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by Yu Fan

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PLAY

Has No Age Limits: how can playable intervention in urban public realm help to achieve healthy and active aging for senior citizens?

Being a Major Project in Msc Urban Design and City Planning submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Urban Design and City Planning at University College London, I declare that this project is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

ACKNOWLEDGEMENT

From its earliest inception to the final stages, I have received a great deal of support and assistance. I would like to thank my supervisor Elanor Warwick for her patience and support in the formulation of project topic and professional guidances throught the project. I would also like to thank my family for their unwavering support throughout the project. Finally, I would also like to thank the 24/7 lofi study music youtube channel and the TV series 'Friends' that accompanied me throughout these countless days and nights.

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ABSTRACT

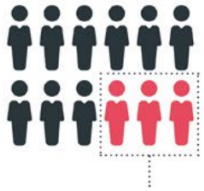
Opportunity to play can make a positive contribution across the life course. While successive amount of academic literature has shown how play can increase levels of physical and mental health for children, its ability of sustaining the quality of life into the older age has been less recognized. Action in actual urban design practice is still in infancy. This project addressed the gap. An extensive amount of literature review demonstrated the rich potential of the older people's play can achieve 'active aging' (WHO,2007) and 'healthy aging' (WHO, 2012). Principles of play were summarized and applied to multiple sites in Walthamstow Town Centre which were selected based on primary observation and interviews with local older adults. In order to respond to the innate needs of playfulness for older people more effectively, this project challenged the conventional approaches to environmental design by introducing a more dynamic and richer typology of urban environment in forms of trails that can potentially encompass multiple playful elements.

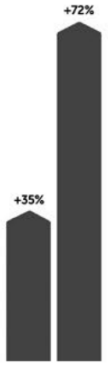
a. ANALYTICAL PHASE:

1. PROJECT INTRODUCTION
2. LITERATURE REVIEW
3. METHODOLOGY
4. **CASE STUDY**

1.2 PROJECT OPPORTUNITIES

AN AGING POPULATION



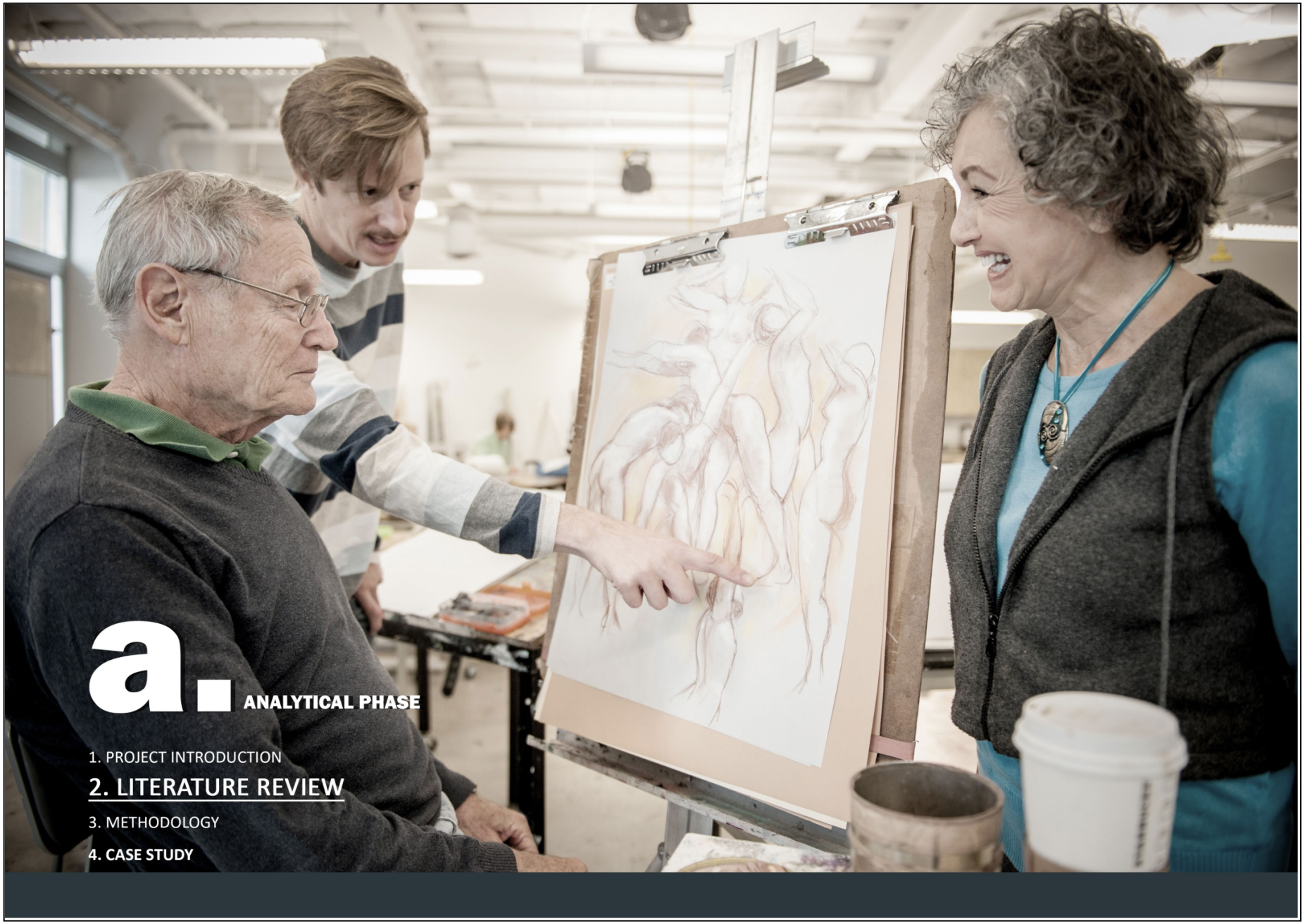


60?
70?
80?

Source: UN, World Population Prospects, 2014

1.3 CRITICAL PROBLEMS

Source: UN, World Population Prospects, 2014; Age UK; Handler, 2014



a. ANALYTICAL PHASE

1. PROJECT INTRODUCTION
2. LITERATURE REVIEW
3. METHODOLOGY
4. CASE STUDY

2.1 THE AMBIGUITY OF PLAY

Since the classical 'surplus' energy theory (Spencer, 1872), play-scholars have long debated the purposes, nature and definition of play without arriving at an agreement. Why play exists remains controversial, to date, and has typically been divided into two paradoxical views.

2.1.1 Utilitarian Perspective

Evolving around the truism that 'play is the work of children, and toys are their tools,' the dominant approach focuses on the preparatory value and practical usefulness of play. Consequently, this view limits play to childhood, both spatially and temporally, reducing adult play to a legacy of childhood behaviour, without much value, and fails to explain why adults play (James et al., 1998; Tara, 2012).

2.1.2 Non-instrumental Perspective

From Huizinga (1970), Sutton-Smith (1997), Caillois (1961) and, later, Burghardt (2005), western metaphysics have positioned playfulness as the binary opposite to seriousness, morality and productive work. A brief summary of the main characters of play is shown in Figure 1, with an expanded comparison between play theorists in Appendix 1.

Caillois' work (1961) is a continuation of Huizinga's thesis but argued that Huizinga's definition is 'at the same time too broad and too narrow'. Caillois' classification of four play typologies: competition, chance, simulation, and vertigo highlight the two contrasting attitudes of players' interactions:

- Paidia which is unstructured and spontaneous playfulness
- Ludus which are guided by rules and regulations, mostly in the form of games

(Caillois 1961: p. 3, pp. 57-61)

Csikszentmihalyi's (1975) study of human motivation indicates play as a state of mind that is in a form of flow, whether in a work-based or a play-based activity. People in a state of flow often report having an optimal experience in which their enjoyment and fulfillment can be expressed externally through smiles and laughter, or purely internally, as a state of satisfaction.

2.1.3 The Importance of Play

The paradoxical nature of the two approaches outlined above reveals the inherent ambiguity of play which has been powerfully summarised by the play theorist, Sutton-Smith (1997) who discussed how almost anything can allow play to occur within its boundaries. Although play scholars are unable to agree on a definition of play, as Burghardt (2005: xii) says, this does not diminish its importance:

In a very real sense, only when we understand the nature of play will we be able to understand how to better shape the destiny of human societies in a mutually dependent world, the future of our species, and perhaps even the fate of the biosphere itself.

Play is more than a mere physiological phenomenon or a psychological reflex, it is a significant function. All play means something.

- Huizinga 1970:1

Play is....

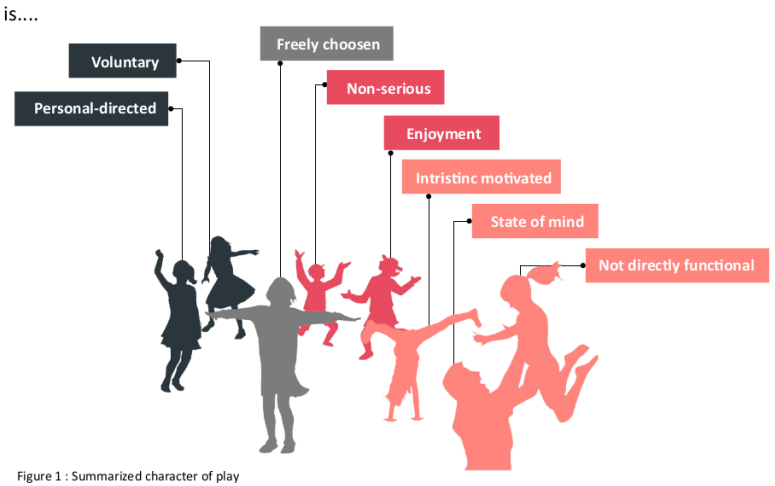


Figure 1 : Summarized character of play

2.2 MULTIDISCIPLINARY APPROACH TO PLAY

Several disciplines are now showing significant interest in the opportunities for play that emerge for people throughout their entire lives. This project mainly explores perspectives from two disciplines: positive psychology (2.2.1), that looks at the benefits of good emotions associated with play, and urban play with explorations of the ludic city (2.2.2) (Stevens 2007).

2.2.1 Positive Psychology

Psychologists argue that play can feed into the experience of frequent, short-term positive events, such as pursuing hobbies and interests that bring joy to the individual which, in turn, can lead to long-term success in life. This suggests that rather than merely signaling well-being, positive emotions can produce well-being and contribute to the maintenance of cognitive functioning and emotional growth in later life (Elder, Johnson and Crosnoe, 2003). Tonkin (2016) developed five steps to mental well-being, and Donoff and Bridgman (2017) then went on to demonstrate that these five steps can all be achieved through play (Figure 2).

A more recent case is the study of the Red Hat Society (Yarnal et al., 2008), which provides a platform for older women to be 'silly and goofy' around each other in an unstructured context that offers freedom from the grind of everyday life. (Figure 3) Specific activities, such as 'dressing-up' with red hats and purple outfits, allow elderly women to display themselves differently in ways that purposely invite public attention, something which is not common for older women. The results show that there is a strong desire for, and expression of, playful thinking and behaviour by women over 50, and the study provided strong support for the arguments made by Burghardt (2005) and Huizinga (1960) that play is non-serious, voluntary and social. Moreover, the process of making new friends has a significant longer-term social impact for elderly women. Shared amusement creates emotional intimacy and social bonds which initiate social interaction, leading to a healthier and more socially integrated later life (Frederickson, 2004). According to Elder et al. (2003), positive emotions assist in developing and maintaining cognitive functions and emotional growth into later life stages.

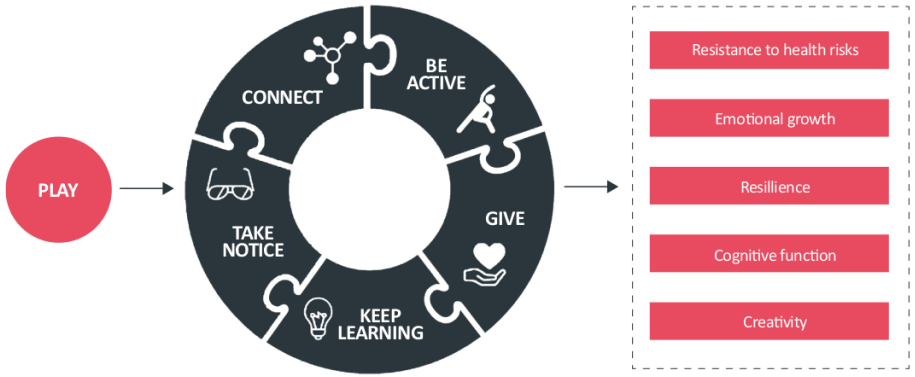


Figure 2: Five steps to mental wellbeing (Tonkin, 2016)

Figure 3 : The Red Hat Society Website

2.2.2 Urban Play: The Spatial Setting of Play

When translating the concept of play into a cityscape, the findings challenge Huizinga's contention (1950, p7) that one of the essential characteristics of play is "its spatial separation from ordinary life, removed from regular routines that sustain life", and "all play moves and has its being within a playground marked off beforehand either materially or ideally, [...] Inside the playground an absolute and peculiar order reigns" (Huizinga 1949: pp. 9-13).

Conventional urban design practice is often criticised for being too over-stimulating, too determined and too function-oriented, lacking the flexibility for surprises and unable to adapt to unexpected events. However, Steven (2007) reveals how urban play can powerfully transform anonymous urban settings into 'extraordinary' ones with a more encompassing sensorial and bodily experience that is non-instrumental, spontaneous and without explicitly playful intentions.

Based on a re-evaluation of Lynch's five spatial elements (Figure 4), Steven introduced the 'props' and 'thresholds' to help create meaningful public interactions with strangers in the audience, a phenomenon called 'triangulation' (Whyte, 1988; Lofland, 1998). External props, such as public art installations, challenge Lynch's ideas of landmarks being instrumental perceiving objectives with a practical end by providing affordance for distinctive movement and triangulating social interaction.

'Threshold' explores the complexity of informal social mechanics between people and the city, where the richness and potential of urban public life is radically different from work or home routines. The element of threshold is an extension of the concept of 'open regions' (Goffman, 1963), and is closely linked to other subsequent concepts including 'third spaces' (Oldenburg, 1989), 'loose spaces' (Franck & Stevens, 2007) and 'fourth places' (Aelbrecht, 2011, 2016). (Figure 5)

Oldenburg (1989) argues that public life is spreading across 'third places' such as restaurants, bars, and informal gathering spaces like building edges, entrances and bus stops which provide "neutral ground" for people to gather and socialise freely and provide personal benefits of novelty and perspective to the individuals who use them.

Extending these concepts further, Bobic (2004) and Franck & Stevens (2007) explore the quality of urban 'loose spaces' in contrast with 'tight spaces', where activities are pre-determined through design and regulations. Later, Aelbrecht (2016) introduced "fourth places" as an additional but distinct category for informal social settings, characterised by spatial, temporal or managerial in-betweenness and a great level of publicness. Such spatial in-betweenness in urban public spaces are worth exploring when considering design to encourage urban play.

These loose spaces are interesting from a sociological perspective as they host the place where public life is being created from private lives as the later transits into the former (Bobic, 2004). The high dramas of everyday life unfold largely in the micro-sociology of spaces: at building entrances, in leftover greenspace and in back alleys which allow a suspension from people's conventional social life. Such spatial looseness increases social diversity in the public space and encourages further challenge to the boundaries of current urban design practice which mostly addresses the macro-sociological aspects of public life in the design of urban spaces (Aelbrecht, 2016).

	Imaginability (Lynch, 1960)	Playability (Stevens, 2007)	Steven's explanation
	Paths	Paths	Emphasize on experiential conditions of pathways such as narrowness that is experienced through body.
	Nodes	Intersections	Strategic behavioural points and decision points of entrance or departure but with bodily encounter: smells, sounds and touch rather than visual properties.
	Landmarks	Props	Landmarks merely orient movment which limits the chances for people to interact. Props emphasize a variety of fixed objects that triangulate social interactions.
	Edges	Boundaries	Has a function of dividing and structruing the inside and outside, can be a tactile object which is engaged with the body.
	Districts	Thresholds	A point at which a path crosses a boundary between public and private - often known as 'loose spaces'.

Figure 4: Re-evaluation of Lynch's five spatial element.

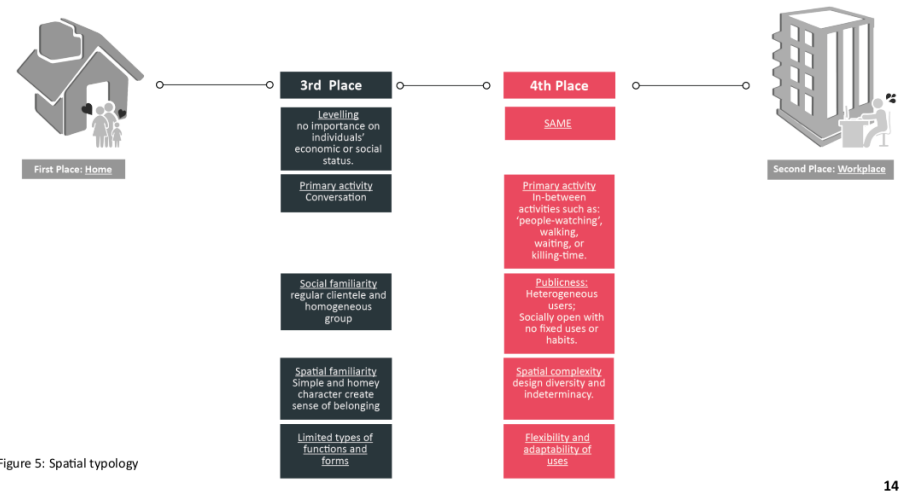


Figure 5: Spatial typology

2.3 The Typology and Design for Urban Play

Moving away from Lynch's object-centered approach, the 'playability' of public spaces is intention-centered through two different types of play. (Figure 6)

- Physical exploration of space (active play) which fosters bodily sensations that encourage passers-by to join in. The involvement of anonymous and unfamiliar strangers is one of the distinct characters of public play

2.3 THE RESEARCH GAPS

As mentioned earlier, the intense research on childhood play rapidly thins out around adult play; when it comes to play for the elderly, this is still largely seen as something frivolous that is the privilege for those who can afford the time and money. With regard to urban spaces, it's widely understood that play spaces should not be designed exclusively for one client group, i.e. not a 'kit, fence and carpet' (KFC) playground specifically for children, nor a grouping of card and chess tables for the elderly. Despite this, the importance of urban play for the elderly has had very little exposure to date.

This paper aims to address this knowledge gap by demonstrating that urban play is particularly essential for the elderly. The survey conducted on why older people don't play anymore shows that loneliness and social isolation can make people more vulnerable to illness and disease and is a barrier to the out-door and social life of the neighbourhood. The urban public realm is "where strangers meet" and where people must negotiate with wider society and appear as part of that society (Purcell, 2003: 577–578), hence playful interventions in urban spaces represents a greatopportunity to make the elderly visible again in modern urban life, enhancing their quality of life by attracting them out of their homes (Baker, 2014).

More recent scholars have attempted to explore the distinctive characteristic of play in later life cycle. Hoppes, Ally and Sewell (2000) shows that play can become the 'temporal structures' to life that fills those previously committed working hours. This is one of the five recurrent motives of play for older adults, the others being physical and mental fitness; competition; a sense of belonging; and continuity of past interests. Similarily, Cheang (2002) explored how 'third spaces' such as fast food restaurants provide structure to life and context for 'play', 'sociability' and 'laughter' for older people. Moreover, Mahdjoubi and Spencer (2015) interviewed 33 people aged over 65 in Bristol and results show that being with their grandchildren provided them with a 'glorious excuse' for playful behaviour, while play for older people is less associated with commercialised landscapes of consumption, and more with informal spaces that give access to basic amenities such as public toilets. Fundamentally, the rights of the elderly to play in the public will offer new insights into the concept of 'the right to the city' (Lefebvre, 1991).

3. METHODOLOGY

Analytical Phase

Focused on understanding the scholars' perspectives on play in general and uncover the thematic patterns of 'urban ludic intervention' which led to an exploration of research gaps on play for the elderly. Case studies are selected in a continuum between urban ludic interventions and age-friendly interventions.

Toolkit Development

Principles of play for the elderly was developed in the analytical phase and summarized into a conceptual framework and initial design toolkit. An iterative process of reflection and refinement was adopted by testing the initial design toolkit on a pilot case study which allows a deep understanding of the actual challenges in the implementation process and creating a feedback loop for the toolkit refinement.

Design Application

Sites of interventions were carefully selected based on desktop research of the planning and policy context and socio-economic background. Field works were conducted before final application of design for primary data collection of the real users and behaviors patterns. Interviews and surveys were conducted 4 times with local residents age over 60. (see Appendix) This includes a basic co-design process by simply asking the interviewees to draw on a printed map to highlight their key daily destinations. A summary from all desktop research and field were compiled to extract successful and ineffective design features and ensure the proposals being more location specific.

Ethical Consideration

Due to ethical considerations, specific elderly groups such as with dementia were not interviewed, hence the information on this particular groups were mainly gathered based on health-related publications. For interviews within restaurants and other private premises, permission was obtained as long as I did not interrupt the flow of the business. Also, permissions were asked for any digital recording and photo-taking to preserve the privacy of interviewees, except for those who were willing to provide.

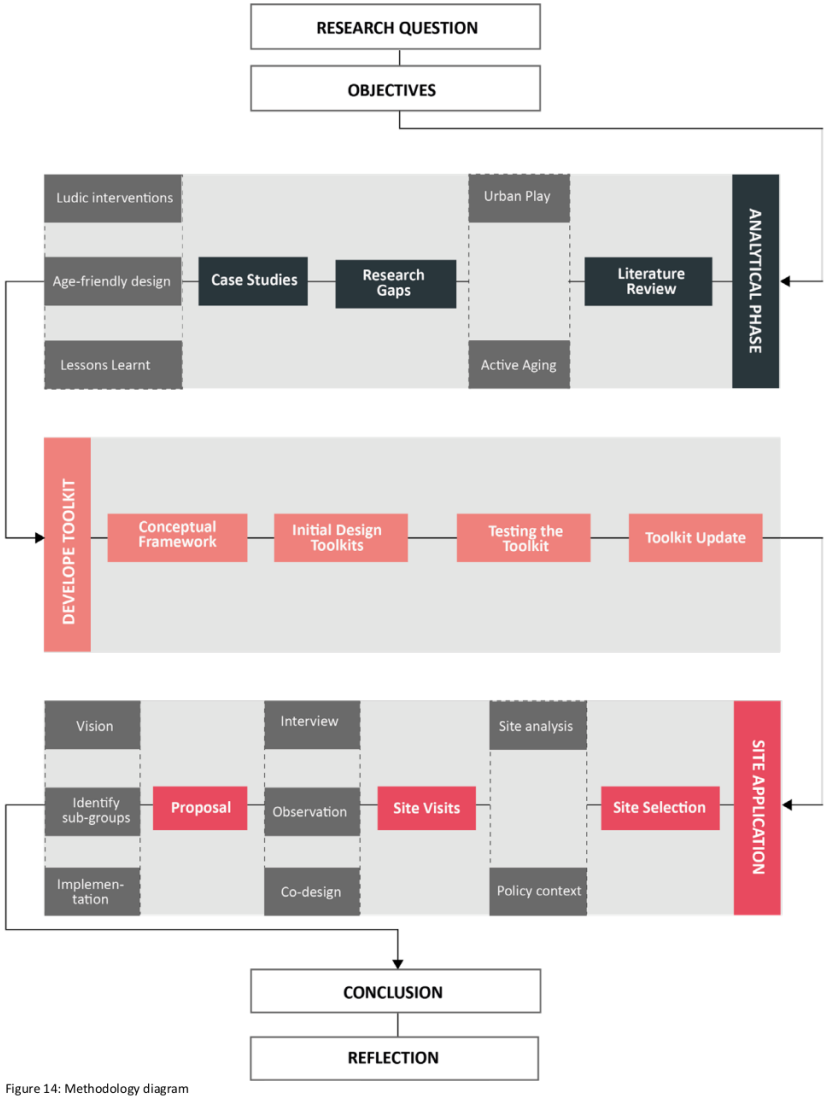


Figure 14: Methodology diagram

a. ANALYTICAL PHASE

1. PROJECT INTRODUCTION
2. LITERATURE REVIEW
3. METHODOLOGY
4. CASE STUDY

4.1 EXCLUSIVE 'AGE GHETTO' vs AGE MIXING

4. 1.1 Pensioner Playground (UK)

Play equipment have been installed in 'pensioner playgrounds' as part of the All London Green Grid. 6 pieces of exercise equipment were selected by local residents through public participation and installed in Hyde Park.

Limited in the ways in which they can be used which suggest that they should be viewed as providing opportunities for exercise to improve core strength and flexibility for the elderly rather than more playful and leisure pursuits.

Figure 15: Pensioner playground in Hyde Park (Source: The Guardian)

4.1.2 West Lake (Hangzhou, China)

The design for open space emphasizes 'less is more'. Minimum design quality in forms of pavilion and pathways allows users to follow their own interests and allows strangers to negotiate the spaces and unselfconsciously enjoy mutual interest activities.

Known as Intergenerational Contact Zone as amenities were designed as 'ageless' to avoid elements such as playgrounds, basketball courts that are dedicated to a particular age or interest group.

Figure 16: West lake, Hangzhou (Source: Google)

4.1.3 Gillett Square (Hackney, London)

A bottom-up process of conceptualization and design that significantly engaged local stakeholders and the community, political entities, and sources of funding.

Programmed performances of all kinds negotiate the space at the same time and attracts a strong mixture of performers and users to represent local cultures and ethnic groups.

Figure 17: Gillett Square (Source: https://www.hawkinsbrown.com/projects/gillett-square)

Lessons Learnt

- There is a need to balance between instrumentality and spontaneity when design for play space. Segregated spaces such as parks are often designed for one particular age group, and often too structured in the regulation of urban spaces to the point where spontaneity is discouraged.
- Urban space with a higher level of publicness has the particular potential to enable social play between generations and age-mixing. Less design gives the liberty to accommodate the unforeseen, host the unexpected and promote the unpredictable. Users 'twist' the 'ideological content' of street furniture practicing an out of the way corner as gym, or a bench as a place to lie down.

4.2 INTERACTIVE AND CREATIVE INSTALLATION

4.2.1 The Hangout (New Orleans, LA)

A 600 sq ft interactive project installed permanently in bus stops in local ommunity, serving a safe and creative spaces in children routes to schools. The design focused on utilizing sound, light and touch to spark creativity and free-choice learning.

Figure 18: The Hangout (Source: https://www.playablecity.com/)

4.2.2 Hello Lamp Post (Playable city)

Invited people to strike playful conversations with strangers in the cities via a simple text message system installed in familiar city objects (eg. bus stops, parking meters, trees).

Figure 19: Hello Lampost (Source: https://www.playablecity.com/)

4.2.3 Shadowing (Playable city)

Street lights recorded and played back the shadows of those who passed underneath. Encouraged people to interact with some of the unexpected and less-travelled streets and pathways.

Figure :20 Shadowing London ((Source: https://www.playablecity.com/)

Lessons Learnt

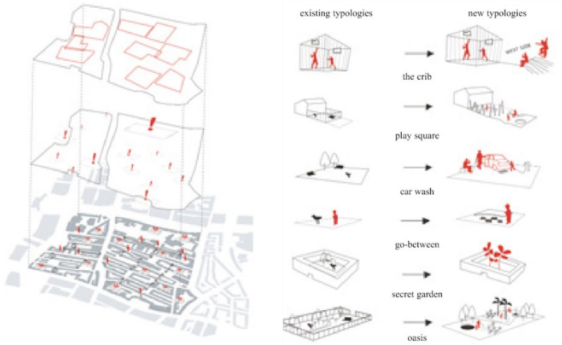
- Play as creative interventions can transform the most common pieces of the standardized and unified urban infrastructure into inspirational, playful and sociable spaces that fosters bottom-up creativity and self-determined urban citizenship.
- Emphasizing on Sutton-Smith's idea of "play everywhere" by creating playful opportunities in everyday destinations and normal routines.

4.3 PLAY NETWORK

4.3.1 Play network (Oude Westen, Rotterdam)

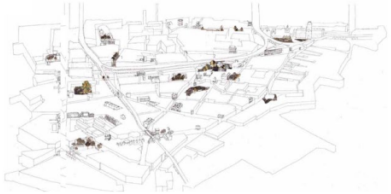
The formation of local play networks create a three-layer landscape-oriented typology with many subtle possibilities for play for all age groups:

1. Interstitial layer: in-between informal places using similar colors, materials and forms to create network. Emphasis not on pre-programmed playing equipment but on landscape elements.
2. Theme layer: play areas are designed to be distinctive from one another and are designed not around age groups but around lifestyle.
3. Connecting layer: a functional, physical and visual link between separate places. Cement of network. The point of departure is the creation of small traffic-free routes- a matter of moving from place to place while playing.



4.3.2 Bankside Urban Forest (Southwark, London)

A coordinated and collective urban design project based on the concept of 'sharing' that connects the Bankside to the Elephant and Castle. Networks were created by taking an ecological approach with diffuse elements of green meshing with existing 'place of exchanges' and connecting to new multiplicity of small-scale spaces.



Lessons Learnt

- Urban interventions should not be regarded as separate projects with individual solutions. Instead, layers of play network with a tissue of low-threshold public spaces can improve the spatial experience in tight urban structure and offer genuine opportunities for people from different backgrounds to meet, connect and exchange and within which play is elevated to urban culture. Chains of events can offer continuing moments of visual and sensual pleasure and simply surprising and unexpected experience which are more powerful than segregated public realm.

4.4 SUCCESSFUL PARTNERSHIP

4.4.1 Take-a-Seat (Old Moat, Manchester)

Local businesses committed to providing a place to sit with no obligation of purchase, in the absence of sufficient public benches in local high streets.

Figure 23 : TAS (Source: Google)

4.4.2 Community Toilet Scheme (Richmond, London)

Responded to the shortage of publicly maintained toilets in local area. The ultimate aim was to reinforce a strong social infrastructure and simultaneously build strong relationships between local businesses and their elderly customers.

Figure 24: CTS signage (Source: Google)

4.4.3 Borrowed time and space (UK)

Figure 26: Band On the Wall (Source: Handler, 2012)

Elderly Dance Club (Manchester)
'Band on the Wall' club is a non-profit venue run by Inner City Music Charity which subverted the generational dynamics of Manchester urban night time economy by turning a few days in a month into an elderly dance club night for 50+ via official authorization. (Manchester, 2012)

Figure 27: Cheetham Hill High Street (Source: Google)

Meanwhile Spaces (London)
Vacant shop on the high street in Cheetham Hill are reconfigured as a temporary space for local skills exchanges via the policy mechanism of 'meanwhile spaces.' and reactivating the 'dead time' of high street via an open-door policy.

Lessons learnt

- Mutually beneficial for local businesses as well as the older demographic. Local business being age-friendly and accessible can help build a 'caring' and trusted brand image, cutting across the 'digital shopping divide' and recognize the power that 'silver economy' can contribute to the marketplace and society in general.
- Emphasizes on the importance of partnership and collaboration across multiple stakeholders under a strong political leadership. Meanwhile, activities such as allowing the elderly to lay claim to urban spaces and times of the day not ordinarily associated with their age group set aside the fondness of age stereotypes and represents an antidote to the risk-averse culture of problem-solving age-friendly design. (Handler, 2014)

b. TOOLKIT DEVELOPMENT

5. CONCEPTUAL TOOLKIT

6.UPDATED DESIGN TOOLKIT

5.2 INITIAL PRACTICAL TOOLKIT

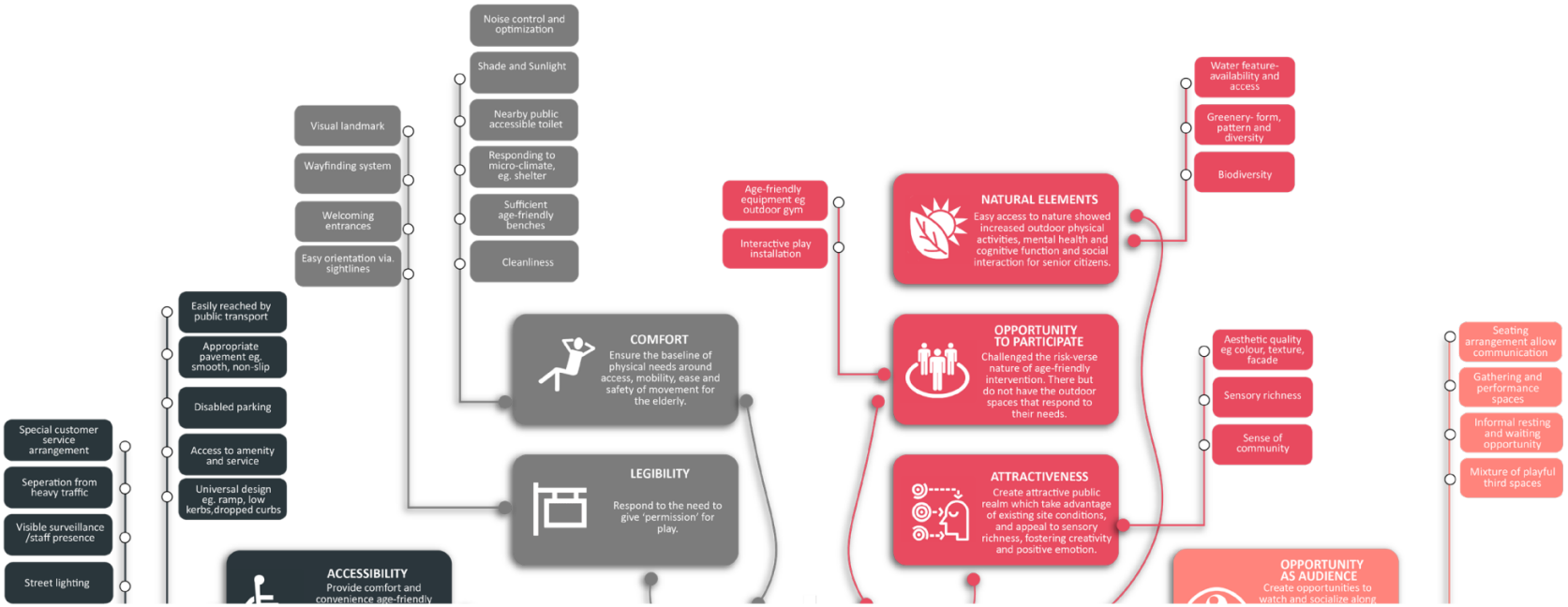


Figure 29: Initial Design Toolkit

b. TOOLKIT DEVELOPMENT

5. CONCEPTUAL TOOLKIT

6.UPDATED DESIGN TOOLKIT

6.1 TESTING THE TOOLKIT

The viability and feasibility of the initial design toolkit is tested on four public realms around Kings Cross which appear to be successful and valuable sociable spaces that balance formality with opportunities to unwind.

1. King's Cross sqaure

2. Battle Bridge Place

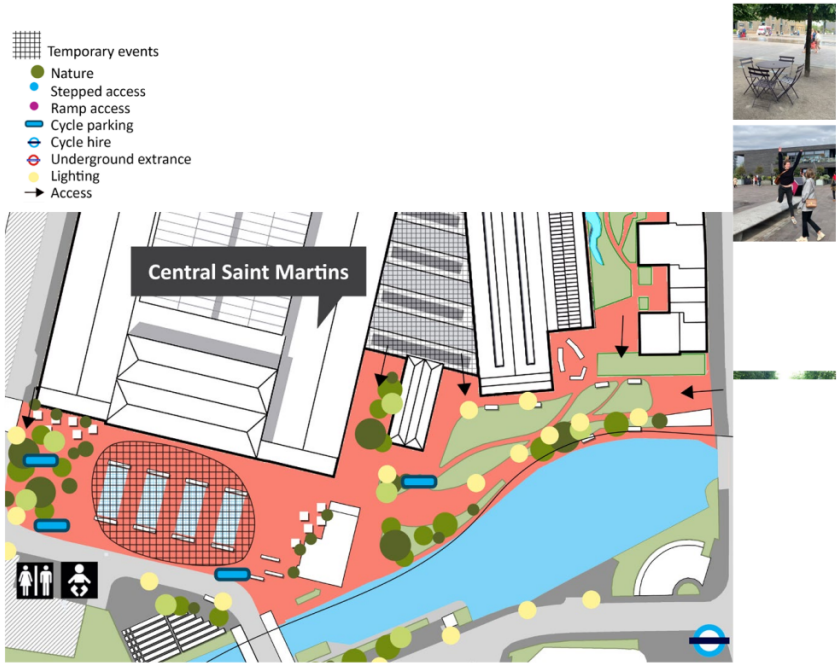
3. Pancras Square

4. Granary Sqaure

Using observation, note-taking and mapping as primary tools, site visits and analysis will focus on empirical knowledge and micro-sociological data of small playful encounters of how elderly using the spaces and main spatial elements that structure the elderly's experience.

The findings from the pilot case study will be used to update the initial that was developed based on literature review to create a feedback loop and identify gaps.

Figure 30: Public realm location map



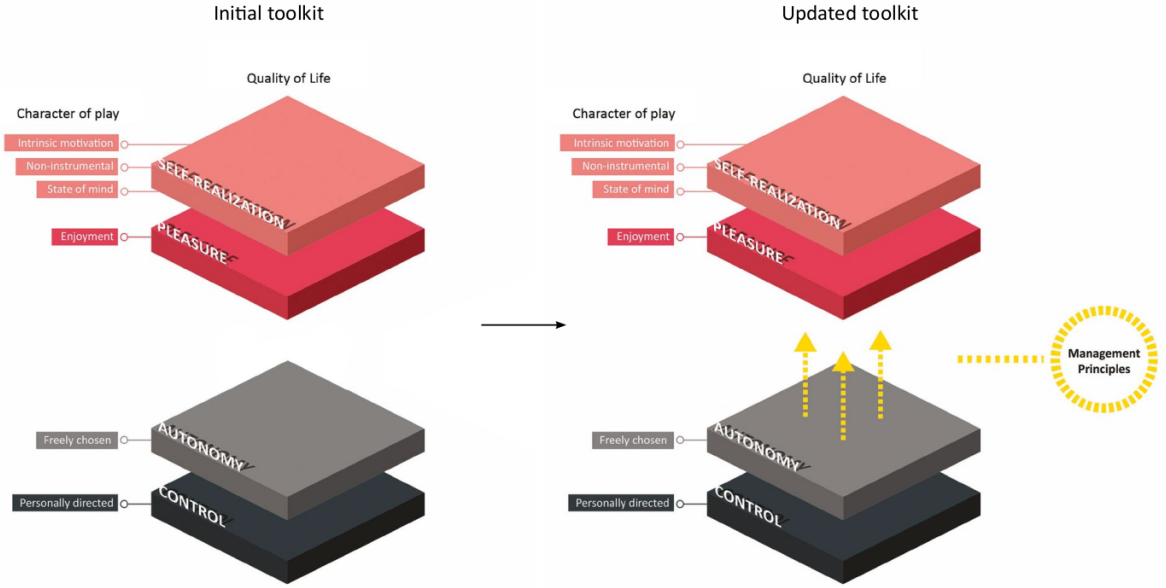
Key findings	Lessons Learnt	Contribution to the toolkit
6. Flexible amenities	Moveable chairs and tables create a relaxed vibe and are kept in good condition with good maintenance.	
7. Intimacy and exposure	Inward-looking enhance privacy while exposed seating provides opportunity for interactions.	
8. Art and culture	Engaging with art are accessible for the public and can reduce stress and depression and are often programmed in partnership with Central Saint Martin or local artists.	
9. Diverse nature landscape	Adding interesting and pleasing visual experience that are preferably of older people.	
10. Public toilets with clear directional signs	Lacking access to toilets will limit the time an old person can spend away from home.	
* Safety and surveillance	The development provides obvious security measures (eg. with security guards and CCTVs).	

6.3 FINAL PRACITAL TOOLKIT

LESSONS LEARNT

Results from testing the initial toolkit showed that the main design principles of play developed in the analytical phase are comprehensive, but the realizations can be improved.

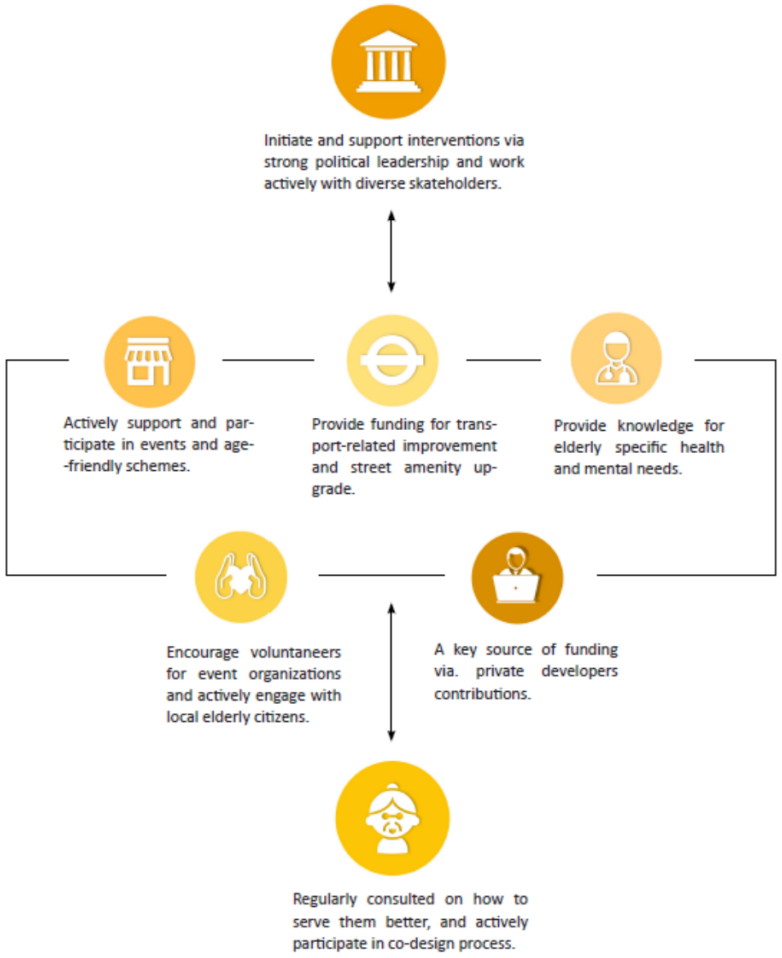
In addition, the pilot case study raised awareness on the importance of management and partnership in the implementation process including the maintenance of amenity and security and regulations of spaces.



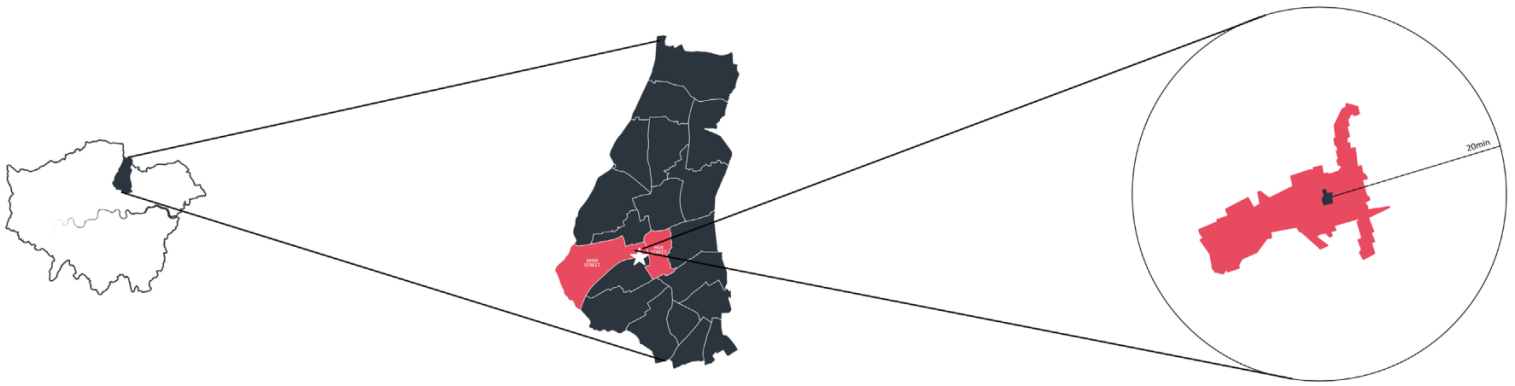
6.3.1 Design toolkit

6.3.2 Management toolkit

Figure 34: Final management toolkit



7.1 POLICY BACKGROUND



7.1.1 LONDON WIDE POLICY

Draft London Plan

- Policy SD6 Town centres
- Policy SD7 Town centre network
- Policy SD9 Town centres: Local partnerships and implementation

Action for High Streets

A London Plan for Older People 2018

- Policy SD6: Town Centers
- Policy SD9: Town centers and implementation
- Policy D7: Public realm

London Borough of Culture

Waltham Forest were awarded £1.35m of funding to deliver a programme of cultural activities celebrating the unique character of local people and places.

7.1.2 BOROUGH WIDE POLICY

Mini-Holland Scheme

£30m funding to LB Waltham Forest to help create a network of cycle routes, aim to be complete by the end of 2021.

Draft Local Plan (2020 – 2035)

Three overarching priorities:

- Safer cleaner streets
- Ensuring a decent roof over the heads of our residents
- Improving the life chances of all our residents

Draft Older People's Strategy (2016-2020)

The key strategies include:

- Health and Wellbeing
- Older People's Housing
- Cultural Strategy

7.1.3 TOWN CENTER POLICY

Walthamstow Town Centre AAP

- Policy WTCOS7 - Arcade Site
- Policy WTCOS5 - EMD Cinema
- Policy WTCOS9 - Selborne Walk Shopping Centre
- Policy WTCOS8 - Town Square and Gardens
- WTC9- Design and Place Making
- WTC10- High Quality Environment

Town Centre Regeneration Scheme

A significant backlash against the scheme due to the lack of affordable housing and the loss of one third of public open space and the Lime Tree Walk.

Table 4: Project policy review

7.2.2 Access to open space and play facilities

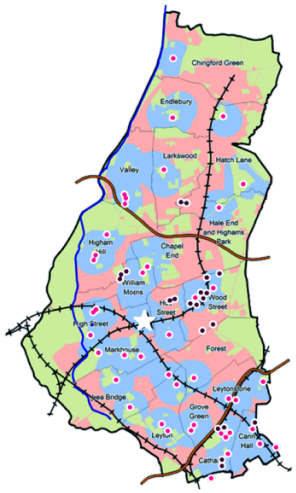


Figure 41: LB Waltham Forest access to play facilities (Source: Waltham Forest Joint Strategic Needs Assessment (JSNA)

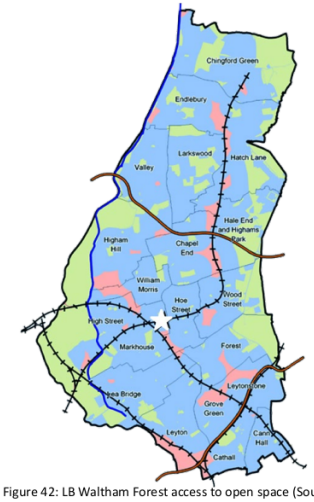


Figure 42: LB Waltham Forest access to open space (Source: Waltham Forest Joint Strategic Needs Assessment (JSNA)

The borough is well served for public open space with a small number of 7% of the borough in deficient access to open space. This is because of the protected Green Belt or Metropolitan Open Land including the Epping Forest and the Lea Valley.

The London Plan sets standards for each category of open space which requires that every Londoner should have a small or local park within 400m of their home. Area around Walthamstow Town Centre is identified as the larger areas of deficiency in access to local open space and local play facilities.

Moreover, surveys have been conducted in the preparation stage for Draft Open Space Strategy for 3,537 park users. Key findings include:

- Under-representation amongst users from African, Caribbean and Asian communities
- Main reasons for dissatisfaction: lack of toilets and disabled facilities; Poor maintenance.

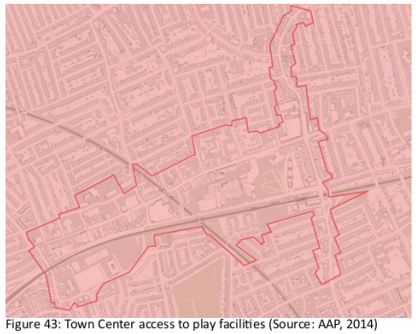


Figure 43: Town Center access to play facilities (Source: AAP, 2014)

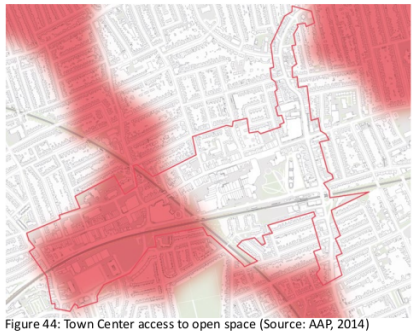
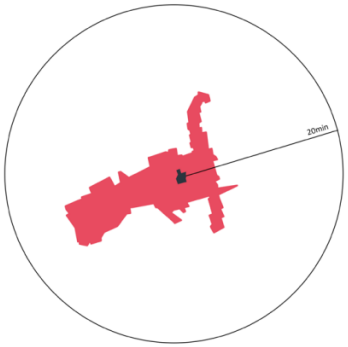


Figure 44: Town Center access to open space (Source: AAP, 2014)

7.3 WALTHAMSTOW TOWN CENTER



The main application sites are within the Walthamstow town centre, yet he impact area can contain a catchment area of 20 min walking distance from the boundary of the town centre.

The estimation of catchment area is based on the recommendation of walking distance for the elderly per day. Research has shown that older adults in good physical will walk between 2,000 and 9,000 steps daily and increasing such distance by roughly one extra mile will produce health benefits. However, the ability to walk can be varied by the individual's ability and stamina. (Centers for Disease Control and Prevention, 2014)

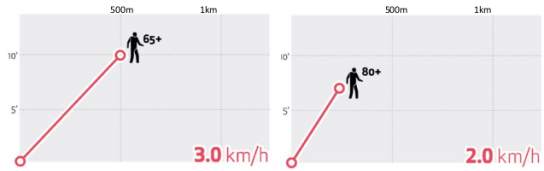


Figure 45: Old people walking speed
Source: Centers for Disease Control and Prevention

7.3.1 Retail

Walthamstow Town Centre is the largest shopping centre in the borough. Selbourne Walk provides a modern indoor shopping experience with larger retail units while the Market is a regional significant asset. There is a strong governmental desire to rebranding the Market within regional appeal in order to generate more tourist expenditure into the local economy, and adding to the viability of the Town Centre.

In Addition, a large amount of SMEs catering for the distinct needs of local diverse ethnic groups adds to the distinctiveness of local retail offer.

Figure 46: Active frontage (Source: AAP, 2014)

Figure 47: The Walthamstow Market

Figure 48: Local SMEs

7.3.2 Accessibility

The Town Centre is highly accessible (with a highest level of PTAL) with Walthamstow Central station and the bus station being significant pieces of inner-city interchange.

However, the Town centre is heavily congested around the station, hoe street/high street and Palmerston road/ St. James street junctions, which causes air pollution and creates an unattractive to both cyclists and pedestrians.

Figure 49: PTAL (Source: AAP, 2014)

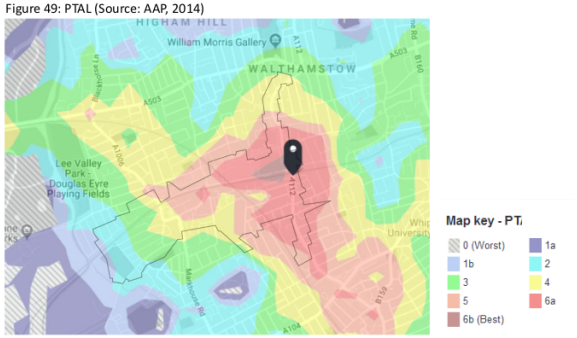


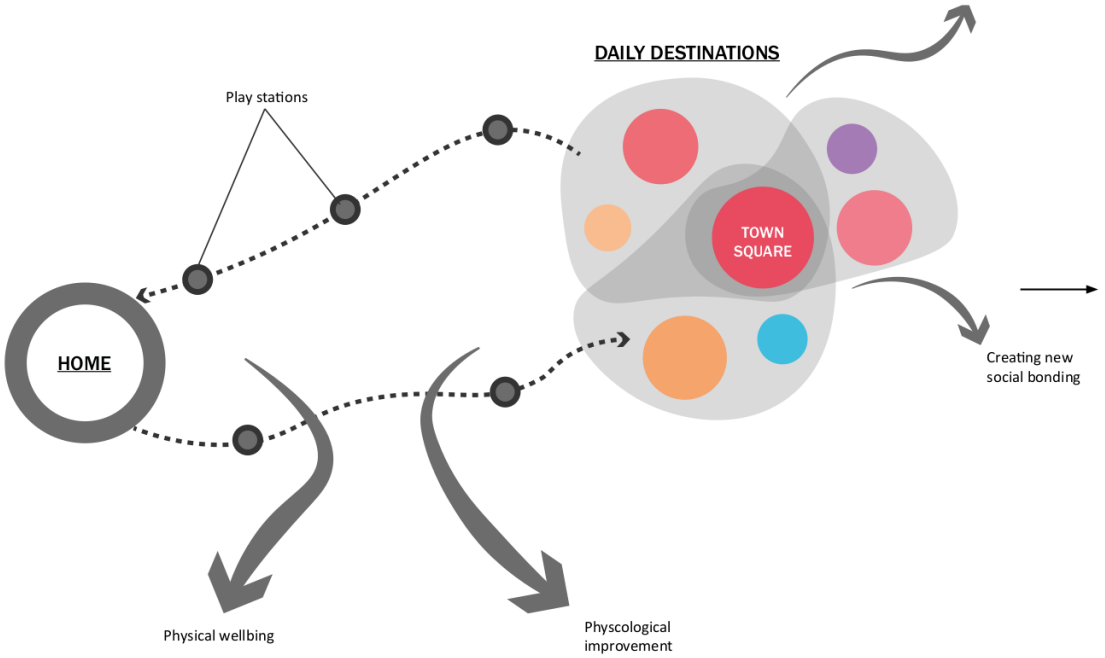
Figure 50: Narrow cycling lane on Hoe Street

Figure 51: Traffic congestion in St. James Street

8.1 THE VISION

Using play as gravitational pull that motivates the elderly to get out of their home, aging in public, and participate actively in their community, the aims of this project are to:

1. further encourage the provision of age-friendly civic amenity, supporting autonomy and control in outdoor environment.
2. cater to the common and distinct needs of diverse elderly sub-groups to improve the physical and psychological wellbeing;
3. providing diverse typology of play day and night through chains of playful experience integrated into the daily destinations;
4. enhance existing social connections, and providing opportunities for new social bonding;



a. Elderly who live alone

b. Elderly who are less active

c. Elderly with dementia

d. Elderly with strong social connections

eg. live with a partner or grandchildren

.....

* Noting that the needs and conditions of each sub-group can be overlapped. For instance, elderly who live alone can be physically inactive and/ or experiencing dementia.

Figure 52: Vision diagram

8.2 DESIGN RATIONALE

STEP 1: IDENTIFY THE EXISTING LOCAL AREA OF INTERESTS

Based on observation, data collection and interview, existing key area of interests for local elderly residents are identified where most elderly tend to approach as their daily destinations.

STEP 2. SPECIFIC PLACES INTENSIFIED

These hidden sites are believed to have the potential to connect current scattered and fragmented 'special places' with a series of complex interventions to re-energize the under-used spaces.

STEP 3. TRAILS FORMING

Using street networks to connect the fragmented existing and new area of interests to form trails providing choices of routes that serve the needs of different sub-groups

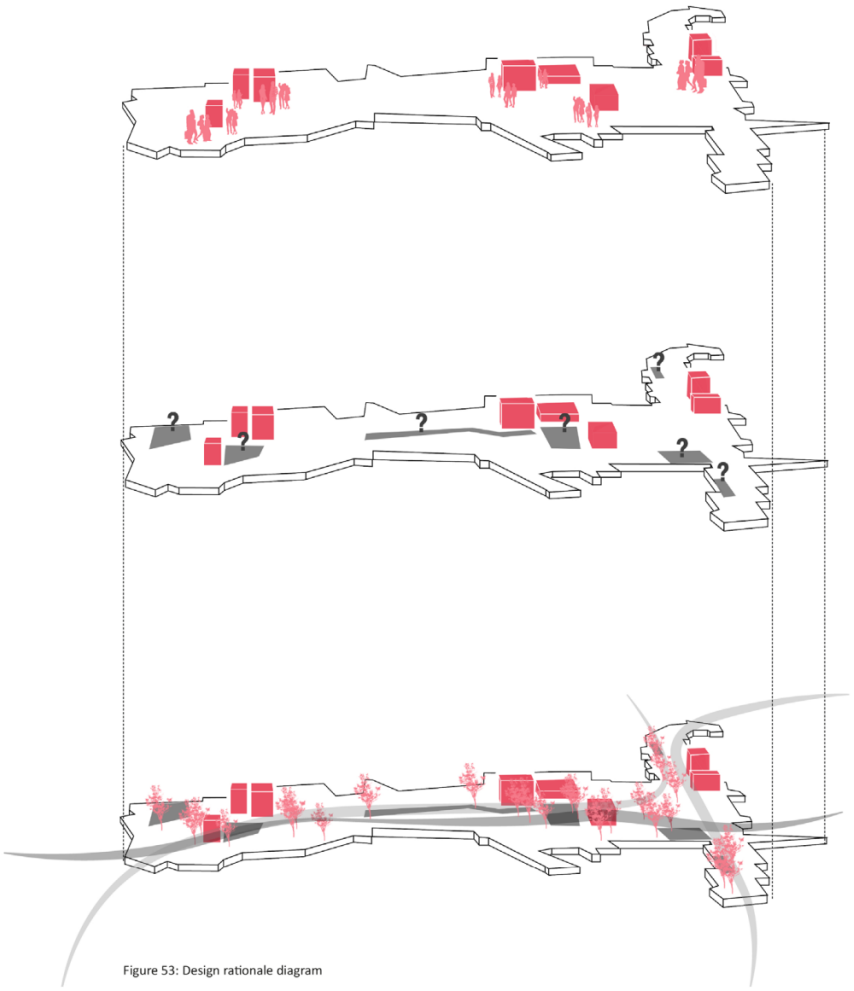


Figure 53: Design rationale diagram

8.3 SUB-GROUPS

Opportunities for age-netural amenities and more active and explorational play;

A constrained desire for more playful activities and how being with their grandchildren provided them with a 'glorious excuse'.

Daily routes will include more intergenerational activities.

Often have a positive outlook on life.

Frank, age 70
Live with granchildren(d)

Loneliness & social Isolation are the major challenges of their daily life, and more likely to have mental health conditions.

More likely to **visit GP,** eg. 21% (65+) who live alone visiting GPs at least once a month, compared to 14% of those who live with others. (Dreyer et al., 2018)

Older women are more likely to live alone, eg. 76.5% of women are widowed aged 85+ (ONS, 2018).

Alice, age 75
Live alone (a)

1 in 14 people age 65+, 1 in 6 people age 80+ have dementia (Alzheimer's Research UK, 2019)

Prefer vibrant spaces full of activities which provide more cues to find their way

No longer use public transport unaccompanied, daily activities occur within walking distance of their home.

Avoid socially demanding situations, preferring less challenging activities.

Michael, age 83
With dementia (c)

C. DESIGN APPLICATION

7. PROJECT BACKGROUND

8. THE VISION

9. DESIGN APPLICATION

10. IMPLEMENTATION AND DELIVERY

9.1 IDENTIFY EXISTING LOCAL PLAY NETWORK

This project sought to understand the web of spatial relationship between residents and local places they value. Interviews (see appendix) were conducted with local residents over age 60 and results were summarized in Figure 55. Interviewees can be divided into 2 main sub-groups: those who live alone and those with strong social connections. Due to sensitivity, questions relating to dementia and physical and mental disability have been avoided.

The common key destinations are summarized below. These existing places have the capacity to foster social engagement between different racial, ethnic, and class communities, and hosting a broad spectrum of regular habitual activities. Connecting these scattered sites represents opportunities to build walking and cycling into their everyday lives as a way of enhancing existing behaviour / experiences.

Street market: significant local assets

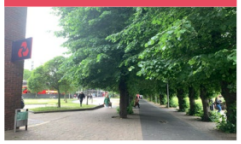
Local shops on Hoe Streets: mainly affordable retail and SMEs

The Library

St. James Health Center.

Church: hosting religious and public events .

The Town Square: serving as transit corridor between bus station and the Mall



Community centers

Lloyds Park: located within 20 min walking distance from the Town Center

Public transit

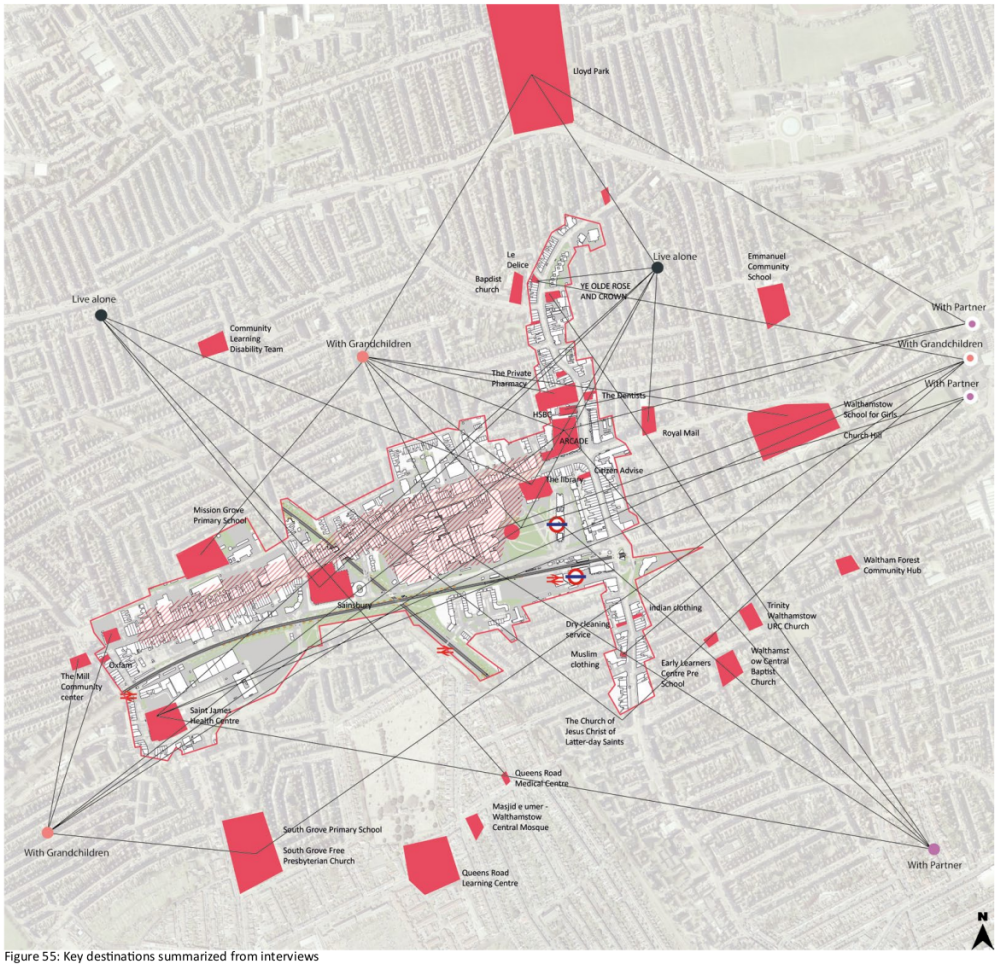


Figure 55: Key destinations summarized from interviews

9.1 IDENTIFY EXISTING LOCAL PLAY NETWORK

Key destinations that are mentioned more frequently for each sub-group are identified in Figure 56. Some interesting findings during interview and observations are summarize below:

With grandchildren:

School for dropping off and collection of children.

Arcade site serving the emerging night time economy

Playground in Walthamstow Town Square

Live alone:

Mirth, Marvel and Maud: a historical significant art and leisure theater.

"I often go there alone just to enjoy some good show!"

Le Délice Café: a regular customer base, mostly older residents.

"They got some nice cake. The shop owners became my friends... I went here really often.. like twice a week."

Fast food restaurants.

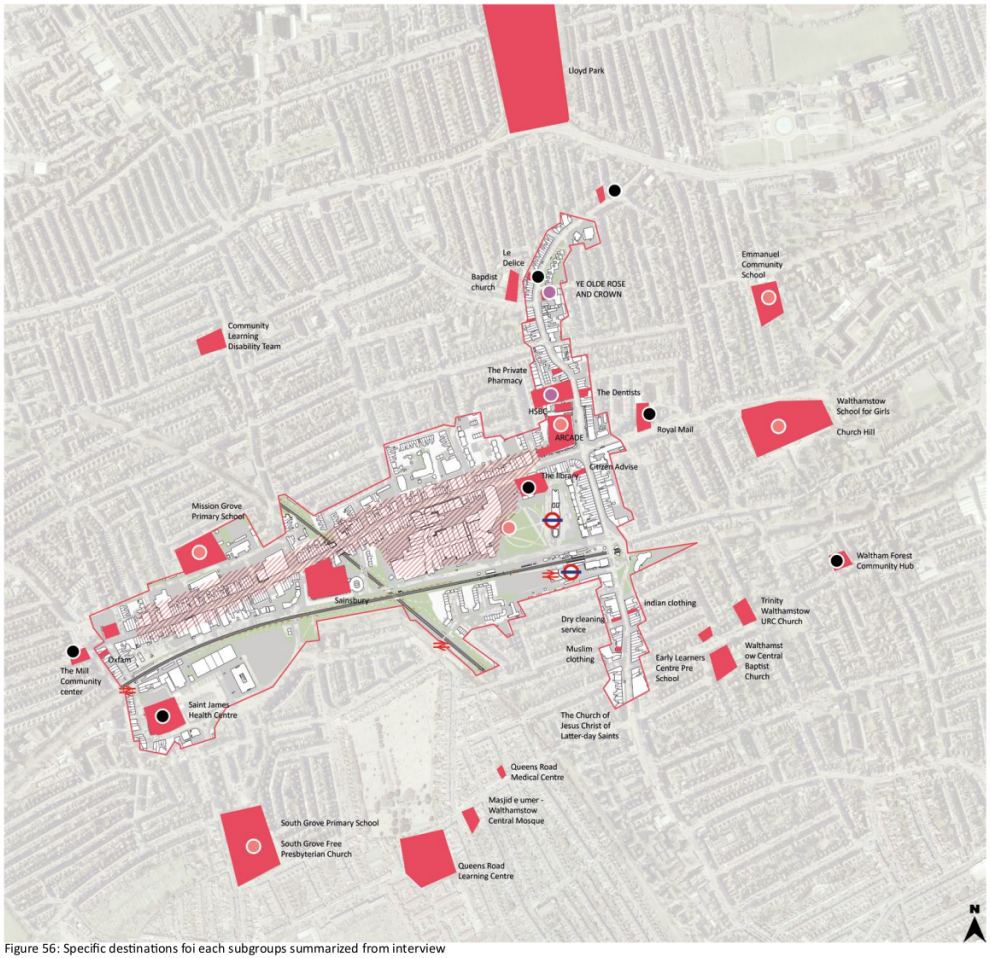


Figure 56: Specific destinations foi each subgroups summarized from interview

9.2 SPECIFIC PLACES INTENSIFIED

Key ‘Play Stations’ are identified based on interviews, personal observations and the review of the opportunity sites in Area Action Plan(LB Waltham Forest, 2014). The location of play stations is selected to serve the needs of different subgroups. In the same time, a rich typology of open spaces unlocks the opportunities of implementing different play types.

Park

1. Walthamstow Town Square and Garden

Threshold spaces

2. Walthamstow Central bus station

4. Under-used underground station exit

Street

5. Hoe Street pedestrian sidewalk

Civic amenity

3. The High Street (at night)

Pocket open spaces (Less than 0.4 ha)

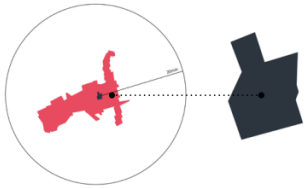
8. Under-used pocket park

10. Car park outside the Medical Center.

Figure 57: Location of Play Stations

9.3 PLAY STATION 1: WALTHAMSTOW TOWN SQUARE

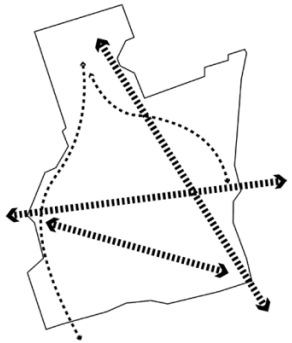
9.3.1 The role of the Walthamstow Town Square



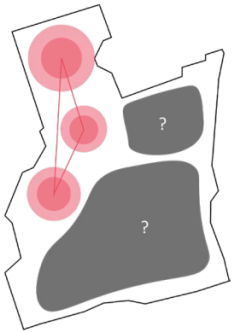
Although the proposals are in forms of dynamic trails, findings from interviews shows a mutual desire for strengthening the image of the Town Square. The Walthamstow Town Square being the largest existing public realm in the Town Centre, sitting adjacent to the public transport terminal, has a rich potential to be upgraded for more playful uses and become the focal point of various trails and a space where civility can flourish.

Existing condition

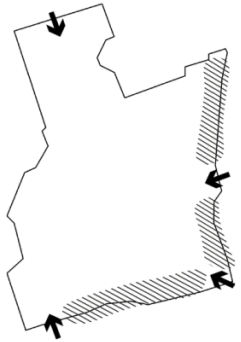
Pedestrian movement



Activity zone



Entrance and hard edges



Natural survillence

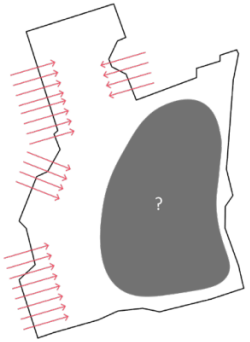
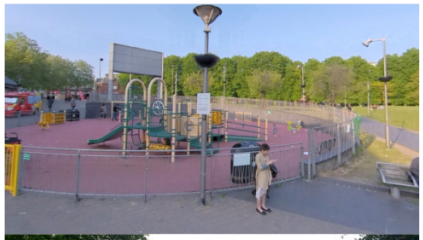


Figure 58: Current Town Square analysis

9.3.2 Opportunities

- Children's Play Space are well-typed by local residents.
- A easily legible spatial structure. Entrances with directional signage are immediately identifiable from arrival points at the railway/tube station or bus terminal.
- An excellent location close to transport links and the major retail centre, surrounded by civic and commercial land uses, and forming the main link space between the local transport hub and the retail core.
- Lime Tree Walk is an inviting route across the space.
- Changes in level between the Town Square around the western edge of the performance space provide opportunities for informal seating.

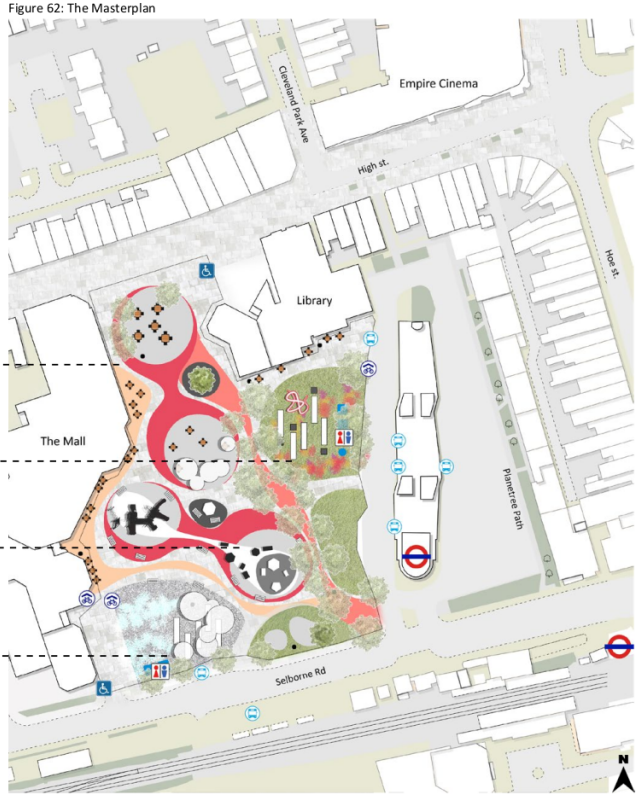


Empire Cinema
Cleveland Park Ave
High st.
Hoe st.
Library
?
The Mall

9.3.4 The Masterplan

Figure 61: Proposed activity zone

Figure 62: The Masterplan



The proposal aims to rebranding the Town Square by creating opportunities for exploration, diversion and discovery with better articulate activity zones and circulation to enliven and animate the Square. Additional costs for maintenance are required. (see:10)

TONE ZONE
Locating tone zones near children's play spaces can create the potential of intergenerational meetings and can foster a sense of place for all and also provides a degree of privacy for older people as the children tend to be more attracted to the playground area.

CREATIVE PLAYGROUND
Shelter and seating responding to micro-climate changes, and fountains is inspired from Granary Square which foster creativity and intergenerational play opportunities but require additional costs for maintenance.

SENSORY GARDEN
Retain the valued aspects of the existing configuration and protect the valuable Lime Tree Walk.

EVENT SPACE (Detailed proposal see: 9.8.3)
Spaces with less design and more flexibility, resisting over-design and offering changes for loose ends.

9.3.5 Tone Zone Playscape

Figure 63: Tone Zone

Figure 64: Gym equipment well lit at night (Source: www.leicester.gov.uk)

Figure 65: Ageless design allowed all generation users.

Figure 66 Vitality Bench with wood material, comfortable height and area for stick or wheel chairs parking. (Source: Miko Engineering)

9.3.6 Creative Playground Playscape

Figure 67: Creative Playground

Traffic noise and pollution are minimised through planting.

Shelter that provide comfortable seating area responding to micro climate. (figure)

Public toilets located in a convenient location. (figure)

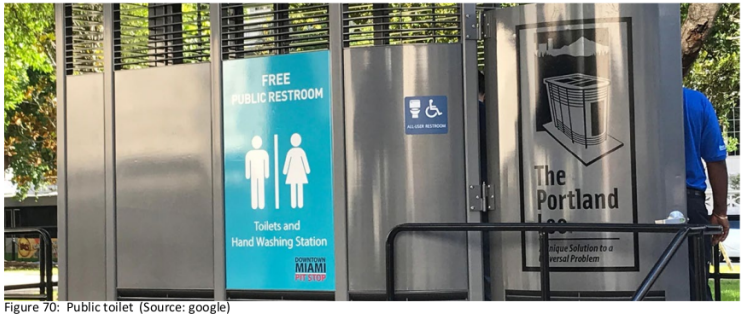
Signage for way-finding, indicating activities on the square.

Interactive water feature creates opportunity for interactions. (figure)

Figure 68: Public shelter design (Source: https://dailyhive.com/)

Figure 69: Water feature design (Source: www.landezine.com)

Figure 70: Public toilet (Source: google)



9.3.7 Sensory Garden Playscape

Figure 71: Sensory Garden

Diversify sensory richness are particularly favourable by elderly. Soft edges create buffer from traffic pollution from the bus station.

Movable chairs managed by the Walthamstow Library allow flexible social distance. (figure)

A new legible entrance next to the library breaks down current barrier.

Age-neutral play equipmen such as tennis creating mixed ages play. (figure)

Well served by public toilets.

Figure 72: Outdoor tennis (source:google)

Figure 73: Lime Tree Walk

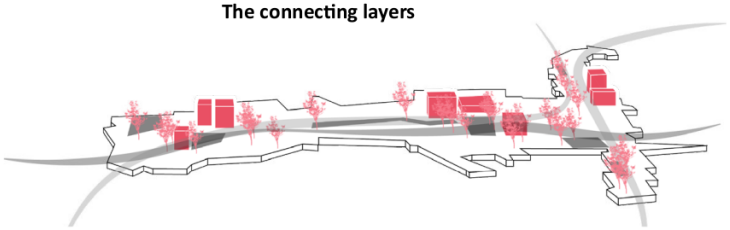
Figure 74: Moveable seating on Flat Iron Square (source: https://www.london-se1.co.uk/news/view/5360)

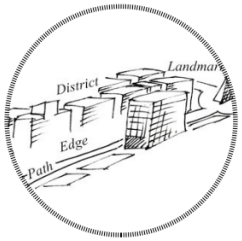
9.6 TRAIL FORMING

At a micro level, urban ludic interventions in forms of small doses of playfulness function like 'urban acupuncture'. However, Diener E., Sandvik E., Pavot W. (2009) suggested 'happiness' or high subjective well-being, is a matter of frequency not 'intensity'. Trails are proposed to examine the effect of this 'acupuncture' on the larger macro-system and encompass a rich typology of play experiences that are suitable for diverse users, providing moments of visual and sensual pleasures such as surprise.

This is accompanied by improvements to streetscape through a systematic wayfinding strategy, programmed events/ meanwhile uses and age-friendly cycling schemes which knit the existing sites and the new Play Station together, also make external links to other key destinations such as the William Morries Gallery, Wetland, Lloyds Park, etc.

The connecting layers





9.7.1. Wayfinding strategy

9.7.2. Play On Wheels

9.7.3. Programmed vents and meanwhile uses

9.7 THE CONNECTING LAYERS

9.7.1 Wayfinding

Wayfinding aids in navigation and legibility which are essential for elderly with degenerated medical conditions, such as dementia. Symptoms include visual impairment, memory loss, confusion (Alzheimer's Society, 2019) will impair the individual's ability to explore their living neighbourhood.

Supporting natural wayfinding is more than an issue of signage, but how the layout of spaces affects what people see during their journey can attract them along specific routes. Successful wayfinding will allow decrease of anxiety and sense of security and ensuring memories of happier times flood back. (Mitchell and Burton, 2004)

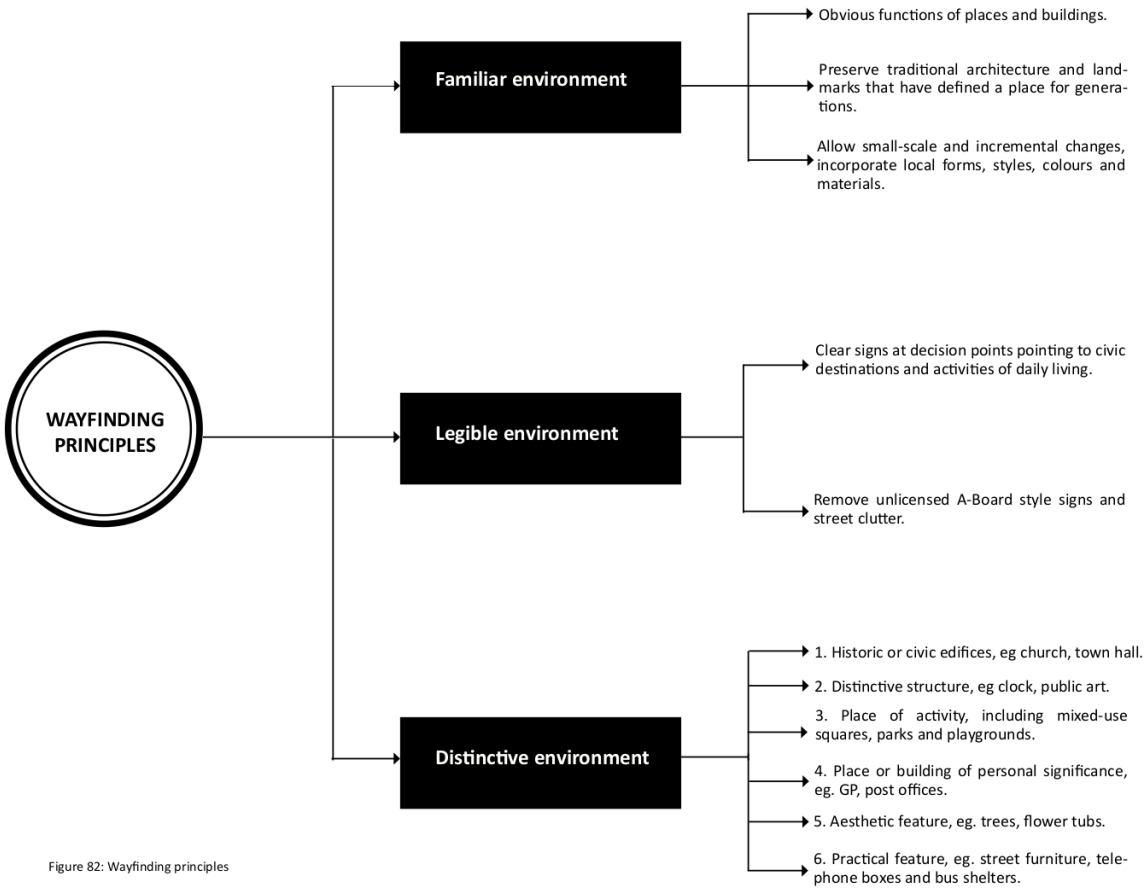
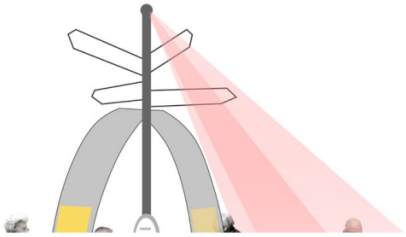


Figure 82: Wayfinding principles



9.7.1.2 Familier, legible and distinctive streetscape

Figure 85: Existing high street street conditions

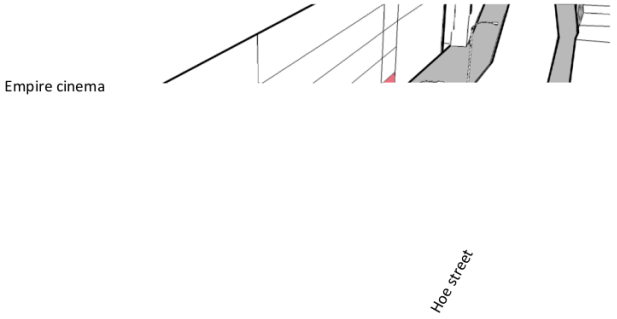
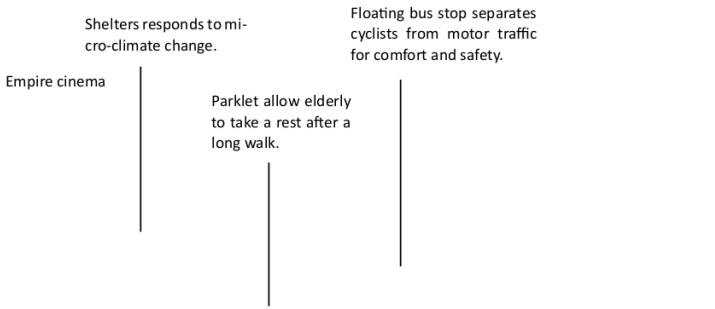
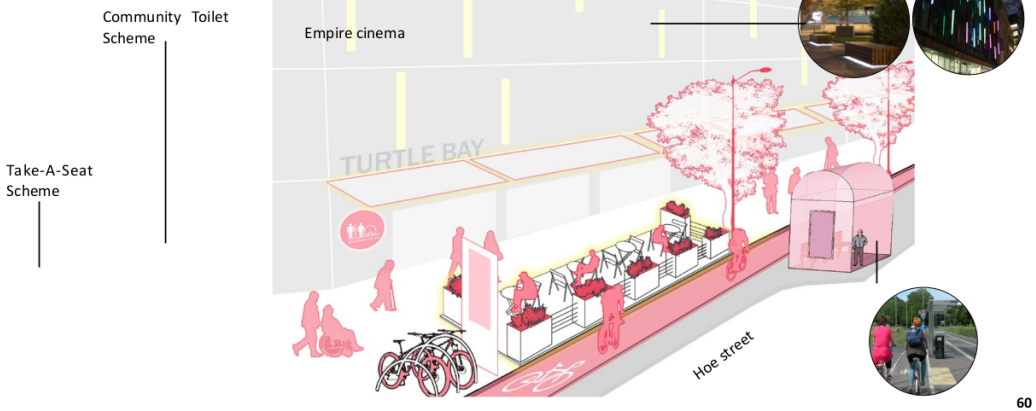


Figure 86: Proposed high street streetscape





9.7.1.2 Familier, legible and distinctive streetscape

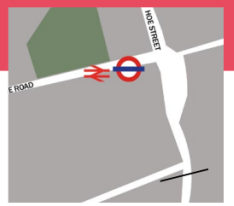


Figure 87: Existing neighbourhood level streetscape

1.6. Protection of distinctive features eg mail box, phone box as interactive landmarks (eg. Hello Lamp Post), and creating a memorable streetscape for people of dementia.

Figure 88: Proposed neighbourhood level streetscape

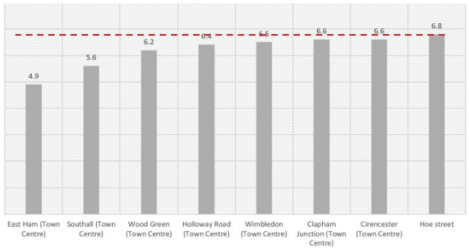
2. 4. Removal of un-licensed A-style boards and street clutters to create a more easily-navigated streetscape.

3. Sheltered bus stops with swings provide s visual attractors, acting as a strong social point for elderly to meet with friends. Passive supervision and clear lines of sight improve s safety as does well lit bus stops.

3.5. Installation of playful lighting reduce fear of crime at night.

9.7.1.2 Familier, legible and distinctive streetscape

9.7.3 Programmed events and meanwhile uses



9.7.3 Programmed events and meanwhile uses

Figure 102: Potential event venue map

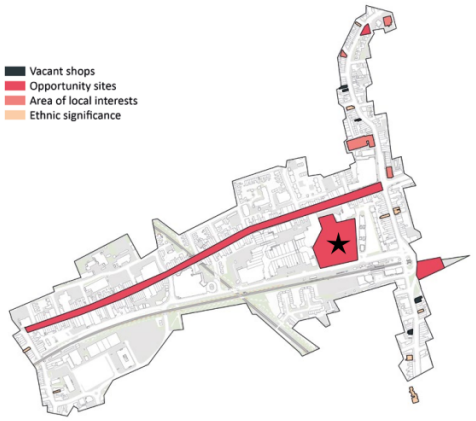
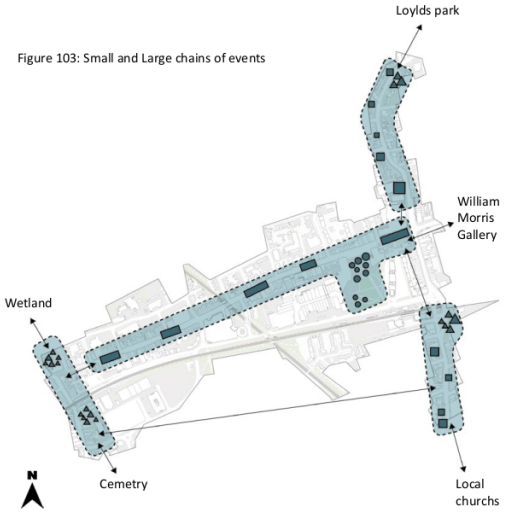
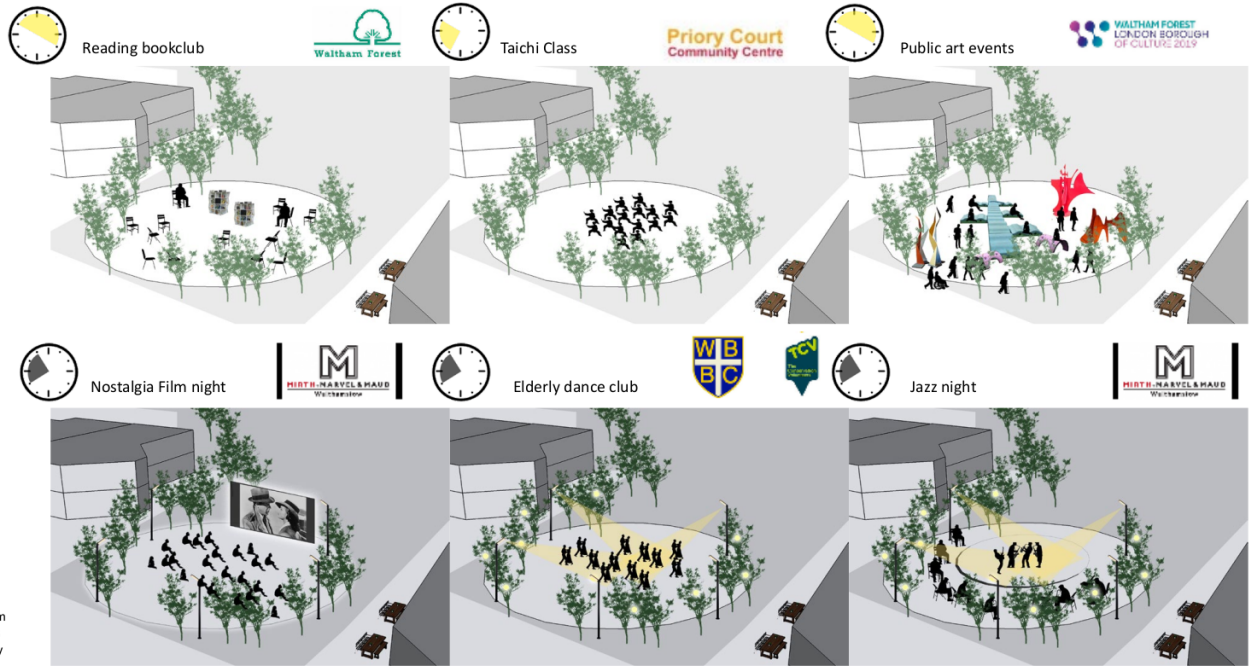


Figure 103: Small and Large chains of events



The Walthamstow Town Sqaure user scenarios

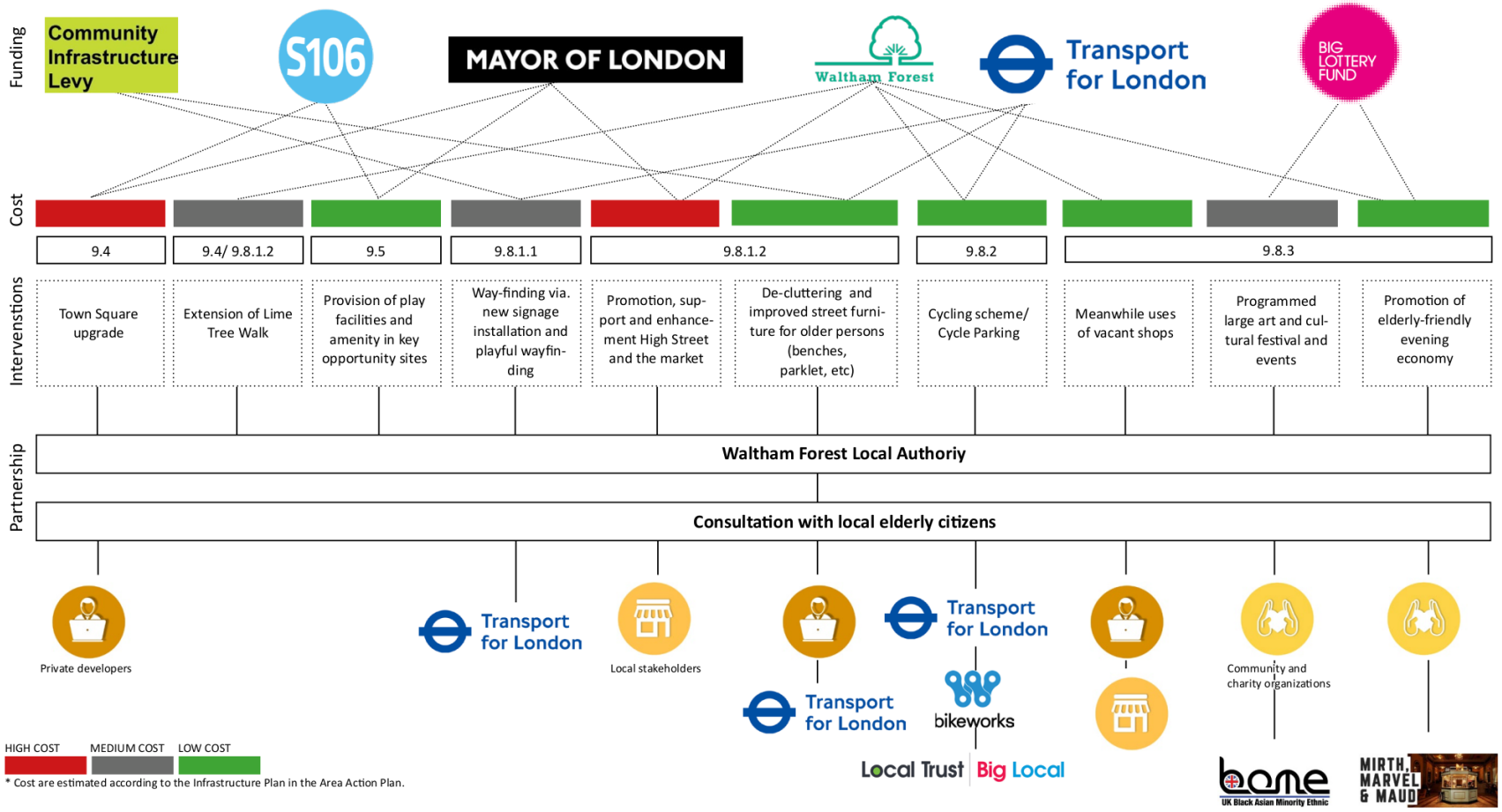


Potential event venues are located close to public transport. (Figure 102) The variety of events appeal to a wide range of sub-groups and ensure older people able to participate with a friend or caregiver.. Small scattered events can be connected into larger chains events beyond the Town Center, eg Borough-wide art festivals. (Figure 103) Voluntary organisations should be supported by the public and private sectors to keep costs of activities affordable. The 60+ bus passes provide privileged permissions for event free entrance.

9.8 OVERALL TRAILS VISUALIZATION

Extension of Lime Tree Walk
The Town Square
Playful lighting
Intergenerational play
Market upgrade
Medical center
ST. JAMES MEDICAL CENTER
Programmed events
Pocket Tone Zone
Mini-holland
Flexible seating

10. IMPLEMENTATION



11. CONCLUSION AND REFLECTION

CONCLUSION

Play can have its place such as the formally designed playground. Equally, play can occur in every aspect of human living. This project aims to explore the potential role of urban play as a mediator to challenge age stereotype and bring playfulness and positive emotions to portray a more accurate reflection of "a young at heart ageing population." (Roberts, 2014)

Since this project focuses intensively on the needs of elderly citizens which is a proportion of the population, careful design considerations need to avoid overdesign of age discrimination and to ensure the needs of the elderly being appreciated and treated as equals.

What has been done

- This project revealed how play can contribute to active and healthy aging and the oveall quality of life by ensuring an urban play environment that supports autonomy, control and meanwhile promotes pleasure and self-realization for elderly citizens of various physical capacity and social needs.
- Rather than contained in one place, the dynamic and flexible trails explored the different typologies of public realm (square, street, loose space, etc..) to increase the frequency and duration of playful encounters. Key opportunity sites were selected based on interviews of 60 local citizens over 60, hence more precisely responds to the heterogeneity of elderly groups.
- Different age groups were not designed to be segregated in this project. In contrast, designing for elderly does not lead to exclusion for other users, because serving the most vulnerable means that interventions will be accessible for citizens of all ages and backgrounds. Chances of contact have been promoted to maintain the camaraderie between social groups. Just as one of the interviewees said: 'playing with their grandchildren offers them license to express their own play interests.' Play is a shared experience that resonates even after play has finished (Huizinga 1955).

Moving forward

The new initiates of playable city as part of the Smart City movement have raised questions of if we can increase social inclusion for older and retired members of the community through city's digital environment.

Ultimately, the urban planning process should not assume play as a frivolity for people who passed the retirement age, and the design for play for elderly should appreciate the largely untapped potential of urban environments for age mixing. The process of discovering play in outdoor environment presents challenges to urban planners and designers. Planners and designers need to understand the paradox is that outdoor environment should be built with possibility for play in mind, but also the fact that more open-ended spaces can emphasize the role of individuals in developing own interpretations and practices of how public space 'should' be used.

EVALUATION

Evaluation of physical design can be tested against 12 public space quality assessment criteria by Gehl Architects, WHO checklist, the scoring system developed by Cho, Heng and Trivic (2015), and also against the value of each toolkit developed in this project.

Outcome such as active/healthy aging are less tangible, and therefore harder to quantify. However, currently the CASP-19 indicators can be used as a surveying method for local elderly citizens to generate feedback. More quantifiable metrics such as the number of elderly usages of different parts of the Town Square, the number of elderlies participating in the programmed events and the distance per elderly cycling/ walking per day will also allow to assess the success of this project.

LIMITATION

The importance of partnership

The success of this proposal largely depends on partnership mechanism between authorities, community groups, local interest groups, local artists, TfL, and most importantly, local citizens. The ability of local authority to facilitate partnership should be emphasized since the project is adapted across a variety of sites with different ownerships.

For Town Square upgrading, negotiation needs to be ensured with the private developers, and can be achieved through S106 agreement. Yet in the current context of fiscal austerity, local authorities or private developers may not be willing to undertake this design due to attached costs.

For interventions such as the Community Toilet schemes, communication with local business are essential, and the council should not underestimate the impact of investing in social infrastructure in creating inclusive and prosperous urban environments. Training need to be provided to business and volunteers to increase awareness.

Applicability

This project aims to develop a transferable design toolkit, yet applicability of interventions such as the elderly-friendly cycling routes to other borough/ town center may not be feasible due to the highest PTAL and current strong political support for mini-Holland scheme within LB Waltham Forest.

Local demographics

LB Waltham Forest has one of the most diverse populations in terms of religion and ethnicity. Although this project attempted to include some recognition of such background, more research needs to be done to explore the needs of BAME elderly who

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APPENDIX

RISK ASSESSMENT FORM
FIELD / LOCATION WORK

UCL

The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form
http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf

DEPARTMENT/SECTION MSC URBAN DESIGN AND CITY PLANNING
LOCATION(S) LONDON
PERSONS COVERED BY THE RISK ASSESSMENT Yu Fan

BRIEF DESCRIPTION OF FIELDWORK Sites visits will be done at multiple times on inner London high streets. Interviews will be conduct for high street users, mainly elderly citizens, and with local community interes groups and experitises within the research field.

Consider, in turn, each hazard (white on black). If **NO** hazard exists select **NO** and move to next hazard section.
If a hazard does exist select **YES** and assess the risks that could arise from that hazard in the risk assessment box.
Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.

ENVIRONMENT — **The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard**

e.g. location, climate, terrain, neighbourhood, in outside organizations, pollution, animals.

Examples of risk: adverse weather, illness, hypothermia, assault, getting lost. Is the risk high / medium / low ?

getting lost. low

CONTROL MEASURES — **Indicate which procedures are in place to control the identified risk**

- ☐ work abroad incorporates Foreign Office advice
- ☒ participants have been trained and given all necessary information
- ☐ only accredited centres are used for rural field work
- ☐ participants will wear appropriate clothing and footwear for the specified environment
- ☐ trained leaders accompany the trip
- ☐ refuge is available
- ☐ work in outside organisations is subject to their having satisfactory H&S procedures in place
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

EMERGENCIES — **Where emergencies may arise use space below to identify and assess any risks**

e.g. fire, accidents

Examples of risk: loss of property, loss of life

CONTROL MEASURES — **Indicate which procedures are in place to control the identified risk**

- ☐ participants have registered with LOCATE at http://www.fco.gov.uk/en/travel-and-living-abroad/
- ☐ fire fighting equipment is carried on the trip and participants know how to use it
- ☐ contact numbers for emergency services are known to all participants
- ☐ participants have means of contacting emergency services
- ☐ participants have been trained and given all necessary information
- ☐ a plan for rescue has been formulated, all parties understand the procedure
- ☐ the plan for rescue /emergency has a reciprocal element
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

EQUIPMENT — **Is equipment used?** No — **If 'No' move to next hazard. If 'Yes' use space below to identify and assess any risks**

e.g. clothing, outboard motors.

Examples of risk: inappropriate, failure, insufficient training to use or repair, injury. Is the risk high / medium / low ?

CONTROL MEASURES — **Indicate which procedures are in place to control the identified risk**

- ☐ the departmental written Arrangement for equipment is followed
- ☐ participants have been provided with any necessary equipment appropriate for the work
- ☐ all equipment has been inspected, before issue, by a competent person
- ☐ all users have been advised of correct use
- ☐ special equipment is only issued to persons trained in its use by a competent person
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

LONE WORKING — **Is lone working a possibility?** Yes — **If 'No' move to next hazard. If 'Yes' use space below to identify and assess any risks**

e.g. alone or in isolation lone interviews.

Examples of risk: difficult to summon help. Is the risk high / medium / low?

lone interviews, risk low

CONTROL MEASURES — **Indicate which procedures are in place to control the identified risk**

- ☐ the departmental written Arrangement for lone/out of hours working for field work is followed
- ☐ lone or isolated working is not allowed
- ☒ location, route and expected time of return of lone workers is logged daily before work commences
- ☐ all workers have the means of raising an alarm in the event of an emergency, e.g. phone, flare, whistle
- ☐ all workers are fully familiar with emergency procedures
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

SUBSTANCES	Will participants work with substances	No	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. plants, chemical, biohazard, waste	Examples of risk: ill health - poisoning, infection, illness, burns, cuts. Is the risk high / medium / low?		

CONTROL MEASURES — **Indicate which procedures are in place to control the identified risk**

- ☐ the departmental written Arrangements for dealing with hazardous substances and waste are followed
- ☐ all participants are given information, training and protective equipment for hazardous substances they may encounter
- ☐ participants who have allergies have advised the leader of this and carry sufficient medication for their needs
- ☐ waste is disposed of in a responsible manner
- ☐ suitable containers are provided for hazardous waste
- ☐ OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

OTHER HAZARDS	Have you identified any other hazards?	No	If 'No' move to next section If 'Yes' use space below to identify and assess any risks
i.e. any other hazards must be noted and assessed here.	Hazard: Risk: is the risk		

CONTROL MEASURES — **Give details of control measures in place to control the identified risks**

Have you identified any risks that are not adequately controlled?		
	NO ☒	Move to Declaration
	YES ☐	Use space below to identify the risk and what action was taken

Is this project subject to the UCL requirements on the ethics of Non-NHS Human Research? No

If yes, please state your Project ID Number

For more information, please refer to: http://ethics.grad.ucl.ac.uk/

DECLARATION — The work will be reassessed whenever there is a significant change and at least annually. Those participating in the work have read the assessment.

Select the appropriate statement:

- ☒ I the undersigned have assessed the activity and associated risks and declare that there is no significant residual risk
- ☒ I the undersigned have assessed the activity and associated risks and declare that the risk will be controlled by the method(s) listed above

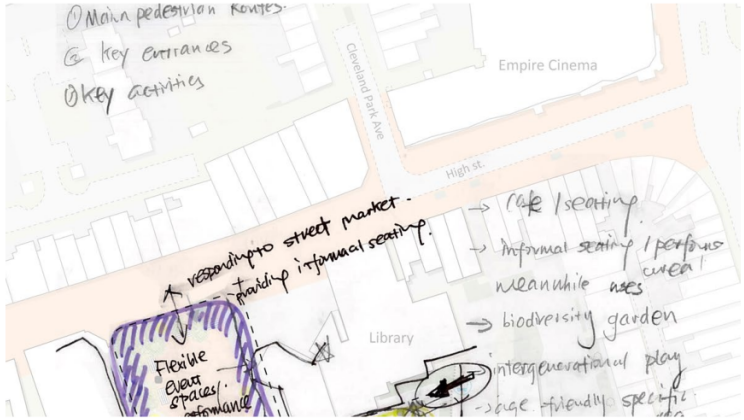
NAME OF SUPERVISOR

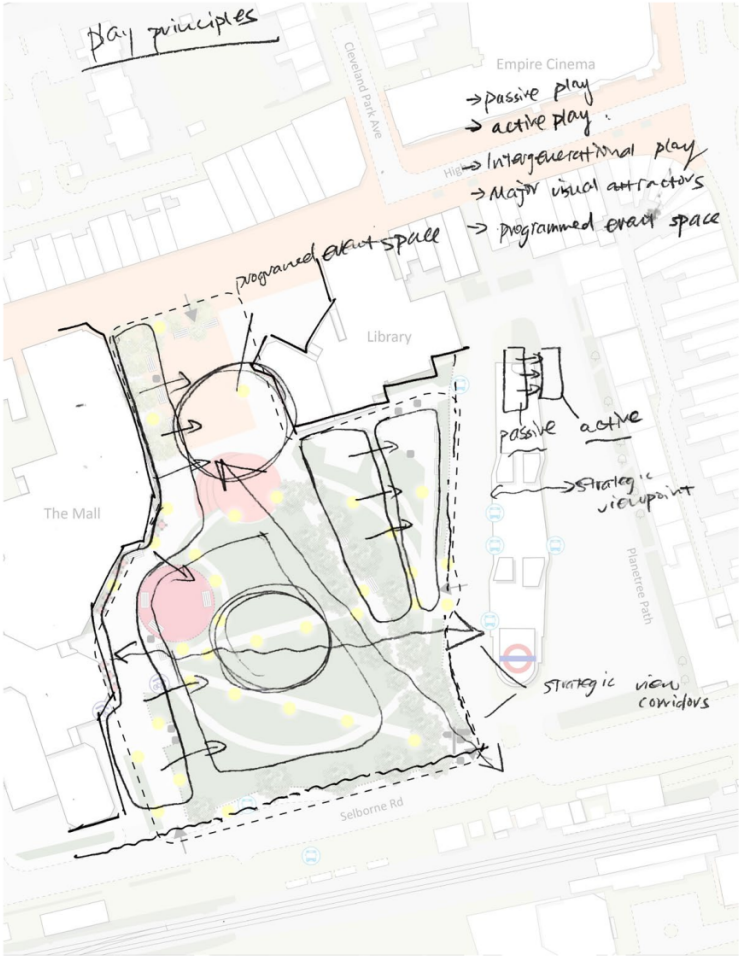
SIGNATURE OF SUPERVISOR DATE

CHARACTERISTICS OF PLAY

Burghardt 5 criteria of play (2005) (must all be present to some degree)	Expanded	Huizinga's Homo Ludens: Characteristics of play (1949)	Caillois six statements (1961: pp. 3-10).
Limited immediate function	Not serious. Not of immediate use, not functional	Creates culture. Fosters creativity	1. Free, i.e., playing is non-obligatory
		Social functions Allows negotiation of social status Dramatizes major divisions in society	
		Cultural functions Displays oppositions Reaffirms fundamental societal concerns Creates public memories	
	Includes elements or is directed towards stimuli that do not contribute to current survival	Not necessary for survival Not for material gain Disinterested Irrational	4. Unproductive, i.e., property may be exchanged but no goods are produced
Endogenous component	Voluntary	Voluntary	
	Intrinsically motivated	Not a duty	
	Spontaneous	Self-controlled	
	Rewarding	Allows escape from obligation/ Can be deferred or suspended	
	Pleasurable	Fun but serious. Does not involve laughter	
	Can be solitary or social	Social	
	Social play is contagious	Promotes the formation of social groups	
A 'relaxed field'	Free from stress	Occurs in protected spaces (magic circle pp. 9-13)	2.Separate,i.e. It's circumscribed within limits of space and time.
	May involve risk and danger	May involve risk and danger to players and audiences. Uncertain outcome	3. Uncertain, i.e., the course of it cannot be predetermined
Structural or temporal difference	Set play apart from 'serious' performance	Involves different spatial and temporal rhythms to ordinary life May involve exaggerated behaviors	6.Make-believe I.e. accompanied by a special awareness of a free unreality (Caillois 1961: pp. 3-10).
	Involves behavior patterns with modified form or sequencing	Players separate themselves from non-players by disguise.	
Repeated performance	Repeatedly performed.	Has rules or is dependent on order	5. Ruled, i.e., under conventions that suspend ordinary,
	Involves mastery	Linked to ritual	
	Differs from exploratory and obsessive or stereotyped behavior		

DESIGN PROCESS FOR WALTHAMSTOW TOWN SQUARE





SURVEY FORM

Name - _____ Age - _____

1. Are you living in the area?
☐ Near the Town Center ☐ In the borough ☐ Other borough:_____

2. How often do you visit the Town Center?
_____

3. What are the most common places you go along the high street and why?
_____

4. Do you often use the Town square, and why?
_____

5. Do you live by yourself?
☐ Yes ☐ No, I live with _____

6. Is it convenient for you to walk around the Town Center?
☐ Yes ☐ No, because_____

7. Do you cycle?
☐ Yes ☐ not often ☐ No

8. How long do you walk on a daily basis?
☐ Less than 30 min ☐ 30min-1 hr ☐ more than 1 hr

9. Do you participate in any social events, such as chess, taichi class, charity workshops, etc?
☐ No ☐ Yes, with who: _____ organized by:_____

10. What do you think as the main reason that prevent you going outdoor?
_____

11. What kind of elements that can attract you to go outdoor?
_____

Play Has No Age Limits: how can playable intervention in urban public realm help to achieve healthy and active aging for senior citizens?

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