

Creating child friendly cities: the case of Denver, USA

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Referencing the UN Convention on the Rights of the Child as the basis to make cities more supportive of children's needs, this paper discusses the emergence and characteristics of child friendly cities. It then reviews the development of an initiative in Denver, Colorado, to become the number one child friendly city in the USA, and describes Learning Landscapes and Safe Routes to School as examples of community-based efforts currently underway. The conclusion draws lessons from the experience so far.

1. INTRODUCTION

The planning and development of contemporary cities support, first and foremost, the production and consumption of goods and services. A further goal is efficient operation of auxiliary systems such as transportation, communication and utility infrastructure. The primary beneficiaries are the chief producers and consumers: paid adult workers and the organisations that employ them. The needs of other groups take a back seat. This is especially so in market-based societies where access to goods and services is based on ability to pay a price that guarantees suppliers a profit. Those who cannot translate their needs into a market demand are largely left out. They include people with low disposable incomes ('the urban poor'), people with disabilities, many of the elderly and children. Among these disadvantaged groups, children deserve special attention because they, more than others, lack political and economic power.

The UN Convention on the Rights of the Child (CRC), adopted by the General Assembly in 1989,¹ created a basis to address this lack of representation. The CRC spells out many rights of children, including the right 'to have their voices heard in all matters affecting them'. State governments have a mandate to support implementation of CRC principles at local level. Although most city governments have been slow to establish participatory processes with children and youth, there is a growing interest in many countries to promote child friendly cities (CFCs). Following the Habitat II Summit in Istanbul in 1996, UNICEF established a CFC Secretariat at the Innocenti Research Centre in Florence, Italy. Owing to a re-prioritisation of funding, its operations were scaled down in December 2005.² However, its website remains (www.childfriendlycities.org) and a CFC network in Europe now organises an annual conference. Similar networks exist in Canada and Australia. Recent years have seen CFC declarations and aspirations from London to San Salvador and from St Petersburg to Amman, and exciting CFC initiatives and

programmes are underway in many Latin American, African and Asian countries.

As ever larger numbers of children live in cities worldwide, there is increasing acknowledgement that urban environments *per se* are not just sources of pollution and crime and generally undesirable places for growing up, but they also provide opportunities for positive childhood experiences³ and can be made into 'nests' for healthy development.^{4–6} The next section briefly discusses the importance of engineering in this regard.

2. ENGINEERING AND CHILD FRIENDLY CITIES

Public health and quality of life are well recognised goals of municipal engineering, but there is rarely recognition that engineering decisions often impact children in different, more serious and longer lasting ways than adults. Municipal engineers' areas of responsibility are vital to children's health, happiness, long-term development and even survival: the provision of clean water, sanitation, drainage, waste collection and clean air; the types of energy used for cooking, heating and lighting; transportation planning; the siting of parks and open spaces; and human settlement upgrading. One of the goals of a CFC is to integrate awareness of young people's special needs into these areas of planning and practice.

The books *Cities for Children*⁷ and *The Environment for Children*,⁸ commissioned by UNICEF, and *Children's Rights and the Physical Environment*,⁹ commissioned by Save the Children Sweden, discuss these aspects of children's lives in detail, and how even the most cash-strapped municipal governments can orient their decision-making to better meet young people's needs. In the developing world, prioritising the provision of adequate sanitation and clean water at affordable costs for all users will contribute to the survival and health of children in particular. Unsafe water and a lack of basic sanitation and hygiene contribute to the leading killers of children under five, including diarrhoeal diseases, pneumonia and malnutrition, with diarrhoea alone claiming the lives of over 1.5 million young children per year.¹⁰ In areas without indoor plumbing, constructing child-sized latrines close to housing improves health conditions for all ages, as young children cannot control themselves long enough to relieve themselves in a distant field or latrine and often fear using adult latrines. While the importance of clean, uncontaminated water for drinking is well understood, it is often less well appreciated that the quantity of water available is as vital for households with children as its quality. Unless water is

piped indoors or close to homes, families are unable to cook fresh meals easily and to keep food, utensils, cooking surfaces, floors, diapers and children clean.

Research undertaken with older children indicates that the benefits of these provisions extend beyond physical health. When school-aged children and adolescents around the world talk about their environments, they view uncollected garbage, dilapidated streets and housing, and inadequate sanitation and water as reflections of their societies' lack of care for their own worth as well as for the place where they live; the struggle to maintain personal cleanliness under even the most difficult conditions is viewed as a sign of self-respect.¹¹ In addition, bringing piped water close to homes saves children hours of time fetching water from distant sources—time better spent in schoolwork, rest or recreation.

An area of municipal engineering that cuts across all income levels is transportation planning. When cities are planned for cars instead of people, children and youth are among the groups that are disadvantaged, along with the poor, the elderly and the disabled. Like the other groups, they lose access to needed services and resources, or become dependent on their parents to drive them everywhere. In addition, they lose their historical freedom to use streets and sidewalks as their playground where they could meet friends, exercise, observe adult roles and participate in the life of their community.¹² Given young children's inability to judge the speed of moving vehicles and older children's risk taking and drive to explore as widely as possible, traffic accidents are the most serious cause of injury among children.⁹ Parents may try to compensate by going outside with their children, but a Swiss study found that five-year-olds who were unable to play outside unaccompanied were less competent in their interactions with other children and more anxiously dependent on their mothers than others their age who could play outside freely; their mothers were also more nervous and overprotective.¹³ These are some of the reasons why Enrique Penalosa, former Mayor of Bogota, argues that the measure of a good city is that a child on a bicycle can go anywhere safely.

These examples from transportation and sanitation illustrate the importance of engineering to the safety, health and wellbeing of children growing up in cities. However, the role of engineering in the creation of CFCs must be seen in the context of other factors. This broader framework is captured by a provisional set of criteria proposed to evaluate how well cities meet children's needs and to inform CFC policies and programmes.^{14,15} According to these criteria, a CFC includes the following.

- (a) Physical environments that respond to the particular needs and concerns of children, for example, safe crossing zones on the way to school, safe play spaces, child friendly toilets. In fact, all aspects of hospitals, schools, transport systems, traffic management, parks, common space, water supply, waste removal, and so on that help to make cities more child friendly.
- (b) Information, communication and social mobilisation to promote the concept of CFCs and raise awareness of children's requirements with regard to the physical environment.
- (c) Methods to involve children in assessing and improving their own neighbourhoods and give them a voice in local decision-making processes.

- (d) Plans of action with and without the participation of children that aim to improve children's physical environments.
- (e) Training packages/methodologies for different target groups (decision makers, planners, schoolteachers, parents, children, etc.) focused on making improvements of children's physical environments.
- (f) Laws, rules, regulations and planning norms that take children's needs and views into account.
- (g) Municipal-level institutions focused on children's rights (e.g. a special child unit or person within a municipality such as a children's ombudsman).
- (h) Monitoring systems to assess the quality of the environment for children.
- (i) Planning and impact indicators to evaluate impacts of municipal or community actions on children.

These criteria are broadly derived from rights articulated in the CRC. The USA is one of only two countries not to have ratified this convention (the other is Somalia, which lacks an officially recognised government capable of treaty ratification). However, nothing prevents city governments from implementing its principles at the local level. The remainder of this paper describes an initiative to do this in Denver, Colorado.

3. DENVER'S CHILD/YOUTH FRIENDLY CITIES INITIATIVE (CYFC)

In January 2006, the Children, Youth and Environments Center (CYE) at the University of Colorado proposed to the Mayor's Office for Education and Children (MOEC) to make Denver the country's number one CFC in the country (Fig. 1). The proposal met with an enthusiastic response from the executive director who suggested bringing in Assets for Colorado Youth (ACY), a non-profit organisation focused on positive youth development based on creating opportunities for developing strengths (rather than accentuating negatives like substance abuse and delinquency). A series of preparatory meetings led up to the launch of Denver's CYFC initiative on 13 June 2006, with presentations by the Mayor, the superintendent of schools and the university chancellor, among others, with leaders from more than 60 organisations present. (The term child/youth friendly city was chosen to reflect a concern with the needs of a wider age group—roughly the first two decades of life.)



Fig. 1. Denver aims to be the most child-friendly city in the USA (photo: J. Kirschke and N. Drobeck)

With major stakeholders onboard, the orientation of the initiative shifted from persuasion to implementation, based on the following principles

- (a) developing an inclusive, participatory process that is representative of all stakeholders
- (b) supporting meaningful participation by children and youth
- (c) leveraging and building upon existing resources
- (d) aiming for a change of culture and systems
- (e) creating a city full of child and youth friendly places
- (f) focusing on the specific needs of children and youth based on the continuum of healthy development.

Stakeholders then developed an organisational structure for implementation of the initiative.

3.1. Structure of the CYFC initiative

The organisational structure of Denver's CYFC initiative aims to harness the potential of the city on behalf of children and youth by providing an integrated response and mobilising resources to meet those needs. A critical component of CYFCs is the opportunity for children and youth to participate in decision-making processes on matters that affect their lives. Therefore, the CYFC organisational structure was designed to include their voices as a driving force for the initiative, while at the same time accommodating the key support roles of adults in effective adult–youth partnerships.

The initiative recognised early on that adult–youth partnerships require extensive training and reflection processes to be effective. Involving youth meaningfully takes time, and early merging of adults and youth into one entity was not in the best interests of the initiative during its initial phases. At the start, no young people were aware of the CYFC initiative, and it took time and resources to mobilise them and build their capacities for participation. Furthermore, while many adults involved in the initiative represent youth organisations or entities interested in youth issues, not all of them were adequately prepared to support youth participation.

The organisational structure for Denver's CYFC initiative thus includes a parallel combination of adult and youth groups that work to develop the unique skills and capacities they need. The resulting structure comprises an Executive Committee, an Adult Steering Committee, a Youth Steering Committee, subcommittees and the CYFC Coalition (Fig. 2).

The Executive Committee includes representatives from the three founding organisations, the MOEC, ACY and the CYE. Its seven members include public officials, youth development specialists and academics. The Executive Committee began the CYFC initiative and mobilised key stakeholders early on. It helps to coordinate and conceptualise the overall initiative, recruits stakeholders and addresses matters that require a timely response. It will soon involve representation from the Youth Steering Committee.

The main decision-making bodies for the initiative are the CYFC Adult Steering Committee and the CYFC Youth Steering Committee; each meets separately. Adult leaders facilitate communication and coordination between the two groups and

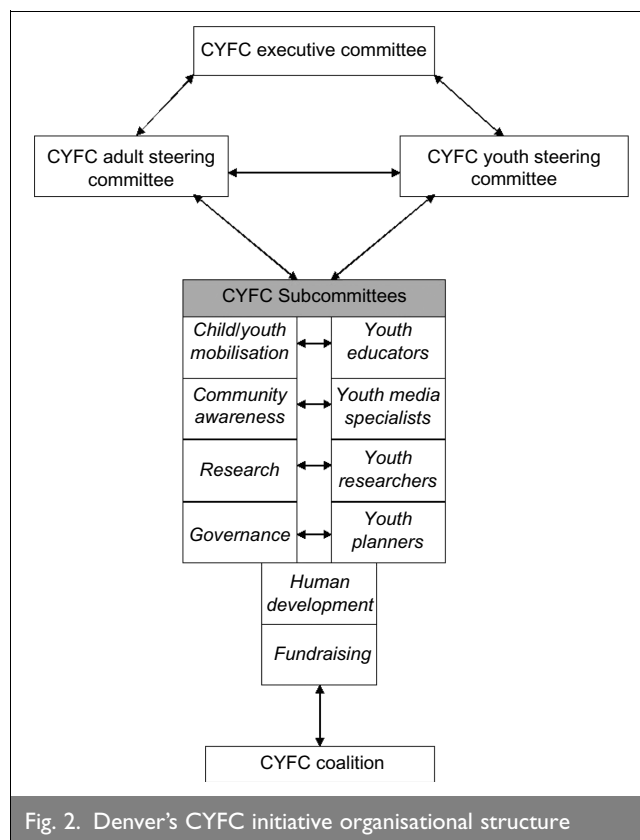


Fig. 2. Denver's CYFC initiative organisational structure

ensure that input from the Youth Steering Committee is critical in directing the initiative. After further training in youth–adult partnerships, both groups will merge into one.

The Adult Steering Committees consist of 30 members, including the Executive Committee, Chairs of the CYFC subcommittees and representatives from key stakeholder organisations within the City of Denver (e.g. Denver business community, the City Planning Department and Denver public schools). Through monthly meetings, the Adult Steering Committee guides and supports the initiative by linking it to human and financial resources, representing the CYFC subcommittees and providing new insights and opportunities for the initiative.

The Youth Steering Committee consists of 20 members, aged 9 to 19, recruited from youth organisations, schools and CYFC stakeholder networks. It meets weekly and is the primary youth decision-making entity, voice and leadership for the initiative. It provides a vision for the initiative grounded in the realities of the young people. It is diverse in terms of gender, age, race/ethnicity, class and ability. Coalition members helped to identify and recruit youth. To date, two adult Youth Outreach Coordinators have been primarily responsible for conceptualising the youth engagement piece of the initiative. With seed money from the City of Denver, an experienced youth leader from the Mayor's Youth Commission was hired as a Youth Outreach Coordinator to work with the adult coordinators.

Recruitment required common talking points about the importance of the initiative to Denver's youth, families and communities, as well as the city as a whole, which could be understood by adults and youth alike. Because the USA has not ratified the UN CRC, the initiative had to develop other strategies for engaging Denver's youth and communities, including

reflection on 'the state of Denver's youth' related to services, resource allocation and other issues.

The Youth Steering Committee first met at a leadership summit sponsored by the MOEC, along with the Mayor's Youth Commission, to learn about the initiative in the context of other youth-led organisations in Colorado. These young people then helped design a larger youth mobilisation effort called You(th) Speak. This day-long event aimed to provide an opportunity for young people to voice their opinions about issues that affect their lives in Denver and to launch the CYFC initiative to the public, especially Denver's youth. You(th) Speak involved 150 young people aged 8-20 and encouraged the participation of young people who live in, go to school in or are otherwise connected to the city of Denver. In addition, 75 adults, including family members, public officials, youth organisation representatives, CYFC stakeholders and sponsors of the event attended. Youth and adults were recruited by CYFC coalition members, in particular, the Adult and Youth Steering Committees.

The Youth Steering Committee designed You(th) Speak with adult support and sponsorship. They formatted it to be a fun, inviting celebration of young people, organised around 'lounge communities' in which small groups of young people discussed how to make Denver a CYFC. Each lounge community was co-facilitated by a Youth Steering Committee member, an adult facilitator and a Spanish-speaking translator. The Youth Steering Committee lounge identified community topics through a series of workshops and included diverse formats such as mapping and role playing. Topics included safety and legal issues affecting Denver's youth, health, education, youth-adult perceptions, neighbourhood perspectives, youth engagement and an 'express yourself' lounge in which youth used poetry and graffiti mural art to articulate youth issues.

The challenge for CYFC since You(th) Speak is to continue to support youth participation through the Youth Steering Committee and youth-led subcommittees, and to share the findings from the event with the coalition and other stakeholders.

The CYFC subcommittees meet bi-monthly and focus on specific themes and tangible projects. There are four adult- and youth-led subcommittees that focus on a parallel topic or theme, and two adult-led subcommittees that do not yet have a youth equivalent. Chairs and co-chairs report to and participate in the both the Adult and Youth Steering Committees. The youth-led subcommittees also receive technical assistance and skills training.

Finally, to keep all stakeholders involved in and informed about the CYFC initiative, as well as to recruit additional stakeholders, the initiative hosts quarterly coalition meetings that are open to the public during non-school hours.

3.2. Child friendly change: learning landscapes

Denver's Learning Landscapes programme provides an excellent model for creating city-wide child/youth friendly outdoor play environments. Since 1998, the Learning Landscape initiative has transformed 46 neglected Denver elementary school yards into attractive and safe multi-use resources that are tailored to the needs and desires of local communities. These school yards serve more than 18 000 low-income children (of whom over 50%

qualify for free or reduced-price lunch programmes). The Learning Landscapes programme, which represents an investment of more than \$20 million, has been sponsored by a broad-based public-private partnership and directed by faculty and students from the Department of Landscape Architecture at the University of Colorado. With a budget of approximately \$450 000 per school yard, the University works with school officials, teachers, students and community members to design new school yards that respond to the culture and aesthetic tastes of neighbourhood residents and the developmental needs of children. In 2003, Denver city voters passed a \$10 million bond to continue funding Learning Landscapes. Plans for renovating the remaining Denver school yards are underway.

Prior to the Learning Landscape initiative, school yards within the Denver public school (DPS) system were, on average, 50 years old and had suffered neglect for many years. In 2000, 75 of the DPS elementary school yards were identified as requiring moderate to extensive renovation to meet standards. Those most in disrepair were in inner-city, high-poverty areas. They consisted of hard play surfaces such as gravel or concrete, were devoid of plant life and had limited play equipment. Playgrounds at these schools were considered 'one size fits all', with younger children often using equipment intended for older pupils.

Realising that the design of the outdoor environment should reflect the uniqueness of its location, activities and users, landscape architecture students and professors work with students, teachers, school officials and community members to design new school grounds that reflect the fit and vision of the community. During the planning phase, landscape architecture students participate in meetings with focus groups of children, parents, staff and administrators at each school to identify elements for the proposed site development. Elementary school students create drawings of what they would like, and parents and teachers discuss problems with the current playground. A photo survey of 19 images of possible schoolyard elements serves to solicit initial community/school preferences and encourage everyone to 'think outside of the box'. By asking constituent groups to select their five preferred elements, the landscape architecture students are able to prioritise components for the master plan and generate a list of community needs and desires.

Learning Landscapes transform Denver's rundown school yards by implementing three complementary goals. First, they support children's healthy development, encourage outdoor play and learning, offer socialisation tools and improve opportunities for physical activity. Second, they create multi-generational spaces for outdoor use by all members of the community. Learning Landscapes are designed to support different activities for users of all ages. They are also open to the community for public use before and after school and on weekends. Third, Learning Landscapes form aesthetically pleasing focal points for the community by creating places that reflect the uniqueness of their location and users. More broadly, Learning Landscapes reconnect schools to their communities by facilitating community use and thus sense of ownership of the school yards. Each Learning Landscape includes the following design elements

- (a) community gateways
- (b) shady places
- (c) common areas for gathering



Fig. 3. A view of the pre-existing condition at Columbian Elementary School (photo: A. Al-Rubaiy)



Fig. 4. A view of the water harvest garden at Columbian Elementary School before a volunteer planting (2003) (photo: M. Berquist)

- (d) natural, wild and cultivated gardens
- (e) outdoor art
- (f) improved multi-purpose fields
- (g) improved hard-surface games and educational elements
- (h) developmentally appropriate play equipment with improved accessibility and safety
- (i) creative play elements.

Figures 3 to 5 show the dramatic changes in an elementary school ground before, during and after modification.

3.3. Child friendly change: safe routes to school

In order for children to be able to access and use well-designed public play spaces such as the Learning Landscapes, they must be able to travel safely within their neighbourhood. Consistent with trends in other countries, the percentage of children who walk or cycle to school in the USA has declined dramatically in recent decades, from 42% in 1969 to 13% today (5-15 age group).¹⁶ In response to the need for safe routes to walk and bike to school and to improve overall neighbourhood safety, the CYE is designing and implementing a Safe Routes to School programme



Fig. 5. The garden in 2006 (photo: B. Yost)

for the city of Denver that began in January 2007. It aims to provide children, parents and other community stakeholders with a process for communicating neighbourhood safety concerns and to address these concerns through a community-based approach tailored to the needs of specific neighbourhoods.

Using a web- and interview-based audit method, CYE is conducting comprehensive safe routes assessments in Denver neighbourhoods. The approach helps parents, law enforcement personnel, city planners, parks managers, school administrators and others to evaluate and address risks identified by children themselves. Research shows that children can articulate their concerns about their local environment if provided with the appropriate tools and techniques.¹⁷⁻²⁰ The Denver approach for creating safe routes to school integrates children's neighbourhood concerns into a broader framework of data and analysis about the physical and social character of the routes to and from school. A Safe Routes planning team, representative of neighbourhood stakeholders, will assist in implementing educational, engineering and enforcement changes based on the priorities identified by children and other stakeholders. The programme is only funded for a one-year assessment phase, so leveraging resources for the long-term sustainability of the programme is a primary goal of the planning team.

3.4. Lessons learned

Critical self-reflection is an important element with regards to Denver's CYFC initiative and the Learning Landscapes programme. Both initiatives routinely take time to assess actions undertaken. These assessments offer opportunities to learn from experience. Things that went well and other things that did not go so well both offer lessons that are used to inform and guide future work. Some of these lessons are specific to Denver, but others are more general and may hold value for child friendly efforts in other cities.

- (a) Building partnerships was critical for the success of the Learning Landscapes and the CYFC initiatives. While most school ground improvement projects are small scale and suffer from a lack of capital funding, the Learning Landscape is a city-wide \$20 million initiative. Learning Landscape project leaders attribute much of its success to engaging key stakeholders and building strategic alliances both top-down and the bottom-up. Likewise, the CYFC initiative involves a broad-based collaboration, including leadership from the top,

from the Mayor's office down, non-profit organisations, research networks, community-based organisations, youth-oriented organisations, the business community, and so on. Such collaboration is crucial for reorienting municipal decisions to make children's health and wellbeing a priority. Developing a city-wide coalition helps develop political support and increases access to funding. Consistent with this spirit of partnership, the initiative is different from a youth-driven or youth-led approach, and has adopted as its slogan: 'A City that is Friendly to Children and Youth is a City that is Friendly to All'.

- (b) The process is as important as the product. Adults involved in CYFC and Learning Landscapes often have a wealth of experience and expertise. They may be tempted to apply these assets efficiently to attain agreed upon goals. Although outcomes are important to youth as well, it is also important for them to be able to engage in meaningful ways. Their involvement in the process makes them feel more invested in the results, provides important experiences with local democratic practices and promotes retention of youth participants. For Learning Landscapes, meaningful engagement by youth is critical for the sustainability of school playgrounds. Students' participation in their design and build generates a sense of ownership that minimises graffiti and vandalism and fosters a culture of community stewardship and long-term maintenance.
- (c) The process takes time. Working with children and youth makes urban development and planning more complex and time consuming. Developing and honing skills in problem identification, gathering information and presenting at public meetings all take time and create a process that is different for youth and adults. This operating on parallel but separate tracks potentially engenders misunderstandings, accentuating the need for training of adults and youth in partnership work.

Next steps for the initiative involve engaging a broad group of citizens in discussions about Denver as a CYFC. These discussions will take place through a city-wide campaign to gather 10 000 opinions and collect information about existing resources for children, youth and families. The CYFC Steering Committee considers this the first step in moving toward a youth master planning process.

To maintain the momentum of Denver's CYFC initiative, it will become increasingly important to establish clear benchmarks that can demonstrate progress towards the overall goal of making Denver the number one CFC in the USA. Although any such claim will necessarily be political and contestable, it helps mobilise city resources for children and youth in more strategic ways that are more targeted and better coordinated than *ad hoc* programmes and projects.

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