

## Summary

# How to create safe and vibrant urban spaces?

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*In this report we have examined the effect of measures that may contribute to reassuring and vibrant urban spaces. These are some of the main findings:*

- 1. People felt more secure in parks after removing vegetation that blocked the immediate view.*
- 2. Those who considered the lighting of an area to be good, also felt more secure. Improved lighting outside the Palace Park in Oslo caused increased pedestrian traffic.*
- 3. Deployment of the city furniture called "ebenke", with free Wi-Fi, charging possibilities and power for events, led to increased activity. "Ebenke" was developed as part of this project. Other types of city furniture with activity-creating elements can also increase activity in urban spaces.*
- 4. Changed design of vehicle barriers did not affect the feeling of security of passers-by. Removal or modification of vehicle barriers to increase accessibility for pedestrians increased pedestrian traffic.*
- 5. Deserted and abandoned areas are often perceived as unsecure. Nevertheless, public incivilities are seemingly more fear-inducing than deserted or abandoned areas.*

## Reassuring and vibrant urban spaces

In the project "Reassuring measures for vibrant urban spaces" we wanted to increase knowledge about reassuring measures in urban spaces. The project has resulted in policy recommendations for Oslo and other urban areas.

In the project, we investigated the effect of measures that helps create reassuring and vibrant urban spaces:

1. Vegetation in parks
2. Lighting
3. Activity-inducing urban furniture
4. The design of terrorism protection

## Vegetation

There is a clear connection between the physical environment in parks and feelings of insecurity, especially for women. Women's sense of security is largely influenced by how good the prospect is. Female residents who were interviewed about the Torshov Valley experienced the park as relatively secure, but nevertheless mentioned that poor visibility and maintenance could cause insecurity. People who had been to the Torshov Valley several times also felt more secure than people who had never been there.

Removing a hedge along a walkway in the Torshov Valley made women feel safer at the site.

Oslo municipality is actively working on making people feel more secure in parks, but the work is mostly based on employees' gut feelings and complaints from users. There is therefore a need for a more conscious attitude and a systematic review of reassuring measures. Nevertheless, the insecure places mentioned by the municipality were also mentioned by the residents.

## **Light**

There is a clear connection between how satisfied people are with the lighting at a site and their sense of security. When asking people to mention what could make them insecure in the Frogner Park and the NMBU Park, many mentioned lack of lighting.

We conducted an experiment in the NMBU park where we illuminated side vegetation that grew close to the walkway where the participants were supposed to walk. The results suggested that lighting of the side vegetation increased the experienced lighting on the walkway and thus increased sense of security.

Installation of LED bulbs in Kristian IV's gate outside the Palace Park, which provided better light distribution, led to more pedestrian traffic on the sidewalk which was better illuminated.

## **Activity-inducing city furniture**

An "ebenk" (Norwegian for "electric bench") was developed as part of the project "Reassuring measures for vibrant urban spaces" (which this report is part of). In addition to offering seating, ebenk provided charging facilities, free internet, power for events and lighting. Analysis of the use of ebenk showed that ebenk was used more widely than ordinary seating benches, both in absolute numbers and as proportion of the number of passers-by.

"Outdoor offices" was one of the first projects in "Car free city life in Oslo" that were realized, and the furniture was designed by students at the Oslo School of Architecture and Design at the request of the City of Oslo. The number of passers-by during the deployment of the outdoor offices was larger than with no benches, but lower than during deployment of ebenk. Our results suggest that outdoor offices have about the same effect as ordinary benches. Outdoor offices, however, have no effect on sense of security.

At all times when some pieces of street furniture were deployed, the number of passers-by was higher than when there were no urban furniture deployed in the streets.

## **Design of terrorism protection**

Despite visible changes in the design of the vehicle barriers in Akersgata outside the parliament and Keyzers gate, interviews with passers-by show no change in the sense of security. Our analyses also show that the respondents' ability to recognize terrorist measures and knowledge of terrorist measures did not have any effect on how insecure they felt either.

Nevertheless, the design of vehicle barriers has a clear effect on pedestrian traffic. Switching from boom barrier to bollards outside the parliament and switching from concrete blocks to bollards in Kongens gate, improved the accessibility for pedestrians. Video countings showed substantial changes in where people choose to go both places after the change of vehicle barriers.

In Keyzers gate, the temporary concrete blocks were removed and painted concrete planters were deployed. Outside Akersgata 64, the temporary concrete blocks were replaced with painted concrete separators placed more streamlined. Both changes were primarily "cosmetic". Video countings showed minimal changes in pedestrian traffic in both places.

## **Activity**

Some respondents experience more insecurity in deserted or abandoned areas, and in some streets, there is a connection between the perception that the street is deserted or abandoned and a sense of insecurity.

However, our results still suggest that public incivilities are more fear-inducing than deserted and abandoned areas. New activity in an area will therefore not increase the sense of security if it is perceived as "scary" (such as drunkenness) by the users. Hence, before implementing measures to stimulate activity, one should first establish what kind of activity that is perceived as reassuring.

## **What characterises people who feel afraid in public space?**

In this report we have looked at the relationship between personal characteristics and sense of insecurity, and have found that:

1. Women feel more insecure than men.
2. People who score higher on (self-reported) neuroticism feel more insecure than people who score lower.

Other variables seem to have an effect on the sense of security, but the effects vary in strength and in many places are not strong enough to be statistically significant:

3. People who have been on site several times / more often feel safer there than people who have never been there.
4. Elderly people feel more insecure than younger people.
5. People with low education feel more insecure than people with high education.

Other variables again seem to have little or no effect on insecurity:

6. Knowledge about and recognition of terrorism prevention measures has little or no effect on sense of security.
7. We see little effect of experience with unpleasant events on sense of security.