Child-Friendly Neighbourhood

To regenerate neighbourhoods of North Tower Hamlets by improving living environment and public space with child-friendly concept.
# Child-Friendly Neighbourhood

To regenerate neighbourhoods of North Tower Hamlets by improving living environment and public space with child-friendly concept

<table>
<thead>
<tr>
<th>Urban Regeneration Graduation Lab Master Thesis Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project</strong></td>
</tr>
<tr>
<td><strong>Student</strong></td>
</tr>
<tr>
<td><strong>Project Mentors</strong></td>
</tr>
</tbody>
</table>
| 1st Mentor | Vincent Nadin, Prof. V.  
Chair of Spatial Planning & Strategy, Urbanism |
| 2nd Mentor | John Westrik, Ir. J.A.  
Chair of Urban Compositions, Urbanism |
| 3rd Mentor | Clarine J. van Oel, Dr. C.J. van Oel  
Chair of Sustainable Housing Transform, Real Estate and Housing |
| **Date** | 29 June, 2010 |
This is a Master Thesis Report of Urbanism at the faculty of Architecture in Technical University of Delft. This Thesis proposes Design Method of Child Friendly Neighbourhood by dealing with complex urban disparity problems in Tower Hamlets. In this thesis, I tried to suggest how multiply deprived location can get a opportunity to regenerate even though it is not located on the economically strategic position.

First of all, I would like to acknowledge the valuable support and guidance from three of mentors:
1st Mentor Vincent Nadin, Chair of Spatial Planning & Strategy, Urbanism
2nd Mentor John Westrik, Chair of Urban Compositions, Urbanism
3rd Mentor Clarine J. van Oel, Chair of Sustainable Housing Transform, Real Estate and Housing

My thanks go to all my urban regeneration studio members and tutors. Invaluable experience from studio activity made the life here much enjoyable.

I also want to thank all my family members and friends, especially my mother’s cook from Korea encourage me to work with happiness and Dr Chae’s help for making booklet also great support.

Finally, grateful thanks also need to go to my husband Master Dong. I has been enjoyed the life in Delft within his great support.

Hyeran.Lee
Delft, 29 June 2010
# Introduction

## Chapter 1 : Thesis plan

1.1 Project aim

1.2 Motivation

1.3 Main problem

1.4 Research question

1.5 Methodology

1.6 Relevance

1.7 Schedule

## Chapter 2 : Child-Friendly City / Neighbourhood

2.1 Child Friendly City _CFC

2.2 Child Friendly Neighbourhood_CFN

   - Child Friendly Environment
   - Group of Children
   - Child Friendly Neighbourhood
   - Measuring Child Friendliness
   - Child Friendly Design

2.3 Workshop for Child Friendly Design

## Chapter 3 : Project area

3.1 General London profile

3.2 Ethnicity in London / Tower Hamlets

3.3 Thinking about London / Tower Hamlets

3.4 Multiple deprivation of Tower Hamlets

3.5 Project location in Tower Hamlets_LAP2 / LAP6

## Chapter 4 : Research and Conclusion

4.1 Child policy context in London

4.2 Planning policy in London / Tower Hamlets

4.3 Child-friendly-led regeneration

4.4 Multi-purpose facility_case study
Chapter 5 : Site analysis and Design proposal

5.1 Introduction 94
5.2 Strategy and Strategic projects 96
5.3 Site analysis 98
   Spatial structure of Tower Hamlets 98
   District scale 106
   Neighbourhood scale 128
5.4 Neighbourhood design 134
   Project definition 134
   Design principle 137
   Designing for two neighbourhoods Design A / Design B 138
      Problem Statement 138
      Design strategy 142
      Concept 144
      Situation plan and Open school 145
      Child-friendly network 148
      Child-friendly route 150
      Programming 152
      3D views 153
      Perspective and Reference 158
5.5 Phasing and Partnership 166
5.6 District Masterplan 172
5.7 Evaluation 177
5.8 Discussion 179

Conclusion 181

Reference 182
Introduction

The aim of the project is to propose a child-friendly neighbourhood design of the urban regeneration area of Tower Hamlets to give more opportunity for children who live in poverty.

Children are vulnerable in city environments where family breakdown, poverty, neighbourhood conflicts, vandalism and bullying in schools have restricted their access to local social and physical resources. One consequence of the impact of urban risk on children’s lives is their retreat to ‘home environments’, with many parents often prescribing and circumscribing children’s access to the environment (Malone and Hasluck 2002).

Nowadays, child-friendly environments have been studied based on the UN Convention on the Rights of Children (UNCRC). According to the CRC, children’s welfare is a priority and they need opportunities to speak up and have their voices heard. Child-friendly city (CFC) is the embodiment of the UN CRC, committed to guide cities and other systems of local governance in the inclusion of children’s rights as a key component of their goals, policies, programmes and structures. The concept of child-friendly environmental studies has usually been inspired by the concept of child-friendly cities.

The UK government agreed to put the UNCRC into practice (following ratification in 1991) so that the effort for developing policies and strategies put children as a key actor in transforming the urban environment. This approach has been constantly attempted in international context as well as in London. London is attempting to solve urban complex problems by understanding children’s lifestyles and needs.

According to the State of Children Report, despite London’s wealth, children in London continue to experience the highest levels of poverty and inequality of any region in the UK. London has proportionally more children who are at ‘high risk’ from poverty – those in single parent families, those who live in the socially rented housing sector, together with those from ethnic minority groups. Tower Hamlets is one of the Boroughs which has high level of child poverty rate in London which is connected to multiple deprivation with social disparity conditions.

In this project, the international, regional and local context of child friendly policy and strategy which are applied in London will be introduced and child-friendly urban design will be defined by studying child-friendly environment and analyzing physical contexts. Child and play strategy reflects the needs of children and their comments are used as a starting point to solve urban problems. For better child-friendly neighbourhoods, physical environments can be improved with child-friendly concept not only for the children but also with benefits for the local neighbourhoods as a whole.

Finally, designing child-friendly neighbourhoods will help to tackle the poverty issues by providing equal opportunities for children who live in deprived area.
Chapter 1 : Thesis plan

1.1 Project aim
1.2 Motivation
1.3 Main problem
1.4 Research question
1.5 Methodology
1.6 Relevance
1.7 Schedule
1.1 Project aim

Child-friendly neighbourhood design

The aim of the project is to propose a child-friendly neighbourhood design of the urban regeneration area of Tower Hamlets to give more opportunity for children who live in poverty.

Who?  
- children who live in two districts, LAP2 and 6 of Tower Hamlets, London  
- different age group of children  
- different ethnicity and social group of children

These target groups will affect to other groups of people for instance, family, neighbour and local groups.

What?  
- Improvement of public space and network to be more child-friendly  
- Quality of living environment in the regeneration area.

To do so, new developments with economic opportunity and reducing problems by regeneration are considered together at the same time.
Child-Friendly Neighbourhoods in Tower Hamlets  
(by considering sustainable urban regeneration)

Source: author’s own

Why? : - To help to regenerate Tower Hamlets from one of the most deprived areas to a more livable and safe area within sustainable social network, especially for children.

Even though the project solutions will be started from neighbourhood scales, it also concerns complex problems in London generally as a metropolitan area. Small scale interventions may help to solve complex city problems at the metropolitan scale.

How? : - To reach the goals and sustainable urban regeneration, bottom up process which community sector lead can be applied at the first step to reduce the complex problems.

By starting small interventions or events, community sector and volunteering sector can be concrete and then it will be the main energy for constant movements and maintainance.
1.2 Motivation

Child Poverty_BBC News

The Borough of Tower Hamlets is located in inner London next to the City of London which is the richest borough in London. Due to the location, the disparity of wealth is presenting with significant contrast.

This project has been started by reading the BBC news titled ‘London divided by child poverty’.

The Article below is showing that 74% of under 16s in Tower Hamlets live in households dependent on benefits and the level of poverty is rather than serious by ethnic minority group.

Excepts from BBC NEWS 19 Nov, 2002

Personal Impression about London

London is one of the metropolitan cities that Endless Cultural opportunity is available. Enormous cultural legacy produce constant cultural event everyday and lots of event are freely accessible. That is why people fascinated in London but on the other hand there are negative things like the lots of accidental happenings in everyday life.
The research for the mayor says approximately 300,000 children are living in conditions below the official poverty line in inner London - the highest proportion of anywhere in the UK.

London divided

The report, ‘London Divided’, finds that across London as a whole, 41% of children are living in poverty. But if the inner London boroughs are taken as a region on their own, that figure rises to 53%. Percentage of children in poverty after housing costs 2000/01

The analysis supports a report from last year by the London Children’s Rights Commissioner. That report found that in one London borough, Tower Hamlets in the traditional East End, 74% of the under-16s lived in households dependent on benefits. London Divided found the highest levels of poverty in the capital - calculated by working out income after housing costs - among minority ethnic communities. Some 72% of Pakistani and Bangladeshi children in inner London areas were found to live below the poverty line. Among black children, 55% live in families in similar conditions. Unemployment rates showed similar disparities by ethnicity (see graph at the bottom of page).

“These figures alone are nothing shore of a national scandal,” said Mr Livingstone. Health officials are already concerned about a rise in tuberculosis in poor areas of London. They say the disease is exacerbated by poor housing conditions.

---

7 people in one flat where I lived

only 5 people in one terrace house where my friend lived

Public Space - Lack of toilets and rest space, unsafety of roads.

Working - Job disparity

Chapter 1

Thesis Plan
1.3 Main problem

Child poverty and multiple deprivation
(Deprived urban neighborhood/ child poverty/ minority groups)

Greater London is a global city with 7.51 million inhabitants. London has a dynamic and successful economy. It is one of the world’s leading centres for international financial and business services and is the headquarter base for many of the world’s leading companies. London has also become one of the most diverse and culturally rich cities in the world. Over 300 languages are spoken and there are at least 50 non-indigenous communities of 10,000 people or more.

However, in recent decades, economic growth has not benefited all Londoners equally. The disparity in wealth and other quality of life measures between the poorest sections of society and the wealthiest has been growing. London also has some of the highest rates of poverty in the UK: according to the official child poverty measure, 43 per cent of London's children are living in poverty.

Inequality of growth has caused deprived areas such as Tower Hamlets even though it is located in the inner London. The area is showing cultural characteristics by the diversity of ethnic group communities but on the other hand, anti-social behavior rate, unemployment rate by ethnicity and income rate are showing that there is a huge gap between rich and poor areas.

According to the London Children's Rights Commissioner report 2001, Tower Hamlets in the traditional East End, 74% of the under-16s lived in households dependent on benefits. London Divided found the highest levels of poverty in the capital - calculated by working out income after housing costs -among minority ethnic communities. Some 72% of Pakistani and Bangladeshi children in inner London areas were found to live below the poverty line. Among black children, 55% live in families in similar conditions. Unemployment rates showed similar disparities by ethnicity.

http://www.london.gov.uk/thelondonplan/about.jsp

1.4 Research question

Main research question

What interventions could help to create more child-friendly neighbourhoods, particularly in urban planning and design?

Sub research questions

1. What problems does the city create for children?
2. What is the policy context in London for child friendly environment?
3. What is a ‘child-friendly neighbourhood’?
4. How can we measure child friendliness of the neighbourhood?
5. How do children currently use public space?
1.5 Methodology

Political research field diagram

Source: author's own
Scientific research field diagram

Creative research field diagram
1.6 Relevance

Social relevance:

The site area is the most multiply deprived borough in inner London with the problem statements of children poverty, unemployment rate, low quality housing, health and ethnicity according to the inequality of growth in London. By proposing the child-friendly neighbourhood design for children and young people who live in Tower Hamlets, existing social issues could be tackled with fundamental approach to solve urban problems which by enhancing the power of subjects. Consideration of child problems and putting their needs on the centre of the urban planning response is becoming start point to regenerate urban environment with thematic approach. At final, improvement of social, physical and environmental condition together with child life will be the way to reach the sustainable regeneration.

Scientific relevance:

The scheme of political, scientific and creative method will generate field of knowledge for instance, spatial planning policy, Child and Play policy and strategy, quantitative analysis of urban environment and the study about child-friendly environment in the local, regional and international scale. Specially, Child Friendly Cities and Measuring child-friendliness in physical environment will be the key findings from research and the concept of design for the neighbourhood regeneration will be defined from it.

1.7 Schedule

<table>
<thead>
<tr>
<th>Research</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MOTIVATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. LOCATION/CITY PROFILE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. PROBLEM STATEMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PROJECT AIM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. RESEARCH QUESTIONS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. THEORETICAL FRAMEWORK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. RELEVANCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. METHODOLOGY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. TIME SCHEDULE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. LITERATURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. RESEARCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. RESEARCH CONCLUSION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. PROJECT DEFINITION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. GOAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. STRATEGY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. RE-SEARCH (feedback)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. MASTERPLAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. STRATEGIC PROJECT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. CONTEXT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. DESIGN</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. EVALUATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. REFERENCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. CONCLUSION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Expected Final Product:

P1 Presentation. (Problem statement, Project aim, Theoretical framework)
P2 Presentation, Booklet (Research and Conclusion), Thesis plan, Theory review paper
P3 Presentation, Sketch (Re-search, Masterplan, Strategic project)
P4 Presentation, Booklet (Design, Evaluation)
P5 Presentation, Booklet, 3D Image.
Problem Statement

- Regional Scale, global context
- City Scale
  - Inequality of the growth & unemployment
  - Social exclusion/Spatial inequality/Depressed urban neighborhood
- Local Scale
  - Deprivation, housing condition, Ethnicity, Demographics, Education, Unemployment
- Neighborhood Scale
  - Mobility, Public space, Health/Safety
- Child Problems

Motivation

- General city profile
- History

Location and City Profile

- Positioning

Project Aim

- Main question
- Sub questions

Research Question

- Who?
- What?
- Why?
- How?

Methodology

- Political Method
  - Positioning & collection of reports

- Scientific Method
  - Research question
  - Urban condition

- Creative Method
  - Child friendly neighborhood concept

Relevance

- Social
- Scientific

Theoretical Framework

- Positioning
- General city profile
- History

Time Schedule & Product

- Literature study
- Government report
- Analysis of urban structure
- Case study for child friendly design principle

Methodology in Strategic Process

P1
Chapter 1 Thesis Plan

- Problem Statement
- Location and City Profile
- Motivation
- Project Aim
- Research Question
- Relevance
- Theoretical Framework
- Time Schedule & Product
- Literature
- Methodology

- Regional Scale: Global context
- City Scale: Inequality of growth & unemployment/
  Social exclusion/Spatial inequality/Deprived urban neighborhood
- Local Scale: Deprivation, Housing condition, Ethnicity, Demographics, Education, Unemployment
- Neighborhood Scale: Mobility/Public space/Housing/Safety
- Child Problems

- Social
- Scientific

- Main question
- Sub questions

- Political Method
- Scientific Method
- Creative Method

- positioning & collection of reports
- theoretical workflow
- government report
- research question
- urban spatial condition
- child friendly neighbourhood concept
- analysis of urban structure
- case study for child friendly design principle
- literature study

- Planning & child policy framework
- Vision & Perspective regional and Local
- Urban Layers_Spatial structure Program analysis Child friendly city,environment GIS research
- Case Study of synergy programming
- Workshop

- role for region local
- re-search question
- scenario for sustainability
- synergy programming design method

- role for region reduced problems social, ecological economical sustainability criteria child friendly environment quantity, quality and accessibility effects

- Regeneration reducing problem Child environment Sustainable development
Chapter 2 : Child-Friendly City / Neighbourhood

2.1 Child Friendly City _CFC
2.2 Child Friendly Neighbourhood_CFN
   Child Friendly Environment
   Child Friendly Neighbourhood
   Group of Children
   Measuring Child Friendliness
   Child Friendly Design
2.3 Workshop for Child Friendly Design
2.1 Child Friendly City _CFC

International context of CFC

The Child Friendly Cities Initiative (CFCI) was launched by UNICEF and UN-Habitat in 1996 to act on the resolution passed during the second United Nations Conference on Human Settlements (Habitat II) to make cities liveable places for all; in UNICEF terms, aiming to put “children first.” The UN Conference declared that the well-being of children is the ultimate indicator of a healthy habitat, a democratic society and of good governance. Child friendly cities are a platform to take forward the child rights agenda in both the developing world and the industrialized world. The CFCI, a movement gathering together a wide range of partners, advocates for governance approaches and participatory urban management promoting the realization of the rights of the youngest citizens(CFCI 2009 : p1).

Child-Friendly cities

There is no single definition for the CFC due to the changing context of urban conditions. Even for the UNICEF definition of CFC has been developed over time. According to the UNICEF(2004), CFC is a city or more generally a system of local governance, committed to fulfilling children's rights, including their right to:

1. Influence decisions about their city
2. Express their opinion on the city they want
3. Participate in family, community and social life
4. Receive basic services such as health care and education
5. Drink safe water and have access to proper sanitation
6. Be protected from exploitation, violence and abuse
7. Walk safely in the streets on their own
8. Meet friends and play
9. Have green spaces for plants and animals
10. Live in an unpolluted environment
11. Participate in cultural and social events
12. Be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability

A child friendly city is the embodiment of the UNCRC at the local level, which in practice means that children's rights are reflected in policies, laws, programmes and budgets. In a child friendly city, children are active agents; their voices and opinions are taken into consideration and influence decision making processes.

The CFCI is defining the process of becoming child friendly as a number of steps in the CFC Framework as nine components - “building blocks” -:

1. Ensure children's participation
2. Have a child friendly legal framework
3. Develop a city-wide children's rights strategy
4. Create a children's rights unit or have a coordinating mechanism
5. Ensure a child impact assessment and evaluation
6. Have an appropriate children's budget
7. Ensure a regular state of the city's children report
8. Make children's rights known among adults and children
9. Support independent advocacy for children

Source : www.childfriendlycities.org
The diagram below is showing how to build a CFC which is developed by CFCI as a toolkit.

Growing up in cities

UN policy continued to recognize the impact of urbanization on children's lives, and the importance of immediate actions in addressing this impact. A plan was put forward to revive the UNESCO Growing Up in Cities (GUIC) project and the GUIC was officially launched in 1996. GUIC is international project to involve children, young people and governments in evaluating and improving local environments and to understand and respond to these and other questions below:

- What does the process of urbanization mean in the lives of young people?
- From young people's own perspectives, what makes an urban neighborhood a good place in which to grow up?
- Can cities be positive places for young people-places that support and nurture their development as constructive, contributing members of a civil society?

GUIC is a collaborative undertaking of the MOST Programme of UNESCO and interdisciplinary teams of municipal officials, urban professionals, and child advocates around the world, working with young people themselves to create communities that are better places in which to grow up-and therefore, better places for us all.

Growing Up in Cities enlists the energy, ideas, and hope of young people to evaluate their own circumstances, define priorities, and create change. It also enables municipal governments and child advocates to implement the participation principles of the Habitat Agenda, Agenda 21, and the Convention on the Rights of the Child. It provides models of interdisciplinary, intersectional collaboration for listening to the voices of young people and creating more responsive urban policies and practices (UNESCO GUIC, undated). Promoting a Better Quality of Life for All Growing Up in Cities originated in the participatory planning movement of the 1970s, and specifically the ideas of the influential urban planner Kevin Lynch, who initiated the project in 1970 in collaboration with UNESCO. Kevin Lynch, in his book 'Growing up in cities' 1977, proposed a project on young adolescents’ developing experience of the city in response from research in Argentina, Australia, Mexico and Poland under UNESCO’s sponsorship. According to the GUIC website, Lynch believed it was necessary to understand how children and adolescents use and perceive their local environment in order to make a better quality of life a reality for all. These ideas are compatible with contemporary practices to create sustainable human settlements and reduce poverty. Growing Up in Cities builds on these ideas and practices to demonstrate child-based methods of community development that include all sectors of society: children, youth, women and men.

Research across all the GUIC sites has repeatedly illustrated that discovering how to negotiate the social and environmental context of a neighbourhood is important for developing children's independence, resilience and social competence. But a safe, child friendly environment is needed before these important opportunities are going to be freely available to all children: ‘Safe environments nurture children of all ages with opportunities for recreation, learning, social interaction, psychosocial development and cultural expression’ (UNICEF 2001).
## Context of CFC and child policy

**What is a Child Friendly City?**

It is a city, or more generally a system of local governance, committed to fulfilling children's rights, including their right to:

1. Influence decisions about their city
2. Express their opinion on the city they want
3. Participate in family, community and social life
4. Receive basic services such as health care and education
5. Drink safe water and have access to proper sanitation
6. Be protected from exploitation, violence and abuse
7. Walk safely in the streets on their own
8. Meet friends and play
9. Have green spaces for plants and animals
10. Live in an unpolluted environment
11. Participate in cultural and social events
12. Be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability. (UNICEF 2004b)

### International context

**CRC initiative**

- Convention on the Rights of the Child
  - Child friendly city is the embodiment of CRC children's rights are reflected in policies, laws, programmes and budgets.

**The Child Friendly City (CFC) Initiative**

- Aim to guide cities and other systems of local government in the inclusion of children's rights as a key component of their goals, policies, programmes and structures.

**UNESCO's Growing Up in Cities**

**UN Habitat's Safer Cities**

**UNICEF**

(United Nations Children's Fund)

### National context

**London child and young people policy and strategy**

**Play policy and strategy**

### 1970s

**Growing up in cities**

- Origins 1970
- Growing Up in Cities
- Kevin Lynch project with UNESCO

- It was necessary to understand how children and adolescents use and perceive their local environment in order to make a better quality of life a reality for all.

- Argentina, Australia, Mexico, Poland

**1977**

- 'Growing Up in Cities' Published by UNESCO and MIT Press.

**1989**

- UN adopted CRC

**1992**

- UN Conference
- Agenda 21
  - Chapter 25 of Agenda 21 identifies children and youth as major actors who need to be involved in the protection of the environment and action for more equitable and sustainable societies.

**1995**

- Foundation for project implementation
- Connection were made between UNESCO and UNICEF

**1996**

- Habitat 2 Conference in Istanbul
- Habitat Agenda, a programme of action to create more just, liveable and sustainable human settlements.

- Children's special needs, and the important roles that young people can play in their communities, were recognized throughout the document.

**1997**

- Workshop in Amsterdam project and method
- Addis Ababa, Ethiopia; Kigali, Rwanda; Yaounde, Cameroon; Mutare, Zimbabwe; Mumbai, India; Dhaka, Bangladesh; Tehran, Iran; Brasilia, Brazil; Rotterdam, The Netherlands; and Bucharest, Romania.

**2000**

- New project website MOST Programme
- UNESCO homepage
- Growing Up in Cities was featured in a plenary session at the Annual Meeting of the Environmental Design Research Association in San Francisco.


Source: author's own
Chapter 2 Child-Friendly City/Neighbourhood

1989
UN adopted CRC includes a set of clauses regarding children’s right to express their views on matters that affect them. Guidelines for the implementation of the Convention explicitly identify matters concerning the environment as one of the areas in which children should have a voice.

1992
UN Conference Agenda 21 Chapter 25 of Agenda 21 identifies children and youth as major actors who need to be involved in the protection of the environment and action for more equitable and sustainable societies. 1995 Foundation for project implementation Connection were made between UNESCO and UNICEF

1996
Habitat 2 Conference in Istanbul Habitat Agenda, a programme of action to create more just, liveable and sustainable human settlements. Children’s special needs, and the important roles that young people can play in their communities, were recognized throughout the document.

1997
Workshop in Amsterdam project and method Addis Ababa, Ethiopia; Kigali, Rwanda; Yaounde Cameroon; Mutare, Zimbabwe; Mumbai, India; Dhaka, Bangladesh; Tehran, Iran; Brasilia, Brazil; Rotterdam, The Netherlands; Goteberg, Sweden; and Bucharest, Romania.

2000
New project website MOST Programme, UNESCO homepage Growing Up in Cities was featured in a plenary session at the Annual Meeting of the Environmental Design Research Association in San Francisco.

1989
Children Act 1989

1991
UK government agreed to put the UNCRC into practice. (Following ratification in 1991)

2002
Children’s Human rights
2004 Children Act
Every Child Matters (Accompanied by the National Service Framework for Child and Maternal Health)

2007
Monitoring the Well Being of Children in the UK
2005 Guide to Preparing Play Strategies
2008 Supplementary Planning Guidance Providing for Children and Young People’s Play and informal Recreation
### 2.2 Child Friendly Neighbourhood_CFN

**Child Friendly Environment**

Children can go everywhere, they need a network!

The study of child friendly environment and workshop for child friendly design indicate that generally children explore and discover their environments wider than adult can imagine. Their curiosity drives their wider perception and experiences about their environment. This study started to focus on the age 6-12 group as a starting point, which commonly referred to Middle childhood and primary school age because of their environmental actual distance is dominated by neighbourhoods scale. I hypothesize that the regeneration of neighbourhood within child-friendly concepts will be one of the ways to tackle child poverty in that area.

**Why we need to focus on the neighbourhood?**

Children, like the elderly, have a particularly heavy investment in the neighbourhood environment (Foley, 1950; Foote et al., 1960; Suttles, 1972, 1975; Lynch et al., 1977). Because they are minimally mobile and spend relatively little time away from the area in which they live, neighbourhoods play a special role in children's daily lives. (Berg, M. and Elliott, A., 1980)

As a physical and social environment, neighbourhoods influence the things children do, can do, like to do, and are able to do. (Berg, M. and Elliott, A., 1980)

Much of children's time is devoted to "environmental learning" and the sharpening of skills and abilities that are acquired through play and related activities (Opie, 1969: Benjamin, 1974: Medrich and Bensom, 1976: Moore and Young, 1978: Berg and Elliot, 1980). Many of these activities take place outside the home, but nearby. In this sense, the neighbourhood represents an opportunity for play and learning.

### Defining group of children

<table>
<thead>
<tr>
<th>Age</th>
<th>Child Grouping</th>
<th>Walking Distance</th>
<th>Child Development</th>
<th>Schools</th>
<th>Curriculum Stage and year</th>
<th>Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Under 5</td>
<td>Newborn/Infancy</td>
<td>Nursery School</td>
<td>Foundation Stage</td>
<td>under 5 Dependency 100 m walking</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Under 5</td>
<td>Toddlerhood</td>
<td>Infant School</td>
<td>Key Stage 1</td>
<td>5-9 School age 400 m walking</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Children under 5</td>
<td>Childhood</td>
<td>Primary School</td>
<td>Year 1</td>
<td>10-11 Independence of mobility</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Children 5 - 7</td>
<td>Preadolescence</td>
<td>Junior School</td>
<td>Year 2</td>
<td>12-15 Secondary school age and gender over 800 m walking</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Children 5 - 11</td>
<td>Adolescence</td>
<td>Secondary School</td>
<td>Key Stage 3</td>
<td>16-18 Pre-adulthood Opportunity</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 6</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 7</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 8</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 9</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 10</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 11</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 12</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 13</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 14</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 15</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 16</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>18</td>
<td>Children 5 - 11</td>
<td></td>
<td>Secondary School</td>
<td>Year 17</td>
<td></td>
</tr>
</tbody>
</table>

Source: author's own
Boundary of neighbourhoods

This concept of neighbourhood unit is not new. As far back as Perry (1929), the elementary school attendance area had meaning to planners. The neighbourhood was built around the elementary school, and it emphasized things that young families with small children were thought to need—green space, easy access to developed areas such as playgrounds and other public facilities. (Berg, M. and Elliott, A., 1980)

In the study of ‘Physical Environment and its Effect on Play and Play Patterns’, Berg and Elliott defined neighbourhood as elementary school enrollment area that child attends and they proved that children's play has relation between neighbourhood physical environments. They applied it to the character of neighbourhoods within three criteria; the play ways by the terrain and land use, the impact of the physical environment on access to play space, social interaction and problems of safety and mobility. They used conditions for school attendance area; within 15min walk, not to have cross major thoroughfares on their way to school and be able to walk to school safety and alone. And they mentioned that the journey to school is a primary experience of space in most children's lives. The walk or bus ride from home to school defines the parameters of many a child's world.

In this study the neighbourhood is represented by the physical boundaries of the primary school’s surrounding areas from 300 to 400m distance. According to the children’s maximum actual walking distance, 400m boundary is walk able for 5-11 year olds in 5 minutes so that the neighbourhood area is defined based on the their walking ability and general norms of neighbourhood scale. To place appropriate and accessible facilities, the important point to note that several neighbourhoods are needed to be connected together to address 12 plus age groups which group have 800m actual walking distance in 15 minutes. By considering the Berg and Elliot's neighbourhood unit scale, even though there is scale difference between European country and America, the condition for 15 min walking distance could be accepted for the study area and that is why two of district scale and neighbourhood scale were studied on this project.

How to define Child-friendly neighbourhood?

The dimensions for child-friendly environments studied to define the child-friendly environment which mentioned by Horelli,L.(2007)

A child-friendly concept can involve huge changes in planning practices. Freeman notes children's experiences extend into arenas such as transport, housing, shopping and the interactions between different urban domains. It is essential that planners understand the variety of children's experiences and the implications of planning decisions in each (Gleeson et al., 2006, p. 153, emphasis added). Horelli has suggested such an extension of child-friendly environment by the normative dimension include a abstract phenomena and that the dimensions need to categorized for physical issues.

In my study, to address the concept of child-friendly in urban design method for deprived area, spatial indicators use urban physical factors and apply them to the environment for children.
Measuring Child Friendliness

Herelli constructed the framework for defining ECF and she described ‘child-friendly structures’ as a network of places with meaningful activities where young and old can experience a sense of belonging whether individually or collectively (Horelli, 1998 : P.225)

The scope of ECF can roughly be defined by ten dimensions which pervade the individual and collective experiences of child-friendly environments (See Appendix A; Horelli, this issue; Prezza, this issue). The dimensions are:
1. Housing and dwelling
2. Basic services (health, education and transport)
3. Participation
4. Safety and security
5. Family, kin, peers and community
6. Urban and environmental qualities
7. Provision and distribution of resources; poverty reduction
8. Ecology
9. Sense of belonging and continuity
10. Good governance

The dimensions paint an overall picture of ECF within which individual and group negotiations and experiences of the perceived quality of the environment take place. The core dimensions seem to be those that deal with basic services, safety, family and peers, as well as urban and environmental qualities.

Appendix A Macro and sub-categories of the analysis classified according to the normative dimensions of ECF
| 5. Family, kin, friends and community | (8) Family, kin | Friends, Neighborhood, Intergenerational relationships, Intercultural relationships, Traditions, Social control, Civility/social disorder |
| 6. Urban and environmental qualities | (10) Characteristics of the built environment | Urban planning, architectural style, type of housing, specific elements of the living place (squares, monuments, fountains), general positive or negative evaluation, beauty |
| | (11) Green areas, "greenery" | Nature, public and private green areas |
| | (12) Public spaces—refers to places where children could go to take part in sports and/or have contact with their peers | |
| | (13) Urban care and decay | Good or bad routine maintenance of public spaces (streets, parks, garden cleaning), urban degradation and regeneration |
| | (6) Independence | Independent mobility/outdoor autonomy |
| | (14) Proximity—the opportunity to easily reach specific places or persons due to their close location. | |
| | (7) Peacefulness | Acoustic pollution, noise |
| | (15) Spaciousness | Large spaces/restricted spaces |
| | (16) Morphological and natural characteristics—eg, mountains or climatic conditions | |
| 7. Provision and distribution of resources | (17) Economy—both work opportunities and provision of resources | Occupational opportunities, tourism |
| 8. Ecology | (18) Ecology | Pollution, Relationships with nature and wild animals |
| 9. Sense of place, belonging and continuity | (19) Identity, attachment—expressions of affective (both positive and negative) bonds with the subject’s own community or place | |
| 10. Good governance | (20) Local institutions and processes that enable even young people to get involved in decision-making, such as children’s councils | Local councils |
Measuring Child Friendliness in physical environment

Accessibility (Distance) -> Very good / Good / Satisfactory/ Poor / Very poor
Quantity (Number) -> Very good / Good / Sufficient / Insufficient / No
Quality -> Describe details

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Element</th>
<th>Accessibility</th>
<th>Quantity</th>
<th>Quality</th>
<th>CFC (p24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>Access to Public Transport</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Train station</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tube station</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bus stop</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>Access by Bike</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Route Existence</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>Walking route</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fence from car</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedestrian route</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>pavement</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Educational spot</td>
<td></td>
<td></td>
<td></td>
<td>3,4,8,11</td>
</tr>
<tr>
<td></td>
<td>Sports centre</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Library</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Museum</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theatre</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shopping st</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leisure facility</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Distance for Emergency</td>
<td></td>
<td></td>
<td></td>
<td>3,4</td>
</tr>
<tr>
<td></td>
<td>Hospital</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health Centre</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Social Service</td>
<td></td>
<td></td>
<td></td>
<td>1,2,3,8,11,12</td>
</tr>
<tr>
<td></td>
<td>Child centre</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Shelter for Youth</td>
<td></td>
<td></td>
<td></td>
<td>6,12</td>
</tr>
<tr>
<td></td>
<td>Existence</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Distance to industrial area</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Warehouse, Depot...</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Distance to Dead End Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infrastructure.</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Danger zone</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private Territory</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: author's own
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Element</th>
<th>Accessibility</th>
<th>Quantity</th>
<th>Quality</th>
<th>CFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green and Blue open</td>
<td>Distance to Green, Blue and open space</td>
<td>Park</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Garden</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pocket garden</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmland(Urban farm)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open space</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outside Playground</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inside Playground</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>Distance to speedy road</td>
<td>Step 1, 2, 3</td>
<td>✓</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Traffic management</td>
<td>Pedestrian priority</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traffic sign</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low speed zone</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduction traffic</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>School Boundary</td>
<td>Wall</td>
<td>✓</td>
<td>✓</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fence</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCTV zone</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>School parks problem</td>
<td>Public P</td>
<td>✓</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private P</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Road P</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking water</td>
<td>in outside public space</td>
<td>✓</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Sanitation (Toilets)</td>
<td>in outside public space</td>
<td>✓</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Housing Quality</td>
<td>Flat</td>
<td>Building</td>
<td>✓</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communal green</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home zone</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Terrace &amp; Single</td>
<td>Building</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private Green</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home zone</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: author's own
The graph below is showing that the categorized dimensions for spatial environments in neighbourhoods centered by primary school as well as degree of statements which are measured using distance, number and quality of places from school.

Ideal neighbourhood model in
Physical condition of CFN

By analyzing the condition of neighbourhood, problematic physical environments can be generated with balanced consideration of urban environment. From the measuring, design interventions will have priority by the problem situations of the neighbourhood to be overcome and also the physical opportunity of neighbourhood will be improved and exploited.

Current neighbourhood model in an area located near heavy infrastructure

Source: author's own
What need to be designed for CFN? How to extend children’s experiences?

Key findings for the child friendly neighbourhood design

1. Propose Child-friendly Network in their everyday life point in the neighbourhood!
2. Design can be started with walk-able school route!
3. The design of space need to be Nature friendly!

1. Child-friendly Network in their everyday life point in neighbourhood!

Mix-used points of destinations, car free route and social supervision in the network.
Nowadays, few children are freely mobile in their neighbourhoods to discover secrets meet and play with other children without supervision of adults. Road safety and urban traffic level as well fear of crime reduce children's autonomous urban mobility and it linked to parent's anxieties and fears. To provide safe route and network, several physical conditions need to be provided which are intending frequent social interaction between child and adult by eye contact on their routings, ensuring visibility physically, designing quality of route better to walk. And each of destinations in their life cycle needs to be located on the designed and connected route in the neighbourhood.

Holzapfel H (2000) emphasizes that the needs of networked spaces for children. He mentioned there are no formula conditions for suitable housing estate as a better place child to grow and learn and pointed out to be aware of suggesting child-friendly solutions by making simple reservations because of children venture beyond them.

According to his argument, children understand and can make their own journey between their main daily destinations within networked spaces with paths, which streets themselves designed in a clear way so that they can understand the rules. For example, pavements make sense to children as an exciting boundary and protective space, which leads onto the dangerous roadway, and children use pavements to the full. Additionally he said pleasantly designed free spaces work not only for children but also for adults. He mentioned if adults do not use certain spaces, children will not find those spaces intriguing either and a place needs faces: ‘Spatially/ materially accessible structures are those that provide the opportunity to experiment, to experience faces and places without suffering disastrous setbacks or disillusionment, so that one is able to find one’s way around’.

Inge Meta Hülbusch wrote these words in 1978 in her work on the planning of free spaces within and outside the home. In other words: free spaces that are good for children are also good for adults. The beginnings of a change in thinking are evident in some European countries, where the notion of legally securing children at least an independent daytime route, the ‘right to a safe walk to school’, is seriously being discussed. Reclaiming the streets for children will take a while yet.
2. Start with walk-able school route!

According to the experiment by RISSOTTO A. AND TONUCCI F. (2002), home-school itinerary following by perception of children are different according to how children travel to school. Children who walk to school alone recognize and remember more diverse urban features than the others who go to school by car or by walk with parents. That means the way to go to school by walk and their independent mobility can provide diverse opportunities for children to experience their environment.

The observation in home-school itinerary was investigated for 8^11 year old children who travelled along the itinerary in different ways (on their own, accompanied by an adult, on foot or by car). The results confirms the importance of the type of individual environment interaction, in particular of freedom of movement, in acquiring, processing and structuring environmental knowledge. Children going to school on their own achieved the best performance in both making sketch map of the itinerary and in drawing their movements on a blank map of the quarter.

Sketch maps of the home to school itineraries and actual itineraries

a. Boy aged 10 years and 6 months who goes to school on his own and his actual itinerary.
b. Boy aged 10 years and 2 months accompanied to school on foot by an adult and his actual itinerary.
c. Boy aged 10 years and 3 months who is driven by an adult to school by car and his actual itinerary.

3. Nature friendly design!

According to the book ‘Designing Outdoor Environments for Children’ (2006) Children benefits from interaction with nature in all aspects of their development: physical, mental, moral, and emotional as well during childhood, people form their values concerning nature. Nowadays children have lack of daily connection with natural environment and they are growing up in urban environment.

When nature no longer occurs naturally in childhood, it is imperative that parents, educators, designers, planners, policy makers and others work to provide ample opportunities for children to explore nature and develop that innate bond. A lifeless landscape of concrete is no substitute for natural spaces and gardens. Tai L. Taylor M, Gina K. and Jordan E. (2006)

It is suggesting design criteria which are orientated for open spaces for instant, parks and landscape with trees and intriguing features, safety in play area with prevent injury design, equipment for primary, preschool and kindergarten, adult supervision, cushioned surfacing, age-appropriate playground and maintaining. It is also mentioning that encourage active living and foster a sense of community so that schools, shopping and other destinations are located within walking distance of residential areas and sidewalks need to be designed with tree-lined buffer for walking safe and pleasant.

Nature and Development

Cognitive development

Neural connections in the brain increase and became more complex when people or animals are surrounded by dynamic environments, such as those provided in nature. Through interaction with physical and social environment, children build on knowledge and understanding (Kahn, 2002).

3 kinds of contact with nature
Way to experience nature : Direct : physical contact
Indirect contact: human manipulation. ex) Zoo, Museum
Vicarious experience: TV, Book Web site. (Kellert, 2002)

Physical development

Childhood immobility and improper eating habits is creating health crises such as obesity. Despite those alarming problems, school access way is dominate by car. Children have to be bussed or driven to schools as communities become unwalkable, due to crowded streets, narrow of nonexistent sidewalks, and the consolidation of the neighbourhood schools into larger learning centres further from homes. Tai L. Taylor M, Gina K. and Jordan E. (2006)
2.3 Workshop for Child Friendly Neighbourhood Design

Children, like the elderly, have a particularly heavy investment in the neighbourhood environment (Foley, 1950; Foote et al., 1960; Suttles, 1972, 1975; Lynch et al., 1977)

Because they are minimally mobile and spend relatively little time away from the area in which they live, neighbourhoods play a special role in children's daily lives.

As a physical and social environment, neighbourhoods influence the things children do, can do, like to do, and are able to do.
(Mary B and Elliott A., 1980)
TO EVOKE MEMORIES IN OUR CHILDHOOD

The Workshop examined which kinds of environmental issues need to be considered for child-friendly urban design by discussing questions with adults who have different cultural and environmental backgrounds when they were children. As a result, by asking their secret places where they liked to go even their parents banned to go, most of them explored and ventured their environment more than adults imagined. And, the places where they and their parents liked to go were concentrated on several facilities and green spaces. Interestingly, most of them emphasized to provide green spaces for child-friendly neighbourhood and in particular, boys mentioned soccer fields and girls mentioned car free street frequently. As a assumption, depending on different backgrounds of their places where they grown up, the preference of the places liked are determined. For example a person from city centre liked toy store and festival, and he was the only man who didn’t mentioned sports field. And, a woman from farm area was the only person who mentioned animals are important for ideal child-friendly neighbourhood.

Theoretical Background of the workshop

The extent of children’s independent mobility and the number of actualized affordances as criteria for child-friendly environments
Marketta Kyttä
Centre for Urban and Regional Studies, Helsinki University of Technology, P.O. Box 9300, 02015, Finland

Diversity of environmental resources and access to play and exploration have been regarded as the two central criteria of a child friendly environment (Moore, 1986). The former has been operationalized in this article by the number of actualized, positive affordances (Gibson, 1979; Heft, 1989) and the latter by the degree of independent mobility.

examination of the interrelationship between independent mobility and the actualization of affordances.

Children frequently do not know how their parents will react to the actualization of their discoveries. The quality and quantity of the individual’s independently actualized affordances vary according to the development of his perceptual, motoric and social skills in context. In addition, the personality traits, personal preferences and skills of the individual may have an effect on the independent discovery of affordances. The degree of independent mobility of children is related to the extent of all three fields of action. The more mobility licenses the children have, the more likely they actualize affordances in the neighborhood. Actualized affordances in turn motivate children to be mobile.

Fig. 1. A schema of the environment as potential affordances, the actualization of which is regulated by the fields of promoted, free, and constrained action.

TO EVOKE MEMORIES IN OUR CHILDHOOD

Participants

**F**
- Age Group: 50-60
- Birth place: Lima, Peru
- Neighbourhood Character: Close to the sea

**M**
- Age Group: 20-30
- Birth place: Nuenen/Noord-Brabant
- Neighbourhood Character: Small village close to Eindhoven suburban expansion area

**F**
- Age Group: 20-30
- Birth place: Gouda, NL
- Neighbourhood Character: VINEX near to Forest

**F**
- Age Group: 20-30
- Birth place: Leiden, NL
- Neighbourhood Character: where my friends lived together

**M**
- Age Group: 20-30
- Birth place: Hochiminh/Vietnam
- Neighbourhood Character: Small village in rural landscape, river, fruit farm

**M**
- Age Group: 20-30
- Birth place: Linschoten, NL
- Neighbourhood Character: Village 10,000pl, grassland and nature.

**F**
- Age Group: 20-30
- Birth place: Almelo, NL
- Neighbourhood Character: Rural, close meadow, small centre

**F**
- Age Group: 20-30
- Birth place: Beijing/China
- Neighbourhood Character: Campus zone

**M**
- Age Group: 20-30
- Birth place: NL
- Joined half

**F**
- Age Group: 20-30
- Birth place: Athens/Greece
- Neighbourhood Character: Suburban close to commercial zone

**M**
- Age Group: 20-30
- Birth place: Schiedam/NL
- Neighbourhood Character: City centre location

**M**
- Age Group: 20-30
- Birth place: Curacao/Caribbean
- Neighbourhood Character: Nice weather, Beach
Process

1. Step 01
   Showing site and school environment pictures
   Let's go back to our childhood
2. Step 02
   Generating the favorite places from the memories
3. Step 03
   Express ideal child friendly neighbourhood as a urbanist

Step 01

WHAT WE HAVE TO CONSIDER?
WHAT WE WANTED TO? STILL WANT?
THINKING WHEN WE WERE IN PRIMARY SCHOOL

Step 02 _ Question

WHAT WAS THE BEST PLACE IN MY WORLD?

3 places which were free to go
(ex: parents, teachers wanted you to go...)

3 places which were banned to go
(ex: parents or teachers didn't want you to go...)
Step 02 _ Results

3 places which were free to go

<table>
<thead>
<tr>
<th>INFRASTRUCTURE</th>
<th>Railway station</th>
<th>Highway crossing</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOVILITY</td>
<td>Tunnel/Dark side</td>
<td></td>
</tr>
<tr>
<td>Biking</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>District centre</td>
<td>F</td>
<td>M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GREEN &amp; OPEN</th>
<th>Other city</th>
<th>Far from house</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Beach</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Forest</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Soccer/sports field</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Playground</td>
<td>F</td>
<td>M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>Garaoke/ktv</th>
<th>Bars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Sports centre</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Swimming pool</td>
<td>F</td>
<td>M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AVOIDING FACILITY</th>
<th>Warehouse/industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOUSING</th>
<th>Private territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home zone</td>
<td>M</td>
</tr>
</tbody>
</table>

Step 03 _ Question

What’s the ideal world for your childhood?

(combine your best places...) drawing... text... anything you want...
Chapter 2 Child-Friendly City /Neighbourhood

Step 03 _ Results

Common: Natural environment, Park, Garden
Male: Soccer field, derelict building, not focusing playground
Female: Caring cars, playground

Small village
Free to explore
Brothers, sister and friends
No cars
Many animals

Many Friends home
Park to play: sports, soccer, soldier, hide and seek, playground, bike, skate, Lighting

Video games, Nature: beach, camping, tree climbing, Cats and dog
Bike, Warm weather

Explore, socializing, play safe
Caribbean: warm weather, beach
European: green

Hide and seek (8~10)
garden, playground, street without cars
Moving around (11~)
bike, skate...

Free to play, come, do...
Playground near home

Sports and park on the way to home

Little danger
New things
Other Children
Shops, business
toys, attraction like carnival

Forest or Park: trees, bushes to build huts (sealed) optimal derelict building (climbing, hiding)
Soccer field

Play and explore
not with artificial playground
Little house to play

Forest: meadow open land,
Soccer field
Derelict housing
Good access to neighbour
Chapter 3 : Project area

3.1 General London profile
3.2 Thinking about London / Tower Hamlets
3.3 Positioning of Tower Hamlets
3.4 Ethnicity in London / Tower Hamlets
3.5 Multiple deprivation of Tower Hamlets
3.6 Project location in Tower Hamlets LAP2 / LAP6
3.1 General London profile

Population growth

London’s population declined from 1939 but has been growing steadily since 1989, and was estimated to be more than 7.3 million people in 2003. It will continue to grow: the most plausible ‘central’ scenario suggests an increase of 810,000 to 8.1 million by 2016. Not only is London’s population growing; its composition, particularly in terms of age structure and ethnicity, is changing markedly. By 2016, the city’s working age population will grow by 516,000 – and of these 411,000 (80 per cent) will be from black and minority ethnic communities. (GLA 2008a, p:26)

Future economic and employment change

Deeply rooted changes in international and UK economies and society have led to the persistence of strong structural trends over a period of three decades; the central forecast for the purposes of this plan is the continuation of these trends. The net growth in jobs in London 2006 – 2026 is projected as 912,000. (GLA 2008a, p:29)
Chapter 3  Project Area

Economic growth

The finance and business services sector is projected to make the most significant contribution to economic growth in London over the next 15 years, providing over half of the gross total growth in employment. Other service activities – especially in the creative industries, leisure and retail industries, and in hotels, catering and tourism – will also grow rapidly. (GLA 2008a, P:31)

Social justice

The disparity in wealth and other quality of life measures between the poorest sections of society and the wealthiest is growing. Measured solely in terms of GDP per capita, London is the wealthiest region in the UK. However, London has higher concentrations of individuals in both high and low income bands than the rest of Great Britain. (GLA 2008a, p:35)
### 3.2 Thinking about London / Tower Hamlets


**Best things about living in London**

The range of shops available was rated the best thing about the city by a third of Londoners. The next best things are job opportunities and the city’s transport network, followed closely by the diverse mixture of people who live here.

**Worst things about living in London**

The aspects of the city that Londoners dislike are, in order of priority, the high cost of living, the high cost of housing, crime and safety, and traffic congestion. (GLA 2008b)

#### Percentage of residents who are “very satisfied,” or “fairly satisfied” with the area as a place to live

**Satisfied with area 2008**

The percentage of satisfaction with London and local neighbourhood is generally high and for the local neighbourhood, the satisfaction rate has been increased since 2006 in average. However, the comparison map on the upper side is showing that the Borough of Tower Hamlets has lower satisfaction rate.
In general, Londoners are getting feel safer and the thinking about fear of crime is moving to a bit positive way.

But comparatively, the Borough of Tower Hamlets has a high level of anti-social behaviour rate.

Tower Hamlets is one of the densified area and it supplies the highest number of social housings.
3.3 Positioning of Tower Hamlets

Global trends
Migration and Globalisation/ Climate Change/ Health Equality and Wellbeing
Housing and financial markets in Tower Hamlets are driven by global forces, but can have significant local affects. Over the past decade Tower Hamlets has directly benefited from the impacts of a global economy. It has witnessed a significant increase in jobs in the borough and significant regeneration of its disused employment land. Canary Wharf, along with the City and the West End all compete with cities such as New York, Paris and Tokyo on an international scale.

(Council of Tower Hamlets 2009)

National agenda
The Role of Spatial Planning/ London Thames Gateway/ Major Transport Improvement/ The 2012 Olympic and Paralympic Games
Regional and sub-regional agenda
Sustainable world city for the 21st century. Setting Housing and Employment Targets
Local vision
"improve the quality of life for everyone who lives and works in the borough.” - The Community Plan 2020

(Partnership of Tower Hamlets 2009)
Tower Hamlets - The Sixth smallest London borough, 1,978ha, 215,300 population

**London’s fastest growing borough** (population increase of 33% expected by 2020)

51%. **Highest number of lone parent families** in England and Wales.

**Highest child poverty** in the UK, **Highest unemployment** in the UK, 11.7%

Still more warehouses, Petticoat Lane ‘Middlesex Street’

Source: London council (2009), Ten interesting things about London’s boroughs
3.4 Ethnicity in London / Tower Hamlets

Tower Hamlets population change over time - long term trends

Components of population change

Tower Hamlets - Components of Population Change (2007-08)

<table>
<thead>
<tr>
<th>Total Change</th>
<th>Natural Change</th>
<th>Net Migration &amp; Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower Hamlets</td>
<td>+5,200</td>
<td>+3,100</td>
</tr>
<tr>
<td>London</td>
<td>+62,900</td>
<td>+77,700</td>
</tr>
<tr>
<td>England</td>
<td>+354,200</td>
<td>+201,900</td>
</tr>
</tbody>
</table>

How Tower Hamlets Compares with other County and Unitary Authorities

<table>
<thead>
<tr>
<th>Population Change 2007-08</th>
<th>Rank / 152</th>
<th>Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Total Change</td>
<td>1</td>
<td>Highest</td>
</tr>
<tr>
<td>% Natural Change</td>
<td>4</td>
<td>Highest</td>
</tr>
<tr>
<td>% Net Migration &amp; Other</td>
<td>9</td>
<td>Highest</td>
</tr>
</tbody>
</table>

Demographics

The borough has the fastest growing population of any London borough and Tower Hamlets is home to one of the most diverse populations in the country, both in terms of age and ethnicity. The borough now has the third largest percentage of 20 – 34 year olds (37%) of all local authorities in the country and 59% of the population are aged 15-44 compared to 42% in the country as a whole. Although the proportion of over 65 years olds is increasing, this age group only accounts for 8% of the population compared to the rest of the country’s 16%. (Council of Tower Hamlets 2009)

The population is projected to increase to 300,000 by 2016 as a result of a combination of natural population growth and new-build initiatives arising from the Greater London Authority London Plan.

Ethnicity

The Office of National Statistics indicated that in terms of ethnicity half of the Borough’s population (49%) are now from the non-white British ethnic groups and the largest ethnic group is the Bangladeshi community. About 7% of the borough’s population is the Black African and Caribbean, of which a significant proportion is Somali. (Council of Tower Hamlets 2009)
Chapter 3   Project Area

Bangladeshi London
Most of Bangladeshis living in London's East End are Sunni Muslims who worship at the East London Mosque on Commercial Road. Established in 1941, it was rebuilt in 1985 and can now accommodate 2,000 people. Another important place of worship is the Jamme Masjid mosque on Brick Lane, opened in 1976 in a building built as a Huguenot chapel, which later became a synagogue.

The Bangladeshi community bore the brunt of racist activity of the 1970s. Some provocative National Front marches in Brick Lane ended in violence. In 1978, Altab Ali, a local Bangladeshi garment worker, was stabbed to death. The violence of the 1970s encouraged young Bangladeshis to become more politically active, and the community is now prominent in local government in Tower Hamlets.

Muslim London
In Tower Hamlets, Muslims comprise over a third of the population. George Galloway's Respect party won the 2005 general election in this borough with a campaign that severely criticized the conflict in Iraq. Muslims also comprise a quarter of the population in Newham. Muslim Londoners are served by hundreds of Mosques and Islamic cultural and community centres. Prominent among these are north London's Finsbury Park Mosque, and the East London Mosque and London Muslim Centre on Whitechapel Road.

Pakistani London
The 2001 census recorded over 143,000 Pakistanis in London, most of whom were Sunni Muslims who speak Urdu. Punjabis, Pathans, Sindhis and Baluchis make up sizeable Pakistani communities in Ilford, Walthamstow, Leyton and Barking, although east London continues to support London's largest community.

Source : http://www.20thcenturylondon.org.uk   2009-09-09
3.5 Multiple deprivation of Tower Hamlets

Local Unemployment

The highest unemployment rate in Great Britain is in Tower Hamlets at 11.7 per cent, followed by Leicester at 11.4 per cent and Birmingham at 10.9 per cent. Differences in unemployment rates in local areas within regions are generally greater than differences between regions. In the 12 months ending December 2008, the region with the greatest contrast between local authorities was London with 8.1 percentage points between Tower Hamlets at 11.7 per cent and Richmond-upon-Thames at 3.6 per cent. (Council of Tower Hamlets, 2006)

Poor housing conditions

Overcrowding disproportionately affects the poorest Londoners. In 2004 the average income per person in overcrowded households was just £4,000, compared to £9,600 for all households. It is also concentrated in the poorest areas of London and is closely linked to other forms of deprivation, including poor health, notably infectious diseases such as TB, and lower attainment in education. Black, Asian and minority ethnic households are disproportionately affected by overcrowding - it is almost four times more common among all minority ethnic groups than among white British households. (GLA 2007, Draft Mayor’s Housing Strategy, P:107)

High density of dwelling

Source: GOL (government office for London) Data Explorer

Equal Interval Legend

- 41.00 - 101.80
- 101.81 - 162.60
- 162.61 - 223.40
- 223.41 - 284.20
- 284.21 - 345.00

Equal Interval Legend

- 58.10 - 62.94
- 62.95 - 67.78
- 67.79 - 72.62
- 72.63 - 77.46
- 77.47 - 82.30
Less Major Planning

Unemployment by Ethnicity

Source: Ethnic Group Projections (GLA 2007)

Source: ONS (Office for National Statistics)

ILO unemployment rates (%) by ethnicity, Greater London 2000/01

Unsatisfaction with area

Poor Housing condition

Percentage of households overcrowded 2001

Source: Census

Multiple Deprivation

Tower Hamlets itself is an area of significant contrast while experiencing high levels of investment and significant housing and jobs growth. According to the 2004 English Indices of Multiple Deprivation, Tower Hamlets was ranked 4 out of 354 local authorities. In 2004, there were 141,000 working-age people in Tower Hamlets. During this period, of the economically active population (those aged 16 and over who are either in employment or unemployed), the unemployment rate was 13% for men and 12% for women. Tower Hamlets experiences unemployment rates that are not only amongst the highest in London, but across England and Wales. (Council of Tower Hamlets, 2006)
Chapter 3 Project Area

Weak community cohesion

![Map of Weak community cohesion](image)

source: GOL (government office for London) Data Explorer

safer communities_anti-social behaviour 2008

![Map of High Anti-social Behaviour](image)

source: GOL (government office for London) Data Explorer

Low Education Attainment

Percentage of pupils achieving 5 or more GCSEs at A*-C

![Bar chart of Low Education Attainment](image)

Source: DCSF

Children on Benefits

![Map of Children on Benefits](image)

source: GOL (government office for London) Data Explorer

children and young people_children on benefits 2007

Low Education Attainment

Percentage of pupils achieving 5 or more GCSEs at A*-C

![Bar chart of Low Education Attainment](image)

Source: DCSF

The Borough sits on the north bank of the River Thames, between the City of London on the west and the River Lea on the east. Within the Borough, two of local partnership areas were selected for the project interventions. The Borough has been divided into eight Local Area Partnerships (LAP’s) based on Ward boundaries and each one of the LAP’s provide an opportunity for local residents to have their say on the improvements in their area, and to influence how the changes are carried out. Therefore, boundaries are in terms of feasible planning development division. The district level of scale, which include several neighbourhoods is appropriate for this study because the LAP boundary fits to be selected for feasibility of
development process and children's actual walking distance aged 0 to 18. LAP 2 area is located next to City of London which has the highest rate of ethnic minority groups living with multiple deprivation. LAP 6 area is a comparatively non-strategic location which is far from regional park (Victoria) and economic centre (Canary wharf). Within the LAP2 and 6 areas, two of neighbourhoods, categorized by characteristic of spatial environments were used as examples of child-friendly neighbourhood model based on the central primary school location and neighbourhood environmental character.
What's it like?

Diversity

LAP 2 has a mixed and diverse community and for centuries it has been a focus for immigration. It has both deprived communities, as well as pockets of affluence. Brick Lane is a well known area for new arrivals to settle and currently serves a well established Bangladeshi community. More recent arrivals from Somalia and Eastern Europe have added to this diversity, as well as introducing new challenges in delivering services to these groups. There still remains an established white community in the area, with more affluent residents also being attracted to this part of the borough.

Local economy

LAP 2 is characterized by its mixed commercial and residential nature. It is in close proximity to the city, with a rich mix of small commercial properties, thriving creative sector, markets and other independent traders. The area around Spitalfields Market has recently been restored and provides a new upmarket retail area right on the edge of the city. Brick Lane nearby provides a contrast with its bustling small specialist shops and renowned curry houses.

Housing

The housing stock is mainly a mix of low rise social housing interspersed with some high rise blocks. There are also a large number of privately owned warehouses which have been converted for residential use. Bethnal Green South ward, in particular, has predominantly low to medium rise high density social housing.

Community safety

The growth in the night time economy around the Whitechapel and Brick Lane areas, however, has created tensions between the needs of visitors coming into the area and the needs of residents. Measures are in place to minimise disruption to people’s lives. A Good Behaviour Zone (giving police extra powers to tackle anti-social behaviour), CCTV, controlled drinking zones and higher visibility policing have been introduced to address community safety concerns.

Open and green spaces

The LAP has two main green space areas - Weavers Fields and Bethnal Green Gardens. Both spaces are very popular with local residents, with Weavers achieving the prestigious green flag award. There are also numerous small green and open spaces in the area, usually provided as amenity space within housing estates. However, like other parts of the borough, LAP 2 generally has few green and open spaces.

Future of the area

The area will be subject to substantial change during the next ten years. This will bring significant inward investment, economic and employment opportunities. Key developments, such as Bishopsgate Goods Yard, the London Metropolitan University, Whitechapel Art Gallery, Aldgate Gyratory and Truman's Brewery will have a positive impact on the area, improving the local infrastructure. All of these developments, plus the prospect of the Crossrail development, will, however, increase the population movement and traffic leading to some disruption to residents for a while.

It will be particularly important to seize the opportunities that these developments bring to tackle the more difficult issues, such as low employment and high economic inactivity levels, experienced in the LAP. They will have the potential for broadening the skill base of the local work force and improving access to long-term stable employment.

Source: http://www.onetowerhamlets.net/your_local_area/your_lap.aspx
District B : LAP 6
Where is it?
LAP 6 has two wards:
- Bromley by Bow – this incorporates areas commonly known as Bromley and Lincoln
- Mile End East

Who lives there?
LAP 6 has a rich and diverse community. The resident population of the two wards is 22,720 (2001) of which:
- over 27% are aged 15 or under, one of the largest populations of young people in the borough [Tower Hamlets: 22.9%]
- 2.5% of residents in LAP 6 are aged over 75, [Tower Hamlets: 3.3%]

What's it like?
Housing
LAP 6 is mainly a residential area with very little commercial activity other than small local shops in neighbourhood centres and
the Tesco supermarket on the Northern Approach Road on the eastern side of the LAP. The housing stock is predominately
high density social housing, with the Council, Poplar HARCA, SWAN Housing and East End Homes being the main landlords.
The condition of the housing stock varies across the LAP, with some of the Poplar HARCA property recently being refurbished
and well within decent homes standards. Whilst the physical fabric of the area is improving, the concentration of social housing
means that this LAP experiences some of worse social conditions in the borough e.g. high rates of worklessness.
Recently, there has been major social and capital investment in the area through funding such as the Single Regeneration
Budget. The area now benefits from five sizeable community buildings including one healthy living centre – the well known
Bromley by Bow centre.
Parks and open spaces
Mile End East has extensive open space with one of the borough’s major park, Mile End Park, on the western side of the area
and Tower Hamlets Cemetery, which has the potential to be a major recreation resource, to the east. However, Bromley by
Bow has little open green spaces, although there are a number of excellent examples of small green spaces that have been
transformed by local residents into multi-use local community parks, for all ages. e.g. Chiltern Green.
Community involvement
The annual residents’ survey shows that LAP 6 has the second highest level of community involvement compared to all other
LAPs. It has a well developed voluntary/community sector, particularly one that supports the development of individuals and
leaders in the community. There is also a strong ethos of community and social enterprise throughout the area, lead by the
Bromley by Bow centre, with some established social businesses operating in the area e.g. Green Dreams, a horticultural
business.
Future of the area
The eastern side of LAP 6 falls with the Leaside development area. The Mayor has identified it as an opportunity area i.e. one
that will support substantial new jobs and/or shops and other local amenities and services. This area is, therefore, likely to
experience significant growth over the next 10 – 15 years. The area action plan, which is currently out for consultation, aims to:-
- diversify the housing tenure mix of the area;
- stimulate the economy to improve the prospects of, and access to, employment opportunities for residents; and
- improve the environmental quality e.g. through better use of open space.
These will create opportunities to improve the quality of life for local people living in the area. Work is already underway to provide
a
- new health care facility at Ryans Yard,
- leadership programme at St Pauls Way, and
- new housing developments at St Andrews.
There will also be a major redevelopment of the Bromley By Bow Station and along the lower Lea valley link that touches on the
borders of LAP 6. All of this is linked into the developments of the Olympics.
Source : general information from one tower hamlets website

Source : http://www.onetowerhamlets.net/your_local_area/your_lap.aspx
Chapter 4 : Research and Conclusion

4.1 Child policy context in London
4.2 Planning policy in London / Tower Hamlets
4.3 Child-friendly-led regeneration
4.4 Multi-purpose facility_case study
4.1 Child policy context in London

Research findings on the child policy and play strategy

The diagram below is showing the guideline of spatial design position. To suggest new attractions for the children’s wider experience, each age group of children’s actual walking distance, open space scale and the school locations need to be considered together.
Chapter 4 Research and Conclusion

London’s public open space hierarchy
Source GLA

Source: author’s own
More and more of the world’s children are living in cities too, and there is a growing international movement to place children’s needs and rights at the centre of city and urban planning strategies and sustainable development. As adults of the future and citizens of today, children have a key role to play as active participants in the sustainable development process. Together with this focus on urban childhoods, there have been several new initiatives to document the position and circumstances of children in European and other world cities; and there are worldwide policy strategies and programmes to develop and promote child-friendly cities. (GLA, 2004b)

Child policy in National ambition

Since the UK government agreed to put the UNCRC into practice (following ratification in 1991), in 2003 Every Child Matters was produced (the Every Child Matters outcomes framework.) Accompanied by the National Service Framework for Child and Maternal Health, Every Child Matters promotes an integrated, outcomes focused approach to provision for children and young people.
Every Child Matters

The Green Paper, Every Child Matters, describes the government’s commitment to ensure the welfare of those children most at risk within a framework of universal services, and sets out major reforms aimed at supporting parents and careers. Importantly, and for the first time, the well-being of the nation's children and young people is to be monitored and measured using an outcomes framework of five key areas:

- Being healthy (enjoying good physical and mental health and living a healthy lifestyle);
- Staying safe (being protected from harm and neglect and growing up able to look after themselves);
- Enjoying and achieving (getting the most out of life and developing broad skills for adulthood);
- Making a positive contribution (to the community and to society and not engaging in anti-social or offending behavior);
- Economic well-being (overcoming socio-economic disadvantages to achieve their full potential in life).

These outcome areas are being used by the government as the basis for a local and national accountability framework, which details objectives and corresponding progress measures for each of the five areas.

Following by the research on context of child and play policy, spatial planning sector has been starting to concern child-friendly concept politically not only for CYP’s well-being, but also their rights as a citizen for creating environment. Policy intends to instate children's opinion and give a attention their views and needs, for instant, the play strategy linked to the open space strategy and generate diverse type of open space to fit various acting of play for better child development Likewise, other strategies could interact between local, regional level policy and play strategy. By stimulating those interactions between policy and strategy, the effort for the child-friendly London will be progressed.


Children and Young People's Strategy at the Regional level

As a Mayor’s Children and Young People's Strategy (CYPs), Making London Better for All Children and Young People(January 2004), is a Regional strategies for children and young people which set out a vision for a more child-friendly London, developed within the framework of the UNCRC. The strategy contained a range of policies and action points shaped by three core themes:

- Reducing poverty and social exclusion
- Promoting inclusion and equality
- Making the case for the delivery of quality services and facilities. (Mayor’s CYPS 2004)

Source: GLA 2004b, P:4
Making London Better for All Children and Young People,
Play strategy
Since 2005, by Big Lottery Fund to London boroughs for play, the Mayor’s ‘Guide to Preparing Play Strategies, local play strategies has been produced, and all London boroughs are now producing play strategies. The Mayor has issued draft Supplementary Planning Guidance (SPG) on ‘Providing for Children and Young People’s Play and Informal Recreation’ for use by those planning local neighbourhoods; introduced free bus and tram fares for all under-18-year-olds in full time education, and free travel for children under 11 on the tube and Docklands Light Railway when accompanied by an adult. In addition, the GLA has developed some innovative participation work with young people through establishing a Young Londoners’ (GLA 2005)
This Supplementary Planning Guidance relates to the implementation of London Plan Policy and provides the opportunity for more detailed guidance that cannot be covered in the plan. It is a companion to the Mayor’s Guide to Preparing Play Strategies (GLA, 2005).

Planning guidance for play from SPG
Defining children’s play
The National Occupational Standards of the play work, childcare and early years professions define play as ‘freely chosen, personally directed, and intrinsically motivated behaviour that actively engages the child. It can be fun or serious by playing, children learn and develop as individuals and as members of the community, B Hughes and F King, 1985 as adopted by the National Occupational
For the planning guide for play, that recognize the diversity, complexity and richness of children’s play is important. The assessment of play provision has been largely focused on measures of quantity and accessibility and has not addressed issues of quality. Although children and young people use and value many different types of space, planners and others have historically relied on a limited number of models for the kinds of space to be provided for them(GLA, 2008).
The Mayor’s CYP Strategy, 2004 mentions that all children and young people should be able to play within their local neighbourhoods and have safe and attractive play spaces within walking distance of their homes. For older children and young people, having opportunities to enjoy and develop their own cultural and recreational pursuits is equally important’

### Accessibility to Play Space (future provision)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Maximum Walking Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5s</td>
<td>100m</td>
</tr>
<tr>
<td>5-11 year olds</td>
<td>400m</td>
</tr>
<tr>
<td>12+</td>
<td>800m</td>
</tr>
</tbody>
</table>

Source: GLA 2008c, P:53

### NPFA Standards for Play Provision

<table>
<thead>
<tr>
<th>Facility</th>
<th>Time</th>
<th>Walking Distance</th>
<th>Radial Distance</th>
<th>Minimum Size</th>
<th>Nearest Dwelling</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Area of Play (LAP)</td>
<td>1 min</td>
<td>100m</td>
<td>60m</td>
<td>100 sq. m</td>
<td>5m from activity zone</td>
<td>Small, low-key games area</td>
</tr>
<tr>
<td>Local Equipped Area of Play (LEAP)</td>
<td>5 min</td>
<td>400m</td>
<td>240m</td>
<td>400 sq. m</td>
<td>10m from activity zone</td>
<td>5 types of equipment, small games area</td>
</tr>
<tr>
<td>Neighbourhood Equipped Area of Play (NEAP)</td>
<td>15 min</td>
<td>1,000m</td>
<td>600m</td>
<td>1,000 sq. m</td>
<td>30m from activity zone</td>
<td>8 types of equipment, opportunities for ball games or wheeled activities</td>
</tr>
</tbody>
</table>

Source: GLA 2008c, P:23

SPG, Providing for Children and Young People’s Play and Informal Recreation

The new requirement, set out in this SPG, is to provide 10 m² of well designed play and recreation space for every child to be accommodated in new housing developments. Appropriate and accessible facilities within 400 m for 5-11 year olds or within 800 m for 12 plus age groups may be acceptable alternatives.

There may also be scope for innovative solutions outside these guidelines if they meet the criteria for quantity, quality and access. Long term maintenance should always be secured by legal agreement.
### Play provision in new developments

<table>
<thead>
<tr>
<th>No. of children</th>
<th>10 – 29</th>
<th>30 – 49</th>
<th>50 – 79</th>
<th>80+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of space required</td>
<td>100–300 sq m</td>
<td>300–500 sq m</td>
<td>500 – 800 sq m</td>
<td>800 sq m +</td>
</tr>
<tr>
<td>Facilities for under 5s</td>
<td>On-site doorstep playable space</td>
<td>On-site local playable space</td>
<td>On-site local playable space</td>
<td>On-site local or neighbourhood playable space</td>
</tr>
<tr>
<td>Facilities for 5–11s</td>
<td>Off-site within 400 m</td>
<td>Off-site within 800 m</td>
<td>Off-site within 800 m or on-site subject to size and local circumstances</td>
<td>On-site youth space</td>
</tr>
<tr>
<td>Facilities for 12+</td>
<td>Off-site within 800 m</td>
<td>Off-site within 800 m</td>
<td>Off-site within 800 m or on-site subject to size and local circumstances</td>
<td>On-site youth space</td>
</tr>
<tr>
<td>Possible variation to reflect existing provision</td>
<td>If area is deficient in play space for 5–11s, some on-site facilities should be provided</td>
<td>If area is within 400 m of existing facilities for 5-11s, an off-site contribution may be considered if in accordance with play strategy</td>
<td>If area is deficient in spaces for 12+, some on-site facilities or new off-site provision should be provided within 800 m</td>
<td>If area is within 800 m of existing facilities for 12+, an off-site contribution may be considered if in accordance with play strategy</td>
</tr>
</tbody>
</table>

### Play types

<table>
<thead>
<tr>
<th>Play type</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Symbolic play</td>
<td>Play which allows control, gradual exploration and increased understanding, without the risk of being out of one's depth.</td>
</tr>
<tr>
<td>2. Rough-and-tumble play</td>
<td>Close encounter play which is less to do with fighting and more to do with touching, tickling, gauging relative strength, discovering physical flexibility and the exhilaration of display. For example, playful fighting, wrestling and chasing.</td>
</tr>
<tr>
<td>3. Socio-dramatic play</td>
<td>The enactment of real and potential experiences of an intense personal, social, domestic or interpersonal nature. For example, playing at house, going to the shops, being mothers and fathers.</td>
</tr>
<tr>
<td>4. Social play</td>
<td>Play during which the rules and criteria for social engagement and interaction can be revealed, explored and amended. For example, any social or interactive situation with abiding rules or protocols, such as games or conversations.</td>
</tr>
<tr>
<td>5. Creative play</td>
<td>Play allowing a new response, the transformation of information, awareness of new connections, with an element of surprise. For example, enjoying creation for its own sake, with a range of materials and tools.</td>
</tr>
<tr>
<td>6. Communication play</td>
<td>Play using words, nuances or gestures. For example, mime, jokes, play-acting, mickey-taking, singing, debate, poetry.</td>
</tr>
<tr>
<td>7. Dramatic play</td>
<td>Play dramatising events in which the child is not a direct participant. For example, presentation of a TV show, an event on the street, a religious or festive event, even a funeral.</td>
</tr>
<tr>
<td>8. Deep play</td>
<td>Play which allows the child to encounter risky or even potentially life-threatening experiences, to develop survival skills and conquer fear. For example, leaping onto an aerial runway or riding a bike on a parapet.</td>
</tr>
<tr>
<td>9. Exploratory play</td>
<td>Play to access factual information consisting of manipulative behaviours such as handling, throwing, banging or mouthing objects. For example, engaging with an object or area and, either by manipulation or movement, assessing its properties, possibilities and content, such as stacking bricks.</td>
</tr>
<tr>
<td>10. Fantasy play</td>
<td>Play which reimagines the world in the child's way, a way which is unlikely to occur. For example, playing at being a pilot flying around the world or the owner of an expensive car.</td>
</tr>
<tr>
<td>11. Imaginative play</td>
<td>Play where the conventional rules governing the physical world do not apply. For example, pretending to be a tree or ship, or patting an imaginary dog.</td>
</tr>
<tr>
<td>12. Locomotor play</td>
<td>Movement in any and every direction for its own sake. For example, chase, tag, hide and seek, tree climbing.</td>
</tr>
<tr>
<td>13. Mastery play</td>
<td>Control of the physical and affective ingredients of the environments. For example, digging holes, changing the course of streams, constructing shelters, building fires.</td>
</tr>
<tr>
<td>14. Object play</td>
<td>Play which uses infinite and interesting sequences of hand-eye manipulations and movements. For example, examination and novel use of any object, such as cloth, paintbrush, cup.</td>
</tr>
<tr>
<td>15. Role play</td>
<td>Play exploring ways of being, although not normally of an intense personal, social, domestic or interpersonal nature. For example, brushing with a brush, dialling a telephone, driving a car.</td>
</tr>
</tbody>
</table>

Source: GLA 2005c, P:60

Guide to preparing play strategies.
6.29 Some open space will not be considered appropriate and may be dangerous, such as building sites and railway lines, and where these are being used by children, particular care should be given to developing or improving safer alternatives.

6.30 Some areas are deemed unsuitable for play by sections of the adult community because of potential or actual conflict with other activities in the area. These can often be made more available for children by reducing tensions. Education, consultation and mediation – leading to improved understanding between children and young people and adults – can be part of the strategy’s development and implementation.

Example: Appraising play in the public realm

The London Borough of Camden’s Play Service mapped the use of the public realm for play through the use of a pro-forma observational survey. It recorded by area, age and ethnicity the type of environments where children and young people where playing, the type of activity and the level of adult supervision. The categories of location were:

- library
- park/square
- street
- doorstep
- playground
- open space – grassed
- open space – non-grassed
- shopping area
- sports pitch/area
- train station
- other.

Where do Children Play in Camden? LB Camden, 2003

6.31 Pooling knowledge and ideas from a range of local authority departments will help to identify types of space to include in the audit. Engagement with external play practitioners and with local play providers would also help in this process. External organisations with data on children’s play spaces might include:

- London Play
- children’s funds
- local play associations
- Kidsactive
- Barnardo’s
- the Children’s Society
- Greater London Authority

• children should have access to the widest possible range of play experiences and play environments, both indoors and outside.

Judgements about quality in provision will be based on the degree to which children are provided with opportunities to experience directly:

- the natural elements – earth, air, fire and water
- fabricated and natural materials and tools – consumables, ‘loose parts’
- challenge – in the physical environment, in the social context and in private
- free movement – running, jumping, climbing, rolling, balancing
- emotions – both painful and pleasurable, the chance to validate a range of feelings
- a variety of stimulation to the senses – hearing, taste, smell, touch, sight
- play with identity – drama, dressing up, role plays, masks, face painting
- varied social interactions – freely chosen across the age, ability, gender, ethnic and cultural barriers, co-operating, resolving conflict, chatting, negotiating, sharing
- change – building/demolishing, transforming environments, the effect of the seasons and weather, growth and decay, predicting and planning, interesting physical environments – plantings, varied levels, enclosed/open spaces, mounds, steps, walls, shelters, surfaces, platforms, seating, privacy, vistas, flexibility.

Audit Commission (BVPI 115)
Open Space and Playable Space

London’s public open space hierarchy

<table>
<thead>
<tr>
<th>Regional Parks</th>
<th>Size guidelines</th>
<th>Distances from homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large areas, corridors or networks of open space, the majority of which will be publicly accessible and provide a range of facilities and features offering recreational, ecological, landscape, cultural or green infrastructure benefits.</td>
<td>400 hectares</td>
<td>2.2 to 8 kilometres</td>
</tr>
<tr>
<td>Metropolitan Parks</td>
<td>Large areas of open space that provide a similar range of benefits to Regional Parks and offer a combination of facilities and features at the sub-regional level, are readily accessible by public transport and are managed to meet best practice quality standards.</td>
<td>60 hectares</td>
</tr>
<tr>
<td>District Parks</td>
<td>Large areas of open space that provide a landscape setting with a variety of natural features providing for a wide range of activities, including outdoor sports facilities and playing fields, children’s play for different age groups and informal recreation pursuits.</td>
<td>20 hectares</td>
</tr>
<tr>
<td>Local Parks and Open Spaces</td>
<td>Providing for court games, children’s play, sitting-out areas and nature conservation areas.</td>
<td>2 hectares</td>
</tr>
<tr>
<td>Small Open Spaces</td>
<td>Gardens, sitting-out areas, children’s play spaces or other areas of a specialist nature, including nature conservation areas.</td>
<td>Under 2 hectares</td>
</tr>
<tr>
<td>Pocket Parks</td>
<td>Small areas of open space that provide natural surfaces and shaded areas for informal play and passive recreation that sometimes have seating and play equipment.</td>
<td>Under 0.4ha</td>
</tr>
<tr>
<td>Linear Open Spaces</td>
<td>Open spaces and towpaths alongside the Thames, canals and other waterways; paths, disused railways, nature conservation areas, and other routes that provide opportunities for informal recreation. Often characterised by features or attractive areas which are not fully accessible to the public but contribute to the enjoyment of the space.</td>
<td>Variable</td>
</tr>
</tbody>
</table>

Source: GLA 2008c, P:19
SPG. Providing for Children and Young People’s Play and Informal Recreation

Playable Space Typology

<table>
<thead>
<tr>
<th>Doorstep Playable Space</th>
<th>Local Playable Space</th>
<th>Neighbourhood Playable Space</th>
<th>Youth Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>A landscaped space including engaging play features for young children, and places for carers to sit and talk.</td>
<td>A landscaped space with landscaping and equipment so that children aged from birth to 11 can play and be physically active and they and their carers can sit and talk.</td>
<td>Social space for young people aged 12 and over to meet, hang out and take part in informal sport or physical recreational activities.</td>
</tr>
<tr>
<td>Size guideline</td>
<td>100 sq m</td>
<td>300 sq m</td>
<td>2000 sq m</td>
</tr>
</tbody>
</table>
| Examples of Facilities | - Landscaping
- Climbing objects
- Fixed equipment
- Seating for carers
- Sand and water feature (if possible) | - Landscaping to create natural feel, including changes of level
- Equipment integrated into the landscaping, that allows children to swing, slide and climb
- Multigames/ball wall
- Kick about area
- Basketball nets
- Seating area away from equipment
- Sand (if possible) | - Landscaping to create natural feel, including changes of level
- Equipment integrated into the landscaping, that allows children to swing, slide and climb
- Seating area away from equipment
- Bike, skate and skateboard facilities
- Kick about area
- Basketball nets
- Sand if possible
- Hard surface area if possible
- Water feature if possible
- Shelter plus basketball net, small wheeled facility or climbing wall/boulevard for young people | - Space and facilities for informal sport or recreation activity (eg multi ball court, basketball court, climbing walls or boulevards, multi-use games area (MUGA), wheeled sports area, skatepark or BMX track, traversing wall, climbing boulders, exercise trails, outdoor exercise equipment)
- Seating areas on the edge of the activity space
- Youth Shelter
- Landscaping |
| Location | - Residential areas including housing estates
- Pocket Parks
- Public Squares
- Home Zones | - Residential areas including housing estates
- Local Parks | - Larger residential areas and housing estates
- Local Parks
- District Parks
- School playgrounds |
| - Larger residential areas and housing estates
- Adjacent to community facilities
- Local Parks
- District Parks
- Town centres | | | |

“Playable” spaces can, with good design, offer a range of leisure and recreation opportunities for people of all ages and enable the development of social networks and a sense of community belonging so that the SPG sets out clear standards, backed up by good practice examples, for all those professionals involved in planning and designing local neighbourhoods. The left chart is showing the typology of playable space defined by function and size for each of aging group of children.

Source: GLA 2008c, P:59
SPG. Providing for Children and Young People’s Play and Informal Recreation
4.2 Planning policy in London / Tower Hamlets

Research findings on the planning policy

The map below is showing the opportunity for Tower Hamlets from the regional planning policy context. Two of Cross rail stations will be developed on the Borough and it could affect to the neighbourhood designs indirectly. Olympic boulevard cross to the LAP2 and 6 so that it will also provide positive affects.

Source : Author’s own
Design location and local planning statement

Neighbourhood design A

Neighbourhood design B

Source: London Borough of Tower Hamlets 2006, Interim planning guidance
Ordnance survey digital data
Local spatial planning policy
Core strategy/ Sustainable Community strategy/ Action plan/ Masterplan

Tower Hamlets Planning Policy Framework 2007_national, regional, city level

National Guidance
The Sustainable Communities Plan is the Government's action plan for delivering high quality, high-density housing, especially affordable housing, creating decent accessible places to live, improving transport and other infrastructure to support new communities and tackling crime and anti-social behaviour. The national planning policies are generally published in Planning Policy Statements or Planning Circulars. Planning Policy Statement 1 sets out the framework for sustainable development including planning for climate change.

London Plan
The Mayor of London's Plan 2008
The Mayor’s London Plan, adopted in February 2004, has a major influence on the Tower Hamlets LDF given all London Borough LDFs must be in general conformity with the London Plan policies. The London Plan sets borough's housing and employment targets and also identifies opportunity areas for growth. The London Plan has been subject to further alterations which will provide an up to date regional policy framework for the Tower Hamlets LDF. The Mayor of London's Plan (February 2004 plus subsequent alterations) forms part of Tower Hamlets' development plan.

Adopted Unitary Development Plan
The UDP was adopted in 1998. Following direction from the Secretary Of State's in September 2007 all relevant policies (that is policies which reflect the principles of local development frameworks; are consistent with current national policy; and that are not desirable or feasible to be replaced by 27th September 2007) were saved for ongoing use in assessing planning applications.

Supplementary Planning Guidance
A range of guidance has been produced to guide the implementation of the 1998 UDP.

Thames Gateway
Major Transport Improvements
Olympic 2012 and Paralympic games

source: local development scheme 2007
Tower Hamlets Planning Policy Framework 2007_local level

- Tower Hamlets Sustainable Community Plan and Other Local Strategies
  The Tower Hamlets Community Plan describes the kind of place that people who live and work here want Tower Hamlets to be. Thousands of people contributed to developing the first version of the document. However the Community Plan is currently being reviewed and a new vision for 2020 is being developed. This production of the Core Strategy has been timed so that it can set out a spatial interpretation of the new 2020 once it is agreed. There are a number of other strategies from the Council and its local partners that have spatial planning implications and these will be taken into account in the preparation of the Council’s Local Development Framework.

- Local Development Documents 2007
  A Local Development Scheme (known as the LDS) sets out the Council’s three year programme (2008-2011) for producing local development documents that will be incorporated into the Tower Hamlets Local Development Framework. Council has assumed the Core Strategy will progress as efficiently as possible under the existing system, until instructions are given to the contrary.

  Statement of Community Involvement (SCI):- Following a successful Independent Examination the SCI is being adopted at the time if writing this LDS. Official date of Adoption is expected to be 28th February 2007.

- Development Plan Documents
  Core Strategy
  Development management
  Site Allocations

- Supplementary Planning Documents
  Whitechapel Master Plan
  Aldgate Master Plan
  Bromley by Bow Master Plan
  Fish Island Master Plan

- Potential Future Local Development Documents

- Other Guidance
  Conservation Area Statements

- Interim Planning Guidance
  Following the withdrawal of the Core Strategy and Development Control Policies, and the Area Action Plans from submission in September 2007, the Council have adopted these as Interim Planning Guidance for the purposes of development control in Tower Hamlets. The draft Whitechapel and Aldgate master plans are also Interim supplement planning documents. These documents have been developed using up to date evidence and are consistent mechanism for implementing national and regional guidance at a local level. These plans also provide policies which seek to respond to identified local needs, issues and opportunities. These plans, and the published evidence base supporting them, will be a material consideration used by the Council in its determination of planning applications, in the transitional period, until the replaced Development Plan Document reaches submission.
The Thames Gateway is a key regeneration priority for implementing the Sustainable Communities Plan. Extending from Tower Bridge eastwards to Thurrock and Dartford this area has been recognised as an important link to Europe with the potential for new homes, jobs and supporting infrastructure. Zones of change, with six in London and two – the Isle of Dogs and Lower Lea (Leaside) falling wholly or in part within Tower Hamlets. The scale of development envisaged in the Sustainable Communities Plan should be delivered in conjunction with substantial investment by Central Government. The expected growth in the London Thames Gateway is 110,000 homes and 225,000 new jobs up to 2016. The Thames Gateway is made up of fourteen zones of change, with six in London and two – the Isle of Dogs and Lower Lea (Leaside) falling wholly or in part within Tower Hamlets. The scale of development envisaged in the Sustainable Communities Plan should be delivered in conjunction with substantial investment by Central Government.

Major Transport Improvements
To facilitate growth in the Thames Gateway, the Government has committed to a series of major infrastructure projects, the biggest being Crossrail, which will connect Maidenhead and Heathrow in the west via Whitechapel to Essex and Kent in the east. Other significant projects include the new Channel Tunnel Rail Link (CTRL) services, and Stratford international which will connect Paris to Stratford and St. Pancras, further enhancing the international connections from East London.

Olympic 2012 and Paralympic games
The 2012 Games and proposed Stratford City regeneration project will have both immediate and lasting affects, which will help to transform London’s east end. The five Olympic boroughs; Newham, Hackney, Waltham Forest, Greenwich and Tower Hamlets are working together across a number of sectors, through the creation of Multi-Area Agreement to ensure the delivery of the games and its legacy benefits to East London. Tower Hamlets is a host borough for the 2012 Olympic and Paralympic Games. The 2012 Games will act as a catalyst for growth and regeneration. It will be crucial to provide a robust spatial policy that harnesses the benefits of the Games for local people in the lead up, during and long after the events. Tower Hamlets adopted its Olympic Strategy in February 2007.
Chapter 4 Research and Conclusion

London Plan 2008_Vision of London

London Plan Key Diagram

The vision of London as an exemplary, sustainable world city for the 21st century.

The London Plan sets out policies to accommodate the expected growth of the city in a sustainable way, within London's own boundaries and without encroaching on London's own precious green spaces. Therefore it provides an integrating framework for, all of the strategies and they are all based on ensuring that London becomes a city for people, a prosperous city, a fair city, an accessible city and a green city. The plan develops each of these five themes into a targeted objective, along with a specific additional objective about the future spatial structure of London.

Objective 1: To accommodate London's growth within its boundaries without encroaching on open spaces
2: To make London a better city for people to live in
3: To make London a more prosperous city with strong and diverse economic growth
4: To promote social inclusion and tackle deprivation and discrimination
5: To improve London's accessibility
6: To make London a more attractive, well-designed and green city

Sub-regional level

The integrated, poly centric approach to development strategy at the heart of the London Plan places particular emphasis on providing coherent planning frameworks for development at the sub-regional level. Many boroughs already look beyond their own boundaries, plan with their neighbours and work with the many institutions now operating at a subregional level.

The Sub-Regional Development Frameworks will take account of inter-regional linkages and the potential benefits of complementary, sustainable corridor-based development across the London boundary. They will provide guidance on development in each sub-region, including the Opportunity, Intensification and Regeneration Areas, town centres, suburbs and Strategic Employment Locations. One of the most important functions of the Frameworks will be to determine how the projected growth in population and jobs should be accommodated, together with an assessment of the necessary linkages between land use, transportation and intensification to meet that growth.
Spatial planning structure of London

London Plan_Vision of London

1. Opportunity area
   Opportunity Areas and Areas for Intensification

2. Regeneration area
   Areas for Regeneration

3. Major rail transport system
   Proposed Major Rail Transport Schemes and Development Opportunities in London

4. Light transit scheme
   Proposed Light Transit Schemes in London
Chapter 4 Research and Conclusion

5. Network of walking route

London's Strategic Network of Promoted and Proposed Walking Routes

6. Network of town centre

London's Network of Town Centres

7. Open space network

London's strategic open space network

8. Conservation & area of deficiency in access

Sites of Metropolitan Importance for nature conservation and areas of deficiency in access to nature in London

9. Restoration and recreation

Broad areas for habitat restoration and re-creation

10. Flood risk area

Indicative Flood Risk Areas
Local Development Plan_Core Strategy

Spatial Vision of Borough Place Making

key spatial planning document for Tower Hamlets, setting out the spatial vision for the Borough and how it will be achieved.

overall vision and Core Strategy aims to achieve it. The five spatial themes:
- Refocusing on our town centres
- Strengthening neighbourhood well-being
- Enabling prosperous communities
- Designing a high-quality city
- Delivering placemaking

Reinventing the Hamlets

A spatial vision for Tower Hamlets

The layers that combine to form the key diagram for Tower Hamlets

These are recognisable places which come together to help build an outward looking One Tower Hamlets.

Illustrative purposes only.
Local Development Plan_Tower Hamlets 2020 Community Plan

Building One Tower Hamlets

The aim of the 2020 Community Plan is to “improve the quality of life for everyone who lives and works in the borough.”

The long-term vision for Tower Hamlets.

The new Community Plan has also been developed alongside the borough’s Local Development Framework (LDF) – which sets out the plan for the physical changes taking place in the borough – so that the new LDF reflects the ambitions, aspirations and priorities of the Community Plan. But the 2020 Community Plan is more than the sum of existing plans – it provides a new vision and framework, from which all future Partnership strategies will take their lead.

4 Themes:

A Great Place to Live
A Prosperous Community
A Safe and Supportive Community
A Healthy Community

The diagram above shows the link between the LDF Local Area Agreement and Community Plan.

Proposed locations for health and well-being centres across Tower Hamlets

A picture of Development & Regeneration

Housing Delivery

Family Housing

Given the low overall delivery of new homes, fewer family homes were completed in real terms. While there was a significant increase of social rented family homes, market family homes completed decreased - requiring certain levels of family housing are not being achieved.
- appropriate family housing sites' location should be considered.

Public Open Space

The overall level of public open space has increased.

New public open space
- Meath Gardens, Royal Mint Square and Middleton Road, balanced by a small loss at Hardinge Lukin Street Play Area. (local policy _1.2 hectares/1,000 pl)

Spitalfields -----Will continue to be a historic gateway to the vibrancy of Spitalfields Market, Trumans Brewery and Brick Lane
Bathnal Green-----Shaping the future of Bethnal Green around its rich history, strong residential communities and thriving Bethnal Green High Street
Uncovering Globe
Aldgate -----Rediscovering its gateway role as a mixed use, high density area with a commercial centre
Whitechapel -----A historic place set around Whitechapel High Street with Crossrail and the Royal London Hospital providing a regional role

Mile end
A lively and well connected place with a vibrant town centre complemented by the natural qualities offered by the local open spaces
Bromley by Bow
A prosperous neighbourhood set against the River Lea and Park and a transformed A12
Bow common
Establishing Bow Common as a family focused residential neighbourhood set around the civic spine of St Paul’s Way

Source : Tower Hamlets Council (2009). CORE STRATEGY edited
4.3 Child-friendly-led regeneration

Urban Development Corporations / Enterprise Zones and Simplified Planning Zones / Task Budget / Urban Regeneration Companies / Housing Market Renewal Pathfinders / City mixed-use developments / Community involvement in regeneration / Partnership work gated communities / **Urban regeneration, health and education** / Local economic development and welfare to work (New Deal) / Social exclusion and disability / Employment-led regeneration / Food superstores as town centre regeneration projects / Office development / The evening and night-time economy and the 24-hour city / Live-work units / Listed buildings, heritage and conservation-led regeneration / Heritage and regeneration / Health and regeneration / Casinos and regeneration / Urban allotments and regeneration / Road transport, health and regeneration / Casinos and regeneration / Urban allotments and regeneration / Urban cemeteries / Creative cities / Culture-led regeneration / Sport-led regeneration and sports stadia / Music festivals and regeneration / Cinemas and multi-leisure parks / Regeneration and the public realm / Black and minority ethnic groups, urban regeneration / Urban development finance / Waterfront, waterway and canal regeneration / Coastal and seaside resorts / European urban regeneration and planning / North America

Chapter 4 Research and Conclusion

Child-Friendly-led Regeneration?
Urban Regeneration History in the UK

<table>
<thead>
<tr>
<th>Period</th>
<th>Key Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1858-1873</td>
<td>Industrialisation, Urbanisation, Municipal intervention</td>
</tr>
<tr>
<td>1891-1895</td>
<td>Suburbanisation, Counter-urbanisation &amp; Decline of the inner city</td>
</tr>
<tr>
<td>1905-1922</td>
<td>Social, economic consequences of wartime bombing and post-war reconstruction projects</td>
</tr>
<tr>
<td>1931-1940</td>
<td>'Housing' and 'town and country planning' rather than 'urban' policy.</td>
</tr>
<tr>
<td>1945-1968</td>
<td>Physical approach. City centre redevelopment</td>
</tr>
<tr>
<td>1977-1979</td>
<td>Social exclusion &amp; social polarisation in cities</td>
</tr>
<tr>
<td>1980s</td>
<td>De-industrialisation &amp; the changing geographies of production</td>
</tr>
<tr>
<td>1990s</td>
<td>The rise of the postmodern city &amp; new urban spaces</td>
</tr>
<tr>
<td>1990s</td>
<td>Entrepreneurial regeneration - The rise of market-led urban regeneration</td>
</tr>
<tr>
<td></td>
<td>- Top-down policy and PPP</td>
</tr>
<tr>
<td></td>
<td>- Property-led regeneration</td>
</tr>
<tr>
<td></td>
<td>- UDCs (urban development corporations)</td>
</tr>
<tr>
<td></td>
<td>- Enterprise Zones</td>
</tr>
<tr>
<td></td>
<td>- Central government housing regeneration policy</td>
</tr>
<tr>
<td>2000</td>
<td>Competition and community in urban policy</td>
</tr>
<tr>
<td></td>
<td>- SRB (single regeneration budget)</td>
</tr>
<tr>
<td></td>
<td>- Competitive bidding urban policy</td>
</tr>
<tr>
<td>Late 1990s</td>
<td>New Labour, new urban policy</td>
</tr>
<tr>
<td></td>
<td>- The new Labour's policy on neighbourhood regeneration and social exclusion</td>
</tr>
<tr>
<td></td>
<td>- Employment, training, enterprise and urban regeneration</td>
</tr>
<tr>
<td></td>
<td>- Sustainable communities and urban regeneration initiatives</td>
</tr>
</tbody>
</table>

**Source:**
- Author’s own

---

**Urban regeneration in the UK**

**Definition**

Regeneration is comprehensive and integrated action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change. (Peter Roberts and Hugh Sykes, 2000, BURA)

As figuring out the notion of urban regeneration for few decades, it has evolved from physical oriented notion, urban reconstruction in 1950s and through the periods of revitalization (1960s), renewal (1970s), redevelopment (1980s) and finally into regeneration focused on more integrated aspects these days.

**Six major process**

Post-industrialism -> globalisation -> changing inequalities and exclusion -> growing social and cultural diversity -> the emergence of new forms of urban governance -> creation of new type of urban space
1801
1853
1882
1952
1858-1873
Urban areas
1891-1895
1905-1922
1931-1940
1945-1968
1968-1979
1980s
1990s
2000

1868 - 1977
Small scale area-based initiatives. Largely experimental reflecting lack of knowledge.

1977 - 1979
Urban White Paper and Inner Urban Areas Act 1978. Attempted to develop an integrated approach, the formation of partnerships, new role for the private sector, and reference made to voluntary and community sectors.

1980s
Social exclusion & social polarisation in cities
De-industrialisation & the changing geographies of production
The rise of the postmodern city & new urban spaces
Entrepreneurial regeneration
- The rise of market-led urban regeneration
- Top-down policy and PPP
- Property-led regeneration
- UDCs (urban development corporations)
- Enterprise Zones
- Central government housing regeneration policy

1990s
1990s
Competition and community in urban policy
- SRB (single regeneration budget)
- Competitive bidding urban policy

Late 1990s
New Labour, new urban policy
- The new Labour’s policy on neighbourhood regeneration and social exclusion
- Employment, training, enterprise and urban regeneration
- Sustainable communities and urban regeneration initiatives

Urban competitiveness
New forms of urban governance
Community and regeneration
Urban regeneration and sustainability
City centre retail-led regeneration
Housing-led regeneration and gentrification
Leisure and cultural regeneration...
Thematic approaches to regeneration
4.4 Multi-purpose facility_case study

Idea store, health centre, home zone

For better playable space, benchmark Multi-functional projects
The SPG is referred that not all children's play space falls into the standard categories of playgrounds. There is a need to reflect the diverse needs of children and young people and the potential to meet needs for play through the multi-functional use of other categories of space.(GLA 2008)
In this chapter, some of the projects adopting multi-functional concept developed by one of the London boroughs, Tower Hamlets. Those projects are showing that the idea of regenerate problematic area by using multi-purposed concept concerning the needs from people who live in that area.

Benchmark For Better Child friendly spaces

Multi-functional projects

In this case study, learned idea is multi-functional strategy to meet the needs from various group of people and changing trends of urban environment. This kinds of approach could be used for the playable space if consider their complexity, diversity and richness in play for the future needs

Health and Well-being Centres, Idea store and Home zone project on the two of districts
Development & Regeneration

Date: THC Community plan 2020

Health and Well-being Centres

The opening of The Barkantine Centre on the Isle of Dogs in 2008 provides a good example of the bringing together of health and social care services. Delivering high-quality, joined up health care at a community level. Due to the successful development of The Barkantine Centre, Tower community plan is suggesting more health and well-being centres.

Date: THC Community plan 2020
Home Zone

Home Zone project are attempting to combine existing residential zone which is less using and car dominant space with playable space to restore the safety in neighbourhood. The Home Zone concept, called woonerf, was pioneered in the 1970s in the Netherlands, since then many countries have successfully transferred the core concepts and created their own safe areas.

The pictures below is showing the transformation of the Lincoln Estate Home Zone's project.
The project linked people with local resources and services through a structured ‘Green Pathway’ running from north of the Bromley area to south of the Lincoln area.
Idea Stores

Some of Idea Stores in Tower Hamlets are providing convenient and accessible one-stop location for library and learning services by changing the concept of Library to Idea Store. From the consultation local people got involved the project to change the old and outdated library to locate on a trip to the library with other day to day activities, such as shopping.

Data: from GIS Tower Hamlets 2009

Idea Stores By listening to residents’ views the Council re-thought its approach to libraries and the concept of Idea Stores was born. As a good example, Idea Store Whitechapel is now the most popular library building in central London, with nearly 700,000 visits a year.

Source: http://showcase.hcaacademy.co.uk/case-study/idea-stores-tower-hamlets.html#reference
Chapter 5 : Site analysis and Design proposal

5.1 Introduction
5.2 Strategy and Strategic projects
5.3 Site analysis
   Spatial structure of Tower Hamlets
   District scale
   Neighbourhood scale
5.4 Neighbourhood design
   Project definition
   Design principle
   Designing for two neighbourhoods
   Design A / Design B
   Problem Statement
   Design strategy
   Concept
   Situation plan and Open school
   Child-friendly network
   Child-friendly route
   Programming
   3D views
   Perspective and Reference
5.5 Phasing and Partnership
5.6 District Masterplan
5.7 Evaluation
5.8 Discussion
5.1 Introduction

The project aims to extend children’s physical life environment by suggesting new attractive points. To find the way of extending their life environment, two of methods were chosen for the design task. One is finding and solving problems in site of their neighbourhoods and another is inventing new places by knowing their tendency and affordance in their neighbourhood. As a start of site survey, school environments were observed as priority by measuring child friendliness and then the surroundings were watched out. From the literature study child friendly neighbourhood design criteria was defined:

1. Create child network not only physical but also social
2. Propose safe school route
3. Nature friendly space

By considering those CFN design criteria, child friendly network, train station renewal, mix-used development and open school projects are proposed.

Neighbourhoods character

A site survey was conducted to analyze the problems in the field of environment and the contexts of particular site areas. Each of site area has its own priority problematic conditions to be overcome. Each of project areas has own positive features to be exploited and also have negative features to be overcome. Those kinds of contexts consist of the characteristic of neighbourhood and it makes differentiation even the same design task applied for child-friendly neighbourhood.

For example, one of the project areas in LAP2 located with heavy infrastructural barrier so that several tunnels are using for primary school route. Furthermore, the roads are dominated by the car and due to the fact that the quality and accessibility of pedestrian routes are bad even though there are some of positive features like parks and gardens.

Another project area in LAP6 has old market street currently quite mono-functionally used. Also it has bad conditions for pedestrian route with lack of green spaces compare to other neighbourhoods.
Chapter 5 Site analysis and Design proposal

City Central Area
Commercial zone

Neighbourhood Character  LAP 2

Bow Road (LT,Tube)

Bow Church (DLR)

Devone Road (DLR)

Bromley-by-Bow (LRT)

Bromley-by-Bow (LT)

Unconnected Green

Neighbourhood Character  LAP 6

Old Market and Facility

Heavy Traffic Road

Green

Urban Farm

Heavy Infra structure

District Centre

Bethnal Green Rail Station
Bethnal Green (LT,Tube)

Shoreditch (LT,Tube)

Whitechapel (LT,Tube)

Stepney Green (LT,Tube)

Aldgate (LT,Tube)

Bangabandhu Junior (PS)

Tower Hamlets Mission (PS)

John Scurr (PS)

Swanlea Sixth Form

Thomas Buxton Junior & Infant (PS)

Osmani (PS)

Keen Student (PS)

St Anne's RC (PS)

Christ Church C of E (PS)

Canon Barnett (PS)

Stewart Headlam (PS)

Hague (PS)

Wessex Sixth Form

Heavy Infra structure
5.2 Strategy and Strategic projects

Design Strategy

1. Create network by improved destinations and connections
   (Problematic area to attractive destination, replace facilities for better network, strengthen social community network by proposing synergy programme, provide diverse attractive places)
2. Conceptual child-friendly route
   (Safe and walk-able route, create landscape and upgrade natural spaces)
3. Open school projects
   (Minimize school fences and walls, spread up classes and learning points, open up schools for public)

Strategic Plan

District A_LAP 2

Child-friendly neighbourhood design location A
Management Strategy

Put the play strategy as a central position and Co-work with Housing and regeneration community association, train station redevelopment partnerships and new mix-used development group.

Programming Strategy

Provide sufficient and balanced programmes and facilities. Health, Green, Culture, Recreation and Education facilities are the basic programmes for surrounding school neighbourhood.
5.3 Site analysis

Spatial structure of Tower Hamlets
Road network – regional, local roads

Tube and Train network
Education_Primary only, Secondary, Primary with infants and nursery

Transport_Loading parking bays, Disabled parking bays, Car club bays
Transport: Congestion charging, Controlled weekend parking zones, Controlled parking zones, Parking CCTV Cameras

Transport: Pay & display parking bays
Green Environment _ Listed parks & gardens, Parks & green spaces , Tree preservation orders

Health and Social Care _ Advice centre, Pharmacy
Health and Social Care _ Hospital, Doctor, Dentist, Opticians

![Map showing health and social care facilities in Tower Hamlets, 2009 data](image)

- **Doctors**
- **Dentists**
- **Opticians**
- **Hospitals**

Education_Schools_Nursery and Infant only

![Map showing education facilities in Tower Hamlets, 2009 data](image)

- **Infants**
- **Nursery class / Early Years Unit / Junior, Mixed and Infants**
Bus route Priority and normal

Bike route
Environment _ Ancient monument, World heritage, Listed buildings

Environment _ Areas of archaeological importance, Conservation areas
LAP 2 Community centre and idea store

Schools
Chapter 5
Site analysis and Design proposal
LAP 2 School route

Train and Tube, advanture playground

Garden, farm, park and playground
LAP 6 School

Playground

Social issue and adventure playground

We are spending £10 million on better homes, security and green spaces on Bow Bridge

In Tower Hamlets...
Crime has fallen 10% in the past year
LAP 6 Old market street

Level difference and railway

Paving and neighbourhoods
Chapter 5  Site analysis and Design proposal
District scale analysis

Infrastructure Barrier_LAP 2

Infrastructure Barrier_LAP 6
Chapter 5 Site analysis and Design proposal
Chapter 5 Site analysis and Design proposal

School Fence/Wall and Route_LAP 2

[Map showing school areas and routes]
Chapter 5  Site analysis and Design proposal

Car club bays
Congestion charging
Parking CCTV Cameras
Loading Parking
Pay & display parking
Disabled Parking
Controlled Parking
Car club bays
Controlled weekend parking zones
Congestion charging
Chapter 5 Site analysis and Design proposal

Green Network LAP 6

- Entrance point
- Access route
- Green space
- Local playground
- School

Scale 1:4000A3
Chapter 5  Site analysis and Design proposal
Health Facilities_LAP 2

- Hospital
- New Health Centre
- Doctor
- Optician
- Dentist
- Pharmacy
- Advice service

Radius 300m

Scale 1:4000A3

Health Facilities_LAP 6

- Hospital
- New Health Centre
- Doctor
- Optician
- Dentist
- Pharmacy
- Advice service

Radius 300m

Scale 1:4000A3
Neighbourhood scale analysis

Heavy Infra structure_LAP 2
Old Market and Facility_LAP 6

St Agnes Roman Catholic Primary School
St Paul with St Luke C of E Primary School
City Central Area_Commercial zone _LAP 2

Cannon Barnett Primary school
Comparison

- City Central Area, Commercial zone, LAP 2
- Heavy Infrastructure, LAP 2
- Unconnected Green, LAP 6
- Old Market and Facility, LAP 6
5.4 Neighbourhood design

Project definition

Scenario

By providing child friendly network, route and attractive points, the scale of neighbourhood can be extended.

Ideal child-friendly neighbourhood model

Reducing problems from this child friendliness measurement is the way to become a ideal CFN
Addressing policy issues on the child-friendly neighbourhood model

The neighbourhood model has relation to the international CFC and national policy context by considering each of criteria within the physical conditions.

Targets

Five group of children, family and neighbour
Role for Children and Local

By proposing wider attractions for children's opportunity to experience their environment, not only the quality of physical environment but also the social improvement will be gained. Finally it will help to tackle deprivation problems in local.
Chapter 5  Site analysis and Design proposal

Design principle

Network making

Child-friendly Route making

Changing road net

Adding friendly route

Barrier to attraction

Open school projects

minimizing wall and fences

open school on the street
Designing for two neighbourhoods Design A

Problem Statement
Chapter 5 Site analysis and Design proposal

Stewart Headlam Primary School

- Poor condition train station
- Car dominant road
- Isolated playground
- Enclosed school
- Low quality tunnel environment
- Poor quality community centre

Diagram showing various elements:
- Pedestrian routes
- Bicycle routes
- Bus stops
- Tube stations
- Traffic signs
- Speedy roads
- Pavements
- Low speed zones
- Fence from cars
- Infrastructure
- Warehouses, Depots
- Sanitation
- Road parking
- Parking lots
- Reducing traffic
- Home zones
- Garden/pockets
- Urban farms
- Open spaces
- Playgrounds/out
- Playgrounds/in
- Green buildings
- Parks
- Playgrounds/in
- Museums/theatres
- Leisure facilities
- Health services
- Social services
- Youth shelters
- Libraries/education centres
- Sports centres
- Shopping streets
- Private territories

Settings:
- Green & Open
- Housing
- Mobility
- Facilities
- Avoiding

Low quality tunnel environment
Enclosed school
Poor condition train station
Car dominant road
Isolated playground
Enclosed school
Low quality tunnel environment

139
Designing for two neighbourhoods Design B

Problem Statement

Public Transport Network
Road Speed Limits
Lack of Bike Route
School Fence/Wall & Route
Green Network
Infrastructure Barrier
Dead Ends
Health Facilities
Culture/Edu/Sport Facilities
Designing for two neighbourhoods Design A

Design strategy

1. Make child network!
2. Design child-friendly route!
3. Open schools!

Problem become Opportunity

positive features to be exploit
a. existing library
b. poor quality existing community centre
c. park affordable learning ecology
d. garden with ball game and playground

Library improvement with new culture centre
Community centre renewal
Park and Garden network for pedestrian
Garden remodeling

negative features to be overcome
a. poor quality tunnel environment
b. tunnel on the school route
c. car industry on the station area
d. enclosed public green

Tunnel shops, cafe with outdoor street
Station renewal project, plaza with facilities
Open garden
School route project

1. Make child network!
2. Design child-friendly route!
3. Open schools!
Chapter 5  Site analysis and Design proposal

Designing for two neighbourhoods Design B

Design strategy

1. Make child network!
2. Design child-friendly route!
3. Open schools!

Problem become Opportunity

positive features to be exploit
a. existing adventure playground
b. existing child centre with recreation field

negative features to be overcome
a. surrounding heavy traffic roads
b. old market street with poor quality open space
c. dark side from old small unit housing
d. tube barrier
e. isolated adventure playground

Neighbourhood market street with social connection
Crossing over the tube barrier
Adventure playground improvement
Open school

1. Make child network!
2. Design child-friendly route!
3. Open schools!
Designing for two neighbourhoods Design A

Concept

connect public green, school, public buildings, safe street and ensured communal green through opening the railway under structure

green connection with train station renewal

community centre renewal and new tunnel shops and environment
Chapter 5  Site analysis and Design proposal

Open school

Problematic school route
Changing car circulation

Car circulation before
Car controlling after
Car circulation before
Car controlling after

Situation plan

Train station renewal and open schools and open up school with green connection
Neighbourhood service facilities development with green connection
Designing for two neighbourhoods Design B

Concept

connect public green, school, public buildings, safe street and ensured communal green with new providing public spaces

library and sports centre and new terrace housing on the market street. keep and ensure visibility and social interaction

open school facilities (ex: art class...)

urban farm and health and culture facility
Chapter 5 Site analysis and Design proposal

Situation plan

open up school
open schools(classes) on the street
open up school

New mix-use development, with open spaces
urban farm, new health care and community and adventure playground

New Sport field on the tube rail and pedestrian bridge

Open school

problematic school route
changing car circulation

car parking before
car parking after
car parking before
car parking after
car parking before
car parking after
underground parking
Designing for two neighbourhoods Design A and B

Child-friendly network
Open space typology within network

- Natural play
- Street
- Plaza
- Tunnel Art
- Open school
- Urban Farm
- Equipped playground
- Speech open school
- Communal garden
- Public buildings
- Green with trees
- Ball game
- Deck play_board...
- Deck place
- Overview

Chapter 5 Site analysis and Design proposal
Designing for two neighbourhoods Design A and B

Child-friendly route

Design factors

- Bollard
- Crossing
- Fence
- Pedestrian Priority (TM)
- Street Marking
- Cushioned or natural Paving
- Sign
- Toilet
- Grass Mounding
- Tree
- Sculpture
- Bench

Activity map_Design A
Chapter 5  Site analysis and Design proposal

Activity map_Design B

Activity map_Legends

- School
- Open school
- Library
- Urban Farm
- Point of interest
- Scenic viewpoint
- Health care
- Drinking water
- Toilet
- Speech
- Music
- Trash
- Umbrella
- Emergency call
- Train station
- Metro station
- Tunnel
- Pedestrian crossing
- Walk on boardwalk
- Wheelchair-accessible
- Strollers
- Ball game
- Climbable
- Exercise/Fitness
- Playground
- Skateboarding
- In-line skating
- Academy
- Shop
- Snack bar
- Cafe
- Multi hall
- Post office
- Economy study
Child-friendly projects _ temporary events

"Bringing Planning and Politics to Children: City Hall School in Calgary" by Gary Christopher

part of the Campus Calgary / Open Minds program
The Campus Calgary / Open Minds program allows for 193 classes to leave their desks and blackboards and travel to settings such as the Calgary Zoo, Science Centre, and City Hall. (At the time of the research, there were nine “sites” operating between 10 and 29 weeks during the school year.)

"Winnipeg's Art City: Children, Art and Urban Revitalization" by Jessica Boot,

Street Party and Play day

“Hands-on Concept Plan for a Recreation Center that Three Students Began to Develop

Maurice Cody celebrates its 200th Walking Wednesday.

“A Participatory Model for Municipal Youth Cabinets: A Case Study of the Toronto Youth Cabinet” by Leah Roos

The Safe Routes to School (SRTS) concept began in the 1970s in Odense, Denmark, over concern for the safety of school children walking and bicycling to school.1.
Chapter 5  Site analysis and Design proposal

Designing for two neighbourhoods Design A

3D views

Before and After
Designing for two neighbourhoods Design B

3D views

Before and After
Designing for two neighbourhoods Design A

Perspective view

References

Amsterdam Bijlmer Arena
source: google

Rotterdam Abraham van Stolkweg
source: google
Chapter 5 Site analysis and Design proposal

The site blends well with the surrounding streetscape.

Train Station redevelopment and opening up the railway under structure.

Open up school.

Bus Station Skate Park
Milton Keynes Photo by Aileen Shackell
Designing for two neighbourhoods Design A

Perspective view

References

Amsterdam Haarlemmer Houttuinen
source: google
Chapter 5 Site analysis and Design proposal

This underpass in Boulder, Colorado, provides students with a route to school that does not require crossing a busy street. Photo by Michael Ronkin

Community centre redevelopment and Museum Garden renewal

Neighbourhood playable street, commercial, health, education facilities
Designing for two neighbourhoods Design B

Perspective view

References

Elementary students walk to school. Students are excited about the walking school bus at the Morton Way Public School in Brampton, Ontario, Canada. Photo by Olive Chapel.

Two-stage crossing island at Sunnyslope High School in Phoenix, Arizona. Photo by Michael Cynecki.

Walking School Buses and Bicycle Trains
Curb extensions prevent drivers from parking too close to the intersection.

Waiting areas and stand-back lines keep students further back from busy streets when waiting to cross in Phoenix, Arizona. Photo by Michael Cynocki

Advanture playground renewal, urban farm, community and health centre

Open up school, connect to the market street, sports centre, library, commercial shops

Curb extensions prevent drivers from parking too close to the intersection.
Designing for two neighbourhoods Design B

Perspective view

References

Amsterdam Haarlemmer Houttuinen

The image of a newly completed boulevard with lights. Photo by Peter Lagerwey
This underpass in Boulder, Colorado, provides students with a route to school that does not require crossing a busy street. Pedestrian and bicycle bridges can range from short connections over streams to extensive structures over freeways and major highways.

Raised crossing islands simplify the crossing and provide a safe refuge in the street. Photo by Cara Seiderman

The Greenway Pedestrian Bridge spans the Greenway Parkway creating a safe way to cross a busy 7-lane road. Michael Cynecki

Connection to the new providing sports field, tube line barrier to rest place

Open school on the child friendly street
5.5 Phasing and Partnership

Phasing

Phasing by time line

Start with school environment

Short Term

1. Child-Friendly School Route and Street system
2. Main projects on Neighbourhood
   LAP 2A: Station renewal / Redevelopment projects under the Railway / Community centre renewal
   LAP 6: Market renewal / Advanture playground improvement
Chapter 5 Site analysis and Design proposal

1. Child-Friendly Network with attractive points
2. Open School
   Minimized Fence and Walls
   Open Classes

Mid Term

Long Term

1. Regeneration projects_Housing
   (to make it affordable for social interact)
   Step 01 : next to child friendly route
             (door step, balcony remodeling)
   Step 02 : extended affordable area
             (garden remodeling, low down fence,
              home zone project)
2. Land use plan change or school moving project
Child friendly environment is good for all!

Funding and co-work Scheme

- **Play strategy**: Housing and Regeneration Association
  - CFN PLAY STRATEGY + @
  - Housing and Regeneration ex-HARCA
  - Mixed-use development

- **Central government Funding**: National Lottery distributors
  - National Lottery fund children's play initiative 2006-2011

- **Local authority funding**: Local & National Charitable trusts and funds
  - Local authority grant

- **Education**: Local authority

- **Public Transport redevelop**: Mix-used development

- **Mix-used development**: Start with small movement
  - Nigh out day!
  - Street play day!
  - Open school day!
  - Open garden day!
  - Physical change
    - Train station
  - Change public space
  - Market redevelop
  - Elderly speech day!
  - Children speech day!

Improvement

- **Community cohesion volunteering groups**: Health service education arts

- **Capacity**: improvement

- **Department for children, schools and families**: the children's charity

- **Department for culture media and sport**: support

- **Play England**: sharing spaces for play

- **DH Department of Health**: supported by The National Lottery®

- **The National Lottery Foundation**: orbin for children

- **NCH the children's charity**: support
Put the play strategy as a central position and Co-work with Housing and regeneration community association, train station redevelopment partnerships and new mix-used development group.
Partnership and Stakeholders

based on One Tower Hamlets partnership (Community Plan Delivery group)

Local Area Partnership (LAP) Steering Groups _ at a local level

**Local Delivery Networks**

Main operational services in each area which include the locality services provided by the Council, PCT, Police, RSLs and Third Sector.

**Community Plan Delivery Groups**

- LAP 1
- LAP 2
- LAP 3
- LAP 4
- LAP 5
- LAP 6
- LAP 7
- LAP 8

- 6 service providers reflecting the relevant Community Plan Delivery Groups and LAP priorities
- 15 residents
- 27 membership
- 6 Ward Councillors

**Representatives of Youth committee in neighbour**

**Local Area Partnership (LAP) Steering Groups _ at a local level**

- LAP 1
- LAP 2
- LAP 3
- LAP 4
- LAP 5
- LAP 6
- LAP 7
- LAP 8

- 6 service providers reflecting the relevant Community Plan Delivery Groups and LAP priorities
- 15 residents
- 27 membership
- 6 Ward Councillors

**Representatives of Youth committee in neighbour**
Chapter 5  Site analysis and Design proposal

The Board will ensure wide scale involvement of all partners and have overall responsibility for the delivery of the Community Plan. It will involve local residents and key players from the public, private, community and voluntary sector.
5.6 District Masterplan

Road Network_LAP 2

Road Network_LAP 6
Chapter 5 Site analysis and Design proposal

Public Transport Network_LAP 2

Priority Bus route
Bus route
Paratransit new route
Emergency route
Tube Station

Public Transport Network_LAP 6

Priority Bus route
Bus route
Paratransit new route
Emergency route
Tube Station
Chapter 5  Site analysis and Design proposal

Service Facilities_LAP 2

Service Facilities_LAP 6
5.7 Evaluation

Design A

Stewart Headlam Primary School

---

Chapter 5  Site analysis and Design proposal
Design B

Green Network

School Fence/Wall & Route

No Culture/Edu/Sport

Open and green network

Open schools

Culture/Edu/Sport/Shopping / Health service

St Agnes Roman Catholic Primary School

MOBILITY

SAFETY

GREEN & OPEN

HOUSING

AVOIDING

GREEN & OPEN

HOUSING

MOBILITY

SAFETY

FACILITIES

AVOIDING

before

after
5.8 Discussion

By creating the child network, child-friendly route and open schools, part of child- friendly neighbourhood could be designed in a way.

Finally, urban design criteria for the child-friendly neighbourhood will be suggested on the physical conditions of CFN which by coming out of the neighbourhood problem analysis, Horelli's normative dimensions for CFE and CFC. Also, those criteria will be used to evaluate each of site areas which located in Tower hamlets and intervened as design projects.

However, by the measuring of child-friendly physical environment, some of location cannot be improved because many of measuring related to the school location with other facilities. If the school is mislocated by the land use plan, the school neighbourhood cannot be a ideal child-friendly environment. For example, Cannon Barnett school is located next to regional road within city centre commercial area and its neighbourhood cannot be improved by the child-friendly design method due to the fact that there are no places to make green spaces and facilities and no reasons to make car speed down in regional road network. Within two of districts, two schools are mislocated.
Conclusion

Tower Hamlets is one of the multiply deprived Boroughs in London and it has highest child poverty rate. From the disparity of wealth, quality of spatial environment is also bad so that the north part of area need to be regenerated. Child-friendly neighbourhood design can give opportunities for children who live in poverty area so that the project aims to extend children's physical life environment by suggesting new attractive points. The child friendly space for children is good for everybody. In this thesis, I showed how multiply deprived location can get a opportunity to regenerate even though it is not located on the economically strategic position.

Child Friendly Cities and Measuring child-friendliness in physical environment is the key findings from research. By proposing the child-friendly neighbourhood design for children and young people who live in Tower Hamlets, existing social issues could be tackled with fundamental approach to solve urban problems which by enhancing the power of subjects. Children need network, safe route and freely accessible various learning environment. These kinds of interventions are intending changes gradually. Even it start from public space renewal, it will stimulate private sectors, housing owners to make improve their living environment themselves. Finally, improvement of social, physical and environmental condition together with child life will be the way to reach the sustainable regeneration.
Reference

Reference

- GLA (2003). Young People, Big Issues. A summary report detailing the results of consultation undertaken across eight London boroughs with black, minority ethnic and refugee young people between the ages of 8 –14 on crime and community safety. london, Greater London Authority.
- GLA (2008c). Supplementary Planning Guidance. Providing for Children and Young People’s Play and Informal Recreation. london, GLA
Local school children and the design team attended design workshops and created the final proposal for Trefusis Playing Fields together.
The Undercroft area at the South Bank Centre is perhaps one of the most well-known skateboarding locations in London.

Kate Shackell

Ground level water jets in Russell Square provide fun for people who don't mind getting wet…

Aileen Shackell

Stirling Council Play Services
Bathnal Green——Shaping the future of Bethnal Green around its rich history, strong residential communities and thriving Bethnal Green High Street Uncovering Globe

Bromley by Bow
A prosperous neighbourhood set against the River Lea and Park and a transformed A12
Bathnal Green-----Shaping the future of Bethnal Green around its rich history, strong residential communities and thriving Bethnal Green High Street.

Globe

Bromley by Bow

A prosperous neighbourhood set against the River Lea and Park and a transformed A12.