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LIFE IN A FAVELA: RECIFE, BRAZIL

The majority of the population of Recife (a tropical city in north-eastern Brazil) live in low-income neighbourhoods, where levels of sanitation are poor (although most homes have water and electricity supplies). Most live in hillside favela communities in cramped, one- to three-storey housing, geographically and socially distant from the middle classes, who mostly live in high-rise apartment blocks and have car-dependent lifestyles (see Figure 1.4). Many homes are perched precariously close to steep, often unstable slopes. Getting around is especially hard. A journey home may involve a slow, crowded bus ride along twisting roads and then a walk through narrow alleyways and up lengthy, steep, uneven paths. Add shopping bags, baby gear and the like into the picture, and these challenges grow – even more so in hot climates and neighbourhoods with a lack of shade. Children growing up in poor neighbourhoods face many environmental, social and health challenges. Some, including access to education, violence, road danger, environmental hazards, infectious diseases and perinatal risks, are typical of Global South contexts – and low-income populations are hardest hit. But Brazil is also transitioning towards problems that higher-income countries also face, including growing rates of child obesity.

Figure 1.4 Cohab favela, Recife, Brazil

planning to the majority of the world. Given the problems many low-income cities and countries face in tackling basic challenges like decent housing, sanitation and nutrition, it is tempting to downplay concerns about children's everyday freedoms. However, far from being a 'nice to have', a planning and design focus on children can both directly improve children's basic life prospects and act as a catalyst that unlocks wider action (a theme explored in Chapter 4 in relation to Recife, Fortaleza and Tirana).

Moreover, it may be premature to condemn slums and informal settlements as irredeemably hostile environments for children to grow up in. Not all the problems of such neighbourhoods are down to their physical form. Many have spatial qualities that, in other contexts, are held in high regard by planners, including a human scale, walkability, low levels of traffic and car ownership, a diversity of markets, and proximity to public transport, work destinations and services (see Figure 1.5).[65]

HISTORICAL INSIGHTS

Urban planning has its roots in creating better places for children and families. The Victorian town planning pioneer Ebenezer Howard embraced the masterplanned garden city as a response to rapid, unplanned urbanisation following the Industrial Revolution, and as the answer to ordinary families' needs and wishes. Since then, interest in children's experiences of urban public space has ebbed and flowed. In the UK, post-war town planning inspired by

Figure 1.5 Local shops and relatively quiet streets make cycling a viable choice: Iputinga, Recife.

both the garden city movement and modernist architecture aimed to create spacious, green, pedestrian-friendly residential neighbourhoods that would appeal to young families in particular.[66] In Amsterdam, leading modernist architect Aldo van Eyck and municipal colleagues carried out a child-friendly public space programme of inspirational ambition and vision.

Around the same time, leading American urban thinkers Jane Jacobs and Kevin Lynch, reporting on the everyday urban experiences of children and parents, argued against wholesale urban reconstruction, instead celebrating the messy complexity of cities and the qualities of existing neighbourhoods. What Jacobs, Lynch and the idealistic planners all shared was a concern for the texture and fabric of urban families' lives. However, by the late 1970s visions of urban utopias and welcoming, family-friendly neighbourhoods had faded, and many global cities were facing family flight, declining populations and poor prospects.

In the 1990s an international child-friendly cities movement, inspired by Lynch and supported by UNICEF, shifted the focus onto children's rights and participation (see pp 106-7).[67] The movement was grounded in the United Nations Convention on the Rights of the Child, adopted by the UN General

The child-friendly framework can be pulled together in a set of ten strategic indicators, written in the form of statements made from the point of view of a child (see above). The statements are short, clear, testable, and reasonably comprehensive. Tool 10 in Chapter 5 offers a longlist of indicators based on this set.

VAUBAN: THE ULTIMATE CHILD-FRIENDLY NEIGHBOURHOOD?

In any ranking of child-friendliness, one neighbourhood that would score highly is Vauban, a masterplanned district in the German city of Freiburg (see pp 77-80). Vauban is a compact, mixed-use neighbourhood with a population of around 5,500 that was built on a former military site in the 1990s and 2000s. It has a strong emphasis on well-designed, accessible green public space, good walking and cycling networks, and a direct tram service to the city centre (see Figure 2.5). The masterplanning was influenced by a large academic study into children's play and independent mobility.[15] Car ownership is particularly low; most roads have no on-street parking and limited car access, and almost all cars are required to be parked in one of three peripheral multi-storey car parks.

Figure 2.5 Aerial view of Vauban

Figure 2.6 Well overlooked, playful, green public space in Vauban

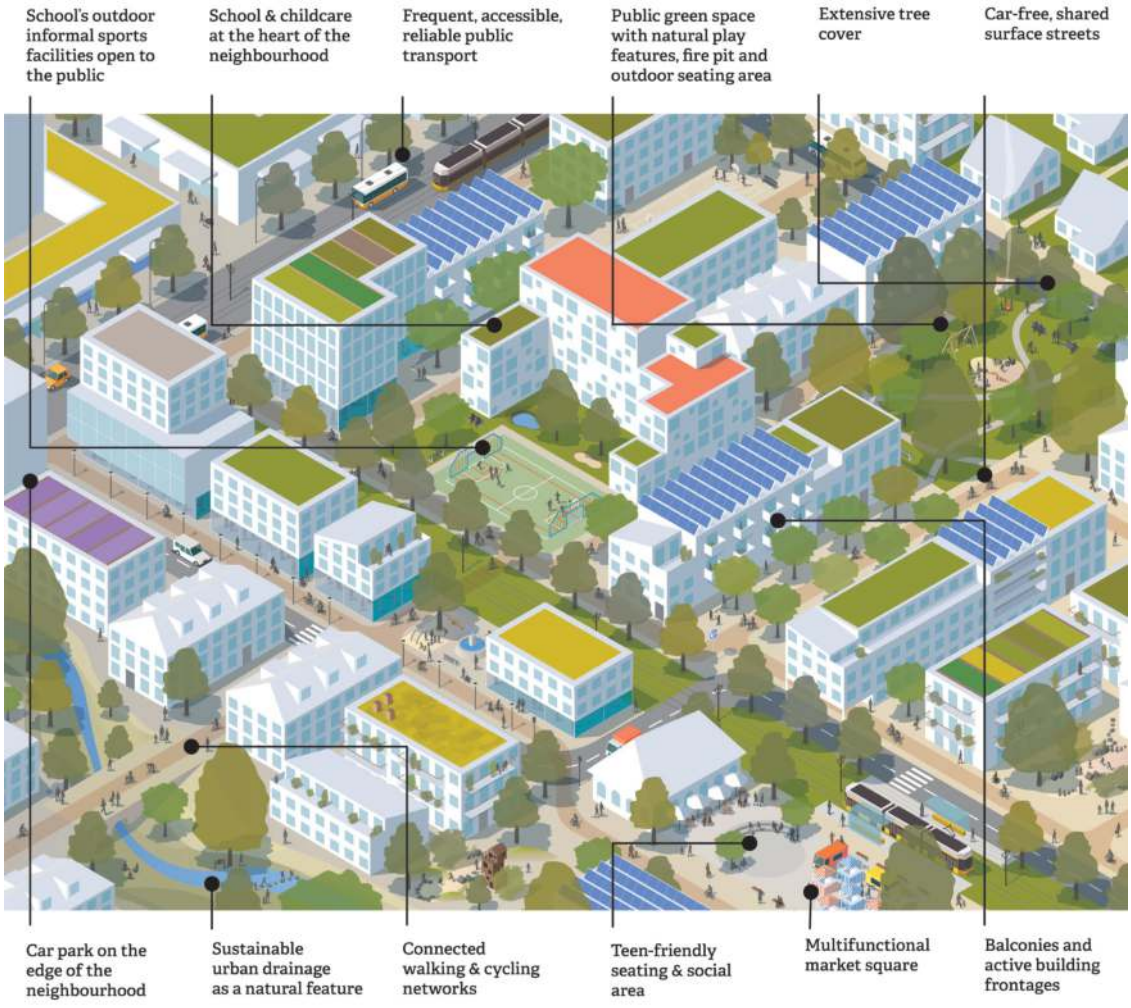


Figure 2.7 The ultimate child-friendly neighbourhood?

Vauban is medium-high density, with almost all housing in the form of 4–5-storey apartments. All dwellings offer direct, car-free access to public space (either green space or restricted access roads). There are few dedicated play spaces; for the most part, play structures and features are integrated into the wider landscape. Public space is well-overlooked (see Figure 2.6, and Chapter 4, Figures 4.13 and 4.14).

Figure 2.7 shows an idealized neighbourhood, inspired by (and loosely modelled on) Vauban, which pulls together the key physical features of child-friendly urban planning and design in diagrammatic form. The question

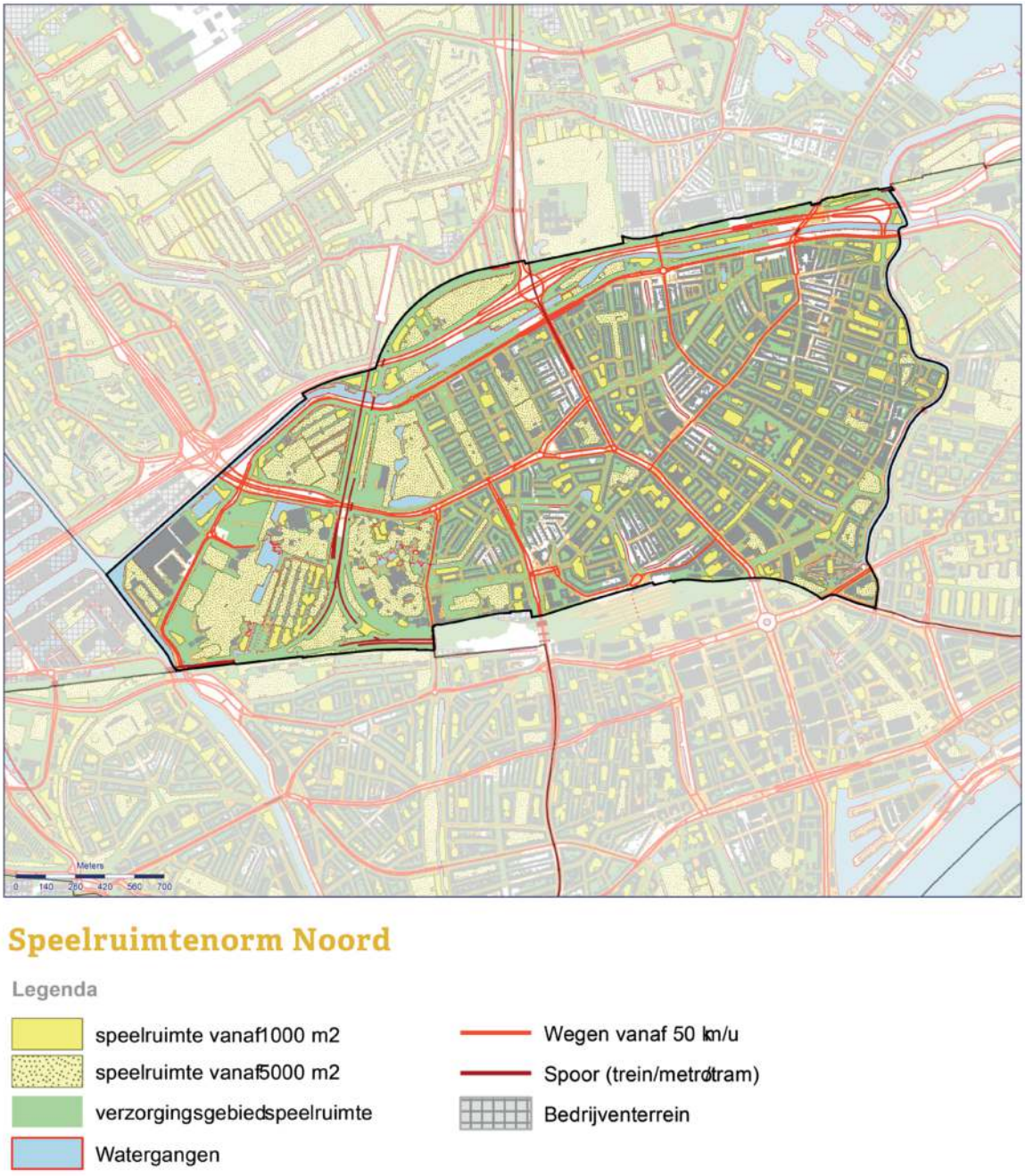


Figure 3.1. Map showing geodata analysis of play space planning norms in one Rotterdam district

KEY FEATURES OF ROTTERDAM'S APPROACH

- a rationale that is closely linked to the city's strategic vision
- attention to spaces for play/recreation and to mobility
- a focus on the residential neighbourhood as the unit of analysis for spaces and facilities
- extensive evaluation
- evolution over a 12-year period, across a number of political cycles
- flexible, participatory and opportunistic implementation.

Phase 3

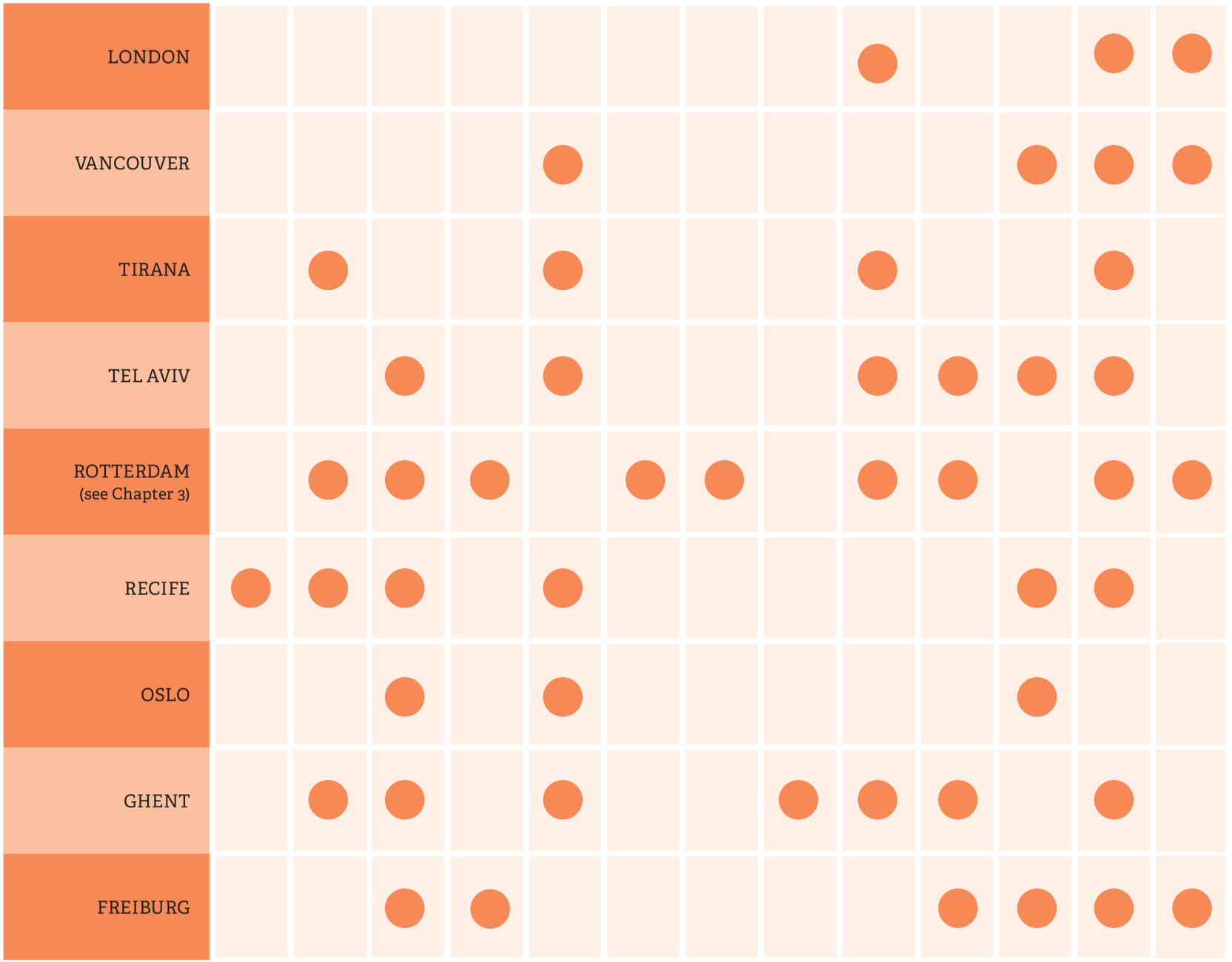
The third phase, called 'Promising Neighbourhoods' ('Kansrijke Wijken'), was another four-year-long investment programme, and ran between 2014 and 2018. It saw €7.5 million (£7 million) invested in nine administrative districts. Like the first phase, it aimed at attracting and retaining families with children. But it had a broader scope, including significant programmes on education as well as housing and public space, in part in response to the Rekenkamer evaluation discussed above. It covered a greater geographical area, taking in nine districts in total (all city fringe areas, with three receiving more attention than the other six). It looked at programming and events as well as physical changes. And it placed greater emphasis on citizen participation (involving adults and children) than its predecessor.

Planning norms based on the lessons from the first phase were refined and applied across the nine Promising Neighbourhood districts. Planners used

Figure 3.2 Map of key interventions in Rotte quarter

	ANTWERP	BARCELONA	BOULDER	EDMONTON	FORTALEZA
Principle 1: DIVERSITY, EQUALITY AND INCLUSION			●		●
Principle 2: VISION AND VALUES					●
Principle 3: CHILDREN'S INVOLVEMENT	●		●		●
Principle 4: NEIGHBOURHOOD FOCUS	●				
Principle 5: GET THE RIGHT PEOPLE AND POLICIES	●		●	●	
Principle 6: COUNT WHAT COUNTS	●	●			●
Principle 7: REGULATION, MANAGEMENT AND MAINTENANCE	●				
Principle 8: OPPORTUNISM	●			●	●
Principle 9: PROGRAMMING				●	
Building Block 1: STREETS		●			●
Building Block 2: WALKING AND CYCLING NETWORKS					
Building Block 3: PUBLIC SPACE	●	●	●	●	
Building Block 4: HOUSING	●				

Table 4.1 City highlights


LONDON
VANCOUVER
TIRANA
TEL AVIV
ROTTERDAM
(see Chapter 3)
RECIFE
OSLO
GHENT
FREIBURG

BOULDER, USA

INITIATIVES	Growing Up Boulder, a participation project based in the city's university, has had a tangible impact on municipal planning, public space and transport initiatives. It has also produced a popular, high-profile child-friendly printed and digital map of the city.
MUNICIPAL RESOURCES (GBP EQUIVALENT)	Annual funding of £57,000 from the municipality, supplemented by grants and support in kind from University of Colorado.
POPULATION	108,507
POPULATION DENSITY	1,621/sq km (29% of the population density of London)

The city of Boulder, Colorado, is possibly unique in North America in deploying a sustained, child-friendly lens to municipal planning and urban design, through the Growing Up Boulder (GUB) project. The city has long been host to a global centre of academic excellence in children's rights and participatory planning based at the University of Colorado Boulder. In 2009 David Driskell – a leading figure in children's participatory planning worldwide – became the city's head of planning, leading to the creation of GUB as a formal partnership.[17]

With revenue funding from the municipality and foundations, and significant in-kind support from the university, GUB has forged constructive partnerships with several municipal departments. An annual work programme is agreed with municipal community engagement officers who broker projects with different departments.

From the point of view of municipal officers, GUB is particularly valuable in helping to defuse community and stakeholder tensions, especially around contentious proposals, and also in providing a balance and counterweight to some well-organised adult interest groups. One site-based project is the Boulder Civic Area (illustrated in Figure 4.8).

In 2012, the City of Boulder began a visioning process to improve the city's downtown Civic Area, a 10.5ha space next to Boulder Creek. The project aimed to develop an urban design vision, to guide decisions for building in a flood

Figure 4.8 Natural play features, Boulder Civic Area, Colorado

zone, and to explore potential recreational and cultural uses. GUB worked with the city to inform the redesign of the first phase of the project, between 2012 and 2018. GUB engaged with schools, after-school programmes for underrepresented youth and a local preschool. Methods ranged from youth interviewing relatives to 3-D model building (see Figure 5.4) to young people testifying before the city council. Participating children told the city they wanted more opportunities for play, safety enhancements, experiences with nature, art, places to hang out and water features. The key spaces in the resulting scheme, including child-friendly see-through elements in a bridge, naturalised access points along the creek, pollinator-friendly plantings, water-education play features and rope-and-rock climbing features, were originally envisioned by GUB participants. GUB input also ensured that bike lanes through the area are properly segregated from walking paths.

GUB's profile and activity have increased over recent years, and encouragingly the project has outlasted Driskell's tenure. In 2019 it produced a child-friendly digital map, developed with local children and highlighting features of interest to them. Paper copies are handed out to tourists and visitors (see Figure 4.9), while a large-scale version has been installed in a shopping mall.

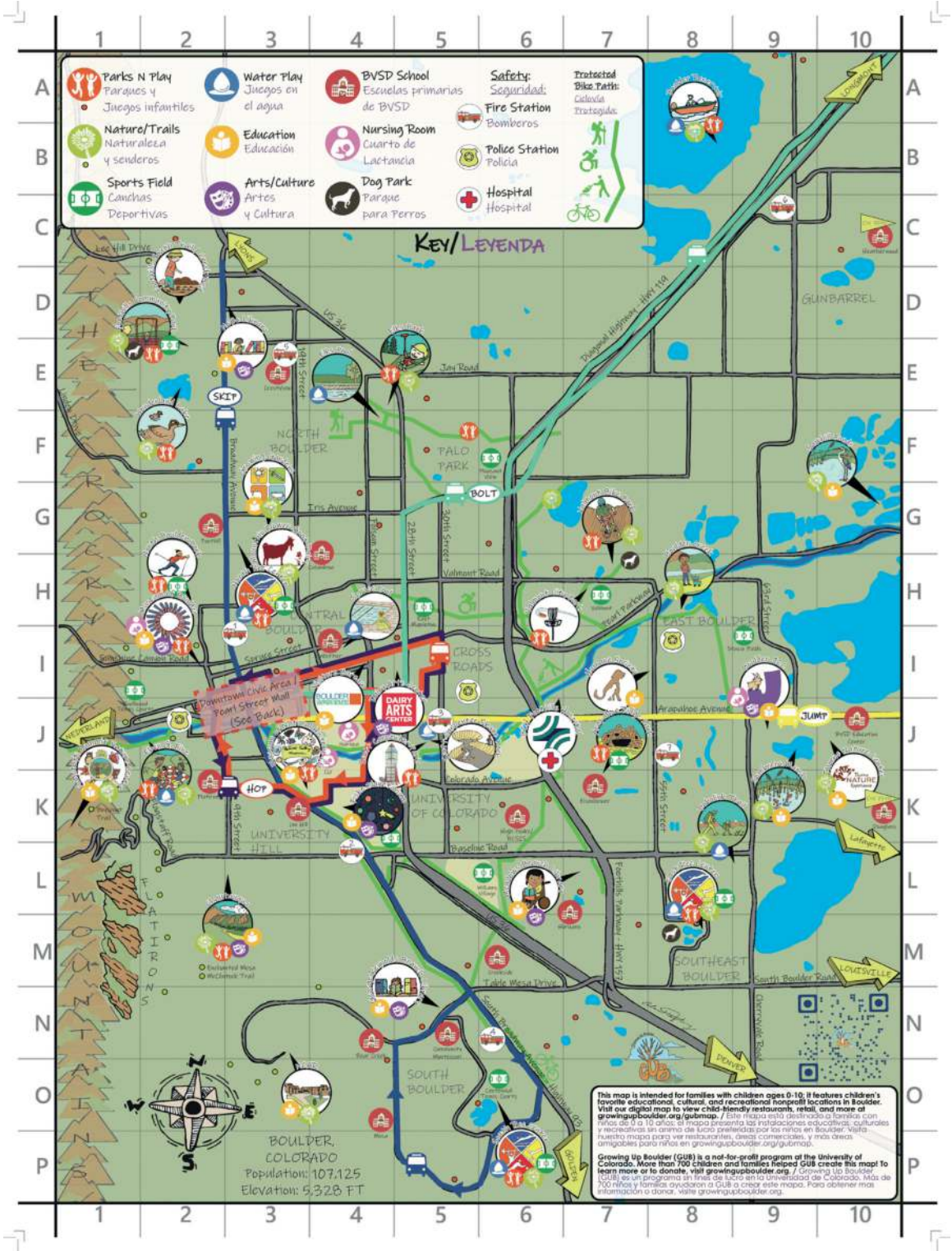


Figure 4.9 Boulder kid-friendly map

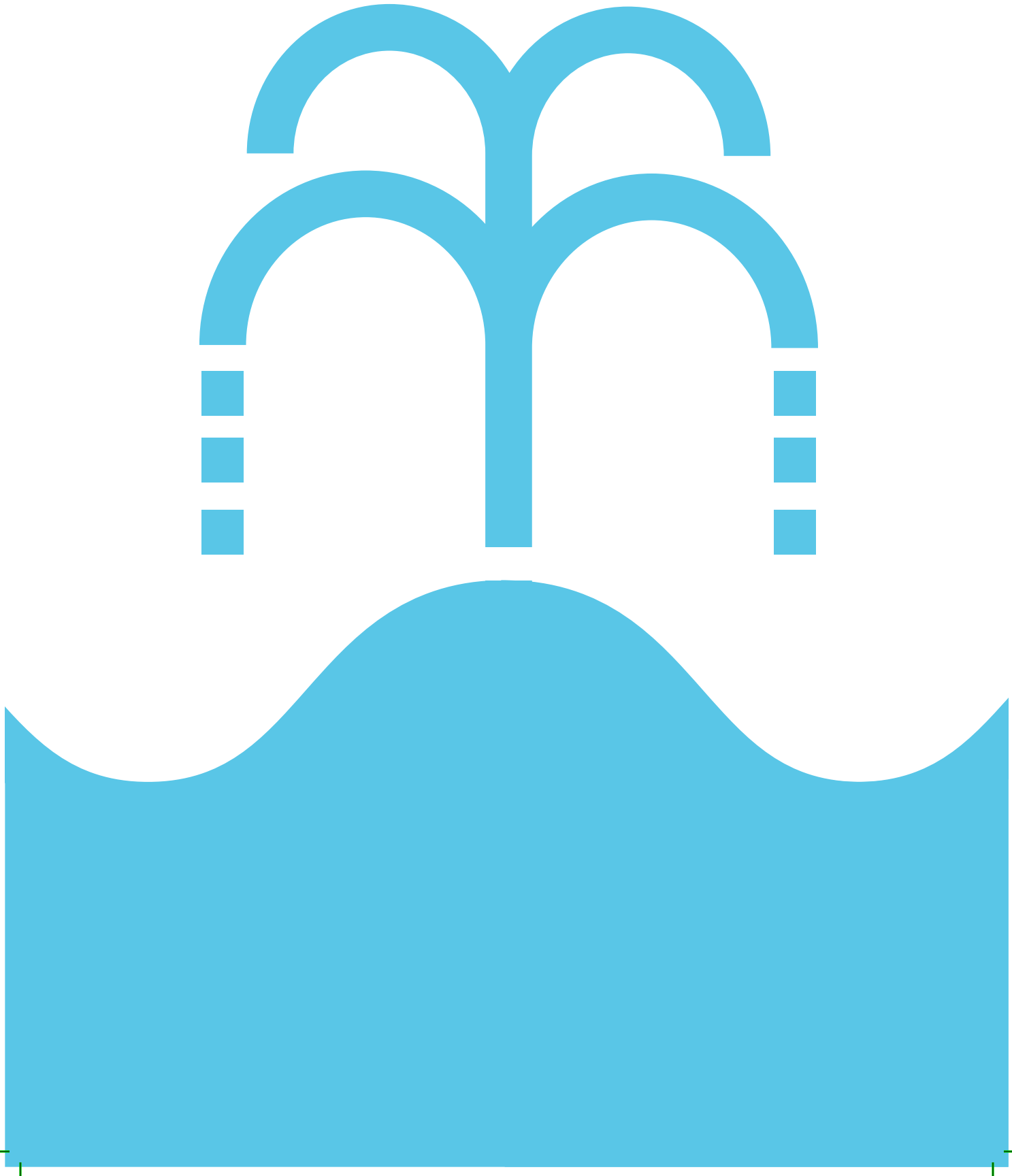
EDMONTON, CANADA

INITIATIVES	The city's downtown area is the main focus for child-friendly public space improvements that aim to attract families and encourage tourism all year round (a challenge given the city's long, severely cold winters).
MUNICIPAL RESOURCES (GBP EQUIVALENT)	Municipal officer (85% of full time); £23,000 programming budget.
POPULATION	933,000
POPULATION DENSITY	1,360/sq km (25% of the population density of London)

Edmonton is growing fast and has a young age profile. The city's downtown is set to densify, with its residential population more than doubling, from around 14,000 in 2016 to around 40,000 by 2040.[18] The municipality sees public space as a key ingredient in attracting and retaining these new residents, and also encouraging visitors to the city centre from surrounding suburbs and beyond. These factors explain why the city's child-friendly initiatives have a distinctly downtown focus (combined with a playful, wintry flavour, thanks to its long, cold winters).

The city's civic precinct around Churchill Square and City Hall Plaza is at the centre of municipal plans to revive its downtown. The area is home to some key cultural and public administrative buildings, and the site of a suite of public-realm projects.

Hence Edmonton's child-friendly urban planning interventions are partly opportunistic (influencing a major public space development programme) and partly demonstration projects, with the longer-term goal of taking successful approaches to other parts of the city.[19] One example is a new park, Alex Decoteau Park, completed in 2017, which includes a playful water feature as well as some grassed space (a rare feature in the city centre) and generous seating. The city is also taking forward ideas for child-friendly public art to be included in the revamped civic precinct.[20]



Chapter 5

MAKING IT HAPPEN: PRINCIPLES, BUILDING BLOCKS AND TOOLS

> **I don't want a childhood city, I want a city where the children live in the same world I do... If the claim of children to share the city is admitted, the whole environment has to be designed and shaped with their needs in mind."**
>
> — Colin Ward, *The Child in the City.*[1]

CONNECTED	Walking routes should connect all areas with key 'attractors' such as public transport stops, schools, work and leisure destinations. Routes should, form a comprehensive network.
CONVIVIAL	Walking routes and public spaces should be pleasant to use and allow walkers and other road users to interact. They should be safe, inviting and enlivened by diverse activities.
CONSPICUOUS	Routes should be clear and legible, if necessary, with the help of signposting and waymarking. Lighting should be considered for dark areas and popular routes at night.
COMFORTABLE	Comfortable walking requires high-quality pavements, attractive landscapes and buildings, and as much freedom as possible from the noise, fumes and harassment of vehicles. Opportunities for rest and shelter should be provided, and public toilets at strategic locations.
CONVENIENT	Routes should be direct and designed for the convenience of those on foot, not those in vehicles. This should apply to all users, including those whose mobility is impaired. Road crossings should be provided as a right and on desire lines.[76]

Table 5.4: The five Cs of walking networks

around schools and childcare settings. High kerbs, steps, narrow pavements and uneven surfaces make using pushchairs difficult, but simple design measures can make a difference (see Figure 5.17).

One of the more dramatic global trends in urban transport has been the rapid growth in interest in cycling. There is a consensus that bikes should have a far greater role in urban mobility, especially for shorter local trips (which are particularly important for children and caregivers). Alongside this growth, the choice of types of bicycle has expanded enormously. E-bikes and cargo bikes in particular have opened up cycling as an option to users who, perhaps for reasons of distance, physique or lifestyle, would not have previously considered it.

For cycling to become a popular, mainstream choice – especially for future generations of urban commuters – children need to be seen as a legitimate

Figure 5.18 Family cycling in Vancouver

user group. Writers, cycling advocates and Vancouverites Chris and Melissa Bruntlett toured the Netherlands with their seven- and nine-year-old children in 2016 to study the Dutch approach to cycling infrastructure and policy. They were struck by the unrivalled freedom and independence enjoyed by Dutch children, often seen riding around in groups without adult supervision. They put this down to two key ingredients: traffic calming and network planning.

First and foremost, the speed, volume and circulation of motor vehicles is reduced, with slow residential streets that are accessed only by local traffic. Second, cities have a cohesive, direct, safe, attractive and comfortable network of cycling infrastructure, taking into consideration a wide variety of users, distances and journey types (see Figure 5.18). These routes can be mixed traffic on quiet residential streets, but are physically separated where dictated by the speeds and volumes of motor vehicles.

> **"The off-street protected bike routes are a really good benefit for families. Families start cycling and kids are likely to keep it up, and it's a great thing for teenagers to have the further distance that mobility can bring."**
>
> Pat St Clair, planner, City of Vancouver

TOOL 15
TEN LANDSCAPE-LED PLAY DESIGN OBJECTIVES

1. Get the location right: the more central and well-connected, the better.
2. Ensure entry points and signage are attractive, clear and well-located.
3. Think carefully about boundaries around the space and between sub-spaces, and avoid rigid fencing.
4. Provide generous seating and social space suitable for children and adults.
5. Provide shade, shelter and lighting that is adapted for the local climate.
6. Create a distinctive, welcoming ambience that encourages people to linger.
7. Design for effective management/ maintenance (see Table 5.2) - however, spaces do not need to be spotless.
8. Use sustainable materials.
9. Allow for change and evolution.
10. Maximise the range and inclusivity of play affordances.

conventional fixed-equipment play areas, with a wider spectrum of offers that appeal to all the senses, as well as a greater emphasis on nature.

Landscape-led play design was brought into mainstream play space design thinking in the publication *Design for Play*, produced in 2007 as the key design guidance for the UK government's national play strategy.[87] While the strategy is long gone (as is the political support for it) the guidance still sets out a clear, progressive approach, and provides the basis for the ten design objectives set out in Tool 15.

Figure 5.19 An unintentional natural play feature, Clissold Park, London

Figure 5.20 Causewayhead Park, Stirling, Scotland

Play affordances

Play affordances can be further unpacked in five more detailed design objectives. First, make use of natural elements: grassy mounds and ditches, trees, robust planting, logs, boulders, sand and other loose materials, and water all expand the play experiences on offer, adding complexity, texture, seasonality and richness, stimulating all the senses and building hands-on connections with nature. Long grass, plant debris, twigs and dirt can create play experiences of their own (see Figure 5.19, and the images of Freiburg in Chapter 4).

Second, provide a wide range of play affordances: not only inspired by equipment (swinging, climbing, sliding, spinning) but also ones that are less tied to equipment, including construction play (for which sand and water are ideal: see Figure 5.20), imaginative play, 'small world' play (where children play with small toys and found objects, as in Figure 5.19), dramatic and performative play, chase games, ball games and wheeled play (for one high-profile example, Westblaak in Rotterdam, see p 52).

Third, make spaces equally appealing to disabled and non-disabled children. This means looking at the space as a whole, and considering what experiences it offers to children with a range of abilities and disabilities,