Safer Cities by Design

About Mahi a Rongo | The Helen Clark Foundation

Mahi a Rongo | The Helen Clark Foundation is an independent public policy think tank based in Tāmaki Makaurau Auckland at the Auckland University of Technology. It is funded by members and donations. We advocate for ideas and encourage debate; we do not campaign for political parties or candidates. Launched in March 2019, the Foundation issues research and discussion papers on a broad range of economic, social, and environmental issues.

Our philosophy
New problems confront our society and our environment, both in Aotearoa New Zealand and internationally. Unacceptable levels of inequality persist. Women's interests remain under-represented. Through new technology we are more connected than ever, yet loneliness is increasing and civic engagement is declining. Environmental neglect continues despite greater awareness. We aim to address these issues in a manner consistent with the values of former Aotearoa New Zealand Prime Minister Helen Clark, who serves as our patron.

Our name

The ingoa/name Mahi a Rongo was gifted to us by Dr Haare Williams (Te Aitanga-a-Mahaki, Rongowhakaata, Ngāi Tūhoe) in early 2022. It literally translates as 'Work of Peace', with both mahi and rongo embodying multiple meanings and associations in te ao Māori. Mahi a Rongo is both what we aim to produce – public policy research that promotes peace, environmental stewardship, and care for all people – and how we aim to do it – by listening, collaborating, facilitating consensus, and supporting women and members of diverse communities to lead.

Our purpose
The Foundation publishes research that aims to contribute to a fairer, more sustainable and inclusive society. Our goal is to gather, interpret, and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them. We welcome your support. Please see our website www.helenclark.foundation for more information about getting involved.

About WSP in Aotearoa New Zealand

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He mihi: Acknowledgements

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Anne Cunningham
Acting WSP Fellow
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Glossary of te reo Māori terms[1]

We recognise the limitations of direct translation and encourage readers to make their own study of concepts based in te ao Māori. This glossary provides an initial guide to the terms used in this report:

Hīkoi: To walk or march. Often used for a purposeful communal walk.

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[1] In alphabetical order. Most definitions are adapted from maoridictionary.co.nz except Taranaki Whānui from www.pnbst.maori.nz.

Iwi: Extended kinship group, tribe, nation, people – often refers to a large group descended from a common ancestor and associated with a distinct territory.

Mana: Prestige, authority, control, power, influence, status, spiritual power, charisma. Mana is a supernatural force in a person, place, or object.

Mana Whenua: Territorial rights, authority, or jurisdiction over land or territory. Also refers to hapū or iwi with mana whenua, whose status, history, and legends are based in the lands they have occupied over generations.

Mauri: Life principle, life force, vital essence, special nature, a material symbol of a life principle, the essential quality and vitality of a being or entity. Also used for a physical object, individual, ecosystem, or social group in which this essence is located.

Pā: Fortified village, fort, stockade, city.

Pōneke: Māori naming of Wellington. Wellington City Council took guidance from local iwi in using this name. It is thought, although not certain, that it is a transliteration of Port Nicholson. Also used in other contexts is Te Whanganui-a-Tara, which describes the harbour, but is commonly used to refer both to the harbour and the city.

Taranaki Whānui: The collective name given to iwi who are the traditional guardians of Wellington Harbour and associated lands.

Te Tiriti o Waitangi: The Treaty of Waitangi (Māori version).

Te ao Māori: The Māori world.

Whakawhanaungatanga: The process of establishing relationships, relating well to others.

Glossary of specialist terms

DCM	Formerly known as Inner City Ministry and then Downtown Community Ministry, this organisation works in the city of Wellington to focus on the needs of, and to help empower, those marginalised in the city.
Social cohesion	Refers to the connectedness and solidarity between different members of a community. It is a result of people's sense of belonging, and the strength of relationships between them.

| Social surveillance | Sometimes referred to as 'eyes on the street '(coined by Janet Jacobs in her seminal work of 1961, The Death and Life of Great American Cities), social surveillance is our observation of and concern for each other's behaviour in public spaces. |
| Spatial stigma | When neighbourhoods are represented in a negative way and this influences the perspectives of people from there and elsewhere. |

Executive summary

Urban public places are an essential contributor to our health and wellbeing. Denser city living, which will be an increasingly important feature of Aotearoa New Zealand's cities in future, increases demand for urban public spaces. Yet, this increased demand also exacerbates existing inequities that impact on how safe we feel. When people feel unsafe, they are less able to participate in – and benefit from – urban life, and this can lead them to withdraw from society and modify their behaviour. These individual behaviours can have a broader impact on us all. High rates of car use, for example, can also reduce the liveability and sustainability of our communities.

We must make our streets and public spaces safer, more accessible, and more appealing so urban public space is open to all who need and want to use it. This report will primarily focus on how crime and the perception of risk of personal crime impacts on our cities. This complements our previous reports that consider traffic safety as an important by-product of sustainable transport.

This report summarises our investigation of two key areas:
1. How some groups within society (women, for example) currently modify and limit their use of urban public space, and the broader ramifications of their exclusion from these spaces.
2. How recent thinking on Crime Prevention through Environmental Design (CPTED) can contribute to safer cities, and the conditions necessary for this to succeed.

Our findings lead to recommendations for how we can develop equitable and effective use of CPTED and other safer city practices in Aotearoa New Zealand.

Summary of recommendations

1. We recommend that relevant central government agencies convene a national forum for dialogue on the future of Aotearoa New Zealand's urban public spaces, bringing together local government, community, private sector, and academic stakeholders.

Roles for this forum could include reviewing relevant legislation, standards, and guidance on an ongoing basis, and defining the research needs for our urban areas.

2. We recommend that professional bodies and academics work together to update current national and local authority CPTED guidance to reflect contemporary understanding of safer city design and our unique cultural context, including the importance of Te Tiriti o Waitangi.

3. We recommend that Local Government NZ develops guidance to support local authorities with their design and social wellbeing functions, and to support greater collaboration between local authorities on these functions – with advice from professional peak bodies in design and planning sectors, to clarify best practice, e.g. Te Kokiringa Taumata New Zealand Institute of Planners, Tuia Pito Ora New Zealand Institute of Landscape Architects, Te Kāhui Whaihanga New Zealand Institute of Architects, and the Urban Design Forum.

4. We recommend that relevant academic institutions and professional bodies such as Tuia Pito Ora (NZILA), Te Kāhui Whaihanga (NZIA), and the Urban Design Forum collaborate to review and enhance a learning pathway for the spatial design profession in relation to safer city design.

Introduction

Vibrant, sustainable urban living is important for Aotearoa New Zealand's future success

By 2050, it is expected that 70% of the world's population will live in cities. In Aotearoa New Zealand, this proportion is already significantly higher: 87% of our population lives in an urban area, and over the next 30 years, nearly three-quarters of our population growth, around one million people, is projected to happen in urban areas (Stats NZ, 2021; Walker et al., 2021). Policy-makers and planners are preparing our cities and towns for denser living, which will involve a shift in expectations for many people from having a dedicated section of land at their home to sharing good quality public places (Walker et al., 2021; World Bank, n.d.).

Public places may include streets, squares, parks, waterfronts, and public buildings such as town halls and libraries. They are critical to vibrant, well-functioning towns and cities. Our public places should serve diverse populations, providing versatile spaces for a wide range of activities that support collective wellbeing and enable mobility. They should also serve a civic function – places to come together, experience difference, and develop a sense of collective belonging. The physical elements of our public places should express diverse community identities and be flexible enough to provide amenities for a wide range of uses, from community celebrations and protest rallies to caring for each other in an emergency.

The current speed and scale of urbanisation is increasing pressure on our public places. Recently, there has been more discussion on how our cities can be safer (Chittock, 2022; Hunt, 2022; Venuto, 2022). A review of crime data paints a complex picture, but there are challenges to respond to. For instance, overall crime victimisation reports in Auckland City Police District, which covers the central city and nearby suburbs, have increased 25–30% on long-term pre-pandemic trends. This is driven primarily by increases in non-violent crime like theft or motor vehicle offences, although common and serious assaults have also increased. Wellington Police District has seen a similar increase in theft and motor vehicle crime, but all other categories of crime victimisation reports are at, or have returned to, pre-pandemic levels (New Zealand Police, n.d.).

Out of 173 cities measured, Auckland and Wellington dropped the most places in the latest Global Liveability Index rankings by the Economic Intelligence Unit (Leahy, 2022).

Recent policy changes encouraging densification and more resilient, sustainable infrastructure have also triggered public debate about the design and use of our public places. Questions such as whose identity these places should reflect and what uses should be encouraged and discouraged in them have underpinned issues such as character protection and improving housing quality (Campbell, 2021). As we continue to grapple with our colonial history and its ongoing legacy, a challenge for urban designers and decision-makers is how to design for contemporary, diverse populations. There has been recent discussion of how, historically, our urban forms have been determined largely by the needs, wants, and cultural expectations of those in power, and thus generally reflect a male, Pākehā, able-bodied perspective (Burnett & Thomas, 2021; Ngata, 2019). How should we adapt our cities in future to democratise public spaces, improve safety, and uphold Te Tiriti o Waitangi? This report focuses on how the design of our public places could respond to these questions and challenges so that, as stated in the UN Habitat's World Urban Campaign, we are "together shaping the future of cities leaving no one behind" (UN Habitat, n.d.).

Urban safety in our cities: The case for change

Vera's story

Learning to exchange freedom for safety

Vera is 18 and lives with her family in Pōneke Wellington. She works at restaurant in the CBD, about 3 kilometres from her family's rented apartment in Pipitea. Her work roster changes each week, and includes both daytime and evening work. Vera and her friends have all had frightening experiences in the city centre: men approaching them on foot, or following them in cars, shouting threatening comments at them when they are waiting at traffic lights or from outside bars. Vera has discussed strategies for staying safe with her mother and friends. She avoids both bustling places and very quiet ones. She walks confidently, not making eye contact. To avoid attracting attention during her walk home, she adds a loose top over her fitted work clothes. She doesn't use the bus stops nearest her work or home, instead choosing ones further away with better lighting and sight lines. She doesn't cycle because she is worried she would not be seen among the traffic at night. When she leaves work, she

phones her mum and talks to her while she walks, because she feels she safer if there's someone who can hear her and because it is comforting. This means her mother has to stay up late, sometimes before a workday. It is busier at the weekend, so Vera will pay for a taxi home.

Vera is planning to go to university in another city, but she isn't planning to look for a new hospitality job when she gets there, even though the hours would fit conveniently around her studies. She has found herself stressed during the day before working an evening shift and does not sleep well after feeling scared on her way home. She hopes she can find alternative employment to support herself.

A safer future for Vera

Vera notices the city centre is calmer. As she walks through the city, she feels a sense of ownership and belonging: public artworks, signage, and buildings reflect motifs from many cultures, including Vera's, and there are boards describing the area's Māori history. The lighting on the street and emitting from bars is warm, and makes it easier for her to see around her. She can see and feels seen, with multiple sightlines between the street, bars, balconies, and side streets. She walks some of the way home among a diverse group of people, including other women. She then has a choice of buses with well-lit stops, or she can cycle using dedicated bike lanes. If she feels unsafe, she can approach a Hāpai Ake, a local host (an existing scheme organised by Wellington City Council).

Anita's story

Feeling out of place in her own city

Anita is 27. She lives in Hataitai and grew up in Lower Hutt. She is a queer woman of Indian, Māori, and Pākehā descent. She has spent all her adult life in Wellington City. She works in the city centre, including in the evenings.

As a small woman, she has felt the impact of street harassment since her teens. She now uses several strategies to help her feel safe. These include driving into the city, walking along main bus routes, and stepping into the middle of quiet streets so she can see people sooner and more clearly. She strides confidently, dresses modestly, and carries keys between her fingers. But still, she is often pushed on busy streets, so now she actively avoids them. She used to work in hospitality, and she plans her city routes around places where she is known. She also tries to help younger women when they look vulnerable – she feels this is important, but it leaves her angry and stressed.

She is uncomfortable showing affection to her girlfriend in public, including on Cuba Street where they can be seen from a distance. She doesn't know who will see her and how they will react. This is a noticeable difference from when she was in a relationship with a man. Anita would like some quieter, cosier places to go, but as these aren't available, she and her girlfriend often just stay home.

As a Māori woman, Anita sees reminders of colonialism on every street, day and night. She mentions her discomfort with current street names and the style of buildings. She is curious and excited about the increased public recognition of Māori heritage, but also wary and conflicted – she wonders about what is motivating it and feels uneasy about her own lack of language fluency in te reo Māori. She also notices that many of the people living on the city streets are Māori. She finds walking through the city unsettling, so she only comes into town when she has to.

A city where Anita can be herself

Anita wants to come into a city, day and night, where all women are safe and her whole identity is welcome: a city with mana and mauri that uplifts her. Anita would love to walk through the city at night. She can remember doing that when she was younger, before she had experiences that frightened and upset her. It was cheaper than getting a taxi, and she would get some fresh air after a night out, arriving home ready to sleep.

Serah's story

Avoiding the city centre

Serah is a 44-year-old trans woman. She lives in Newlands. She only goes into the city when she has a reason to, like shopping, meeting friends for dinner, or to attend a rally. She usually drives into the city because public transport takes longer. She doesn't often feel unsafe: she describes having a physically larger body and has learnt de-escalation techniques through work. She also wears baggy clothes and deliberately walks in a way that doesn't draw attention. Even so, she doesn't walk down darker, quieter streets, instead sticking to the main well-lit areas. She also takes a detour if she notices a group gathering. She would be cautious about showing affection to a partner in public, and plans routes to use out-of-the-way and quieter toilets.

Serah would prefer not to use the city centre. She mainly travels through in her car to visit friends at home in other suburbs. She describes how she has retreated from the city as she has got older, often socialising at home where she feels safe. The city doesn't feel welcoming to Serah.

Welcoming diversity and enhancing Serah's safety

Serah recognises she is a reassuring presence in the city – to younger, smaller women – and that more diversity on the streets is key to everyone feeling welcome. She'd love to see trans women celebrated in the city places; this would encourage her to play a more significant part in city life. If the city had greener, calmer places to hang out after a meal, she would come into town more often. She'd also like cleaner, safer public toilets. Together these factors would mean she would spend more time in the city.

The impact of unsafe cities

Marginalised groups exchange freedom for safety

There is a striking consistency between the experiences of Vera, Anita, and Serah. All three accounts illustrate how people's perceptions or fears about potential crime affect where they choose to live, and whether and how they use public places. As these stories also show, some groups suffer disproportionately from this fear of crime, especially women, trans and non-binary people, children, and older people. It is common for members of these groups both to modify and limit their use of public places. This is not a minor concern. A 2021 survey by the Wellington Alliance against Sexual Violence found that 73% of the predominately young, female respondents reported feeling unsafe in the Wellington City centre at night, and 94% wanted to see a change in Wellington's culture, by raising awareness and addressing systemic issues (WAASV, 2021).

In this way, the impact of crime goes well beyond the direct harm caused by individual crimes, especially for marginalised groups. For example, girls and young women may adjust their appearances and/or limit their activities, and LGBTQI+ people may avoid specific neighbourhoods and/or limit their expression of public affection. Women's mobility is also impacted; they may limit or modify their use of public transport to avoid harassment (for instance, by getting off a stop earlier or avoiding travel at certain times of day) (Azzouz & Catteral, 2021; Burnett & Thomas, 2021; Chowdhury, 2019).

These phenomena have been evocatively summed up by sociologists, Dr Vera-Gray and Dr Kelly (2020, p.273) as an "exchange of freedom for safety".

When we feel unsafe it reduces the liveability and sustainability of our cities

Diversity benefits social cohesion – positive contact with a wide range of people reduces our fears of those who are different from each of us as individuals. When a neighbourhood develops a reputation for being unsafe (known as spatial stigma), people often limit their use of public places and are thus less likely to come in contact with each other. Everyday social contact, where we observe and are concerned for each other's behaviour (described as social surveillance or as coined by seminal urbanist Professor Jane Jacobs, 'eyes on the street'), is key to feeling safe. In addition, when spatial stigma develops, it is often internalised by residents of the affected area, impacting their sense of self, and limiting their mobility and ability to form relationships outside their community. Spatial stigma, where negative perceptions of a place influence outsider perspectives, often develops in areas where people already face social and economic disadvantage, further compounding that disadvantage (Witten et al., 2022).

When people feel unsafe, they are more likely to use cars, if that option is available to them. They may also be more likely to perceive people and areas less positively when they drive. The increased traffic generated may contribute to congestion and traffic safety concerns. Research indicates that passing cars do not provide effective social surveillance of public places, and that that is done more effectively by pedestrians. In this way, car use fuels a vicious circle – we feel unsafe so we drive, and driving can make us feel even more unsafe (Gatersleben et al., 2013; Witten et al., 2013).

As our previous reports have examined, New Zealanders' collective over-reliance on cars as our main form of transport has fed decades of policy decisions and infrastructure investments which, in turn, have further encouraged vehicle dependency. Cities designed for private vehicles tend to provide limited and inadequate public and active transport options for those who cannot drive or for whom car ownership is unaffordable, limiting their choices and mobility. As expanded on in our 2021 report into transport equity, non-drivers are often already disadvantaged, including Māori and Pacific people, people with a disability, people on lower incomes, women, LGBTQI+, and ethnic minorities (Walker et al., 2021). Therefore, car-centric cities impel already marginalised groups into unsafe choices, where they can face the additional burden of having to adapting their journeys in order to mitigate these safety risks (Burnett & Thomas, 2021; Chowdhury, 2019; Russell et al., 2021; Walker et al., 2021).

Designing safer cities

Pōneke Promise: A case study from the Wellington City centre

An interview with Jenny Rains, Manager, Community Services, and Dr Farzad Zamani, Urban Regeneration and Design Manager at Wellington City Council (WCC).

Can you explain the background of Pōneke Promise?

Pōneke Promise responded to growing concerns about safety in our city centre and heightened awareness about the impact on young women. You may recall the joint WCC and Wellington Police report in 2022 and, prior to that, the rally organised in 2021 by Wellington Alliance against Sexual Violence (WAASV). Both did a huge amount to raise awareness of sexual violence in the central city. Alongside this, COVID-19 affected the use of our central city. Retail and hospitality numbers reduced. There was an increase in vulnerable people's use of public spaces because they were being housed in places without adequate living spaces. The final driver was future liveability – the need to make central city spaces more comfortable for pedestrians and cyclists, which also helps reduce carbon emissions.

The response was a multi-agency group that considers the city centre through a harm reduction lens. We knew from previous work that harm in the city centre is very complex. It was not enough for agencies and businesses to work in parallel to each other on specific problems. So, WCC partnered with Greater Wellington Regional Council, Hospitality NZ, First Retail, NZ Police, Chamber of Commerce, Wellington City Mission, DCM, Taranaki Whānui, Victoria University of Wellington (VUW), and the Ministry of Social Development to work on a shared vision of a safe, vibrant, welcoming, central city. To support that, we formed a social contract – Pōneke Promise.

How does Pōneke Promise work in practice?

Behind the scenes, we work on sustaining long-term relationships between the partners so that all our initiatives are underpinned by a diverse pool of experience and expertise. Together, we guide initiatives, including urban design, community policing, and social

services. Our formal structure supports decision-making about current and future initiatives. At its heart is the Partners 'Group. Pōneke Promise at WCC is overseen by our Chief Executive Officer, who chairs the Pōneke Promise's interdepartmental governance group. Then we have both interdepartmental management and delivery groups meeting regularly.

It's worth saying that, in the past, our teams have had similar values but were working in parallel, e.g. our community services team and urban designers or agencies such as DCM – but now our teams are working together. For instance, several organisations (Let's Get Wellington Moving (LGWM), Accessibility Advisors, Wellington Alliance Against Sexual Violence, and VUW) came together for a 2 am hīkoi with our urban designers. Together, we explored the dynamics of nightlife in the central city. It was beneficial to share lived experiences and take the time to challenge each other's blind spots and biases – for instance, by hearing how young women experienced the city centre at night.

There is also a clear and vital role for mana whenua, both as part of our Partners 'Group and, more widely, influencing multiple work streams and identifying crucial projects. One example is the relocation of the toilets from Te Aro Park to a nearby site. Te Aro Park is a key site for mana whenua, as it is the site of Te Aro Pā. The toilets sit above a stream, which has been a long-standing concern for mana whenua. We are now co-designing Te Aro Park with them. Uplifting this key heritage site will have broader benefits, giving the central city a stronger identity and enhancing a broader sense of belonging.

Can you describe how environmental design contributed to solutions in the central city?

WCC and our partners recognised that the design of the central city was contributing to harms experienced there. As mentioned by our iwi and indeed other partners, Te Aro Park was an area of particular concern (WCC, 2022a, 2022b). From an urban design perspective, there were straightforward ways to improve the restricted sightlines caused by the toilet block and a lack of 'eyes on the street 'due to it being a traffic island between two major roads. We also knew it wasn't fulfilling its potential as a much-needed city centre green space. As urban designers, we know creating a sense of place is key to local ownership and therefore ongoing care of a place. Our community police officer summed it up by saying, "No one respects the mana of this place." Te Aro Park was spatially and culturally detached from the city's life. Our response has been to relocate the toilets and uplift Te Aro Park's mana. Future work includes enhancing the existing artwork, adding interpretation boards on Te Aro Pā's cultural significance, and ensuring a good maintenance regime. We have also extended the space by adding café seating platforms. This means sightlines aren't blocked by parked vehicles and the narrower road slows traffic. Local shops and cafes, pedestrians, and cyclists can see each other: they will be our 'eyes on the street'. We are also working with other teams at WCC to consider how Te Aro Park can be activated, through arts events and activities like skateboarding.

It would be helpful to hear how Crime Prevention through Environmental Design (CPTED) fits into your response.

CPTED practice has moved on from a focus on increasing lighting and sightlines. These are important, but are only one piece of the puzzle of safe urban design. First, we knew from the research and from listening to a range of groups how specific features enable and limit different users of the central city. For instance, some young women told us that bright lighting on long streets meant they felt like they were on a catwalk past bars, and was encouraging catcalling and other harassment. This was discouraging them from continuing their evening at another venue. So, there may be things that need doing now to sort out immediate problems. We also need to use CPTED in a sophisticated and nuanced way, over the longer term and in partnership with other social measures, and while thinking about the whole city. That way, we can sustain a shift in focus from harm to vibrancy.

Second, it's essential to consider who does the CPTED analysis. As the lead designer, I was aware that I felt relatively safe in the central city – even late at night. So, I decided to step back and support my younger female colleagues to do CPTED through their eyes. I encouraged them not to rely on standard solutions but instead to reflect on whether those solutions would make them feel safe enough to live how they wanted. They also consulted with others with different life experiences to inform their design thinking.

How do you see Pōneke Promise developing in the future?

The question foremost in my mind is, "What is our 10-year plan to maintain the city from a vibrancy point of view, so we can live safely and maintain social cohesion?" We need a vibrancy master plan for the city, identifying gaps and future needs. This could include managing entertainment areas – to guide where they are and how they evolve and expand, not just react to where a bar opens. As WCC, we need to respect the mana of the place, and guide others to work with us to create a place where we all experience belonging and have fun.

From crime to vibrancy

Look at an aerial photograph of Copenhagen's Red Square, Superkilen Park, and see how vividly it pops from its grey surrounds. Opened in 2012, the park has since become one of the best global examples of how the development of community spaces can help pivot urban areas from crime to vibrancy.

At the heart of Superkilen's reimagining is an urban design approach called placemaking – where public places are co-created in a way that reflects the identity of the communities they serve. In this way, enduring meaning and belonging is established.

Superkilen illustrates the transformative power of placemaking, urban renewal, and public art. It's located in the city's Nørrebro neighbourhood, where crime rates are higher than in wider Copenhagen.

While perceptions of crime in the Superkilen area have been perceived as high, they're lower than in other parts of Nørrebro. Reports suggest that vandalism and antisocial behaviour hasn't been much of an issue in the park since it opened. In fact, the park has helped rejuvenate a problematic area.

The aim with Superkilen was to create a public space where people from diverse backgrounds could meet, interact, and feel at home. It's achieved all that, and more – having gained an impressive reputation for how deeply the local community was involved in its design. The co-design stage of the project was an example of what the planners and designers called extreme participation.

Divided into three areas – Red Square, Black Square, and Green Park – Superkilen covers 30,000 square metres. It features 150 elements and objects proposed by over 60 nationalities living in the area – including an Indian playground, Moroccan fountain, Palestinian soil, Bulgarian chess tables, benches from all four corners of the globe, and plenty more. Thanks to the bringing together of these objects, Superkilen developed greater social cohesion and increased feelings of being safe.

Colour, landscaping, lighting, and material selection have all played an important role in Superkilen's success. But there's been another reason for its positive social impact. When communities are invested in places they've had a hand in creating, vibrancy and lower crime rates are usually the result – especially when they've been designed to Crime Prevention through Environmental Design (CPTED) principles.

Co-design creates a feeling of stewardship over a place, which is what leads to community creation and, in turn, decreased crime rates. From introducing community gardens and living walls to painting murals and re-making thoroughfares to be more people-friendly, the creation of great urban places that bring people together and help reduce the incidence of crime is happening around the world. Homegrown examples can be found here in Aotearoa New Zealand.

Since Wellington began revitalising its laneways, the Police have reported positive changes to inner city behaviour. And after Christchurch's bus interchange was redesigned with CPTED principles, statistics showed a drop in crime.

Auckland's Te Ara Whiti Lightpath and Christchurch's Margaret Mahy Playground are other fine examples of how smart, participatory urban design treatments can bring communities together, breed neighbourhood vibrancy, and increase feelings of safety, security, and collective ownership.

The future of our communities depends on public places like these that boost energy and activity, strengthen bonds between people and foster a sense of pride and belonging – along

the way helping transform precincts into safer, more lively places to be. It's heartening to observe. Let's do all we can to enable even more.

Let there be light

It says a lot about our obsession with cars that roads are better illuminated than many public places. But with <u>active modes of transport</u> and people-friendly <u>urban regeneration</u> coming to the fore across Aotearoa New Zealand, dimly lit gathering places are slowly but surely being cast in a new light.

Modern lighting treatments are an important part of urban design and planning. By improving visibility when the sun winks below the horizon, they can boost feelings of safety and security – while reducing the risk of accidents and injuries and adding ambience to urban settings.

Lighting features in the Ministry of Justice's <u>National Guidelines for Crime Prevention through Environmental Design (CPTED)</u> for good reason. It reduces the opportunity for crime and <u>makes people feel safer.</u> It heightens passive surveillance, or 'eyes on the street', and sends a subtle signal that urban spaces are valued and protected by the community.

The right light works too! A systematic review of UK and American studies published by international social science research network the Campbell Collaboration found that <u>improved street lighting reduced crime by 21%.</u>

Lighting a public space isn't quite as straightforward as screwing in a few bulbs. It may seem counterintuitive, but brighter also isn't better. It turns out the opposite is true, with <u>research from Australia showing</u> that bright, over-lit spaces don't make women and girls feel safer.

That same piece of Australian research found that consistent, layered lighting is the best way to enhance feelings of safety and security. Here, multiple light sources reduce the potential for floodlighting and glare that can quickly overwhelm the human visual system.

Thanks to advances in lighting technology and computer-aided tools for better measuring light distribution, our understanding of how to create illuminating night-time experiences for everybody is improving in leaps and bounds.

An example of where this has been done well is Auckland's award-winning <u>Nelson Street Cycleway, Te Ara I Whiti</u>. Known as the Lightpath, it's lined with hundreds of LED (Light Emitting Diode) mood lights. In another fitting example, CPTED lighting principles have been used with success on Hamilton's <u>new State Highway 21 underpass</u>.

Well-designed and illuminated facilities like these encourage people to get out and about, interact with one another, and embrace carbon-friendly active modes of travel. Interestingly, urban lighting approaches can also be used to influence how people act – for example, by introducing lighting that encourages pedestrians to walk and cross the road at the right places. In yet another benefit, studies have even shown that the intensity and distribution of urban lighting can influence people's emotions.

Low-glare LED lighting is now being widely used in many urban areas. The benefit of bathing in the warm glow of this kind of light extends well beyond feelings of safety and wellbeing. WSP has researched the health and environmental impacts of LED street lighting. It reduces light pollution, results in energy and carbon savings for city administrators, and can do wonders for local ecosystems.

Since it started installing LED streetlights in 2012, light pollution has reduced in Christchurch. The city has saved $1.5 million and cut its annual carbon footprint by more than 1100 tonnes. Studies by the National Institute of Water and Atmospheric Research have found that fewer flying insects are being attracted and disrupted by Christchurch's new lighting too.

With all the evidence and technology now at our fingertips, it's clearer than ever that lighting can contribute to strengthening the experience of cities at night. That's something worth encouraging because, after all, there's no good reason our public spaces need to shut down after sundown – they can (and should) be vibrant places, day and night.

Crime Prevention through Environmental Design

When people think of crime prevention, they tend to think of labour-intensive measures, such as additional security guards and police patrols, or technological fixtures, such as cameras, locks, and gates. However, research indicates that simply introducing more patrolling and/or security devices into high-crime areas is insufficient to prevent harm and may even be counterproductive. For example, gated communities may give residents the perception of safety but their presence can undermine wider social cohesion and drive up crime within the gated community.

In contrast, CPTED examines how urban form influences the likelihood of criminal activity and people's perception of safety. It is the primary methodology that supports designers to focus on reducing crime while grappling with the complexity of urban spatial change. CPTED is now supported by the United Nations Human Settlement Programme 2007 and many governments worldwide. CPTED draws on environmental design and behavioural psychology to guide design processes that support decreases in crime and increases in perceptions of safety.

CPTED was established in the 1970s. It is often described in terms of the following seven environmental and behavioural principles, applied differently to public, semi-public, and private spaces. These form the basis of our current CPTED guidelines, both at a city and national level (Auckland Council, n.d.; CCC CPTED Guidance, 2004; Ministry of Justice, New Zealand Government 2005; WCC, n.d.).

- A sense of ownership by legitimate users.
- Enhanced levels of informal social surveillance/eyes on the street.
- Consideration for how people access and move around a place.
- Promotion of a positive image of a place, including effective maintenance.
- Use of design elements to promote legitimate activity in a place and place 'unsafe' activities in areas with adequate crime prevention measures.
- Introduction of measures that make crimes harder to commit, for example, fences or locks to control access between private and public zones.
- Account for geographical juxtaposition, how adjacent areas influence each other.

CPTED research has developed from these seven principles into a wider field of research and practice that examines the relationships between crime and urban form. The thinking is closely aligned with wider thinking on the social life of cities. Recent research has also supported CPTED to remain a popular and relevant response to current urban challenges, such as increasing population densities, population diversity, new ways of life, and emerging crime problems – as illustrated by the Pōneke Promise case study. The following section draws on this research to articulate five future positions that could support safer cities in Aotearoa New Zealand. The final section describes recommended actions to get us there (Cozens & Love, 2015; Crowe & Fennelly, 2013; Mihinjac & Saville, 2019).

Safer Urban Design: The five future positions we want to be in

1. Local government leadership is key to developing and sustaining partnerships with local social agencies and local people whose on-the-ground knowledge is needed to inform improvements in liveability, through safer design.

Safety is now considered a by-product of wider social strategies that build community and social cohesion over a longer period. Recent research into CPTED concludes that physical improvements and social initiatives are best done together. This encourages positive uses of the place and has wider benefits, such as enhancing people's personal identity, developing our communities, and improving their connection to, and care for, a place. CPTED's contribution is to how social dynamics interplay with the physical and spatial characteristics of a place, and those of the wider city and region (Mihinjac & Saville, 2019).

To do this we need a shift in how we think about changing our cities, recognising the evolving social life of urban spaces, rather than perceiving them as permanent. This requires a step change in practice to:

- *Sustained multi-agency, action orientated collaborations* that draw together diverse perspectives and expertise, such as urban designers, iwi, social agencies, local businesses, and local people. This approach requires shared ownership of strategies at all levels of the organisations involved (Butler, 2013; Mihinjac & Saville, 2019; Ramsay, 2013).

- *Regular use of tools that help identify bias and counter inequity*. Globally, a number of cities use tools like the Women in Cities International's Women's Safety Audit and the UK's Equality Impact Assessments to take stock of current safety (Lambrick & Travers, 2008). The Women's Safety Audit enables a critical evaluation of the urban environment, identifying the factors that make women feel safe or unsafe in urban public places. The results lead to recommendations "for increasing women's sense of safety and use of public space, by firstly, improving various elements of the built environment and secondly, changing community behaviours and local government policies" (Lambrick & Travers, 2008, p. 5). Equality Impact Assessment (EIA) is an evidence-based approach designed to help organisations ensure their buildings, policies, practices, events, and decision-making processes are fair and do not present barriers to participation or disadvantage any groups, and was introduced to help organisations comply with the UK Equality Act 2010 (Pyper, 2022). These tools centre marginalised groups. They could be used alongside CPTED in Aotearoa New Zealand to counter implicit bias and identify the particular reasons women in general and marginalised groups are not able to participate fully in public places. This would include investigation of how CPTED works within the unique planning and design context of Aotearoa New Zealand, including upholding our commitment to Te Tiriti o Waitangi.

- *The trialling of new uses of a public place.* There are now multiple examples of how trialling a temporary use of space can help hone a more locally appropriate design. Trials also help to introduce more positive uses of a place and to attract a wide range of people back into urban public places, and can inform longer term physical changes. Examples include pop-up social service hubs, cultural events, and physical elements such as seating, cycleways, or extended pavements. Our previous reports (Walker et al., 2021) called for a bespoke regulatory tool to make it easier for local authorities to trial street-level changes – this has informed the upcoming Reshaping Streets Regulatory Changes (Mackie Research & Waka Kotahi, 2021; Te Manatū Waka Ministry of Transport, 2022; Walker et al., 2021).

- *Consistent use of post-occupancy evaluation (POE) of public places* to help build collective understanding of how urban design changes work in practice. Understanding this also supports a city's strategic momentum by helping decision-makers and planners to identify and focus on what is needed next. POE also raises questions about how well wider policy and legislation settings support and enable

safer urban design, and whether these could be strengthened – and made more equitable (Bennetts et al., 2017; Butler, 2013; Government of Victoria, 2012).

2. Our urban public places are designed in a way that restores mana and mauri Māori.

Equitable liveability and sustainability can be achieved if we can critically examine the cultural heritage of our public places. Recent public debates have highlighted the harmful impact colonial artworks and street names can have on mana whenua (Elkington et al., 2020; Ngata, 2020). But we need to go beyond these elements to consider additional factors like urban form, architectural layouts and styles, planting, and building types, and the amenities they guide and provide. These elements often trace their origins to Pākeha norms, heritage, and institutions.

To successfully design urban places that reflect and uphold mana and mauri, we need to consider to what extent CPTED supports cultural safety in our physical environment, including how it aligns with te ao Māori. To draw on the thinking of Courtney Bennett and others, we need to recognise, resource, and incorporate a step change in practice that supports Indigenous ways of being in our cities (Bennett et al., 2021). This has been approached in a number of ways, guided by local iwi. Examples include Māori design principles and practices, for example Matapopore's Urban Design Guide, that articulates Ngāi Tūāhuriri identity, cultures, and narratives in Ōtautahi Christchurch, and can draw on leadership and expertise from Ngā Aho, the national network of Māori design professionals (Matapopore, n.d.).

Organisations and individuals working in this space need to develop high levels of cultural competence. This is important for how we design our cities and includes a willingness to do proactive research, undertake early and ongoing engagement with mana whenua, ensure sufficient resource for the partnership, consider mana whenua as experts, and observe appropriate kawa and tikanga (Bennett et al., 2021). Wider policy and regulatory settings will also need to change the identity and amenity of our places, for example to support changing or adding to street names and incorporating mahinga kai in public places (Meher et al., 2021).

3. Our initiatives build on recent research into how our physical environment impacts our safety, and our regulations and guidance supports that.

To respond to the complexity of social and cultural needs in our cities, we need to move away from physical determinism, where certain features are considered 'safe 'and others 'unsafe'. For instance, a key CPTED strategy has been to open sightlines to allow more 'eyes on the street 'and increasing lighting. Research has shown that this can deter property crime and help more people feel safer in public places, but in other areas it may also encourage harassment of marginalised groups as they become more visible to their harassers; it may also displace crime to other areas (Arup, n.d.; Cozens & Love, 2015; Jeong et al., 2017; Mao et al., 2021; Mihinjac & Saville, 2019). Further, research into making public space more LGBTIQ+ welcoming reports that couples may refrain from showing affection in open, bright

public places, preferring 'cosy corners', like benches that face each other (Azzouz & Catteral, 2021). This preference for discreet places by groups who are already marginalised is echoed in research exploring how girls would like to use public parks; for instance, wanting discrete areas to sit together. Some studies note the positive use of warm light spreading into streets from bars and façades, while in others, young women prefer darker places where they can gather unseen to avoid harassment (Arup, n.d.; Make Space for Girls, 2022).

Design teams need to be aware of this research and enabled to apply its insights. This signals the need for the profession to have ongoing access to the information, via, for example, regular research and practice updates and enhanced links to academics. Then, where necessary, they can advocate for changes in regulations and guidance.

Researchers also acknowledge there is still much we do not understand about how urban form impacts on the social life of cities, especially for groups that continue to feel unsafe (Cozens & Love, 2015; Farrington & Welsh, 2002; Mihinjac & Saville, 2019). This signals the need for further research on these issues within the unique cultural context of Aotearoa New Zealand.

4. Safer design practices are applied with expertise rather than just technical and prescriptive competence. These design practices give precedence to diverse lived experiences, and safer design principles reflect local conditions and community needs.

Design professionals define themselves by their use of 'design thinking', a practice suited to tackling "open complex problems" like those we find in urban public places (Dorst, 2011 p.522). The design process involves synthesising different understandings of a place with wider knowledge to propose physical solutions. Successful synthesis requires experience and expertise to avoid common pitfalls such as the simplistic transposition of physical elements from one place to another.

There are also risks in design practice, not least the sometimes limited experiences designers bring to bear on their work. Research has noted a recent 'humbling' of the profession, moving from a world-view in which designers or planners 'control 'a process and site, to designers increasingly seeing themselves as participants in the complex networks that develop our cities (Slavin, 2016). An example of this practice in action can be seen in the example on [insert relevant page number, when known] of Pōneke Promise, the Wellington project in which experienced designers have been integrated into wider interdisciplinary teams, with attention paid to the range of lived experience within the team. This supports a shift from working separately on physical solutions to participating in networks focused on social outcomes.

Participatory design expertise is underpinned not only by information, but also by relationships and empathy, enabling designers to be guided by a 'local lens 'through which they can synthesise different information and perspectives. For this to succeed in Aotearoa New Zealand, design teams need to work directly with mana whenua and local people to enable whakawhanaungatanga, the process of coming into a relationship with each other.

This requires new and enhanced ways of working as well as continued attention to ensuring diversity within the profession (Bennett et al., 2021; Hoddinott et al., 2019).

5. Our regulation and guidance reflects what we know will enable us to design safer cities.

This report has focused primarily on CPTED, but we also recognise there are wider concerns that impact on urban safety. All these need to be considered as part of a wider review of the existing regulations and guidance that currently determine design practice in our towns and cities (Government of Victoria, 2012).

Current national and city CPTED guidance focuses on applying the seven principles of safer design. While these are still relevant, they need to be applied with expertise and local nuance, which will necessitate a change of approach. Local guidance needs to be updated to reflect current practice – including advice on multi-stakeholder governance and delivery, introducing post-occupancy evaluation as a key stage in a design process, and consideration of how CPTED practices are coherent with Aotearoa New Zealand's unique cultural context and Te Tiriti o Waitangi responsibilities.

Several designers raised concerns with us during the research for this report about how current regulation inhibits safer design – for example, lighting standards focused on sightlines from cars to pedestrians rather than between pedestrians. There are relevant changes in the pipeline like the Accessible Streets Regulatory Package (Ministry of Transport, 2022) that may improve current practice, but further changes may be required as new approaches to CPTED are further developed and integrated in our towns and cities, and research identifies new concerns.

Recommendations

1. We recommend that relevant central government agencies convene a national forum for dialogue on the future of Aotearoa New Zealand's urban public spaces, bringing relevant local government, community, private sector, and academic stakeholders together. Roles for this forum could include reviewing relevant legislation, standards, and guidance on an ongoing basis, and defining the research needs for our urban areas.

This forum should include academia, professional bodies, social agencies, central and local government, and iwi and hapū Māori, and would help identify where current settings enable and/or limit urban safety. It would take account of recent and ongoing research and post-occupancy evaluations of our public places and involve those with direct lived experiences of various urban safety and liveability challenges. It would focus on the perspective and experience of marginalised groups, and identify and address barriers to mana Māori in our urban places.

2. We recommend that professional bodies and academics work together to update current national and local authority CPTED guidance to reflect contemporary understanding of safer city design and our unique cultural context, including the importance of Te Tiriti o Waitangi.

This should include recognising that a range of social and cultural competencies is a vital component in the application of CPTED, the consistent use of post-occupancy evaluation is essential to ongoing learning about how to design liveability and sustainability of public urban places, and relevant central and local government agencies, design professionals, and researchers should work to stay abreast of emerging research and new insights about what works to create safer cities.

3. We recommend that Local Government NZ develops guidance to support local authorities with their design and social wellbeing functions, and to support greater collaboration between local authorities on these functions – with advice from professional peak bodies in design and planning sectors, to clarify best practice, e.g. Te Kokiringa Taumata New Zealand Institute of Planners, Tuia Pito Ora New Zealand Institute of Landscape Architects, Te Kāhui Whaihanga New Zealand Institute of Architects, and the Urban Design Forum.

This should include examining current principles and mechanisms for sustained collaboration between public agencies, mana whenua, and a wider network of social agencies and community organisations, and recommending improvements, including advice about best practice governance arrangements and operational settings. It would include advice from professional peak bodies in design and planning sectors, to ensure the different practices and expertise of the spatial and physical disciplines are drawn on, alongside those within the social sectors.

4. We recommend that relevant academic institutions and professional bodies such as Tuia Pito Ora (NZILA), Te Kāhui Whaihanga (NZIA), and the Urban Design Forum collaborate to review and enhance a learning pathway for the spatial design profession in relation to safer city design.

This could include setting out clearer professional development pathways for urban designers and allied professions to ensure they have opportunities to develop relevant expertise and wider competencies, the profession is diverse with a wide range of lived experiences representing the communities that make up our cities, and there are regular opportunities to update their knowledge and skills to reflect emerging research. This should include not only an update on CPTED, but also increase the profession's focus on spatial justice and collaborative approaches.

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