence is intended to provide the necessary attributes of a home for the people living there. It is important that CPTED changes such as improving natural surveillance does not compromise the attributes of the home.

Where CPTED interventions compromise important local design considerations then users will act to minimise the effect of the CPTED interventions. This will in turn reduce the crime prevention effectiveness of the CPTED.

In many cases, **natural surveillance** can be easily incorporated into local design considerations without loss, and often with some improvement to existing design benefits. However, to recap, it is important when implementing **natural surveillance** to avoid reducing the intended amenity of the location by CPTED compromising the local design considerations.

## Effective natural surveillance depends on supporting ease of action of observers and reducing ease of criminal action and escape.

For criminals, four factors make a place attractive:

- Being able to easily see valuable targets
- Being able to plan to make crime easier
- Being able to easily see and plan a fast escape
- Being able to see that observers will find it difficult to intervene

Again, looking the above picture (copied below) illustrates these points. Thieves can see any valuable goods in cars from the footpath; can see easy escape routes in the complex; can see that the view of people from the apartments is limited (in part by the shade sail above the vehicles); and can see that residents' ability to intervene is small

because of the stairs. In addition (off the picture) criminals can see that escape can be pre-prepared, because on the other side of the street is a large car parking area for 100s of cars, with multiple exits onto a network of streets.



## Arrange Natural Surveillance to ensure observers of criminal activity cannot easily be identified and threatened

**Natural surveillance** can be designed in many ways. Different forms of natural surveillance can, however, expose observers to risk of identification, violence and retaliation.

Observers of crime reduce their involvement where there is increased risk to themselves of identification by criminals and potential violence or retaliation .

For example, it is less risky for an observer seeing and reporting a crime from an upper story of a block of apartments than someone directly observing and intervening on the street.

However, evidence indicates the **larger the number** of people who may potentially observe and report a crime, the **less** each observer will think it important to do so.

## Ensure natural surveillance is not compromised by routine activities

Crime most commonly occurs as a result of the overlaps between the routine activities of criminals and law-abiding victims.

The foundational assumption underpinning **natural surveillance** is that crime is reduced if criminals are observed by law abiding persons.

An essential aspect of  CPTED designs for **natural surveillance** to be able to reduce crime, is that the routine activities of both criminals and law-abiding people must coincide in some way.

For example, if CPTED to reduce day-time drug-related activities in a park depends on natural surveillance from nearby houses, then the success of the CPTED  depends on some people in those houses being at home during the day.

In a dormitory suburb with everyone at work during the day, such natural surveillance is unlikely to be effective.

This necessity for the routine activities to overlap also means in effect, that the conditions for effective natural surveillance are also those that potentially support crime activity.

## Effectiveness of natural surveillance is crucially shaped by geographical juxtaposition factors

The effectiveness of **natural surveillance** for crime prevention depends on:

- The visual lines of sight that enable law abiding observers to observe criminals in action
- The presence of observers
- The presence of criminals
- The ratio of law-abiding observers to criminals in that location

If this latter ratio is of  many criminals and no   observers then natural surveillance is limited in its effectiveness.

In contrast, if the ratio is the other way, and there are many law-abiding observers and no criminals, there is no need for natural surveillance.

The ratio of law-abiding observers and criminals strongly depends on **geographical juxtapositional** factors.

**Geographical juxtapositional** factors strongly shape which groups are within a location or passing through; what times of day and day of week they occur; and the kinds of routine activities and motivations of the people involved - all are factors that shape which designs of natural surveillance will work to reduce crime.

In short, geographical juxtaposition factors are an important aspect that shape design decisions about the most effective forms of natural surveillance

## Conclusions

This article has explained how and why it is important to look beyond 'eyes on the street' as a basis for CPTED. It has identified **8 different aspects of natural surveillance** that are important when designing CPTED solutions.

The article indicates that a good starting point in exploring best CPTED design for using **natural surveillance** is to understand that 'eyes on the street' offers only a limited basis for design to reduce crime, and to be aware that, in some cases, focusing on 'eyes on the street' may increase crime rates.

For more information see the resources available at  [www.designoutcrime.org](http://www.designoutcrime.org)