

Inclusive public space

Improving inclusivity through spatial design in Tarwewijk

P5 Presentation | Esma Karadag | January 2021

Mentors
Dr.Ir. M.G.A.D. Hartevelde
O. Trienekens
Dr. A. Romein



Structure

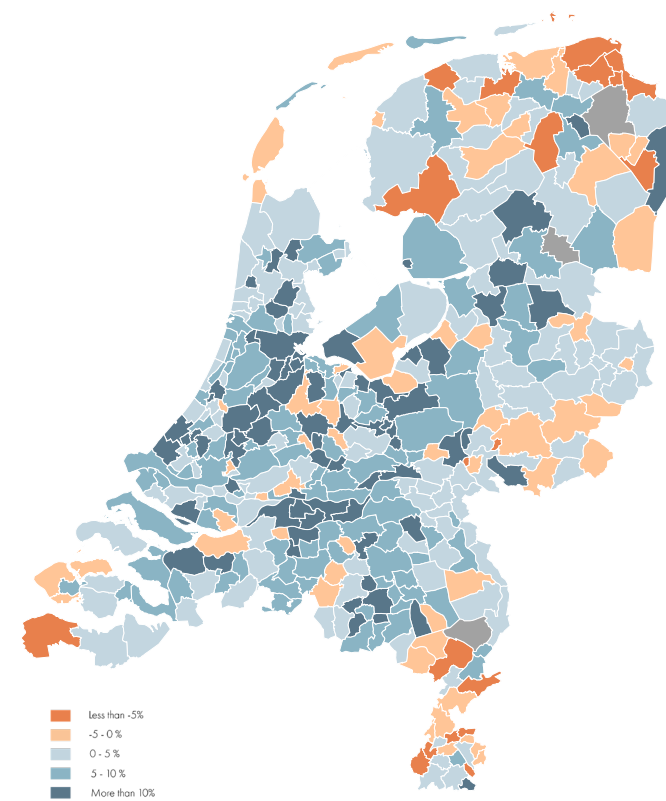
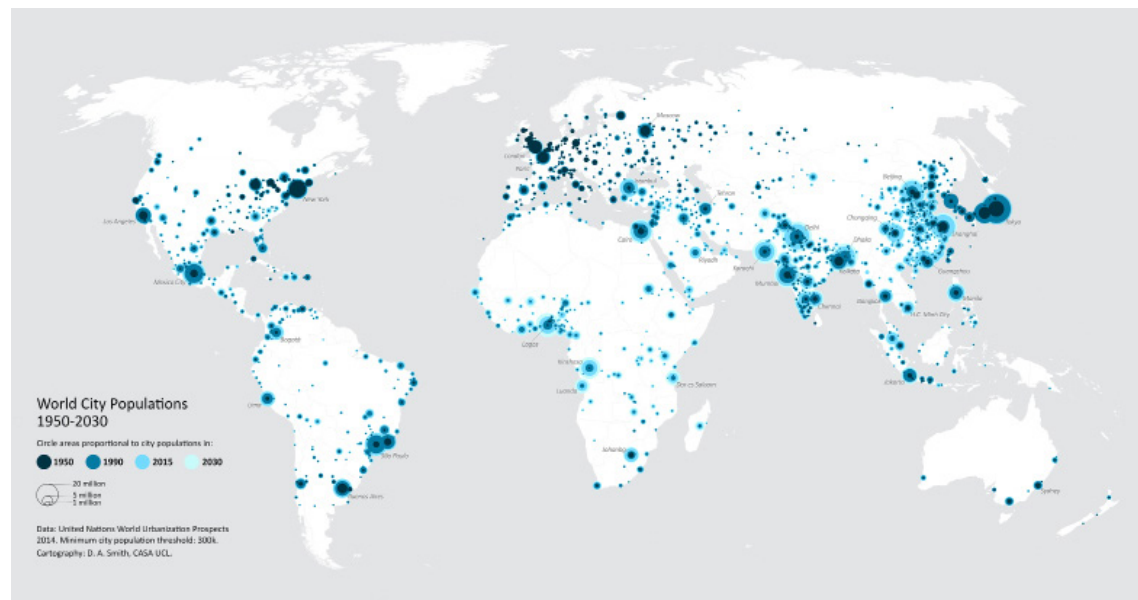
- 1 | Problem introduction and analysis
- 2 | Theory and values
- 3 | Design strategies
- 4 | Spatial analysis and fieldwork
- 5 | Design
- 6 | Conclusion

Motivation

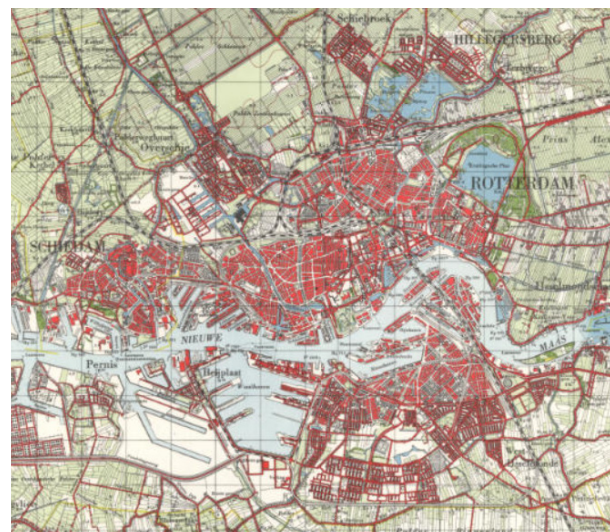
Context

MIGRATION

URBANIZATION



Rotterdam



1800 —————> 2021

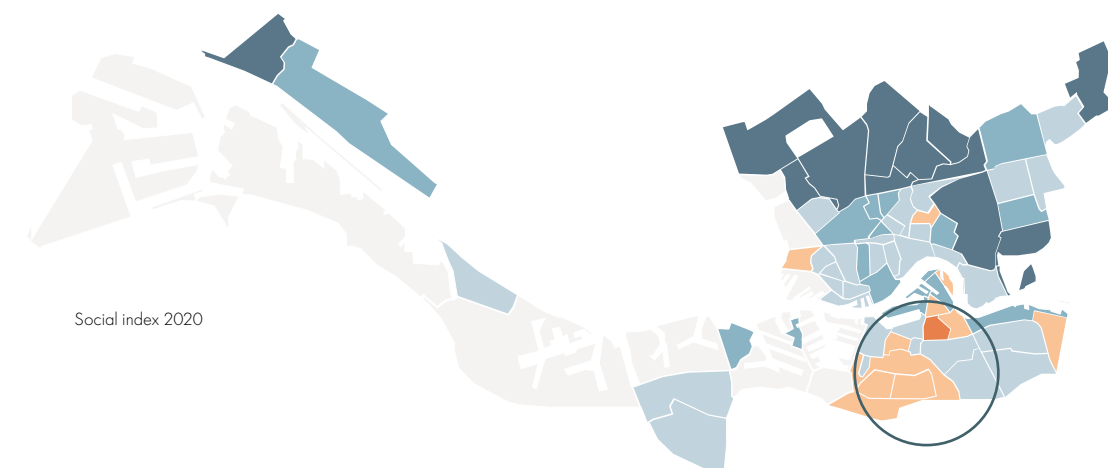
Problem introduction

**Baangarantie moet jongeren
Rotterdam-Zuid uit criminaliteit
houden**



▲ De Tarwewijk in Rotterdam-Zuid. © anp

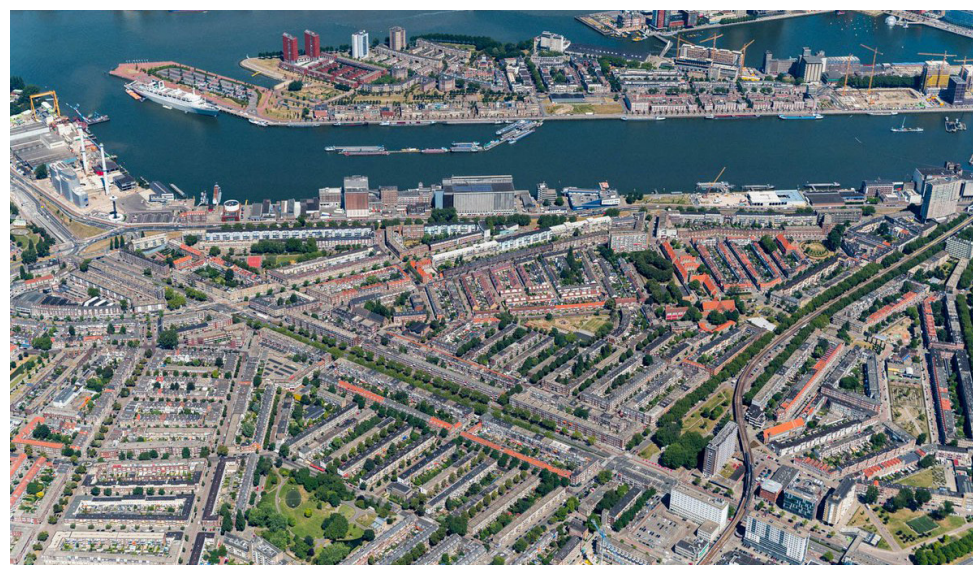
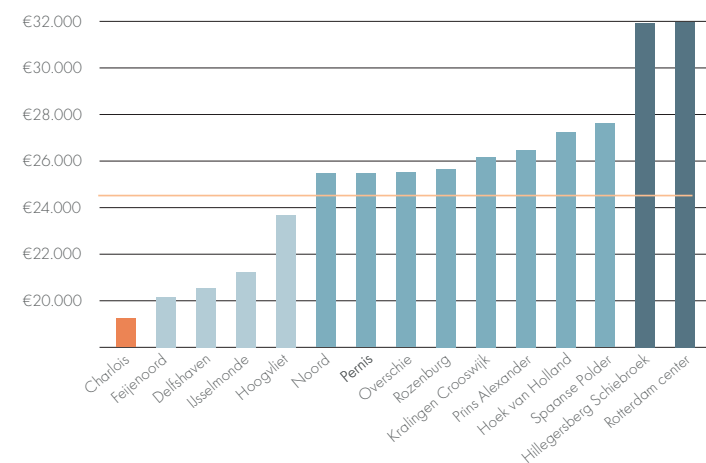
**Geldplan voor grootschalige
opknopbeurt Rotterdam-Zuid**



Pressure on sharing public space

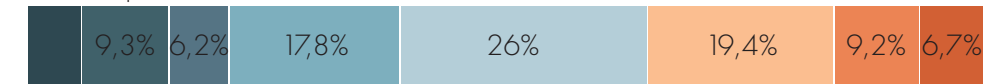


Tarwewijk

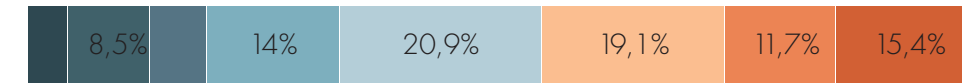


Age categories population

Tarwewijk



Rotterdam



- 0 - 3 years
- 4 - 11 years
- 12 - 17 years
- 18 - 26 years
- 27 - 39 years
- 40 - 54 years
- 55 - 64 years
- 65+ years

Salary level population

Tarwewijk



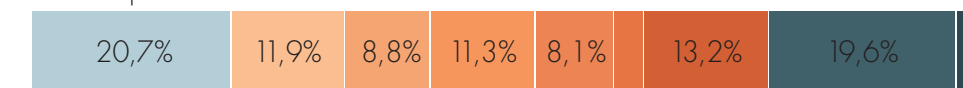
Rotterdam



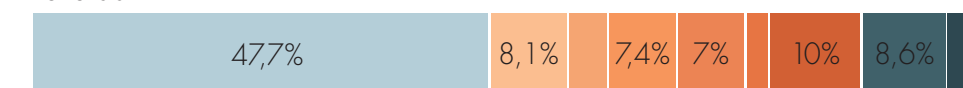
- Untill 110% of minimum wage
- Minimum wage - average income
- Average and higher

Migration background population

Tarwewijk

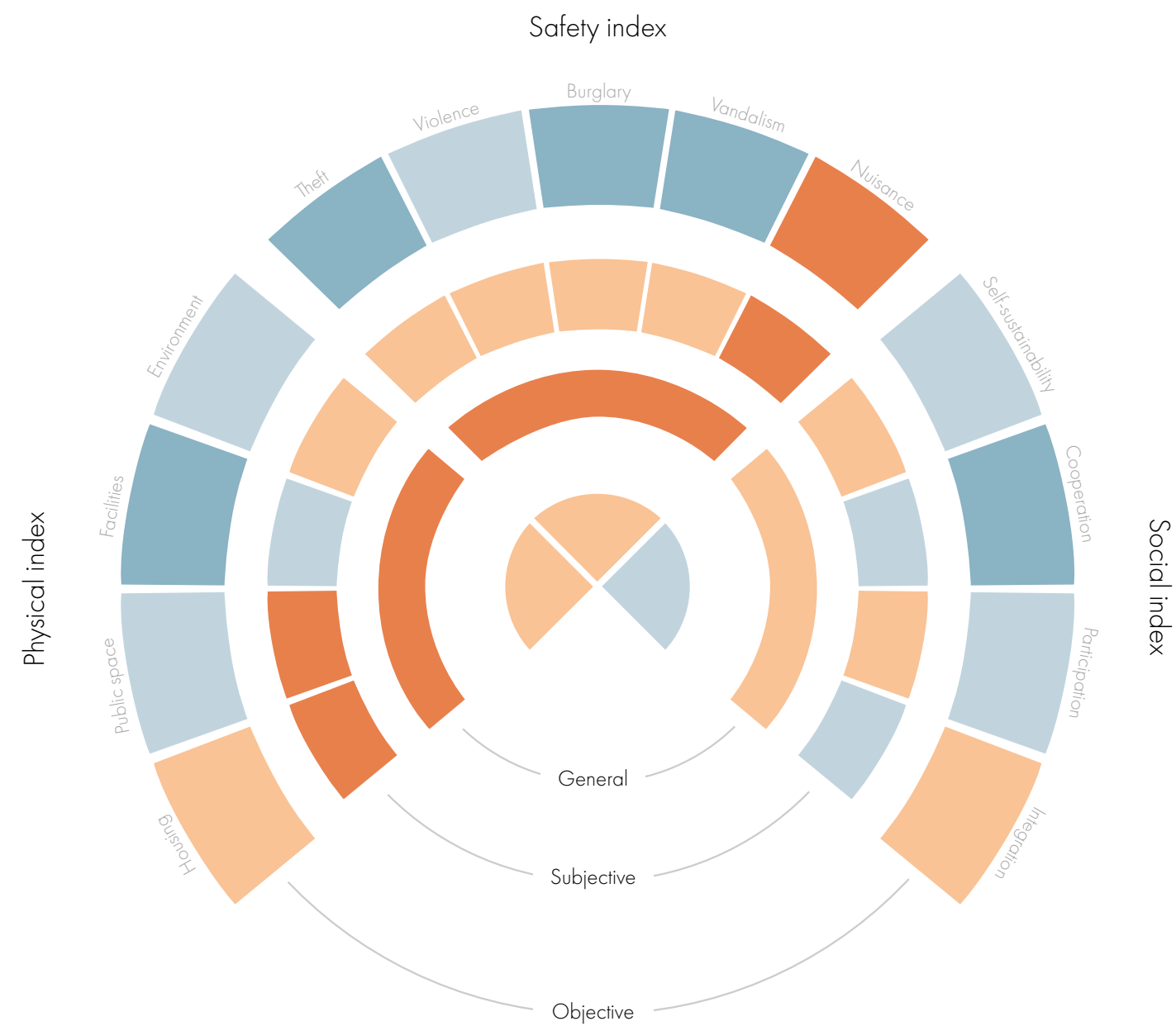


Rotterdam



- Native (Dutch)
- Surinam
- Antilles
- Turkey
- Marocco
- Cape verde
- Other non-western
- Other European Union
- Other western

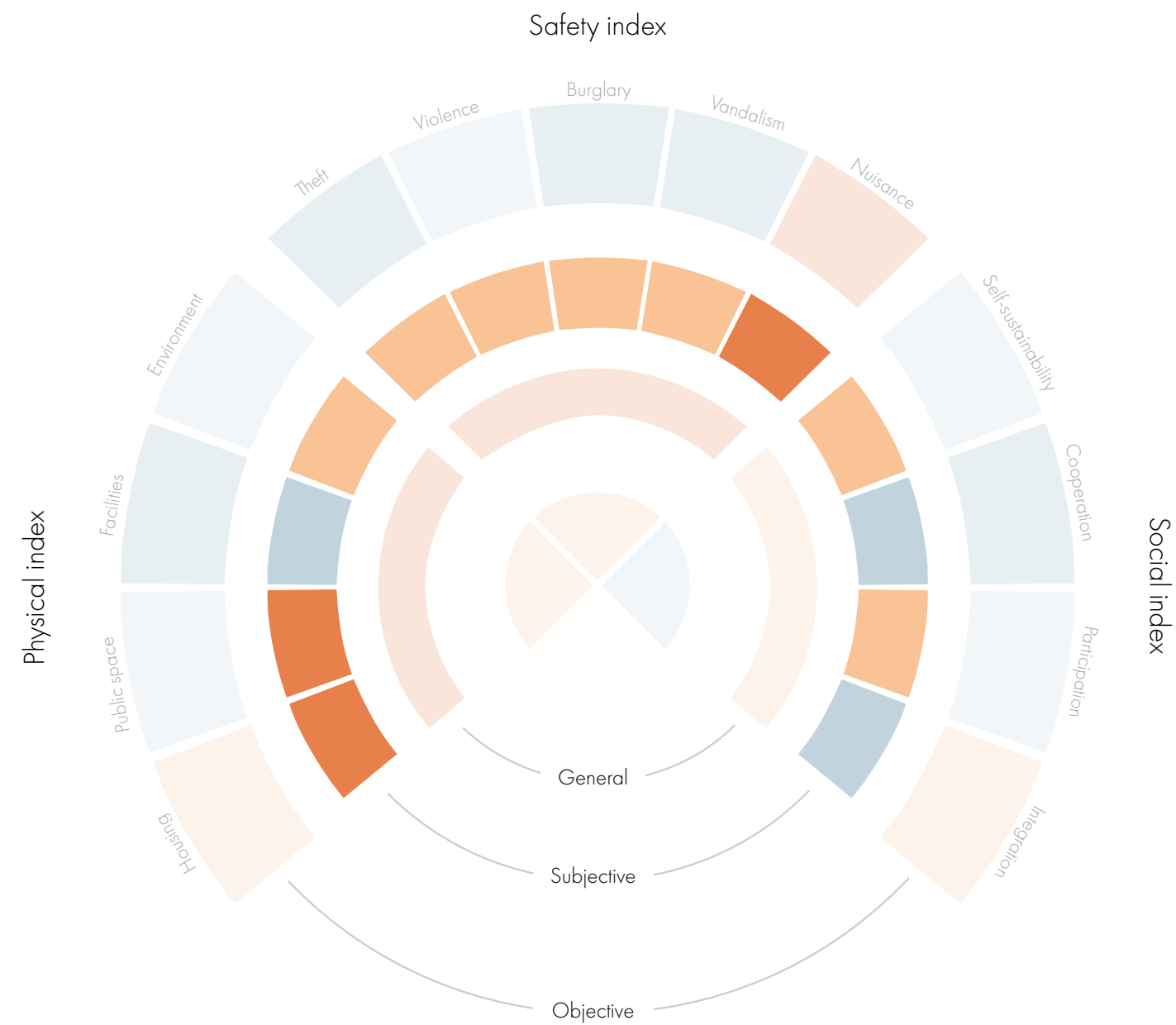
Neighbourhood profile



2020

- Far above average of Rotterdam
- Above average of Rotterdam
- Around average of Rotterdam
- Beneath average of Rotterdam
- Far beneath average of Rotterdam

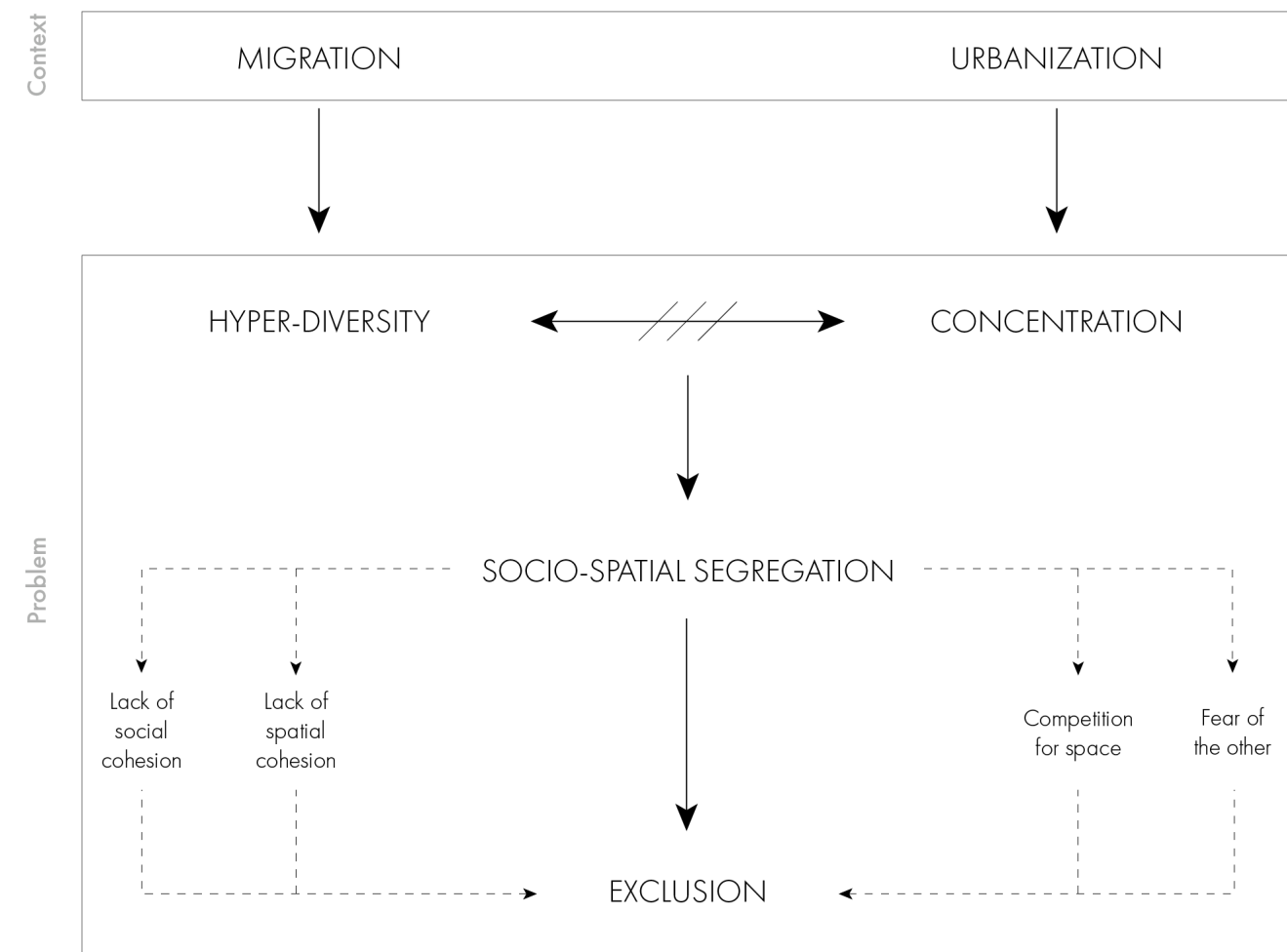
Neighbourhood profile



2020

- Far above average of Rotterdam
- Above average of Rotterdam
- Around average of Rotterdam
- Beneath average of Rotterdam
- Far beneath average of Rotterdam

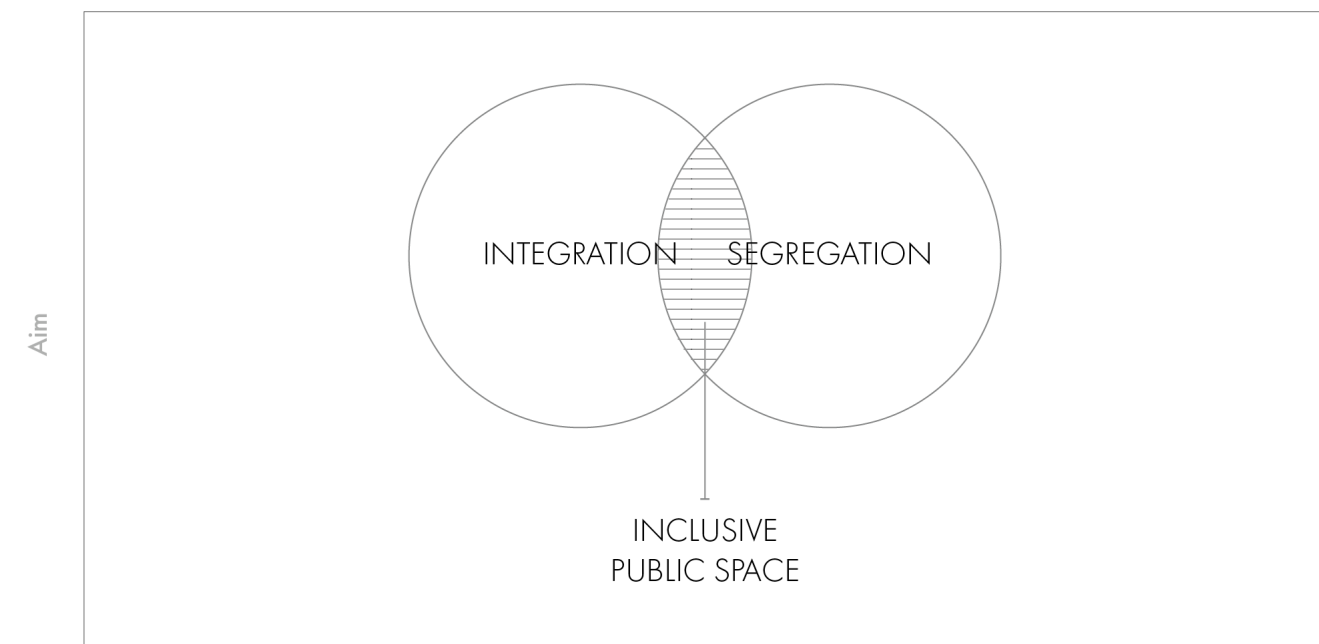
Conceptual framework



Keep people together



Provide people own space

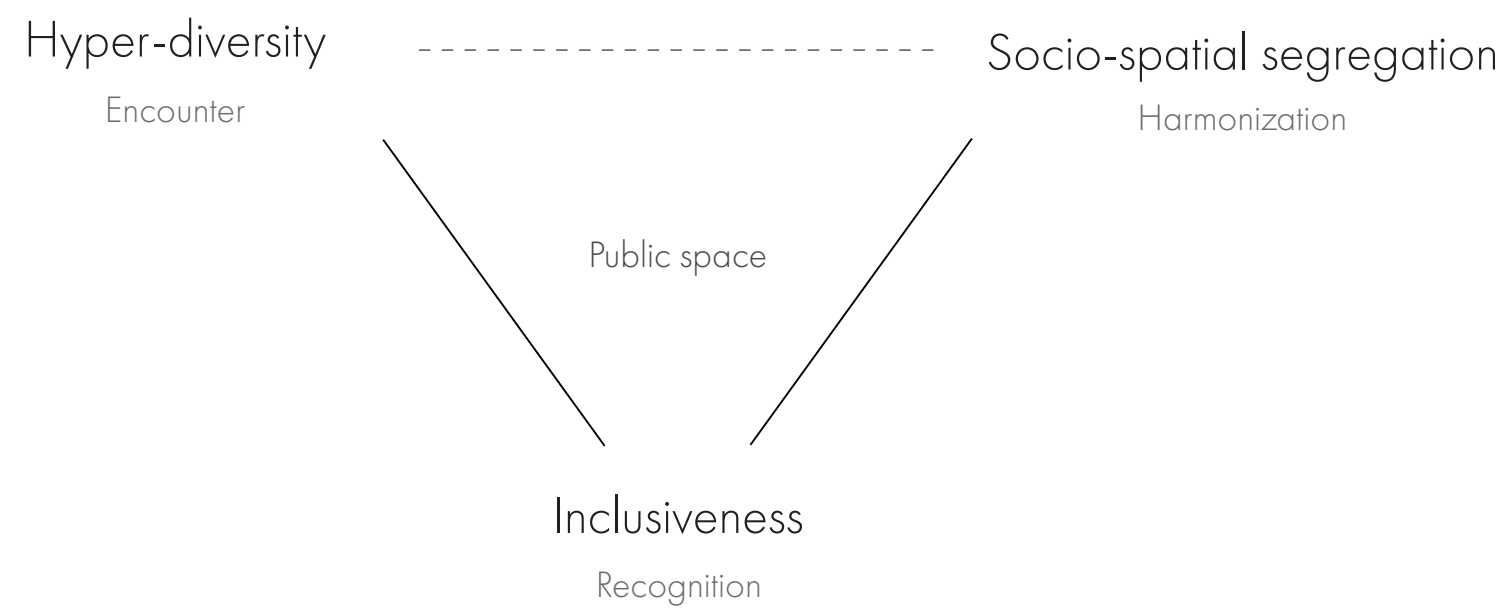


Research question

How can public space design enhance inclusivity in a hyper-diverse and socio-spatial segregated neighbourhood of Tarwewijk?

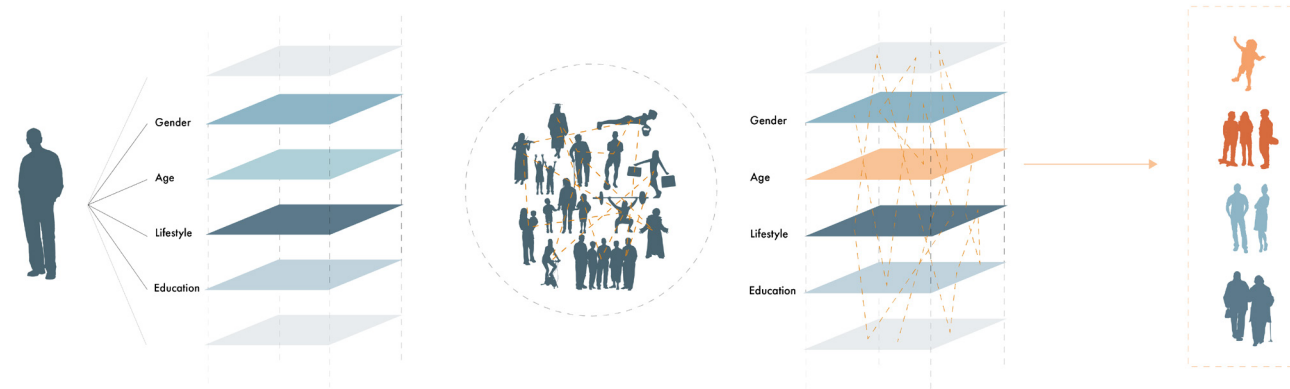


Theoretical framework

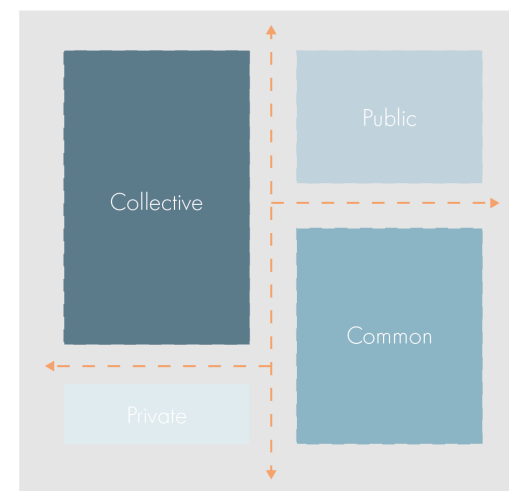


Three values

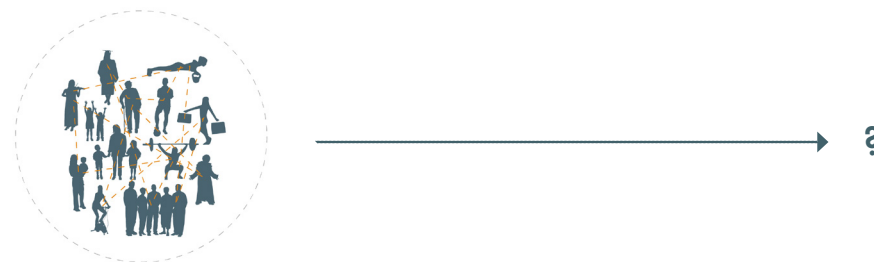
1. Encounter



2. Harmonization



3. Recognition



Design strategies

- Walkability
- Places for staying
- Edges
- Variety of land use



Design strategies

- Walkability
- Places for staying
- Edges
- Variety of land use



Walkability

1. It is necessary for pedestrians to have enough room to be able to walk freely, without being forced, disrupted or steered too much.
2. Enough trust should be provided for the pedestrians to move through the space without a need to worry about their safety in traffic.
3. Sidewalks, streets, squares and parks should be safely accessible and usable for pedestrians.
4. Physical distance people can and are willing to walk should be kept in mind.
5. The street design should be adapted to the speed and pace of pedestrians, a 5 km/h street design.
6. Diminish barriers and prevent waiting in order to prevent people to retreat from the street.

Design strategies

- Walkability
- Places for staying
- Edges
- Variety of land use



Places for staying

1. Provide places for staying along the edges or in the transition zone between spaces (edge effect).
2. Offer choices for sitting such as in front, back, at the side, in the sun or shade, alone or in groups.
3. Provide a comfortable microclimate for the users of the public space regarding conditions such as being exposed and shielded from (sun)light, shade, noise, wind and rain.

Design strategies

- Walkability
- Places for staying
- Edges
- Variety of land use



Edges

1. There must be a clear demarcation between public and private spaces and between different types of public spaces. Public spaces should be inviting to which everyone should feel welcome to.
2. There must be open and active facades for active ground floors and a direct connection between inside and outside of buildings to contribute to the amount of eyes on the street.
3. Suitable places for staying should be at places where it is quite simple and natural to enter and exit such as entrances.
4. There should be an opportunity for people to appropriate space in front of their home to make it semi-private.

Design strategies

- Walkability
- Places for staying
- Edges
- Variety of land use



Variety of land use

1. Neighbourhoods should have a multifunctional purpose. There must be enterprises located along sidewalks such as stores, bars and restaurants.
2. Frequent enterprises and different kinds should be provided.
3. Public spaces should contain a variety of activities.

Design strategies

- Children
- Youth
- Adults
- Elderly

Design strategies

- Children
- Youth
- Adults
- Elderly



Children

1. Children should have a variety of places to play and to learn.
2. Children should have enough opportunities for sport and exercise.
3. An unspecialized outdoor home base should be provided from where they can play and hang around.
4. Children should play under the supervision of adults.
5. The design should recognize things that children can do, rather the things they can not do.

Design strategies

- Children
- Youth
- Adults
- Elderly



Youth

1. The public space should provide options for communication and interaction.
2. There should be exercise possibilities offered for young people.
3. Young people should have the option to retreat from the public space for social distance, a place out of sight to gain experiences in their own social structure.
4. The design should offer them a place to stay at the edges of public spaces.

Design strategies

- Children
- Youth
- Adults
- Elderly



Adults

1. The public space should offer comfortable opportunities for staying.
2. Seating possibilities should be offered at edges of public spaces such as along facades.
3. Physical activities to do with their children and accessibility to them while playing should be provided for them.

Design strategies

- Children
- Youth
- Adults
- Elderly



Elderly

1. Possibilities for physical activities should be provided for them.
2. There should be relaxation options in the public space.
3. The design of facilities for elderly should enable social interaction.
4. The design should take the reduced mobility of elderly into account to prevent them from withdrawing from the public space.

Spatial analysis

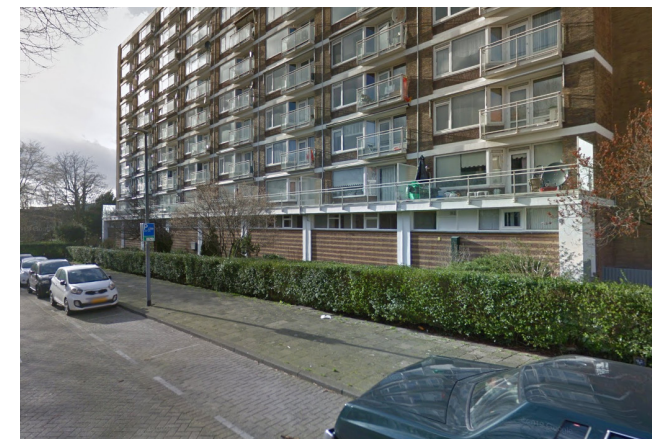
- Walkability
- Places for staying
- Edges
- Variety of land use



Walkability



- Narrow sidewalks
- Unsafe crossings
- No 5 km/h street design



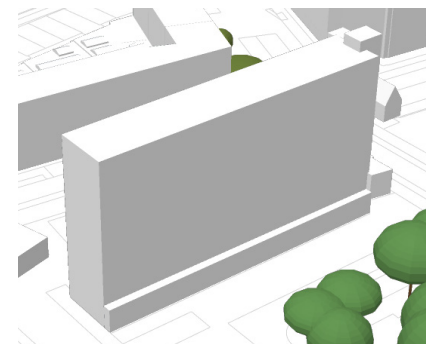
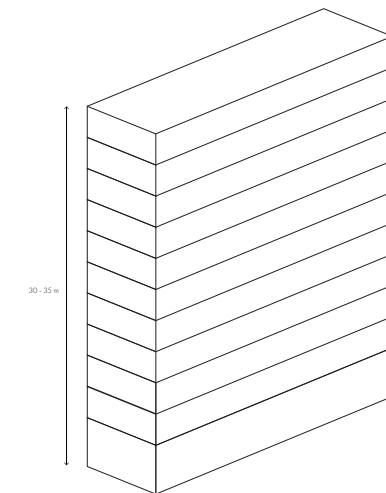
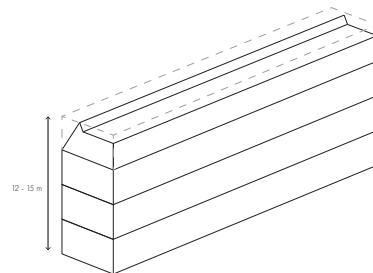
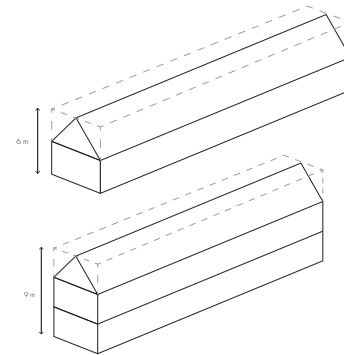
Places for staying

- Few choices in sitting
- Lack of seating in transition zones
- Need for better microclimate



Edges

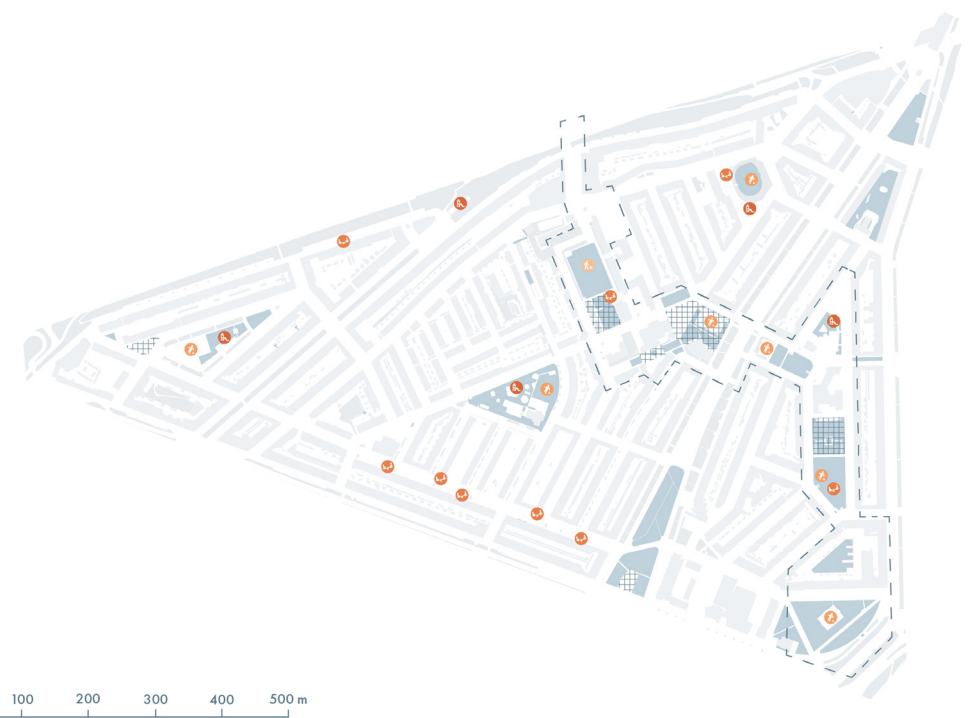
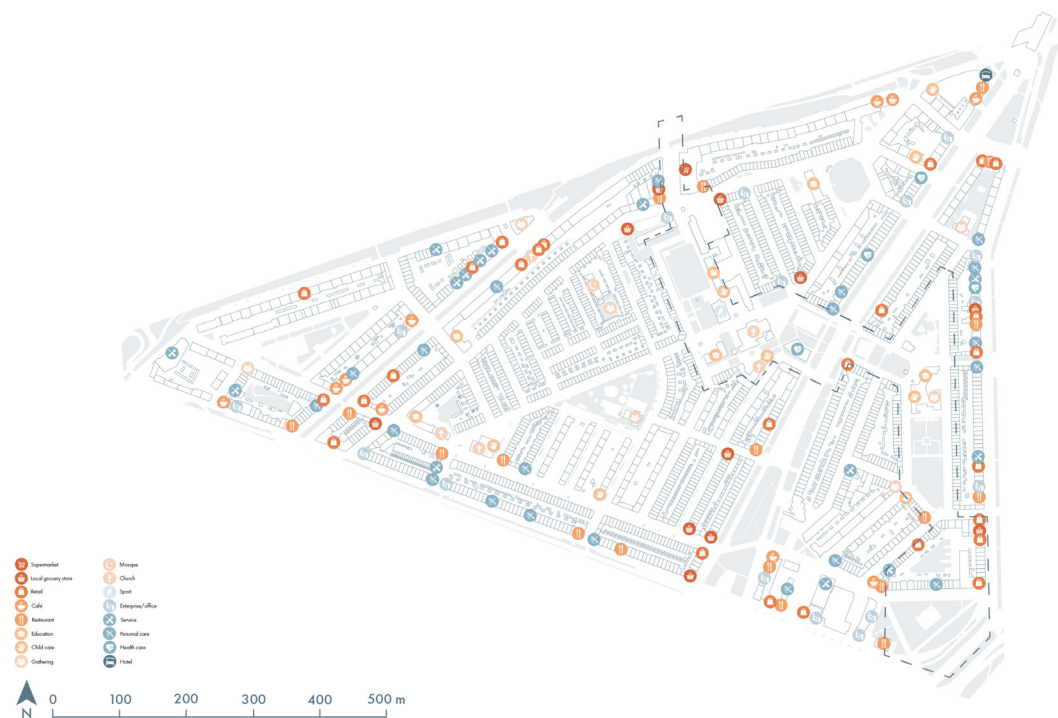
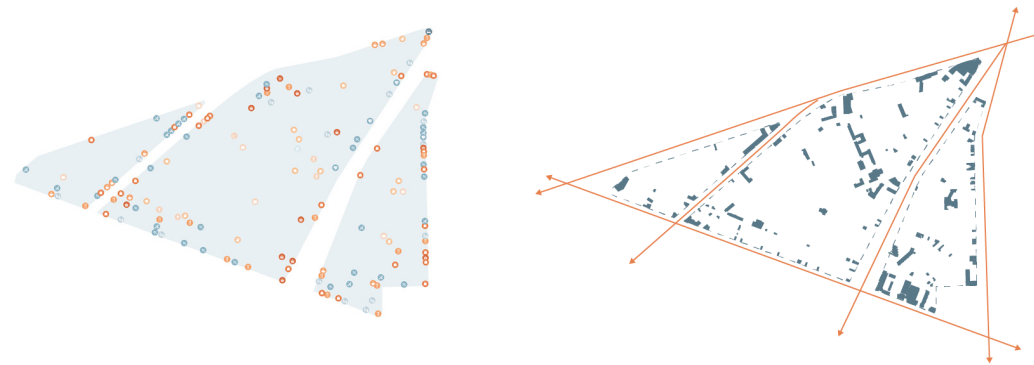
- No private garden
- More welcoming public space
- Better connection inside outside
- Lack of seating at entrances
- Lack of soft borders



Variety of land use



- Facilities at borders



Fieldwork

- Survey
- (Street) interviews



Results fieldwork

General



- Cars drive aggressively and fast
- Playgrounds not accessible during whole day



- Most beautiful space is destined for dogs
- Lack of benches



- Lack of social control



- Lack of sport facilities, parks and shared gardens

Age specific

Problems



- Hard materialization floor playground
- No space for girls to play
- Missing playing equipment
- Public spaces are too dirty
- Nuisance from adults hanging around
- Playgrounds not accessible due to traffic



- Hard materialization floor sports field



- No activity for adults
- Public space not usable during other seasons
- Public spaces are too dirty
- No usable green



- No market in neighbourhood

Wishes

- Hedge or fence for safety
- Space for sport
- Space for playing
- Place for creative expression
- Inspirational space
- Choices for multiple activities
- Activity with parent

- Space to meet other youth

- Space for outdoor eating
- Shared (allotment) garden

- Space for meeting others
- Green space
- Accessible public space

Extra design strategies

- Flexibility
- Shared space
- Maintenance



Extra design strategies

- Flexibility
- Shared space
- Maintenance



Flexibility

1. There should be enough room for own interpretation of the public space.
2. The public space should be adaptable to different uses and activities during the day, week and year.

Extra design strategies

- Flexibility
- Shared space
- Maintenance



Shared space

1. There should be an activity in the public space that appeals to different social groups at the same time.
2. Current circumstances regarding space appropriation and exclusion should be taken into account.
3. Sufficient alternative outdoor spaces should be available for all social groups to prevent them from being excluded from the public spaces at all.

Extra design strategies

- Flexibility
- Shared space
- Maintenance



Maintenance

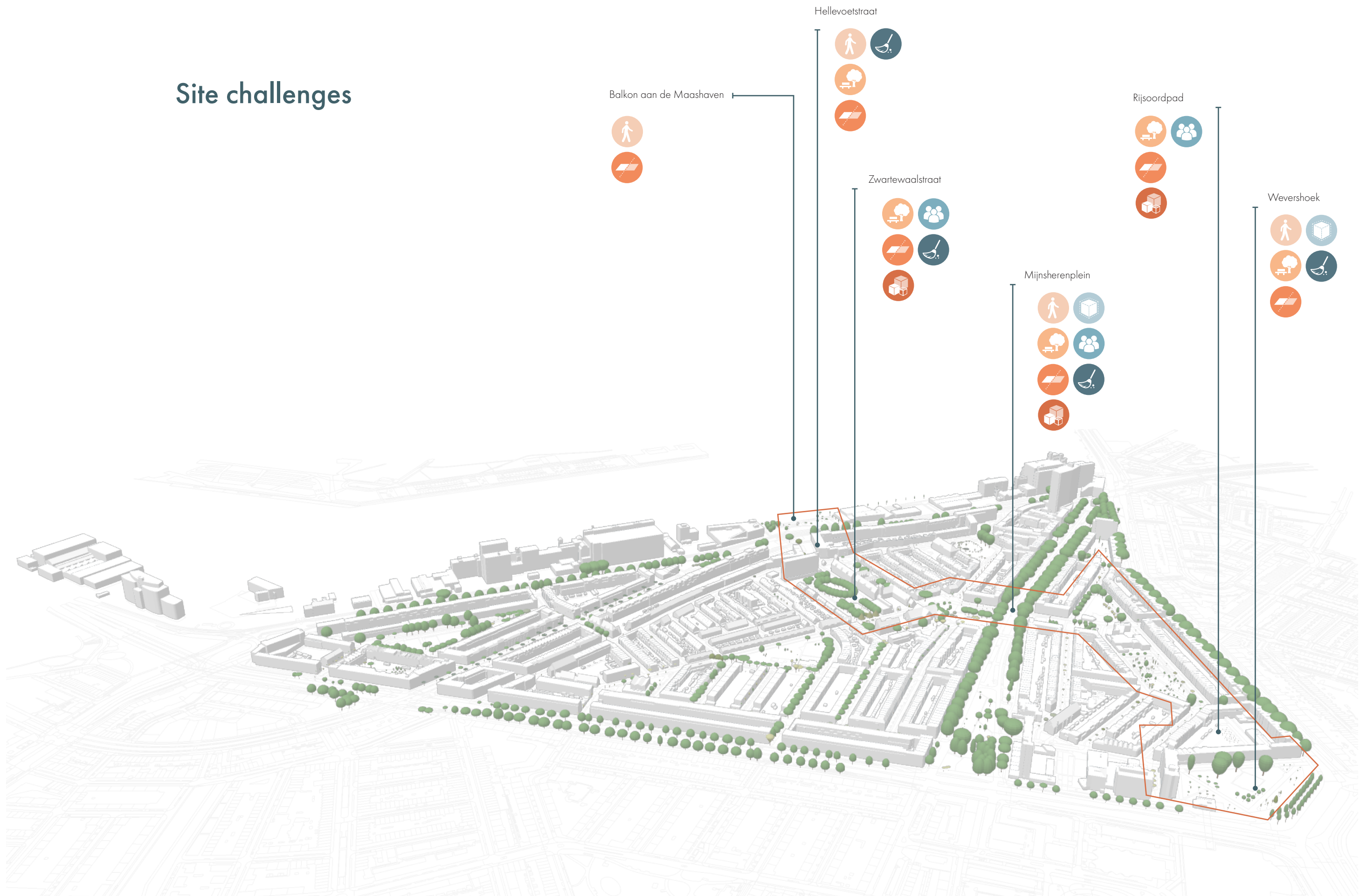
1. There should be valuable public space offered for the already existing organizations.
2. The design of the public space should enhance the sense of community, connectedness and ownership among inhabitants.
3. The design of the public space should be robust and sustainable.

Design

- Site challenges
- Vision
- Design principles
- Design interventions



Site challenges

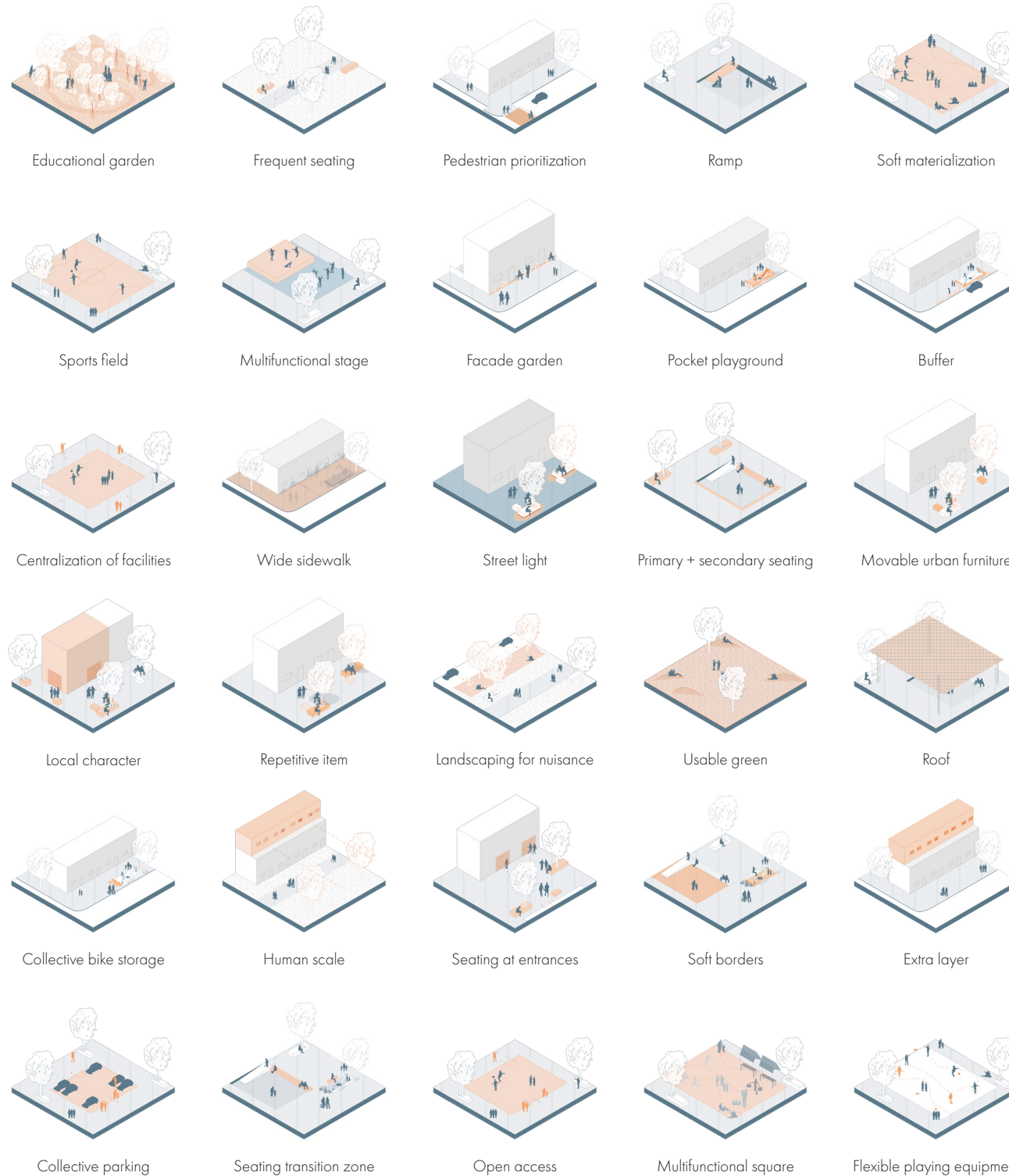


Vision Campus Tarwewijk








- Green ribbon
- Connecting people and place







Design principles



General

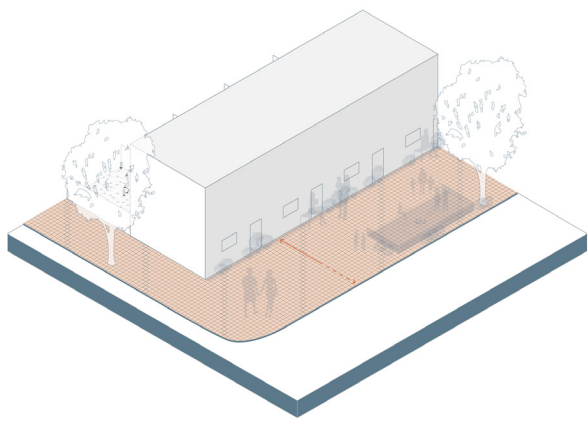
-  Walkability
-  Places for staying
-  Edges
-  Variety of land use
-  Flexibility
-  Shared space
-  Maintenance

Age specific

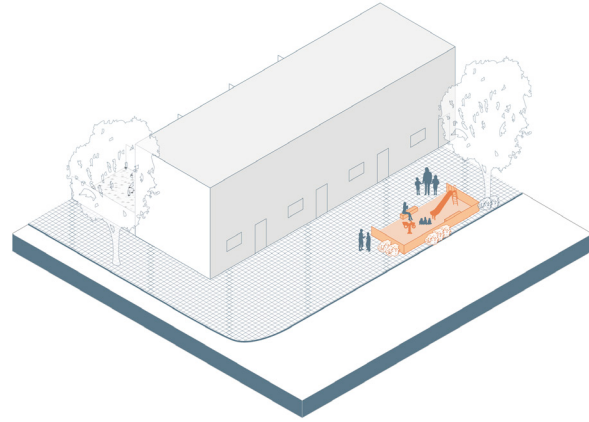
-  Children
-  Youth
-  Adults
-  Elderly

Combination of design principles

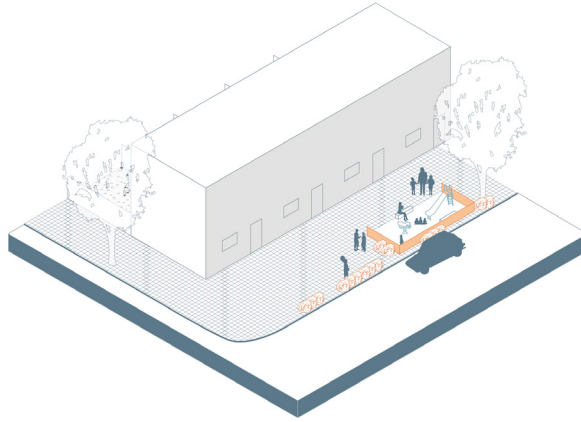
Wide sidewalk



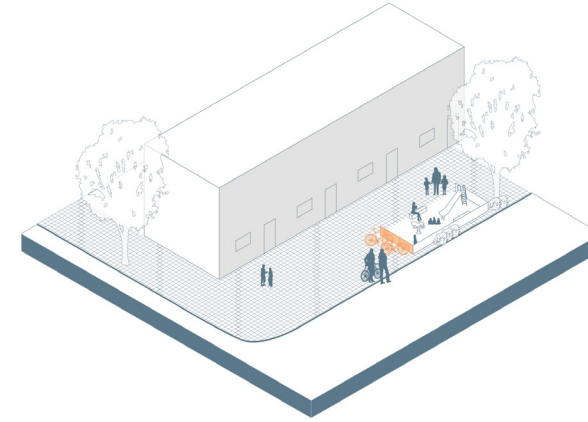
Pocket playground



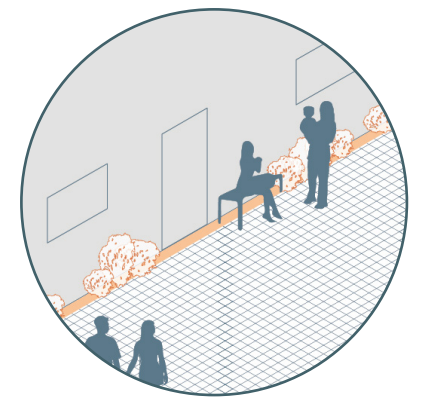
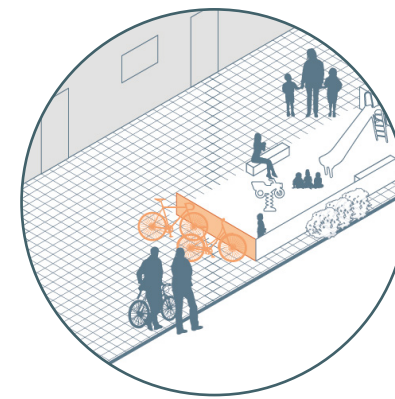
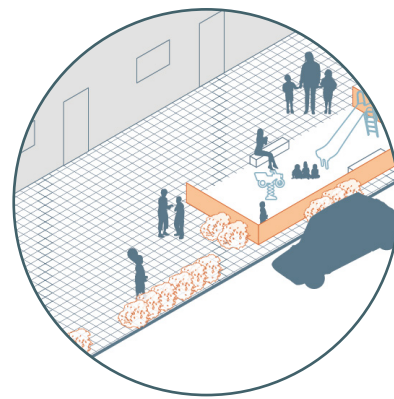
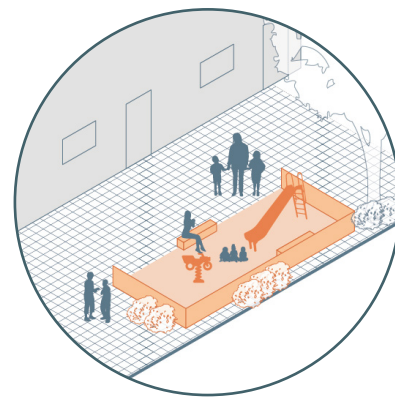
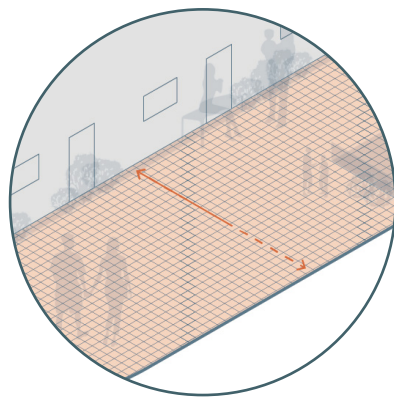
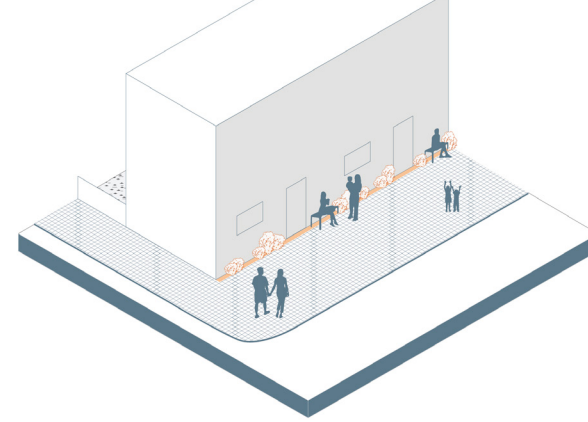
Buffer



Collective bicycle storage

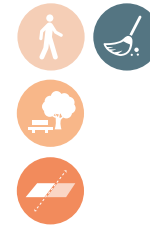


Facade garden



Design interventions location 1

Hellevoetstraat





A pocket playground including a buffer and sufficient amount of green will provide environmental comfort for people to stay longer in this public space. Moreover, this playground can via triangulation result in interaction between inhabitants.



Seating at the entrances can for example result in elderly combining the activity of grocery shopping with meeting others turning grocery shopping into an exciting trip rather than just a necessary activity.



A ramp is provided to achieve Balkon aan de Maashaven for people who experience difficulties with walking.



Secondary seating in the transition zone at the edge is being provided to offer choices for sitting.



Possibilities for shop owners to appropriate public space and contribute to maintenance will be stimulated.



A place for sitting at the entrance of local shops are provided for people to stay longer in the public space, in this case to enjoy their ice cream purchased at the corner shop. Moreover, this will become a valuable space for this ice cream shop and could result in the shop owner to contribute to the maintenance.





Design interventions location 2





An educative garden will provide a shared (allotment) garden for the residents and an inspirational place for the children from the school (located next to it). The dog free run area placed next to it will make the space even more interesting and joyful for people to stay in.



Primary seating such as benches and movable urban furniture will provide people a place to sit between different types of public spaces and entrances to watch and interact with their environment. This will also provide a space for parents to stay when picking up their children from school.



Small walls will serve as secondary seating to provide options for sitting.



The space in general will be interesting to walk through (when going to the supermarket for example) and will entice people to stay and hang around.



Space appropriation in front of the apartment building will be made possible by lowering the hedge and provide options for sitting.



People will be enticed to sit in their front gardens due to the activity that will be going on by these design interventions.





Design interventions location 3





The extra layer will result in more eyes watching the street, which will enhance safety.



The curb extension will make the crossing more safe. This way especially children and elderly will be able to cross this 'barrier'.



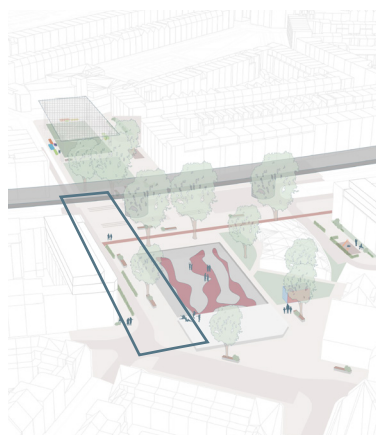
Movable urban furniture will provide choices for sitting to watch the surrounding activities.

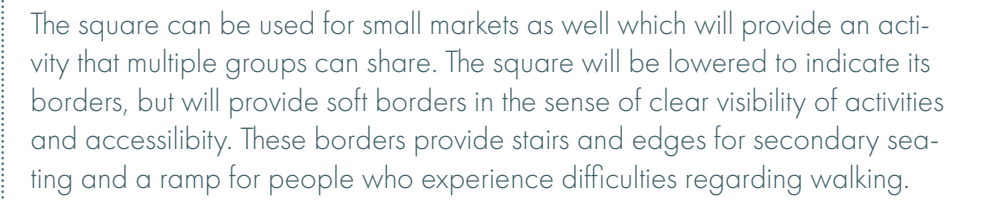
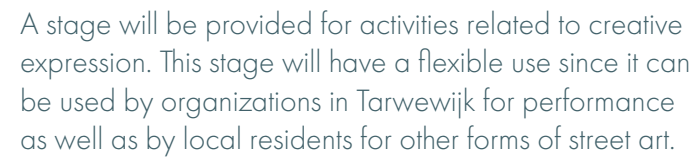
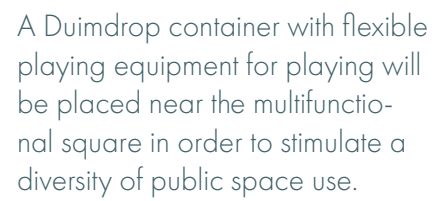


The multifunctional square will have be flexible in use due its design that allows own interpretation of the space. This way multiple groups can share the square.



The widening of the sidewalk will provide room for a pocket playground and facade garden to appropriate the public space in front of homes. People will have the possibility this way to sit in the niche of the facade or put a bench in front of their homes. The buffer between the sidewalk and street will prevent children from running unto the street. The soft borders will stimulate people passing by to interact with each other. Even if they do not directly interact, this visual connection will enhance the knowledge about the people living behind those walls and will enhance empathy and cohesion among inhabitants.

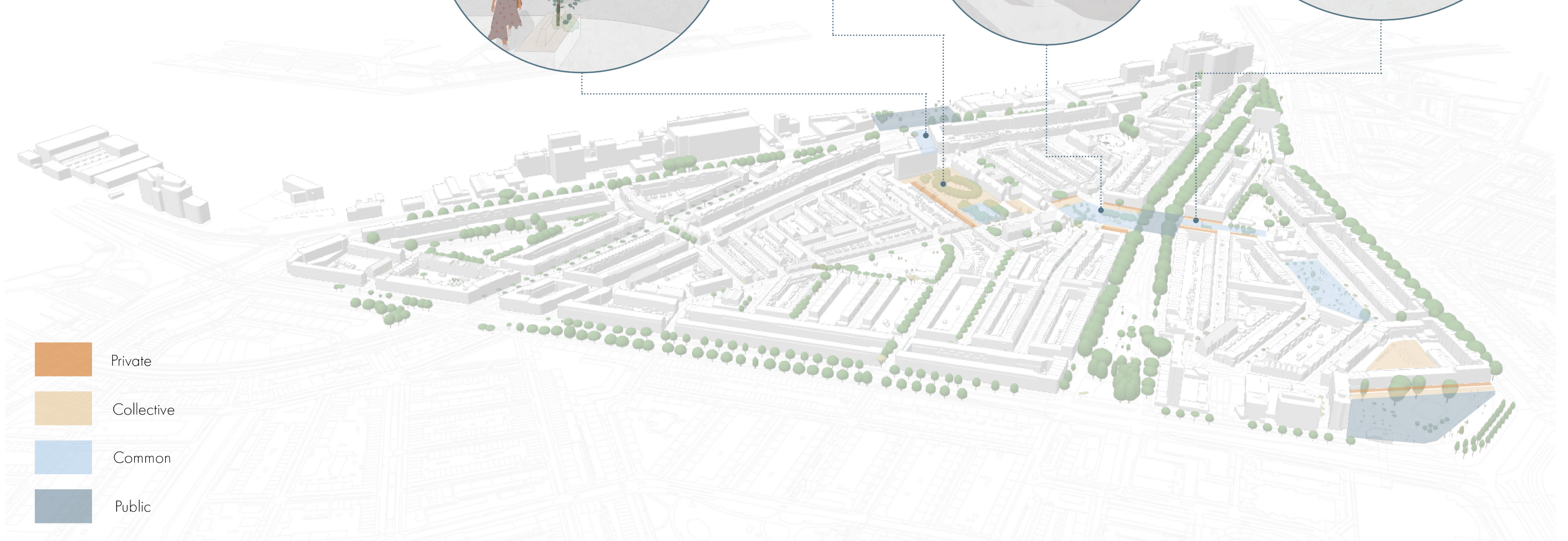








Overview design interventions



- Private
- Collective
- Common
- Public

Research question

How can public space design enhance inclusivity in a hyper-diverse and socio-spatial segregated neighbourhood of Tarwewijk?

- Encounter between people
- Harmonization rooms with soft borders
- Recognition of needs



Thank you!

