

# Shaping Co-existence

# 1. The Problem

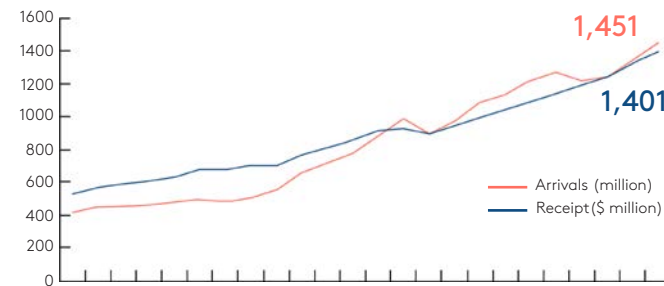
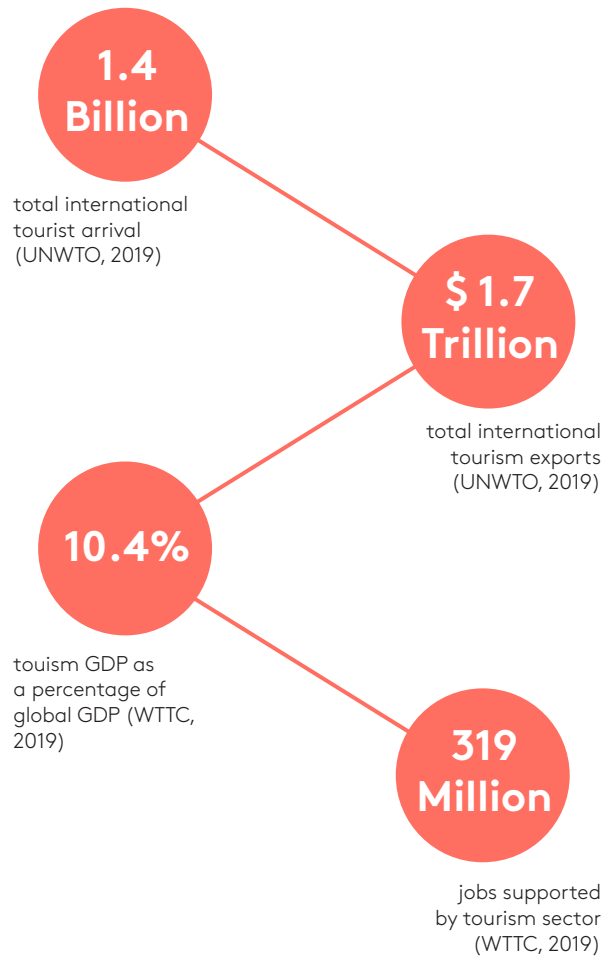


Figure 1:  
International tourist arrivals (million) and tourism receipts (\$ billion)  
Source: UNWTO, 2019

Tourism becomes a pillar industry for urban development. The economic benefit is huge. However, critical voices have questioned the industry - is the growing healthy for the city?

# Venice becomes the front line in the battle against overtourism

Kara Fox, CNN • Updated 19th June 2019

The Guardian picture essay



## How tourism is killing Barcelona - a photo essay

One of the coolest destinations in Europe just two decades ago, Barcelona is now so overcrowded it has become a tourist theme park - and is losing the character that made it so popular

by [Stephen Burgen](#). Photography: Paola de Grenet

This explosive development is a double-edged sword. The exceeding tourist flow is constantly oppressing the urban carrying capacity of destinations; In The daily lives of local communities are intruded by tourists

Home » Cities » Amsterdam » Sinking City: Overtourism and how it affects Amsterdam

Cities Amsterdam Expat Traveling

## Sinking city: Overtourism and how it affects Amsterdam

By [Freya Sawbridge](#) • November 22, 2019

thejapantimes

NEWS

NATIONAL

## Kyoto works to disperse crowds amid fears of 'overtourism'

KYODO



**17.9m**

foreign tourists overnights stays (CBS, 2017)

**13%**

growth of international tourism (CBS, 2017)

DE, BE, UK, US, FR are the 5 largest guest countries (CBS, 2017)

**8.3m**

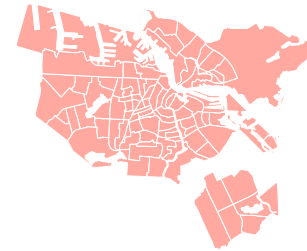
tourists visited Amsterdam in 2018 (NBTC, 2019)

**15.9m**

overnight hotel stays in Amsterdam hotels in 2017 (Gemeente Amsterdam, 2018)

**33%**

of all overnight hotel stays in the Netherlands are in Amsterdam (Gemeente Amsterdam, 2018)



**24.4m**

Dutch tourists overnights stays (CBS, 2017)

**€75.7b**

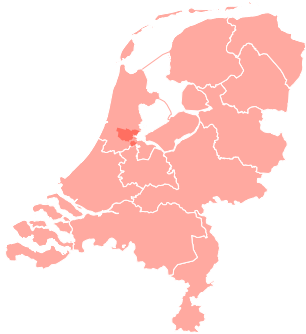
tourist economy in the Netherlands (CBS, 2017)

**3.9%**

tourist economy in the Netherlands (CBS, 2017)

**641k**

jobs provided by tourist sector (CBS, 2017)

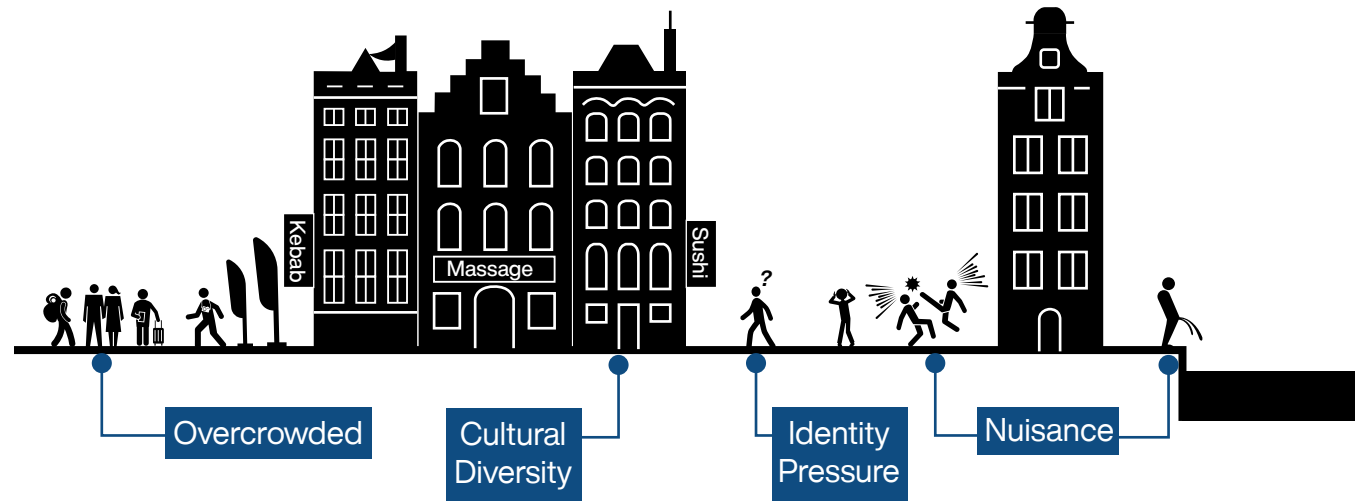


In 2018, the tourist numbers reached 8.3 million. This number has increased more than 60% since 2007. Dutch tourism is highly concentrated at Amsterdam.

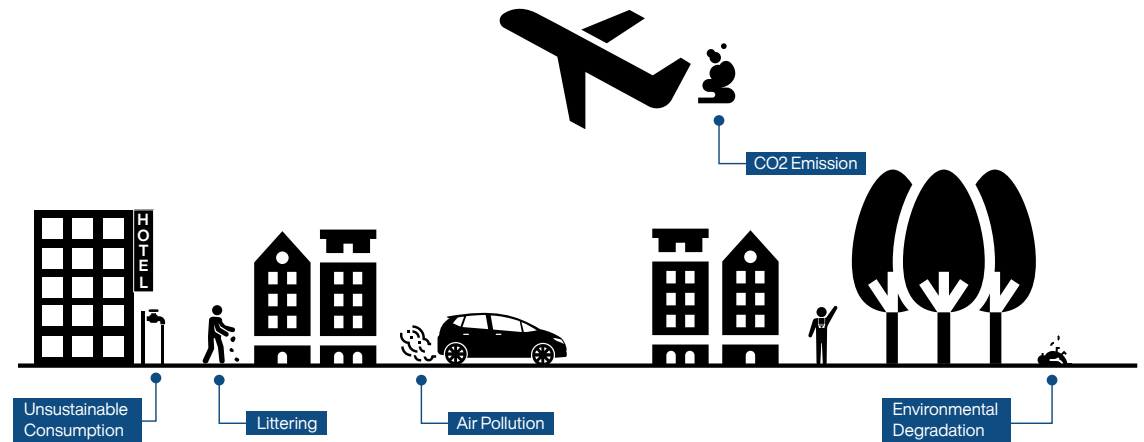
## Problem Field 1: Tourism put pressure on space

Due to the high concentration of attractions and commercial functions, the historic centre is facing massive spatial pressure.

Residents' narrow living space is invaded by tourists and the following noise and nuisance is making the liveability here worse.

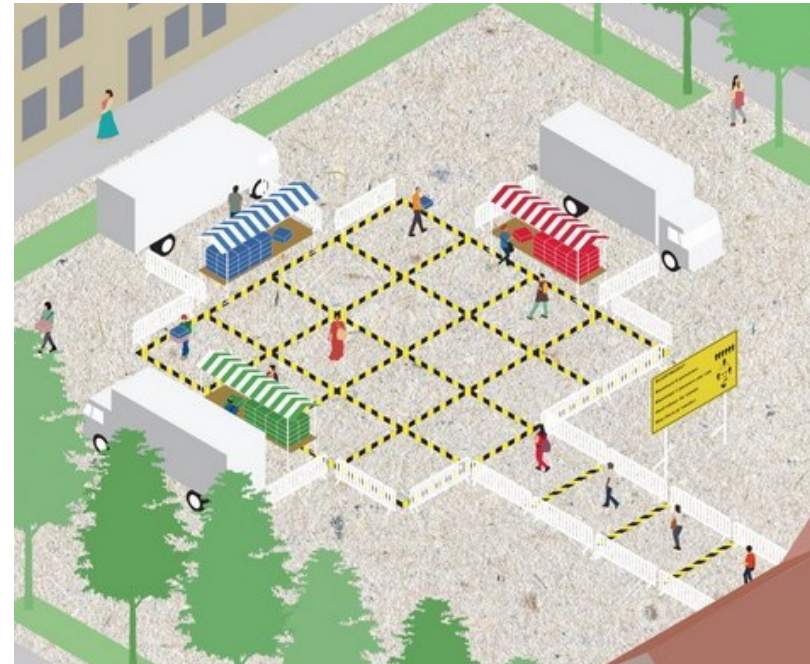


Problem Field 2:  
Tourism put pressure on  
environment and resource



## Problem Field 3: Pandemic situation

It is a threat undoubtedly, the future. the shrinking situation will still lasts for several years comparing with previous years. But it is also an opportunity to help tourism sector develop in a healthy way for the future.



Source: [www.shift-au.com](http://www.shift-au.com), 2020

## Problem Statement

The tourism of Amsterdam has undergone rapid growth. However it has also brought negative impacts. The space and environmental resources are under the massive pressure of tourism. First, In the situation of overtourism, Amsterdam needs to regulate development of tourism; Second, in the situation of post corona virus, the shrinking situation provide more flexibility to bring co-existence of tourists and citizens. Reflexing the actions on space, the (public) space of Amsterdam need to transit and upgrade corresponding to the dense and crowded centre.

## 2. Methodology

## Main Research Question

From situation of overtourism to post corona virus era, tourism of Amsterdam need to be upgraded for co-existence of tourists and residents. In this case, how to transit public space to support sustainable development of tourism?

## Research Question

## Sub Questions

### Scope

Urban carrying capacity

1. What is urban carrying capacity and how does it related to tourism?

### Design Approaches

transit and upgrade public space

2. What are the impacts of tourism and how does them reflex on public spaces?  
3. What are the principles that guiding the transition and upgradation of public spaces?

### Aim

support sustainable development of tourism

4. How to achieve a balanced reationship between tourism and UCC by spatial intervention?

### Context

Amsterdam in overtourism era and post corona virus era

5. In overtourism situation, how does tourism affect Amsterdam at spatial dimension?  
6. What should be taken into consideration in terms of post pandemic era?

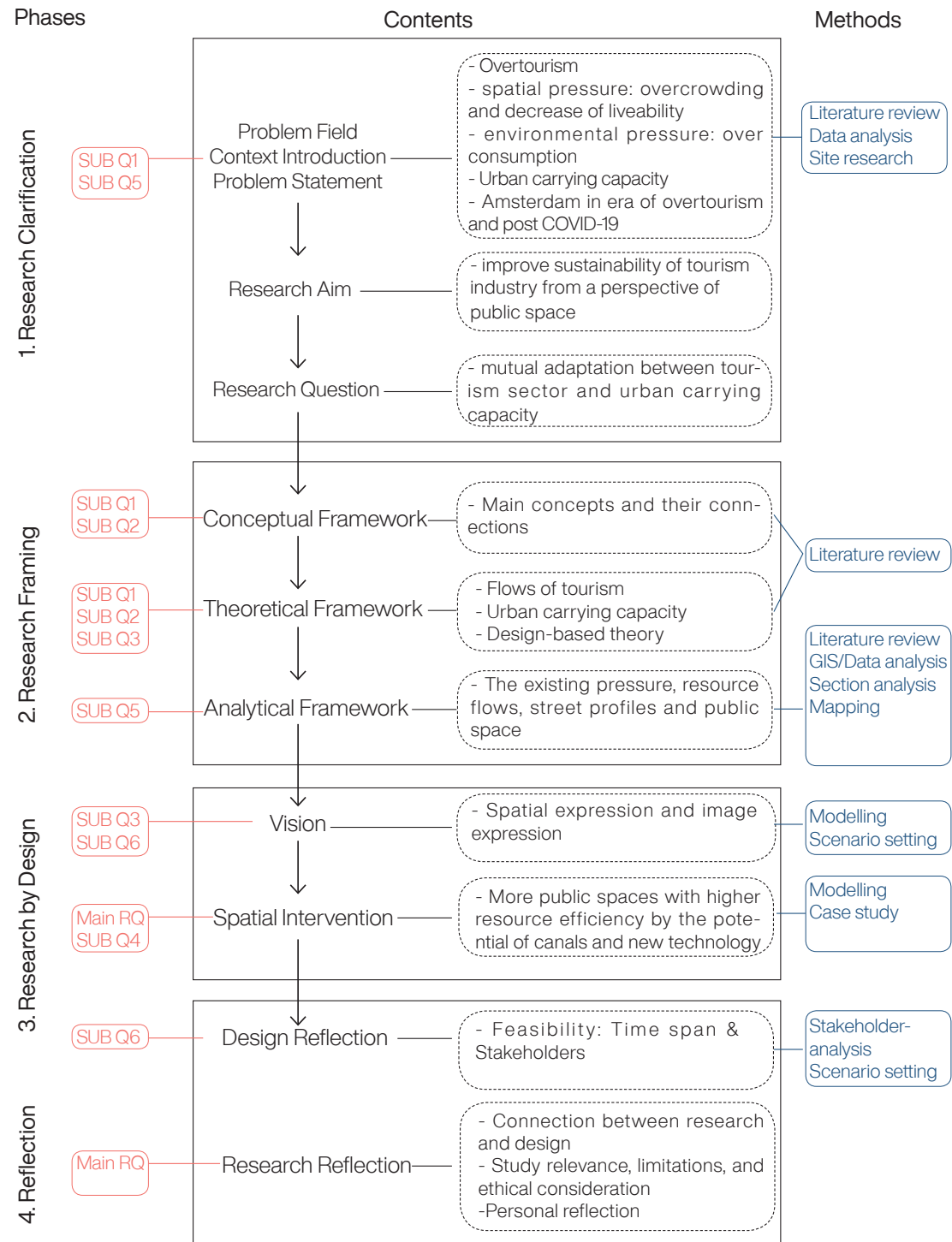
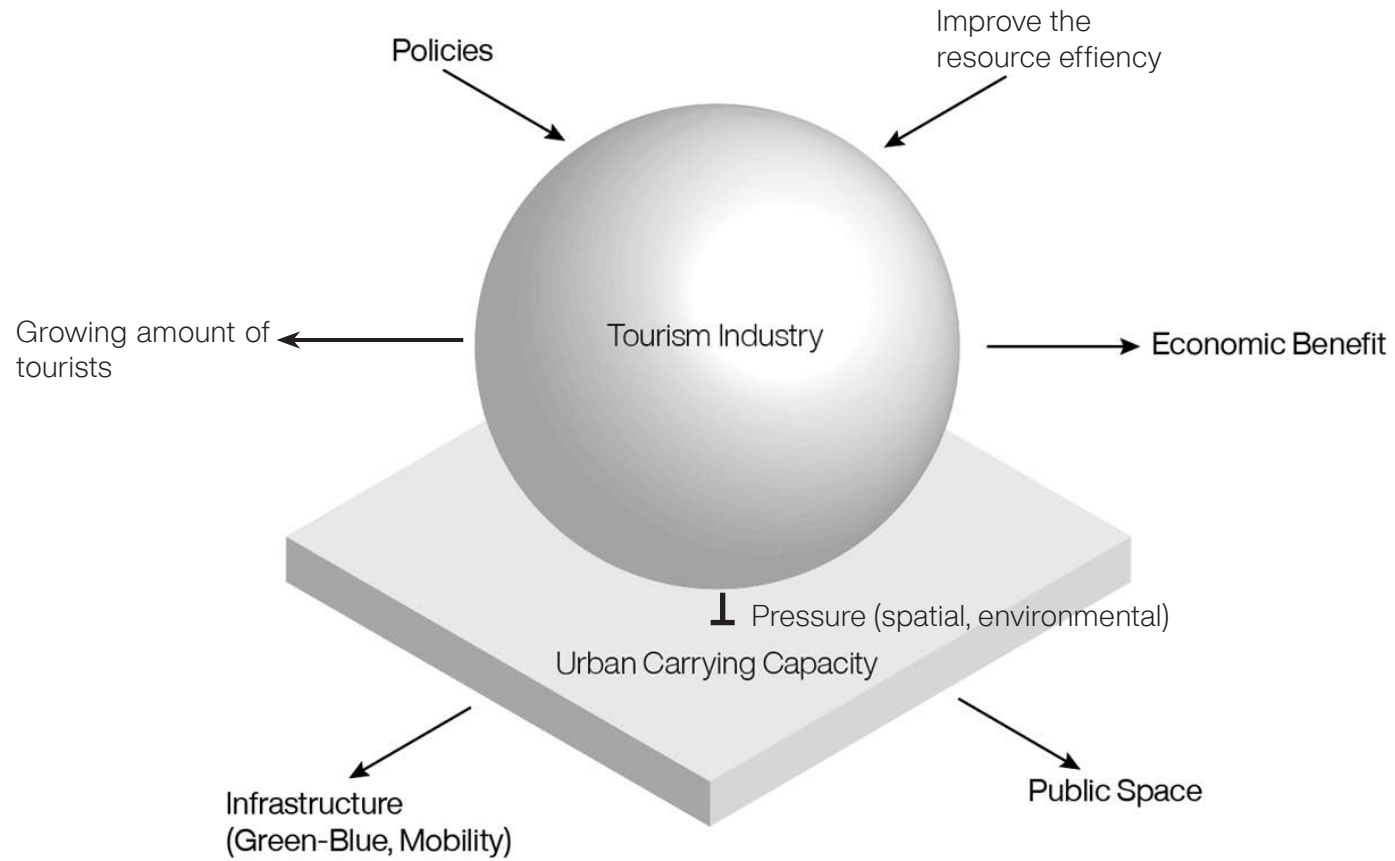
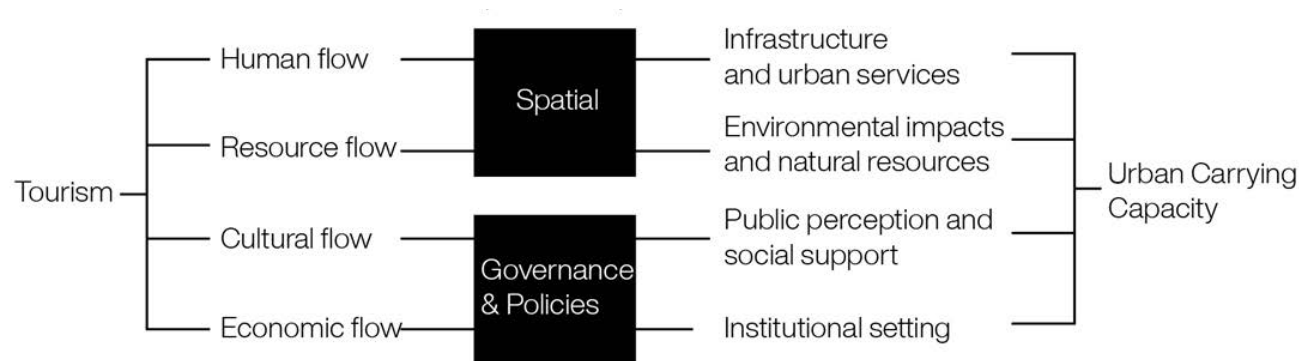


Figure 4: the roadmap of methodology (Source: Author)



Urban carrying capacity is supporting the development and the well-being of citizens in the city, including tourism sector. Tourism sector is growing rapidly, which puts much pressure on urban carrying capacity.



## Flow of Tourism

### Human Flow

Tourism essentially is a spatial-temporal movement of human from home to destinations. This flow has a spatial interaction between places.

### Resource Flow

Tourism is an industry of mobility; The growth of arrival numbers and average distances travelled results in larger and more intense resource flow.

### Cultural flow

Tourism is a modern commercialized culture which offering romance, paradise. It is also a communication platform of different cultures and lifestyles

### Economic flow

Tourism is considered a method of providing jobs, income, tax and capital inflow.

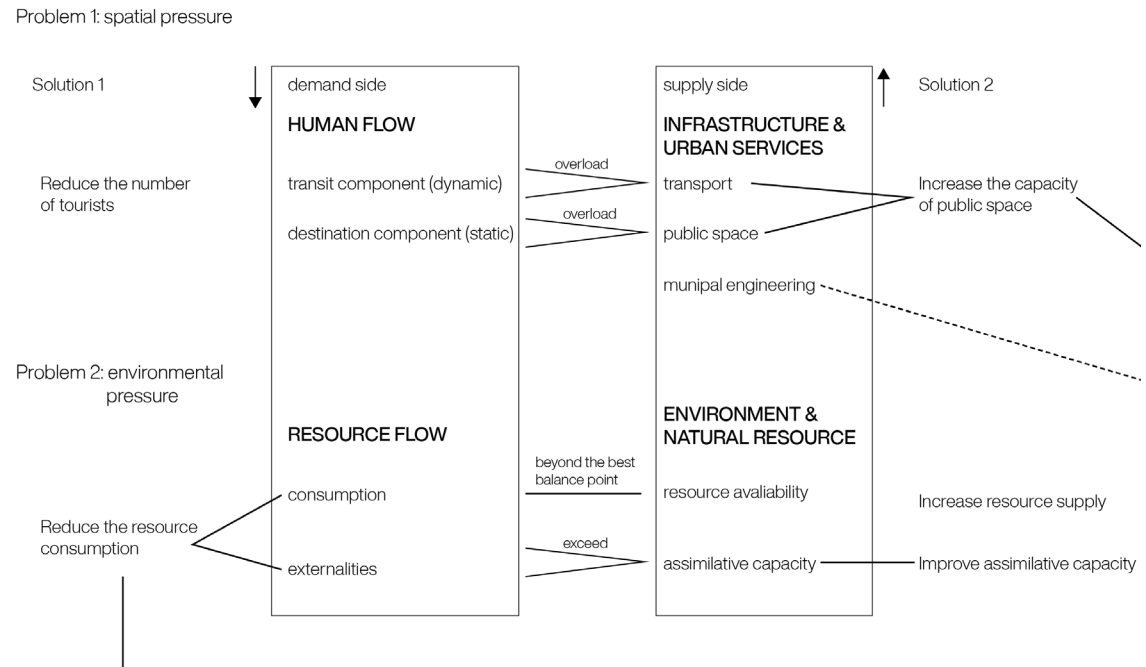
# Urban carrying capacity

Urban carrying capacity is initially proposed as “the maximum level of human activities.

The concept includes 4 main components:

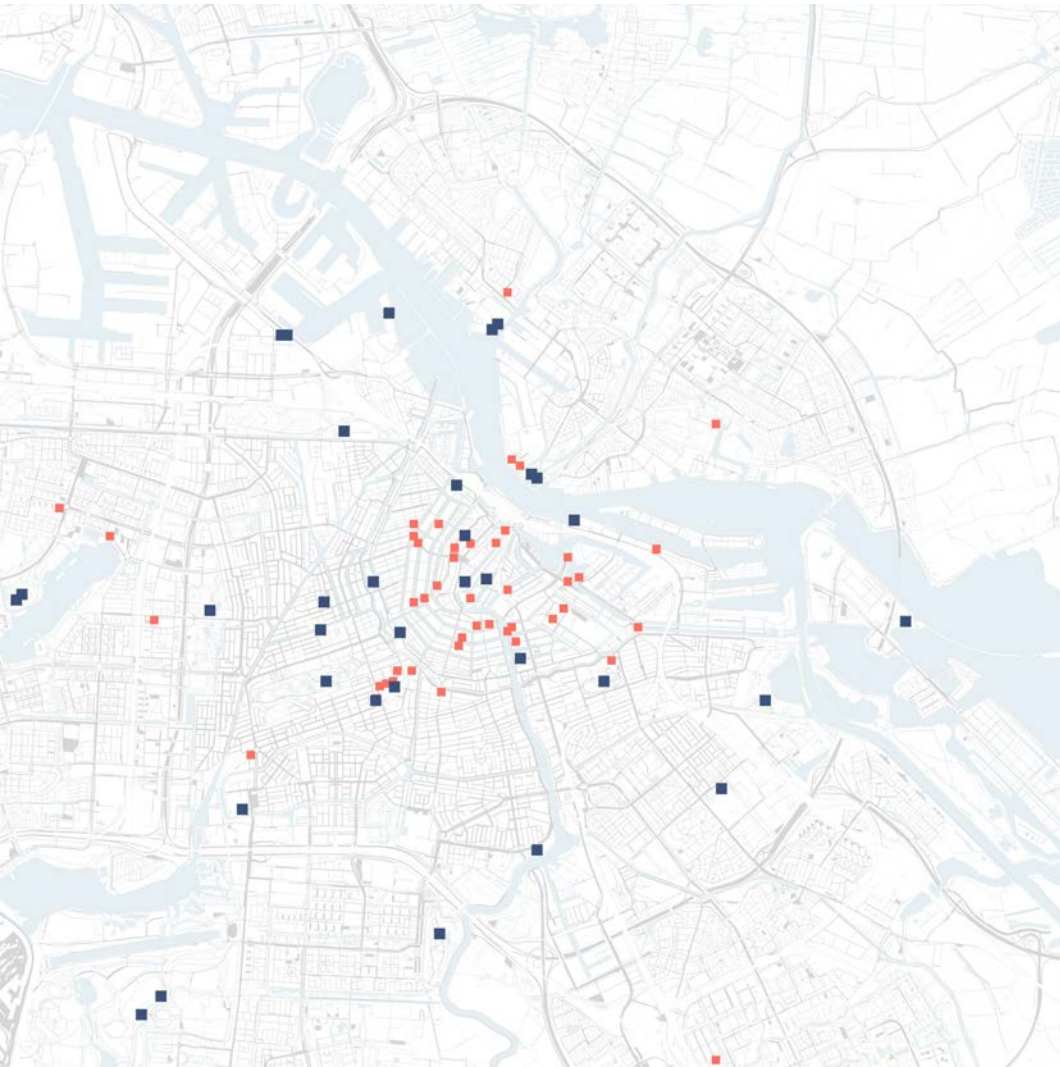
- environmental and resource
- Infrastructure and urban services
- public perception and social support
- institutional setting.

For the problems caused by tourism, we can comprehend them from the perspective of demand-supply balancing.



# 3. Analytical Framework

## Spatial Pressure - Internal factors

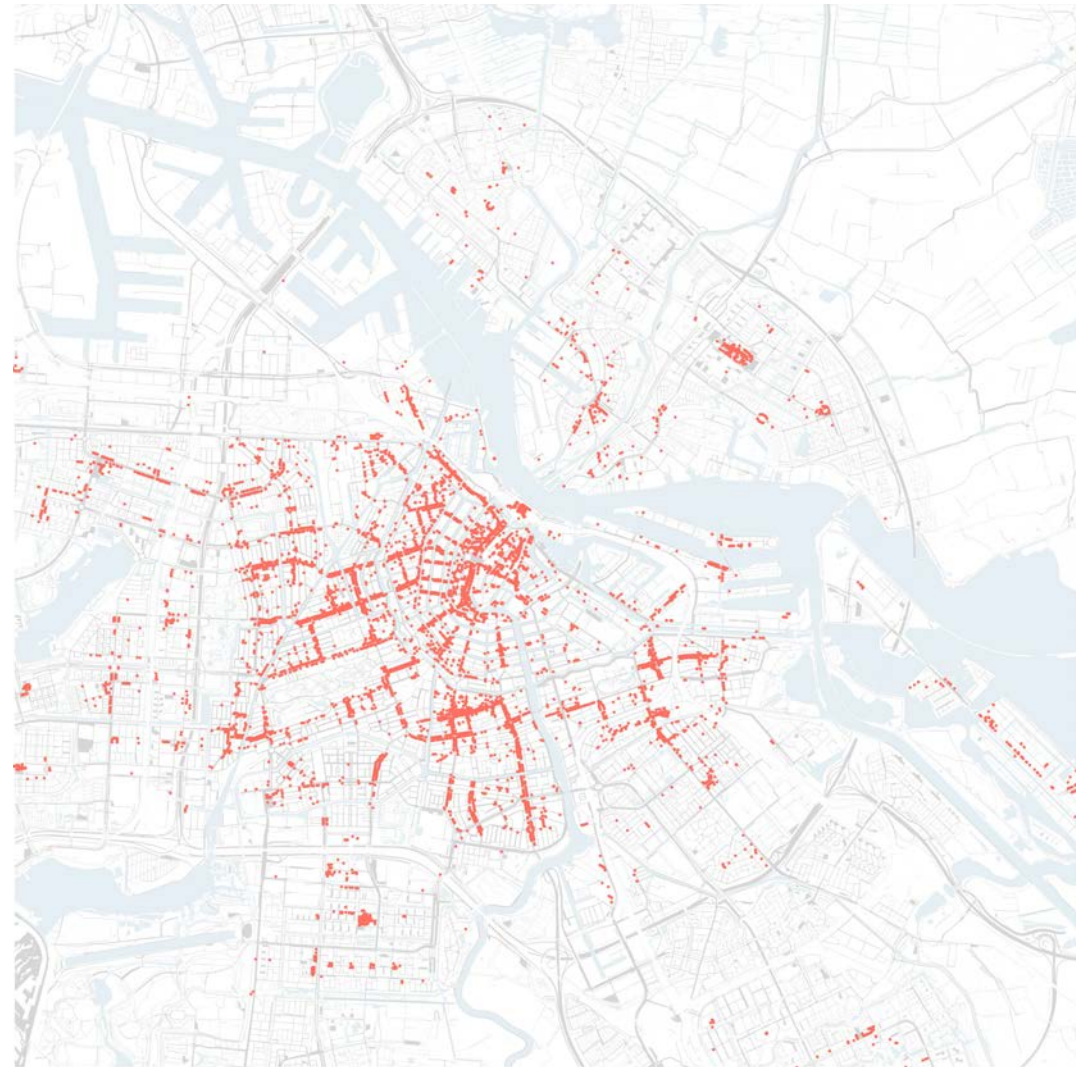


### Cultural Attractions

Legend  
■ Cultural Attractions  
■ Festival Locations

Source: Google map, [www.amsterdam-tips.com/festivals](http://www.amsterdam-tips.com/festivals)

## Spatial Pressure - Internal factors

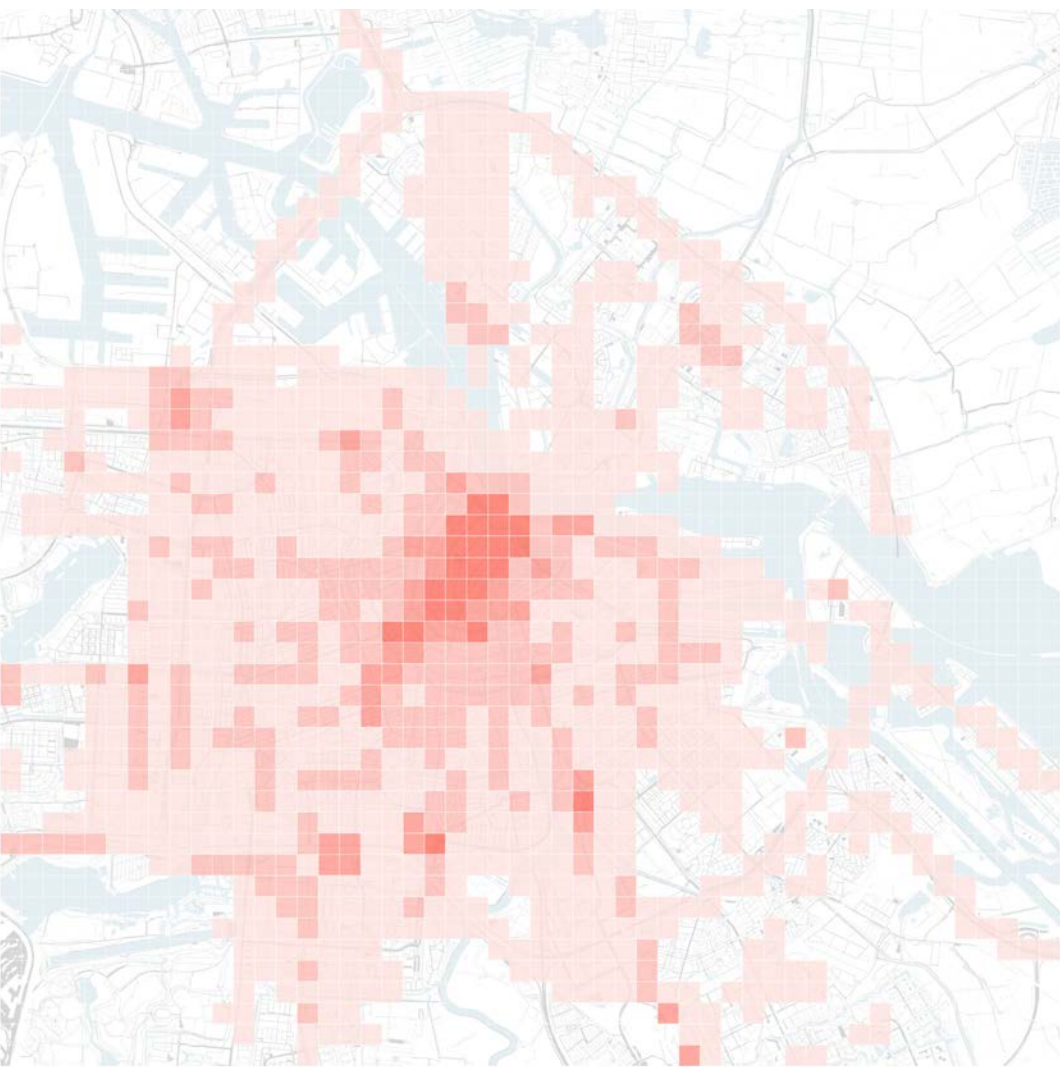


### Retail

Legend  
● Shops

Source: Gemeente Amsterdam (2019)

### Spatial Pressure - Internal factors

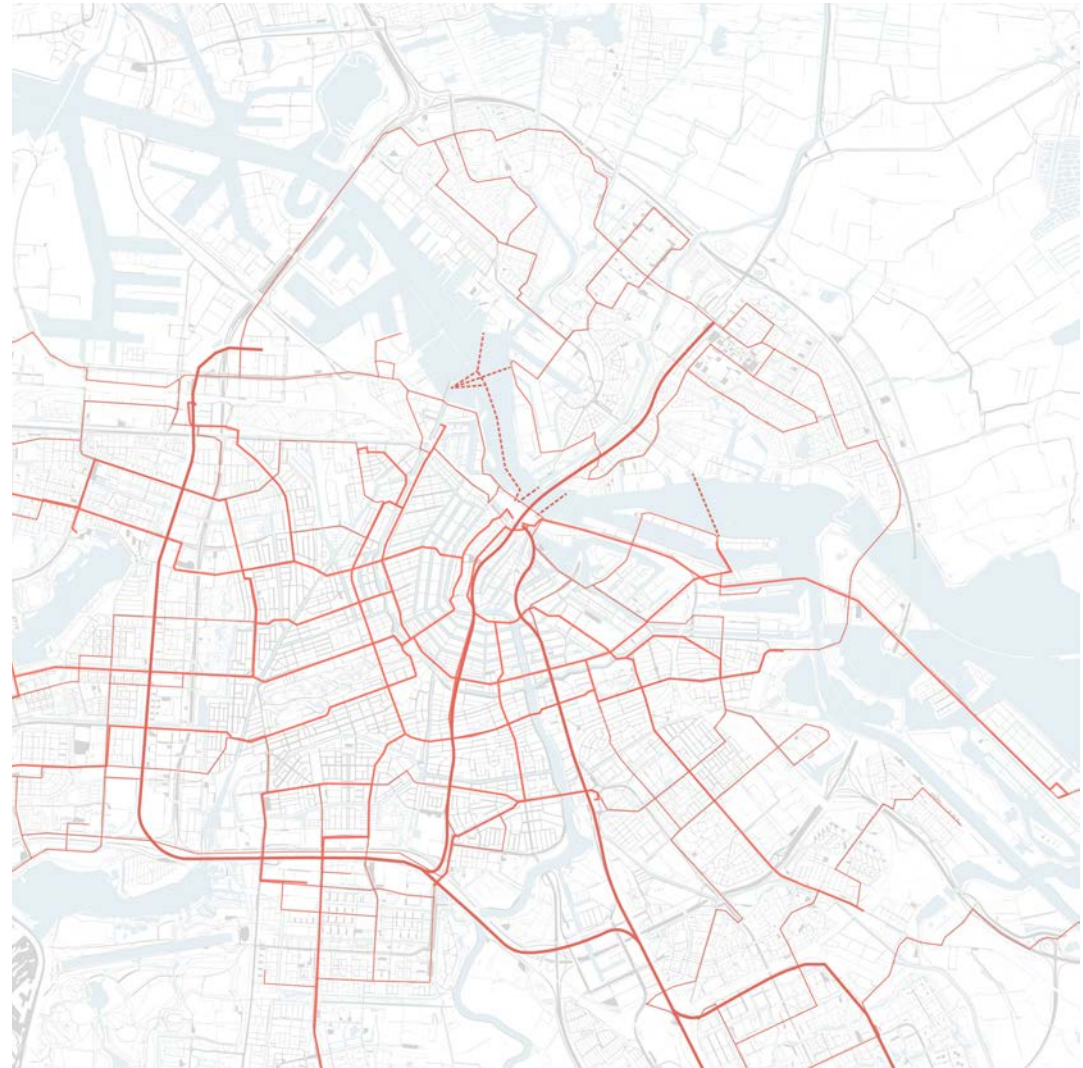


Spatial Pattern of Tourists

Legend  
Dense Sparse

Source: Eric Fischer's research. (2019)

### Spatial Pressure - External factors

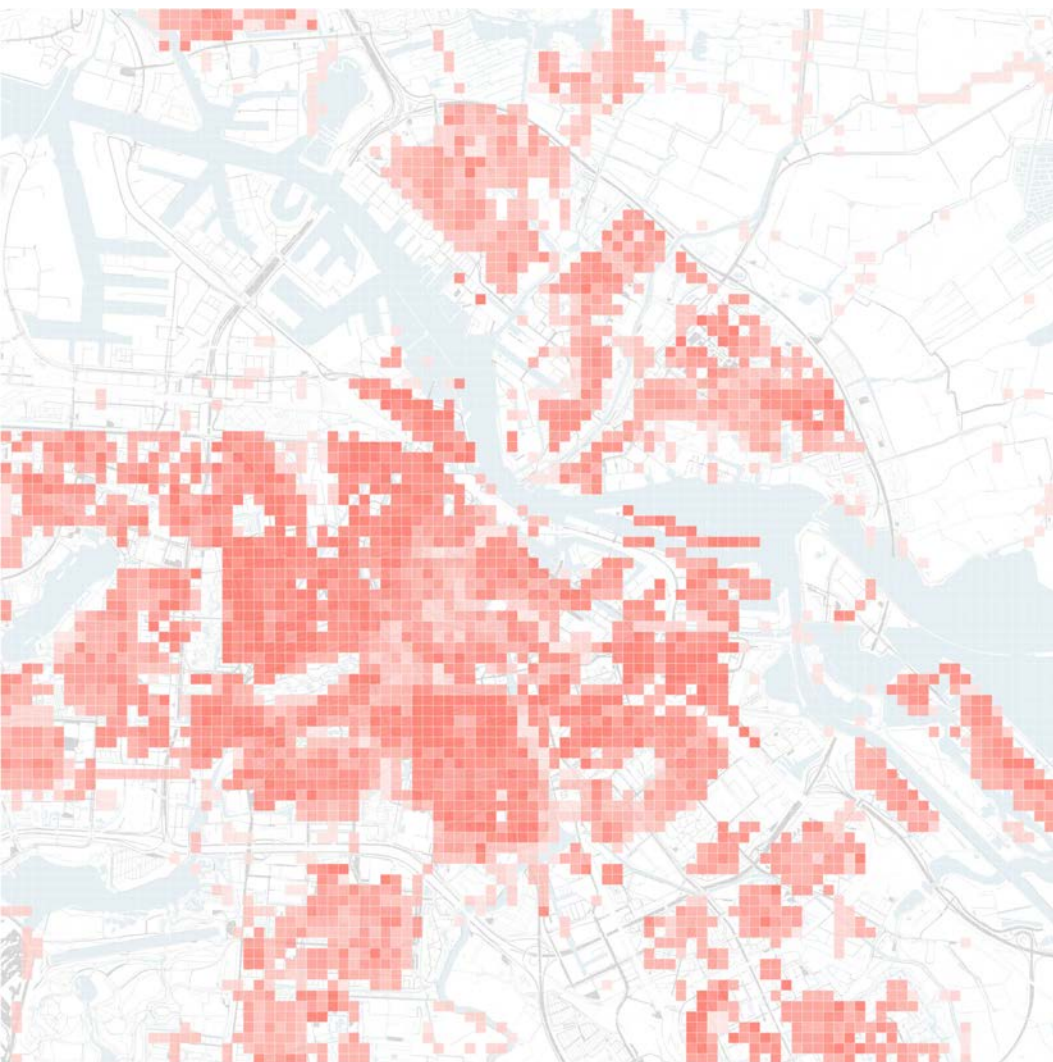


Public Transport

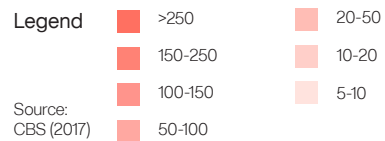
Legend  
Metro  
Tram  
Bus  
Ferry

Source: Gemeente Amsterdam (2019)

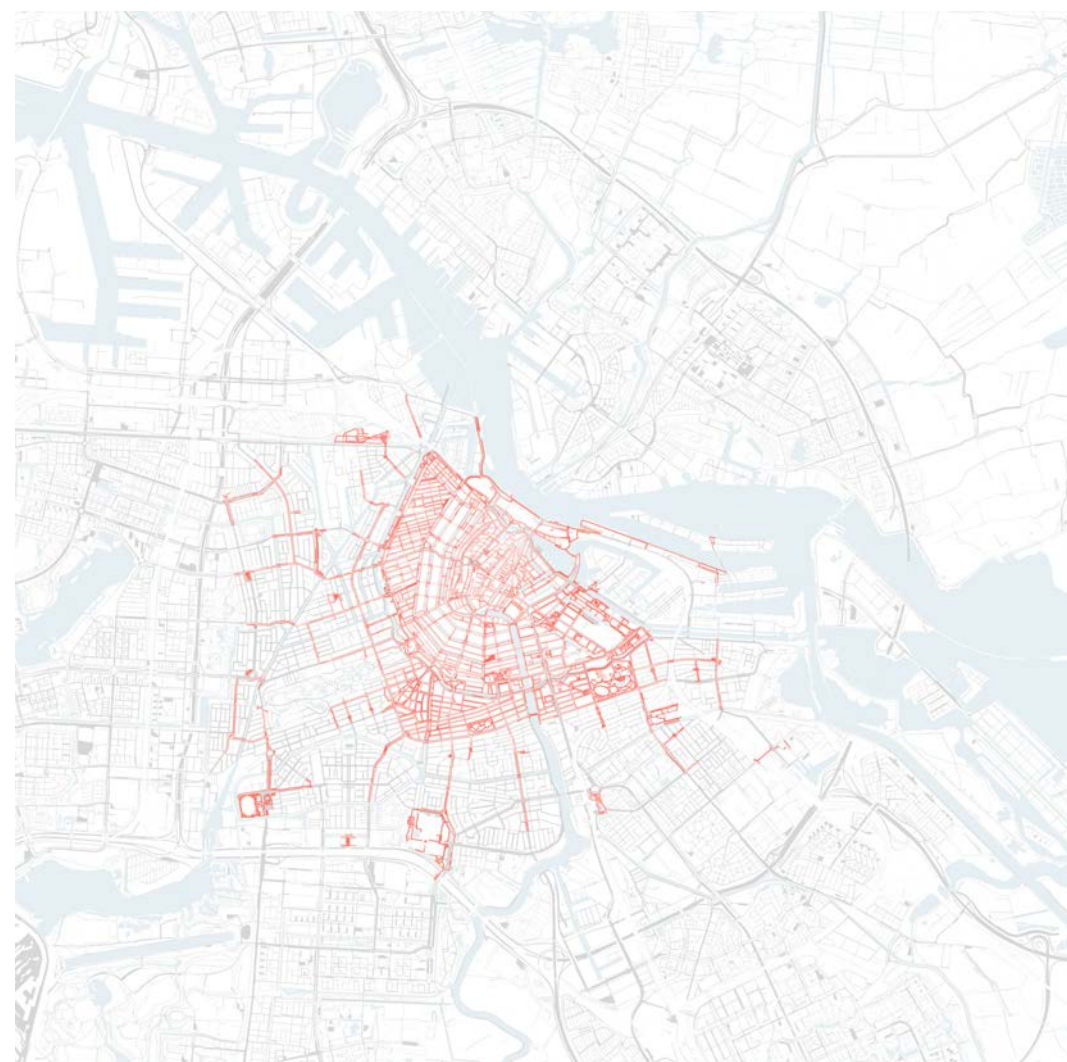
### Spatial Pressure - External factors



Population Density



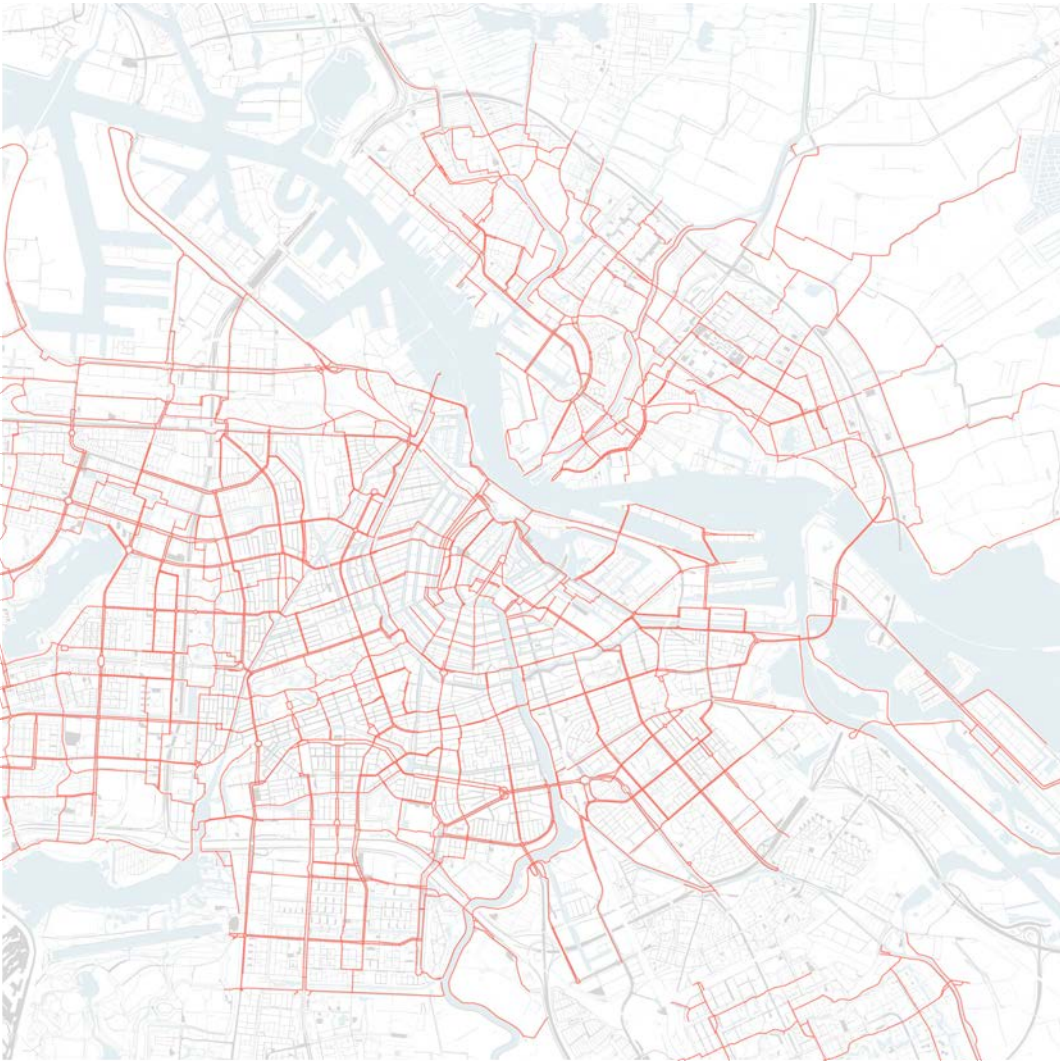
### Spatial Pressure - External factors




Walkability



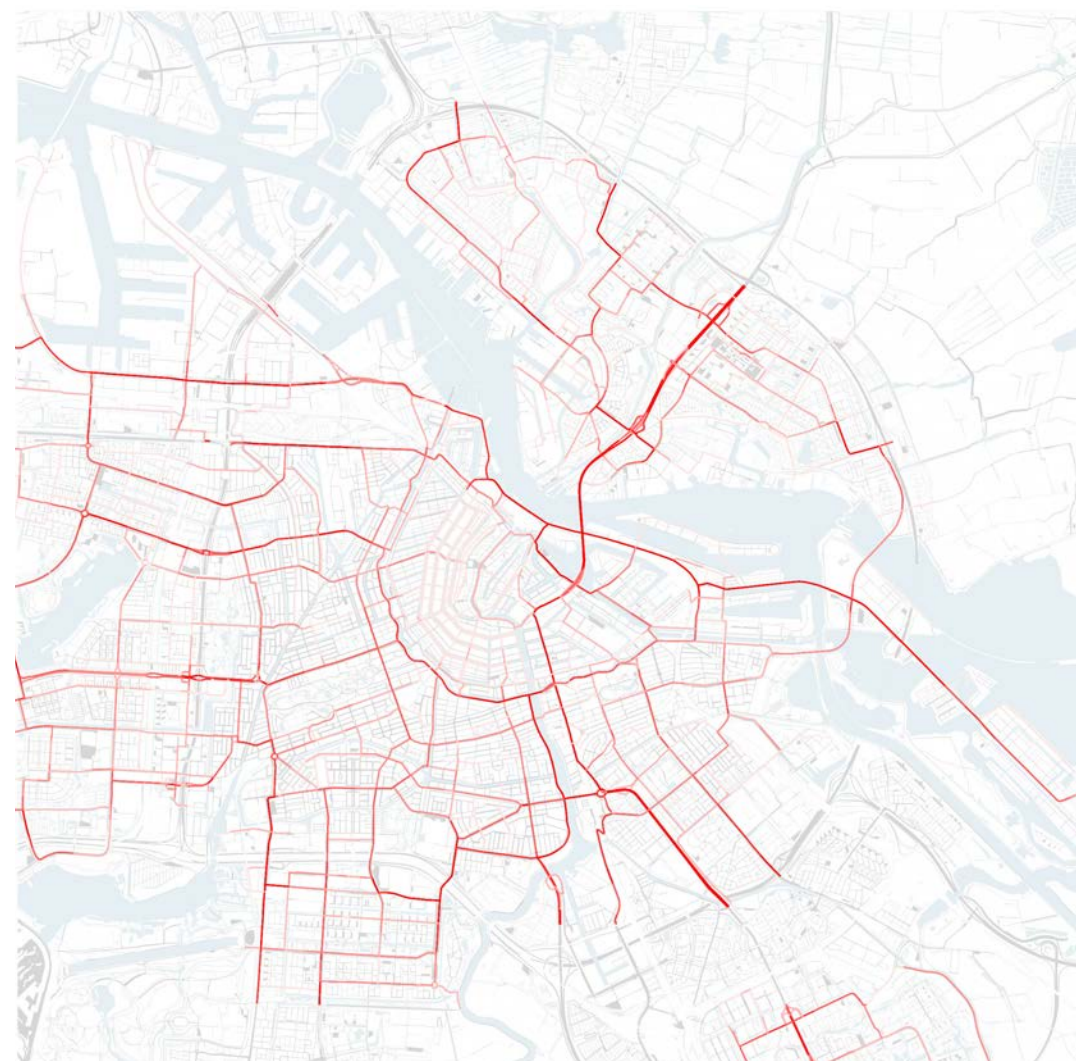
## Spatial Pressure - External factors









### Cyclability

Legend  Bike Lanes  
Source: Gemeente Amsterdam (2019)

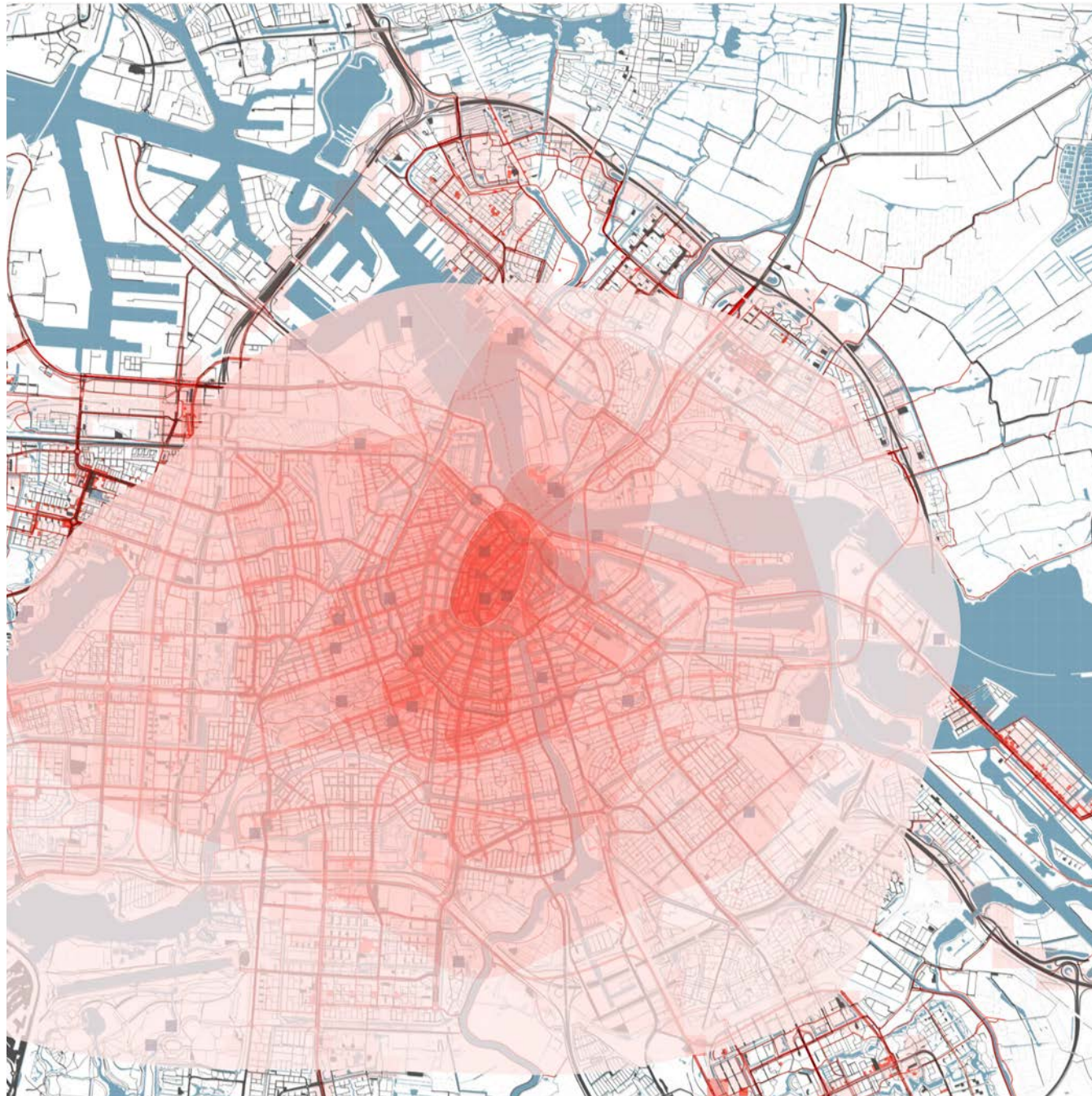
## Spatial Pressure - Impacts



### Traffic Intensity

Legend  >20000 vehicles  
 16000-20000  
 12000-16000  
 8000-12000  
 4000-8000  
 0-4000  
Source: Gemeente Amsterdam (2019)

# Spatial Pressure - Overview

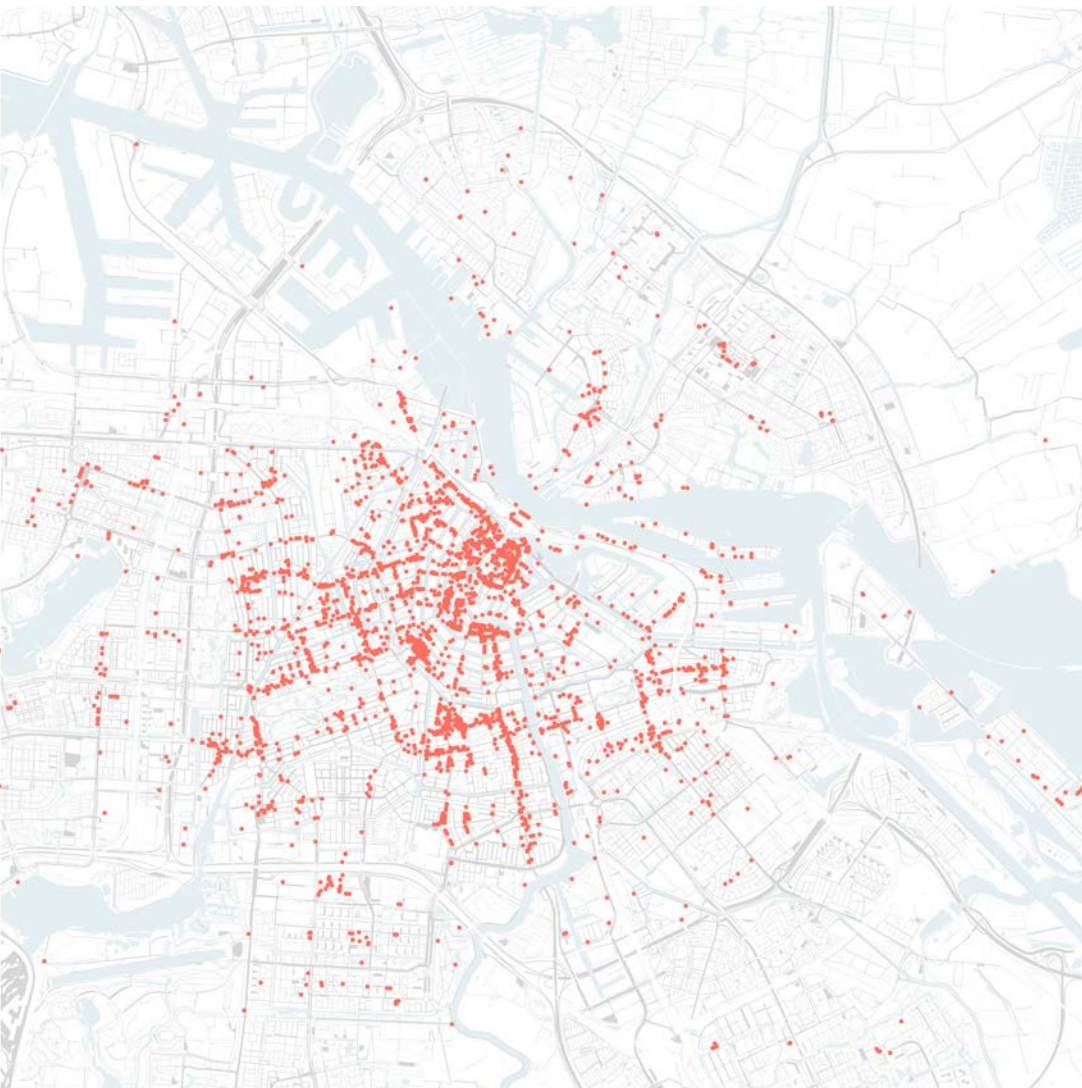


Overlay of factors

Legend



### Environmental Pressure - Internal factors

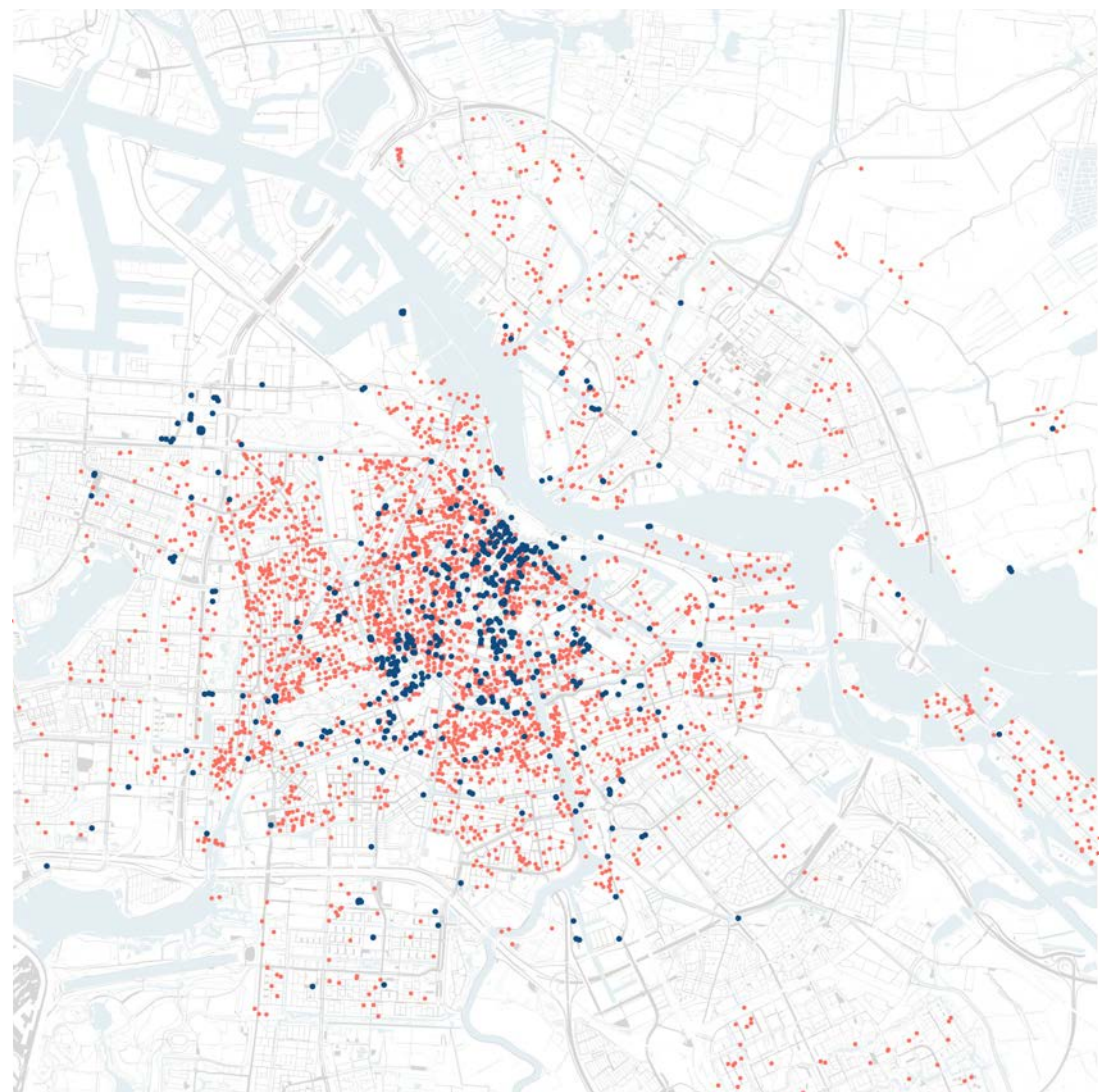


### Catering

Legend ● Restaurants & Cafes

Source: Gemeente Amsterdam (2019)

### Environmental Pressure - Internal factors



### Hotels & Airbnb

Legend ● Airbnb rooms ● Hotels

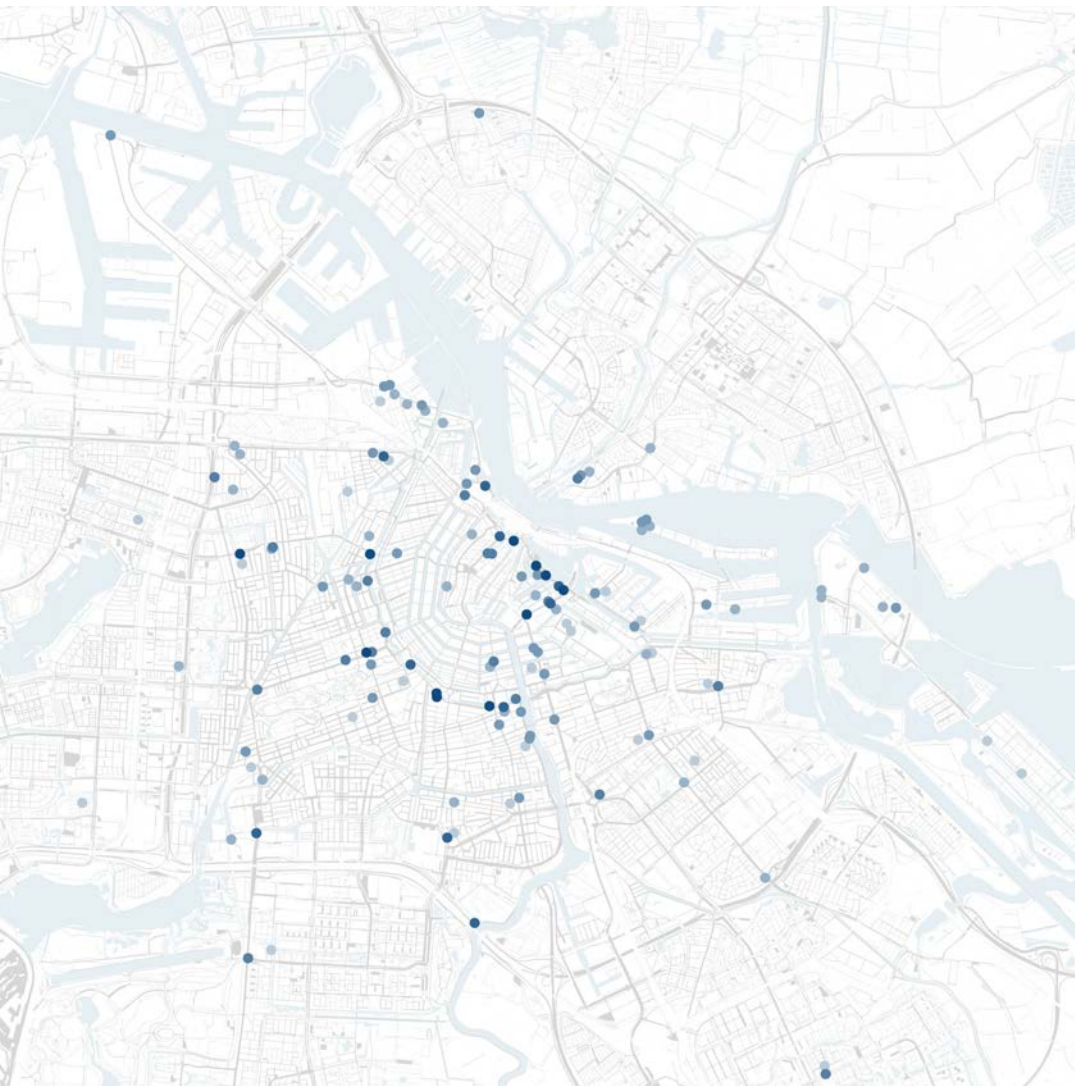
Source: Gemeente Amsterdam (2019),  
insideairbnb.com

Environmental Pressure - External factors

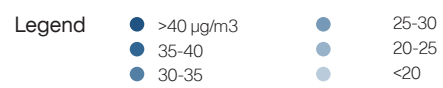


CO2 Emission

## Environmental Pressure - Impacts

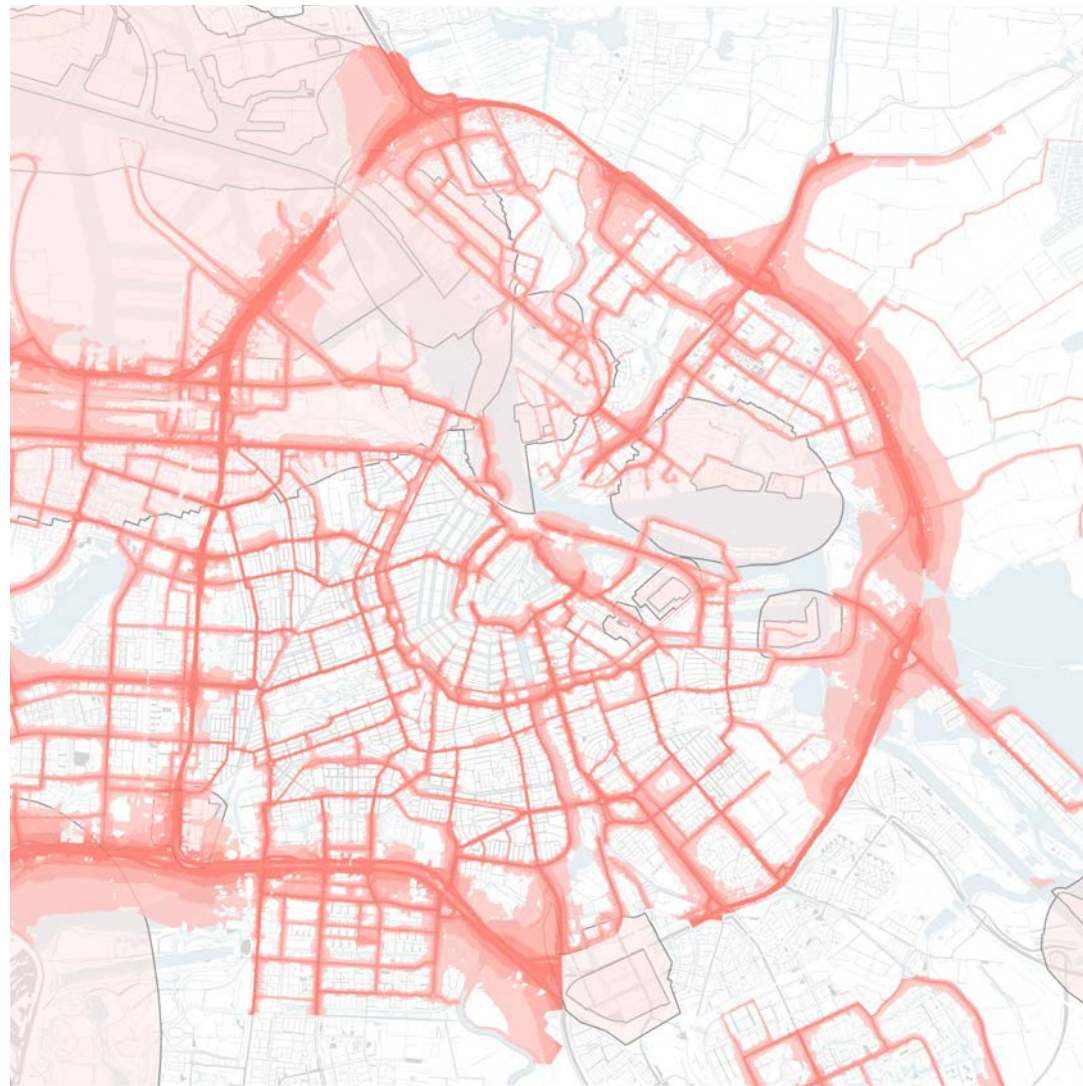


Air Quality (NO2 Density )

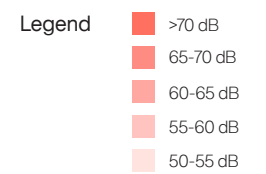


Source: Gemeente Amsterdam (2019)

## Environmental Pressure - Impacts

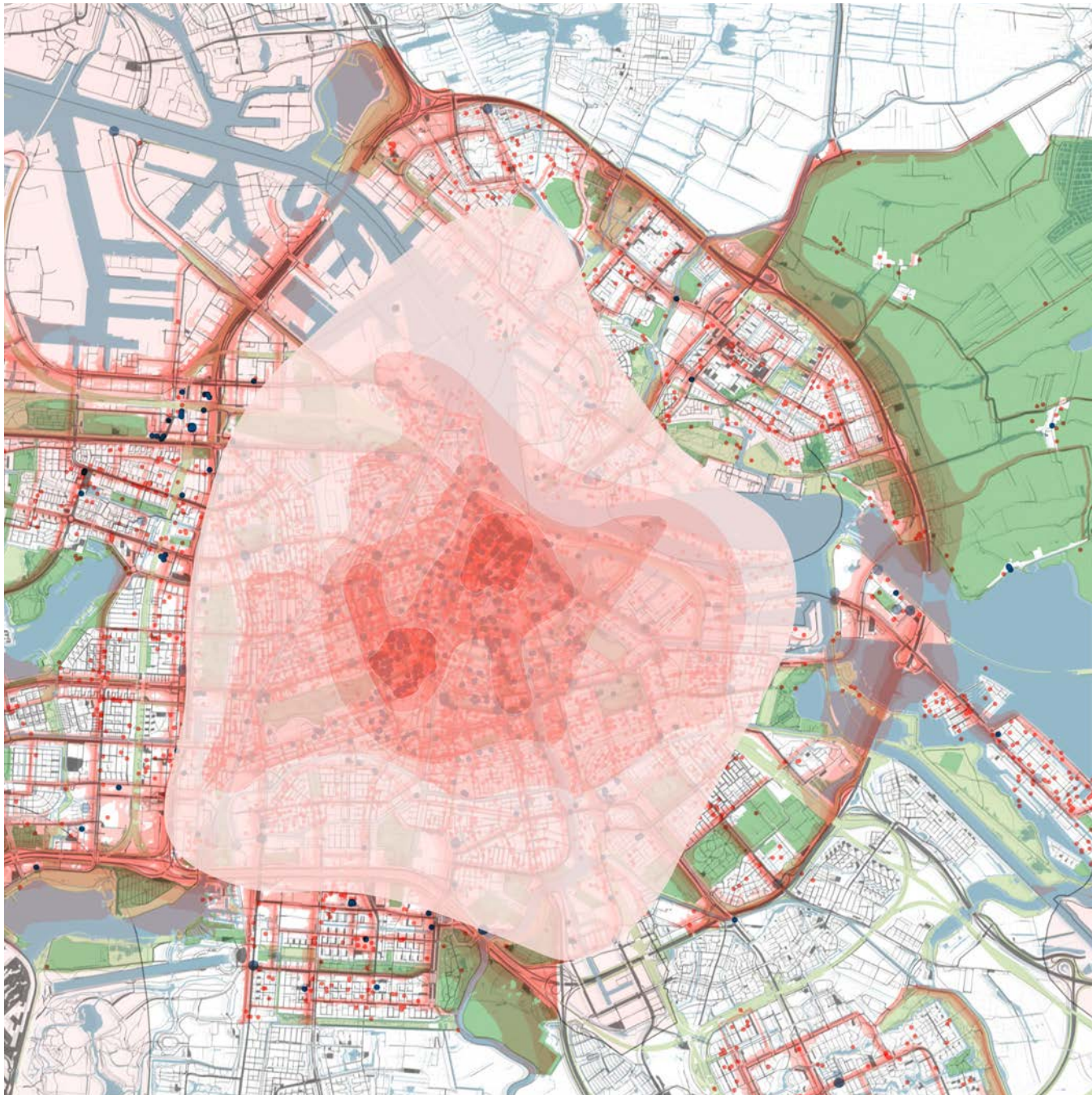


Noise Pollution



Source: Gemeente Amsterdam (2019)

## Environmental Pressure - Overview



The pressures spread all over the city and concentrate on canal rings, where Amsterdam centre locates.

In the narrow historic centre, public spaces are highly commercialized and motorized, which is one reason for overcrowding.

The design of the project includes two parts: First, transforming existing spaces and exploring potential spaces to provide more public spaces.

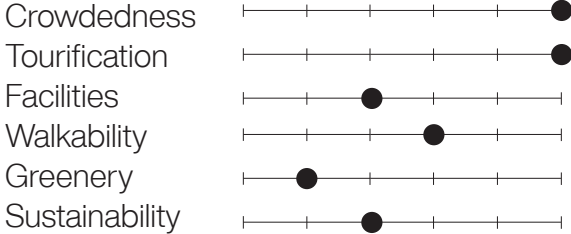
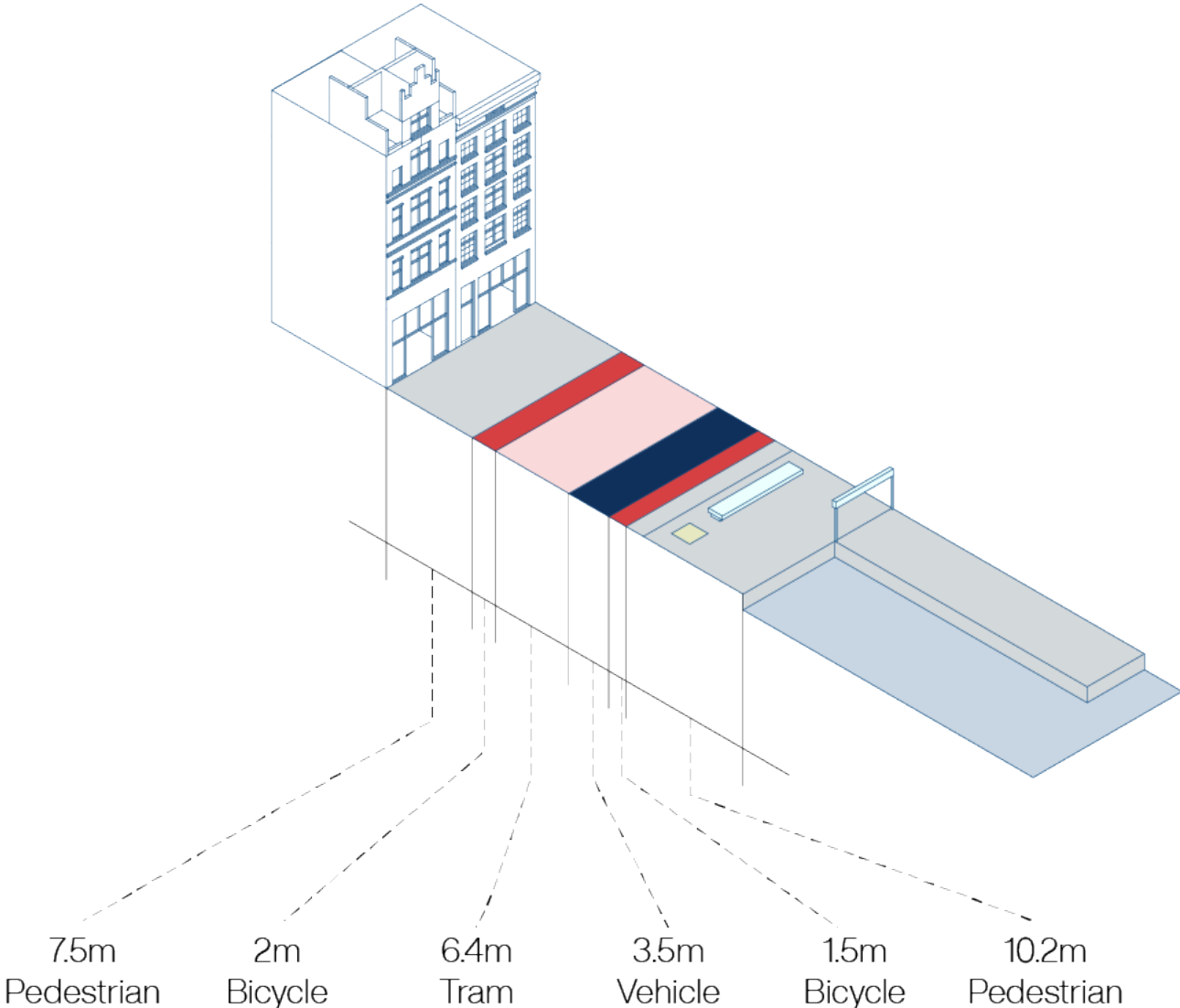
Overlay of factors

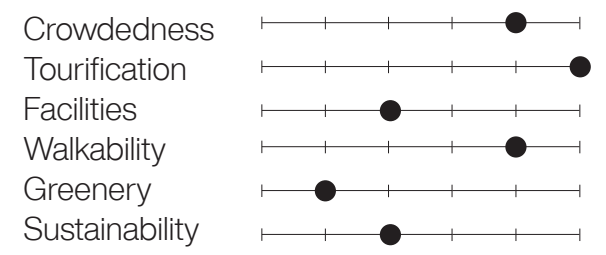
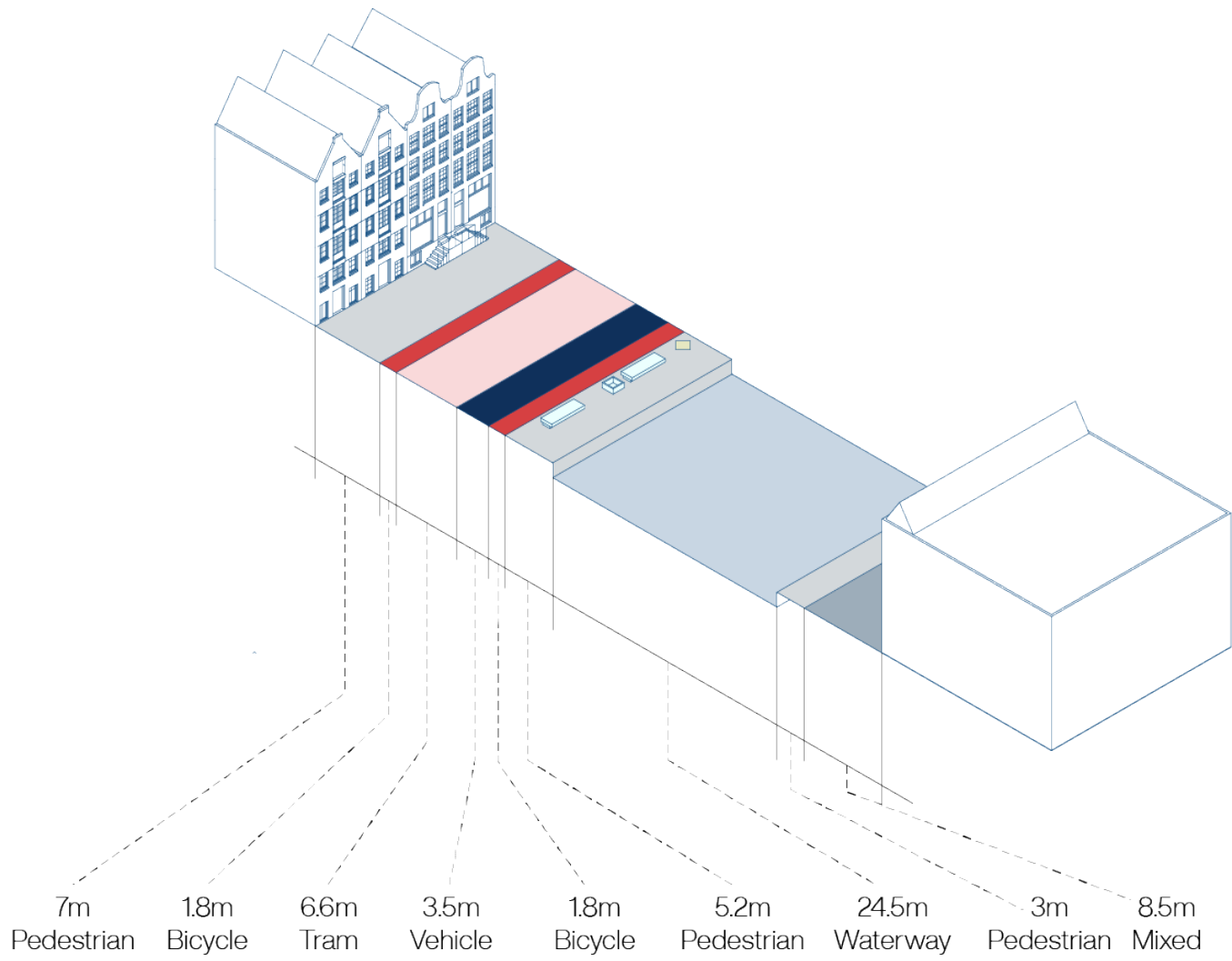
Legend



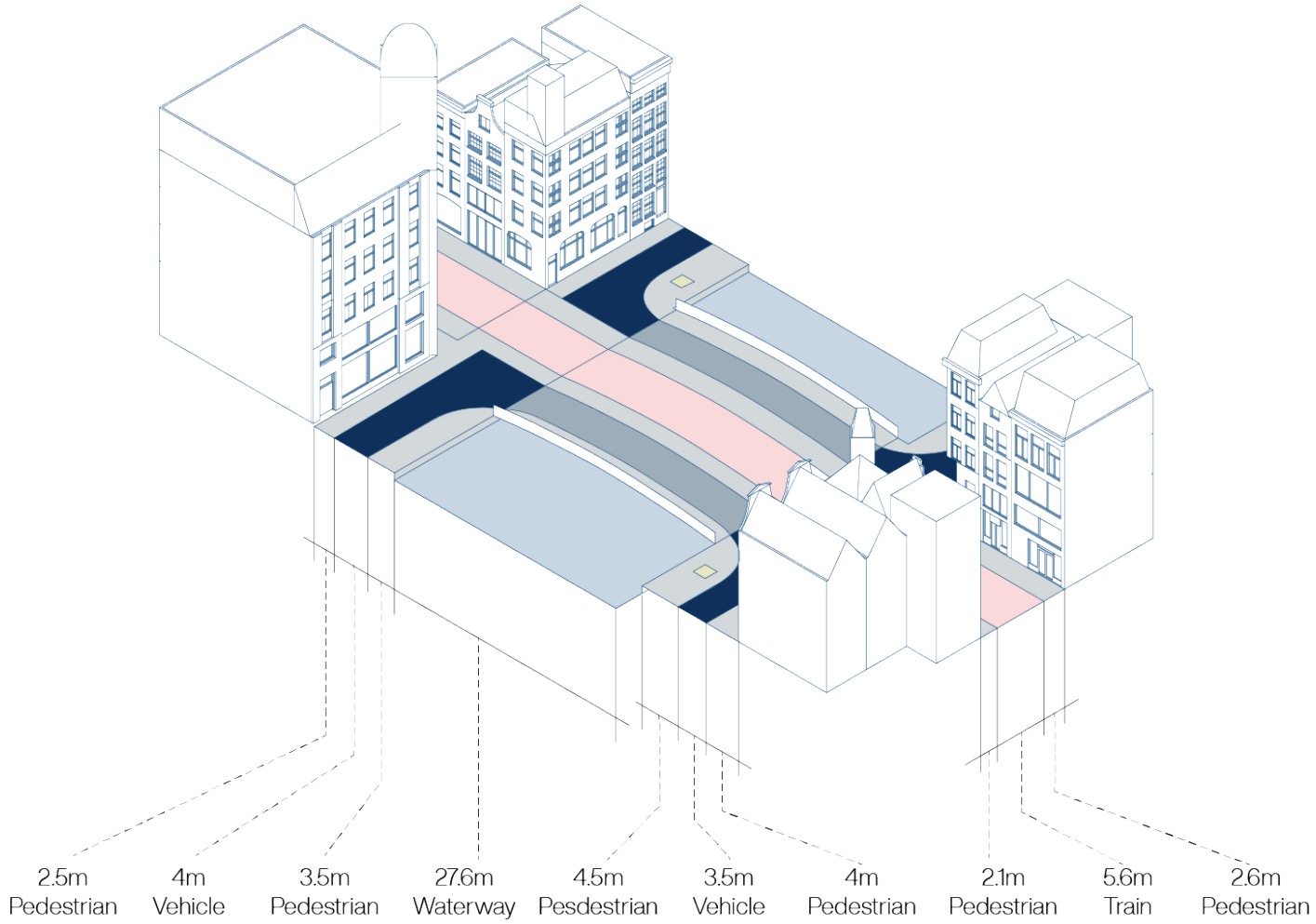
# 4. Detailed Analysis



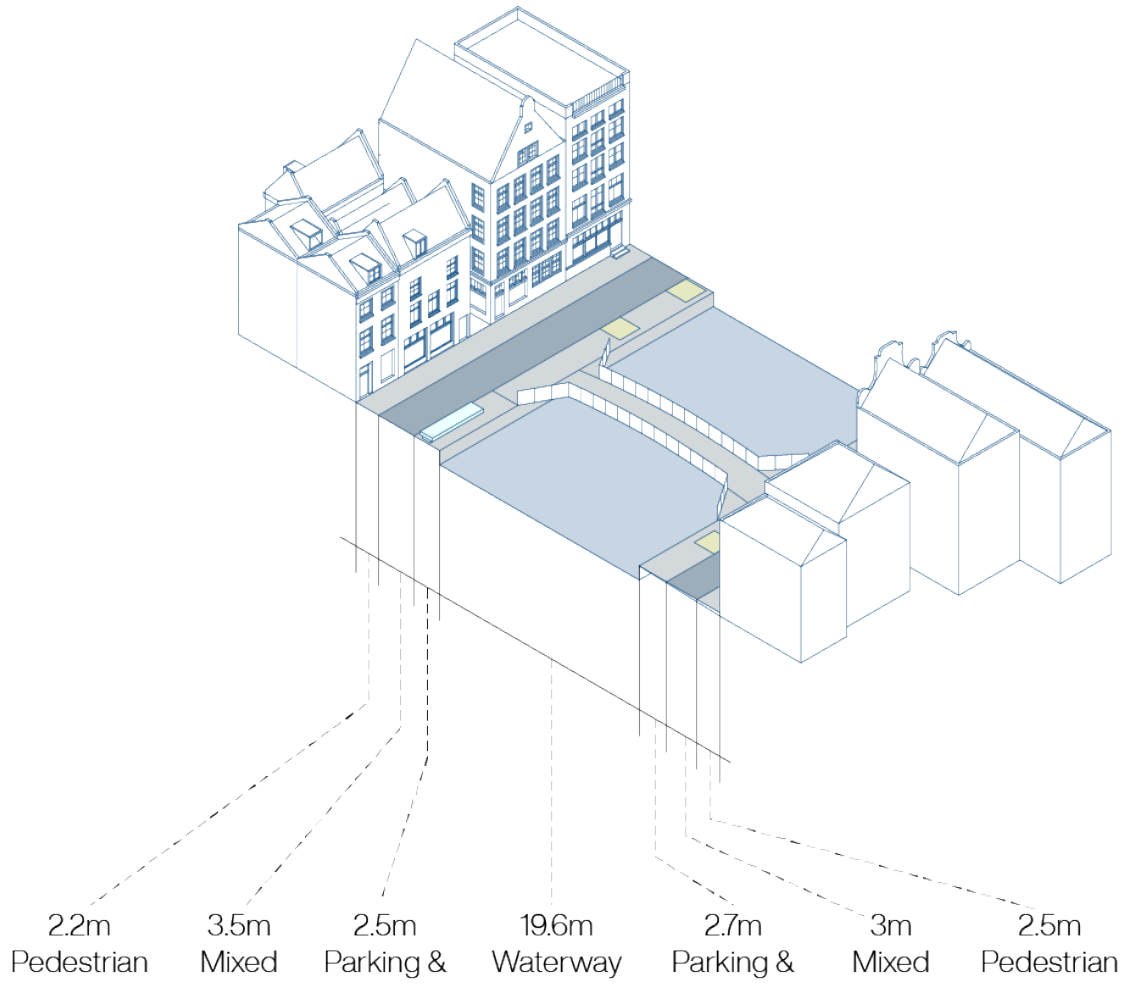




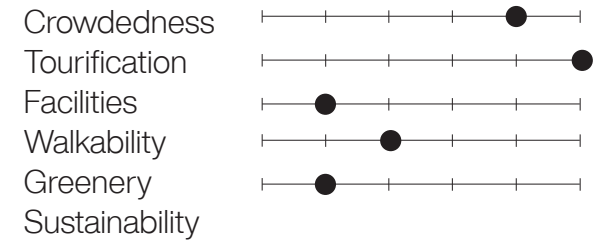
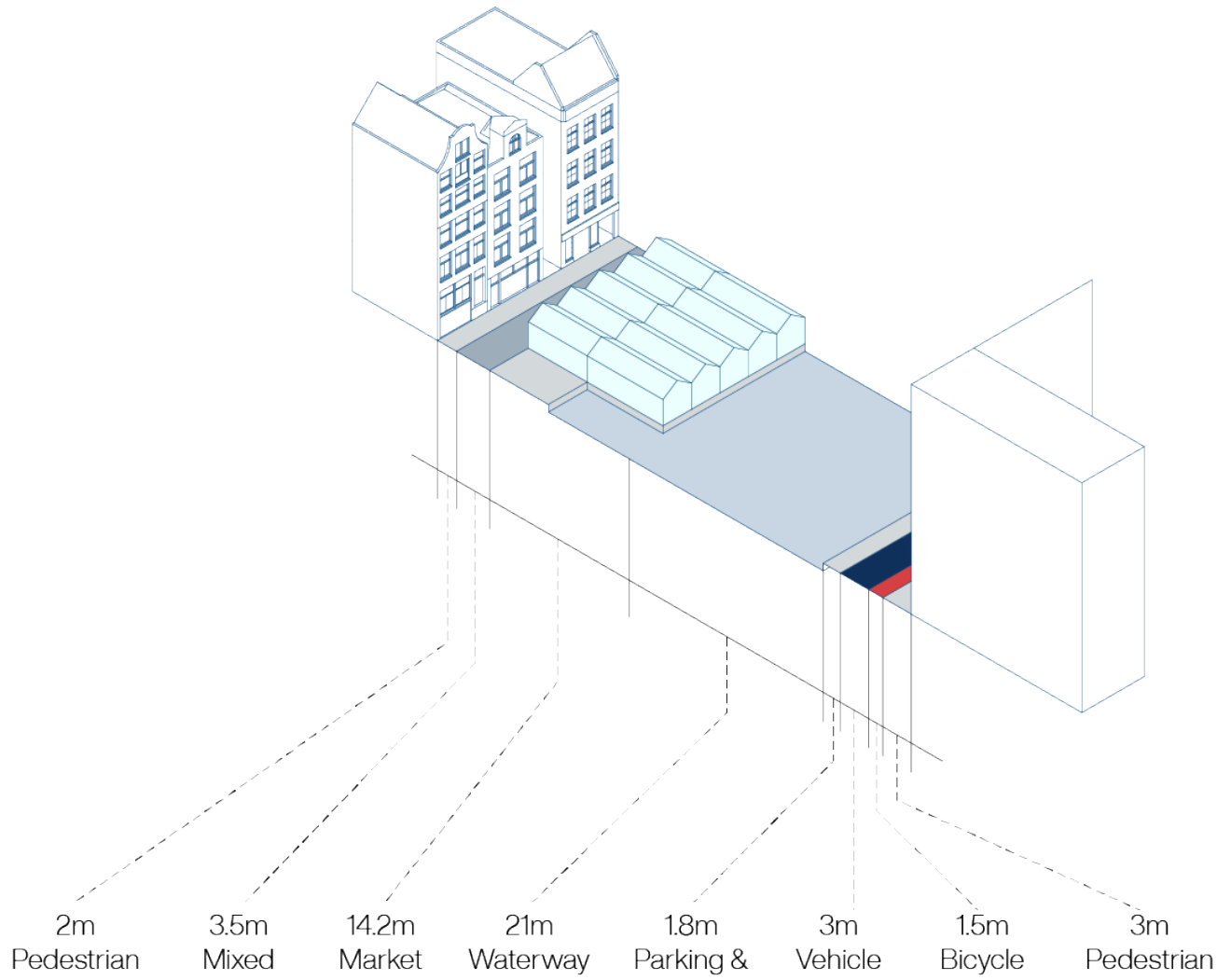
Leisestraat



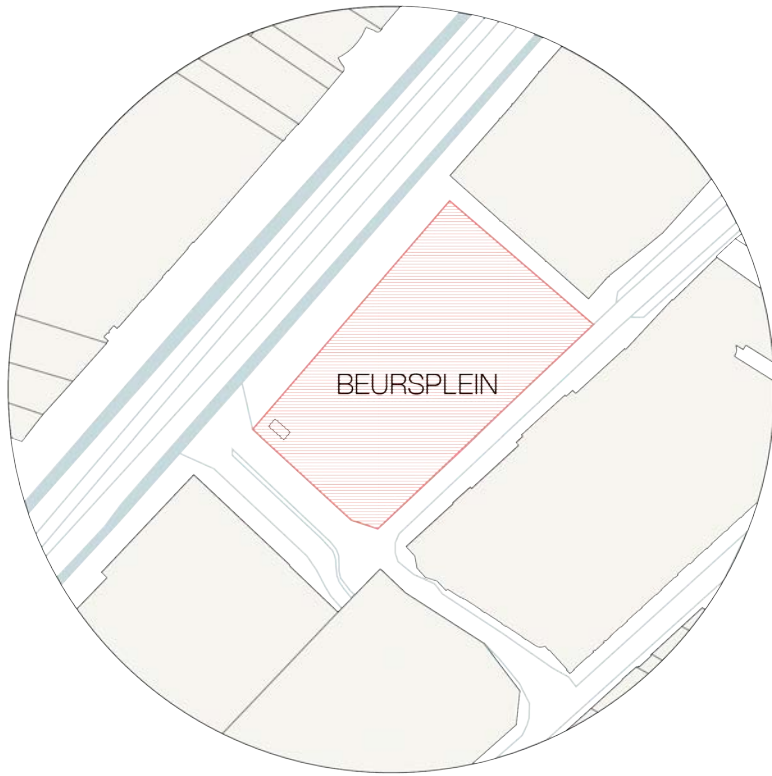
Oudezijds Voorburgwal



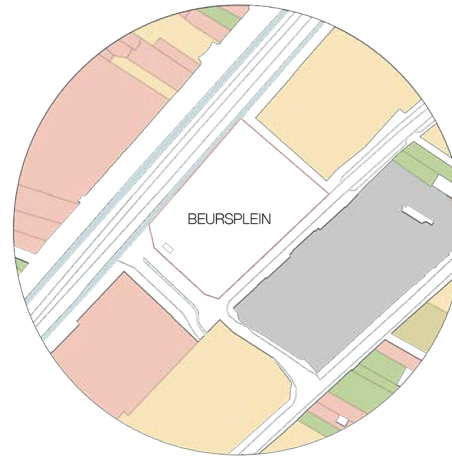
Singel



# Beursplein



## Building Functions



- Commercial
- Meeting & office
- Residential
- Others
- Accomodation

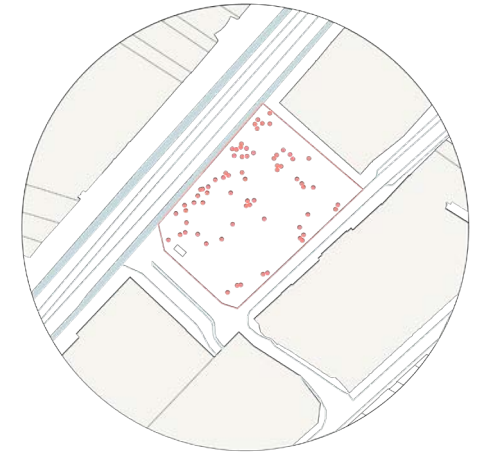
## Facilities



- Bicycle parking
- Lights
- Seats
- Bin
- Fountain

# SQUARES

## Crowdedness

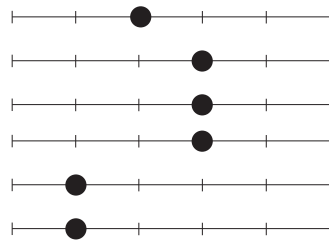


## Traffic

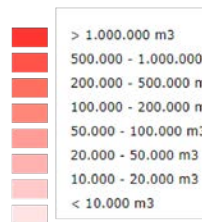
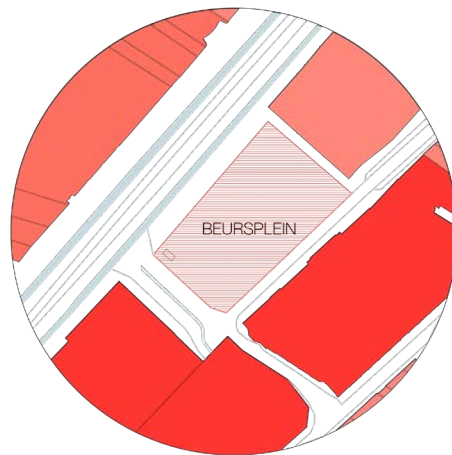


- Vehicle
- Bicycle
- Pedestrian
- Tram

- Crowdedness
- Tourification
- Facilities
- Walkability
- Greenery
- Sustainability



Sustainability

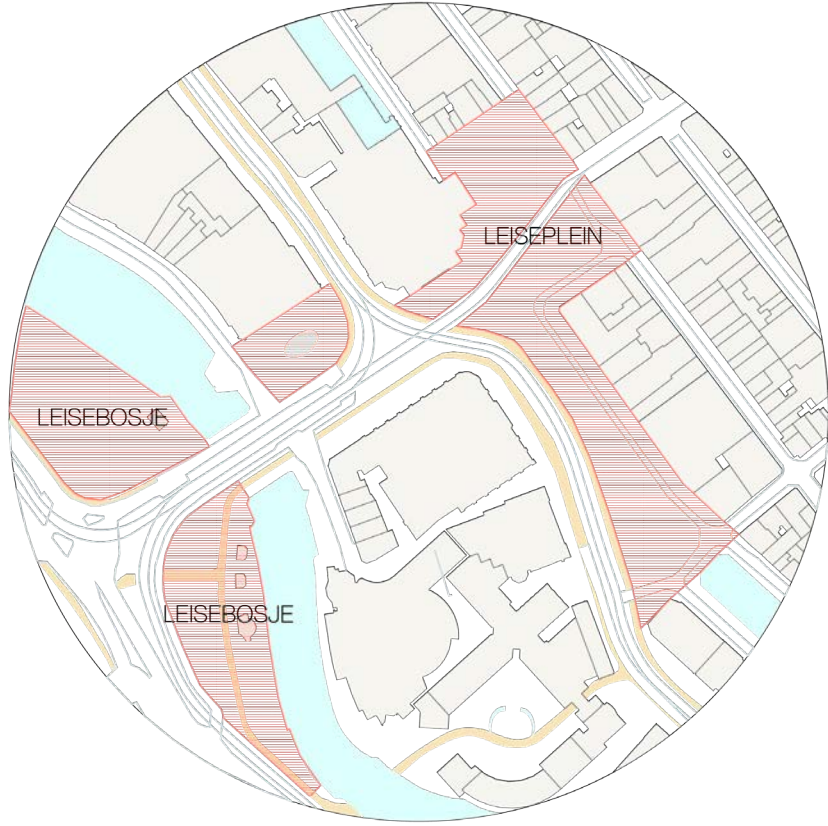


Greenery



# Leiseplein

# SQUARES

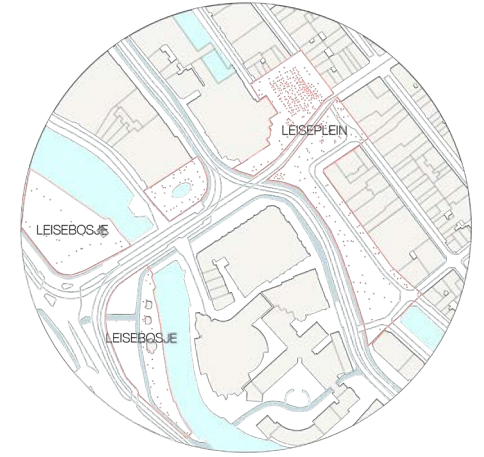


### Building Functions



- Commercial
- Meeting & office
- Accomodation
- Residential

### Crowdedness

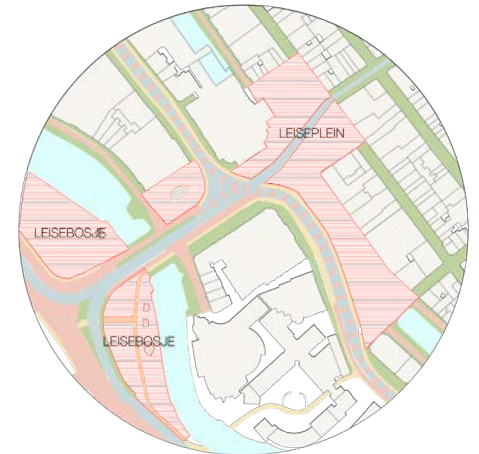


### Facilities

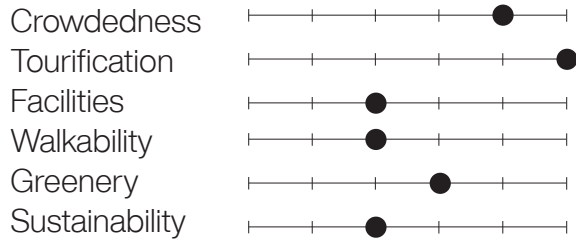


- Bicycle parking
- Lights
- Seats
- Bin
- Fountain

### Traffic

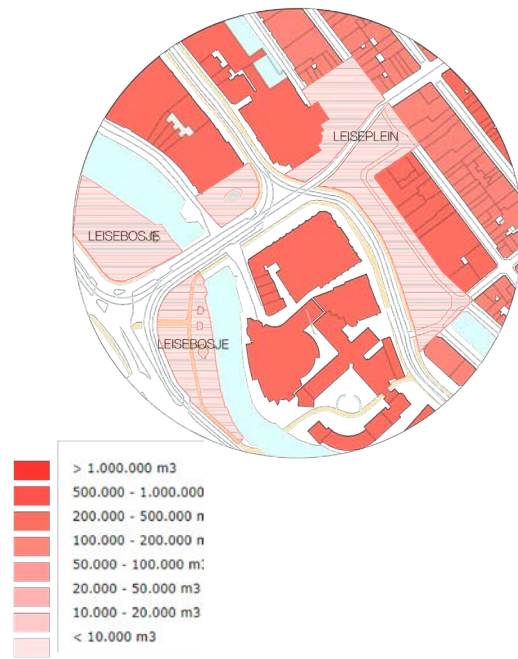


- Vehicle
- Bicycle
- Pedestrian
- Tram

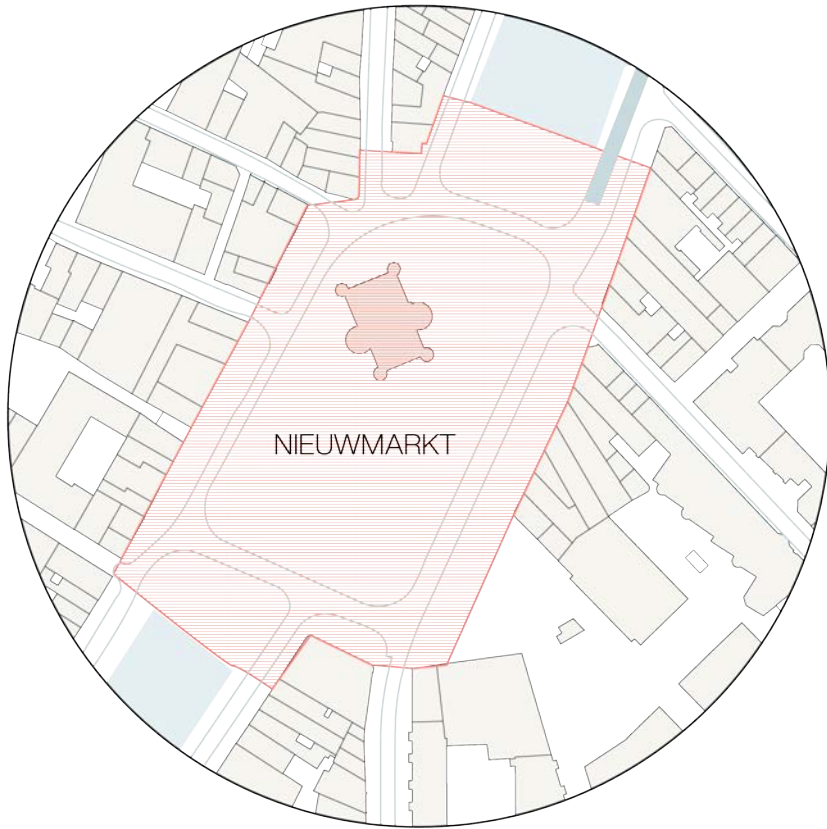


Sustainability

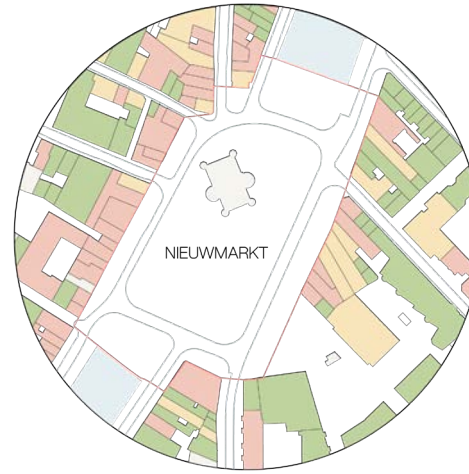
Greenery



# Nieuwmarkt

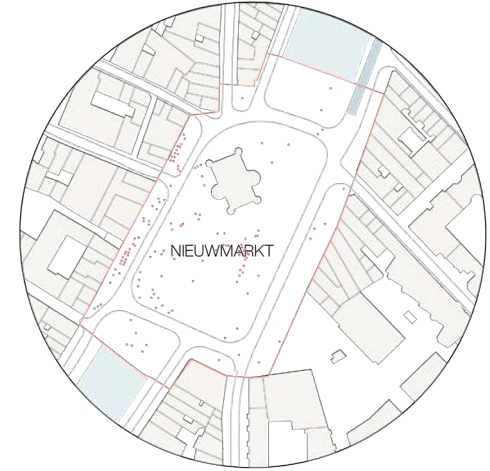


## Building Functions



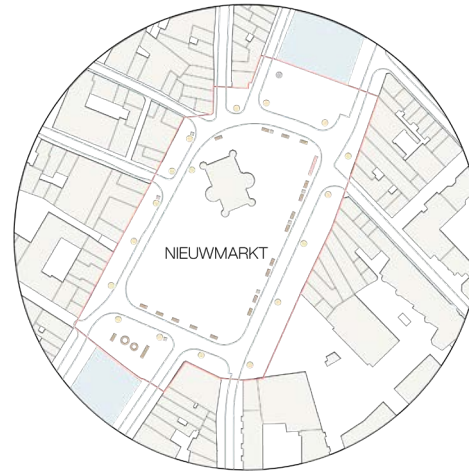
- Commercial
- Accomodation
- Meeting & office
- Residential

## Crowdedness



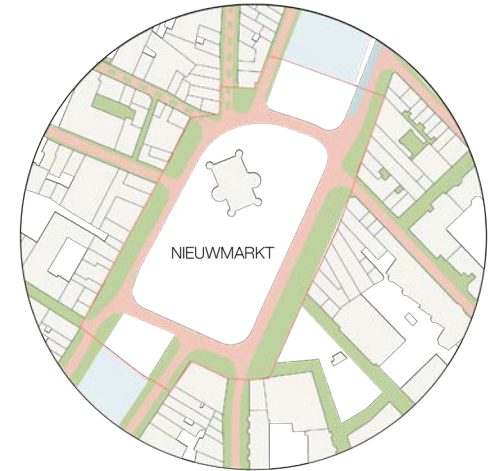
# SQUARES

## Facilities

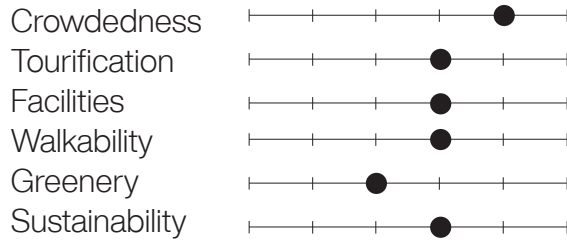


- Bicycle parking
- Bin
- Lights
- Fountain
- Seats

## Traffic

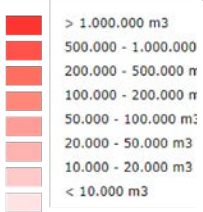
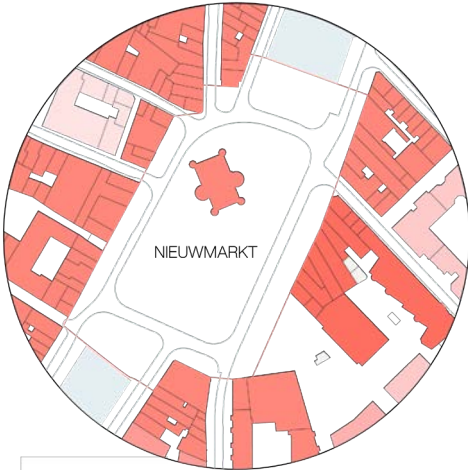


- Vehicle
- Bicycle
- Pedestrian
- Tram



Nieuwmarkt

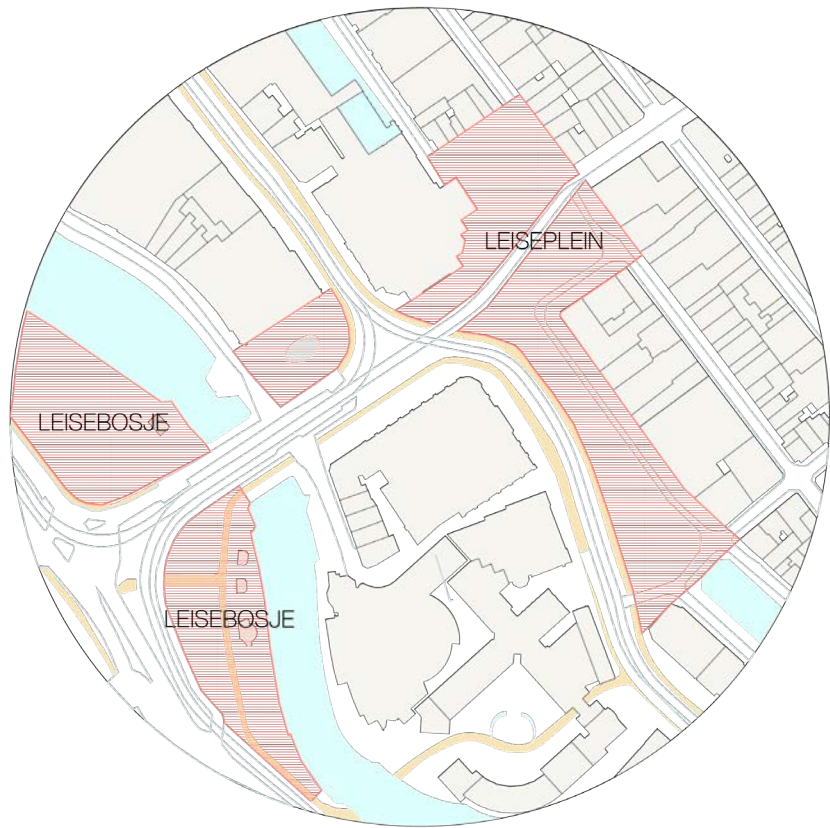
Sustainability



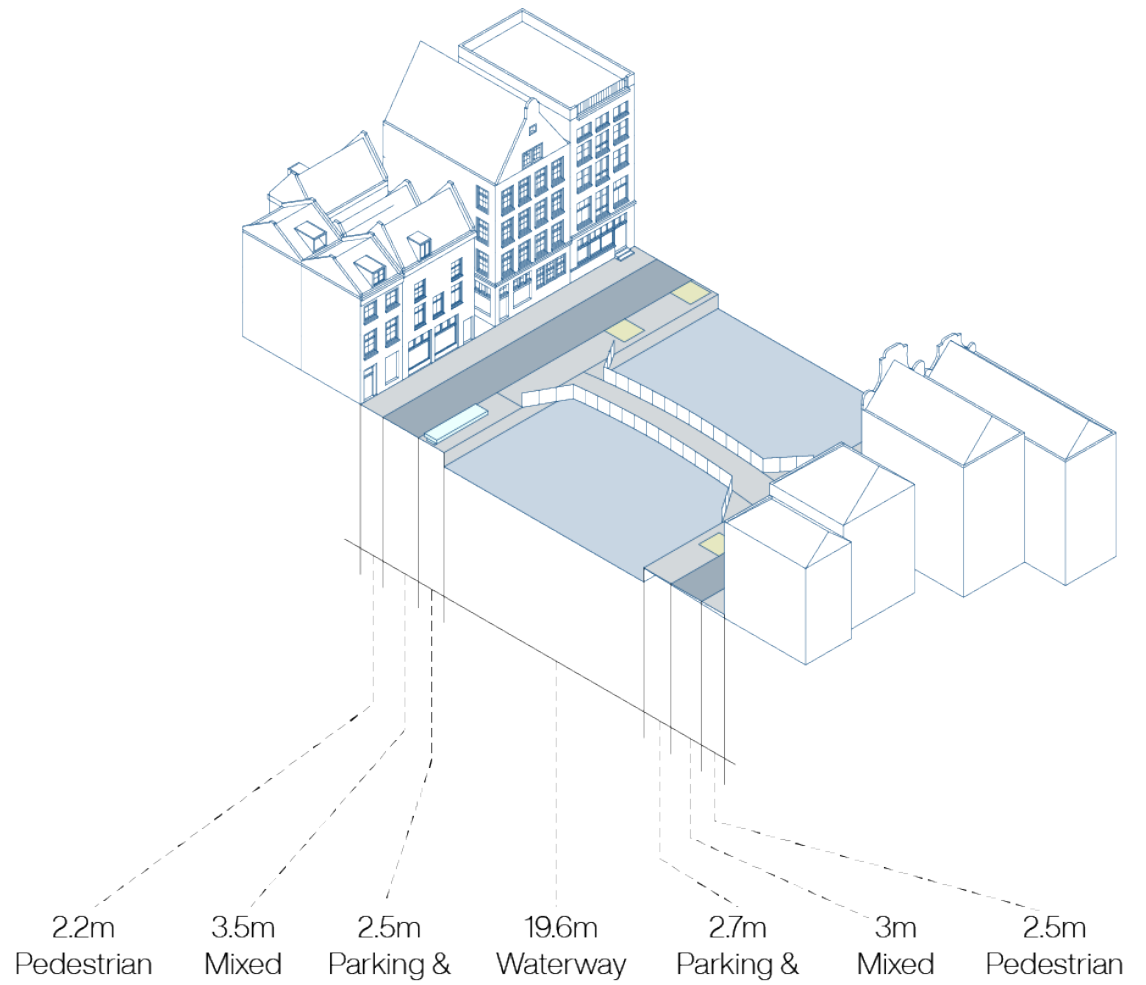
Greenery



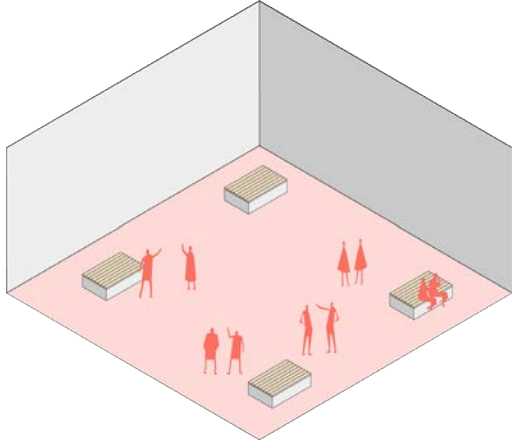
## Leiseplein



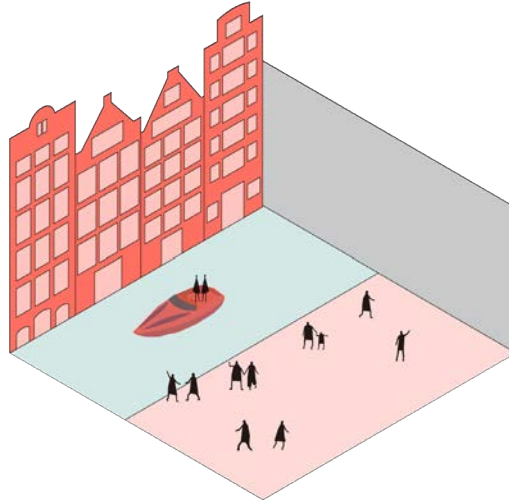
## Oudezijds Voorburgwal



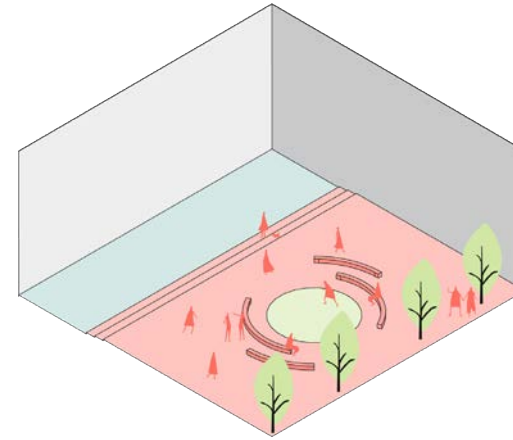
1 Meeting places



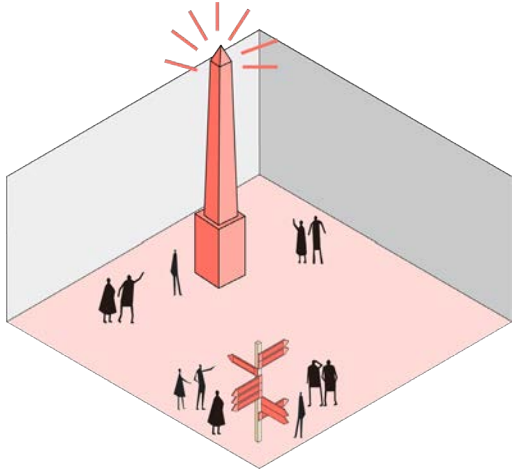
4 Place with local characteristics



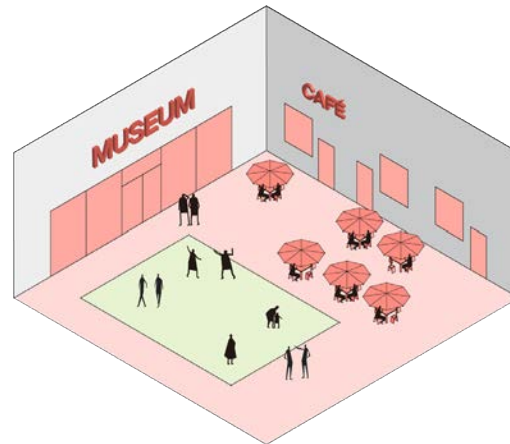
7 Place for wandering and explore



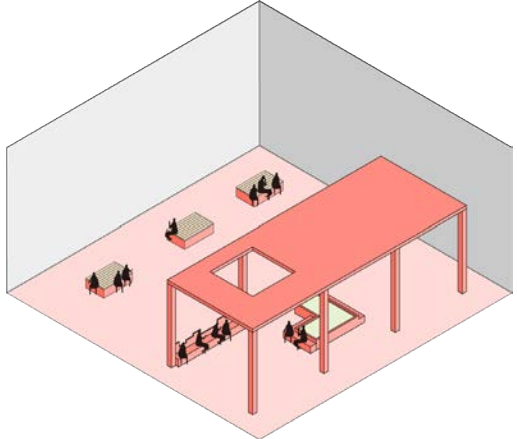
2 Places of orientation



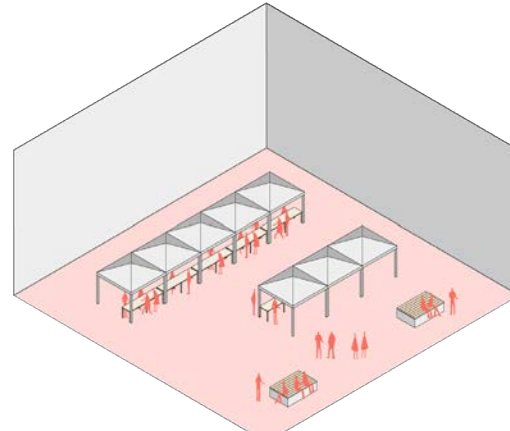
5 Place reflects their desires as a tourist



3 Places of respite or refuge



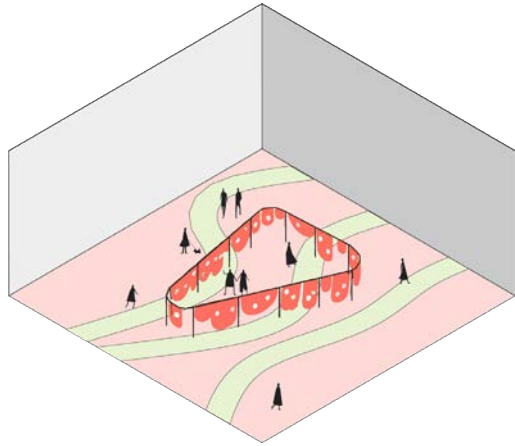
6 Place for encountering and communication with locals



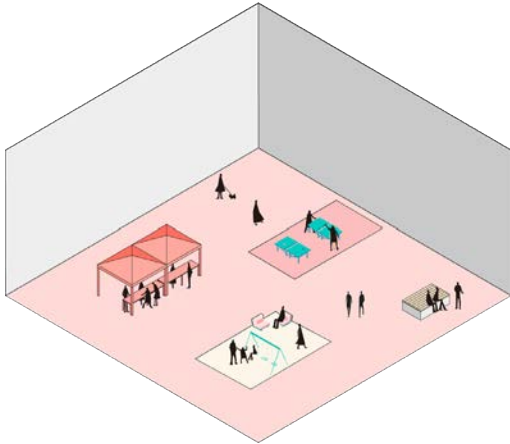
### The needs of tourists

Tony Griffin's (2008) research, they conclude what types of public spaces are tourists' preference by researching existing literature, observation and interview. Overall, the public spaces are divided into 3 types: Facilitating functions; External or place-connecting functions; internal or state-of-mind functions.

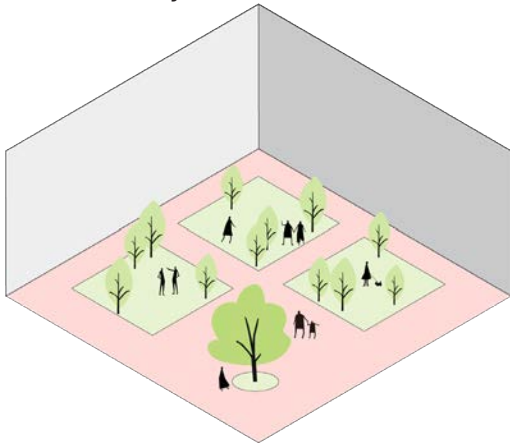
1. Aesthetic needs



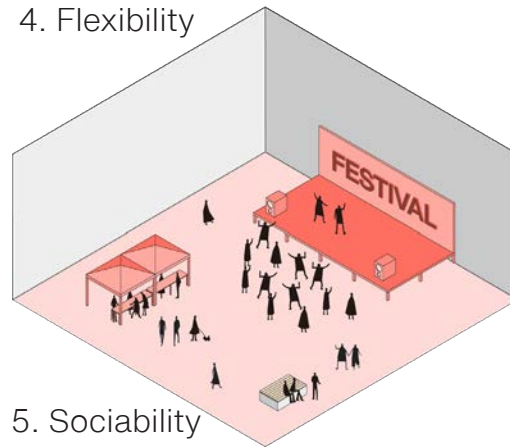
2. Multi-functional



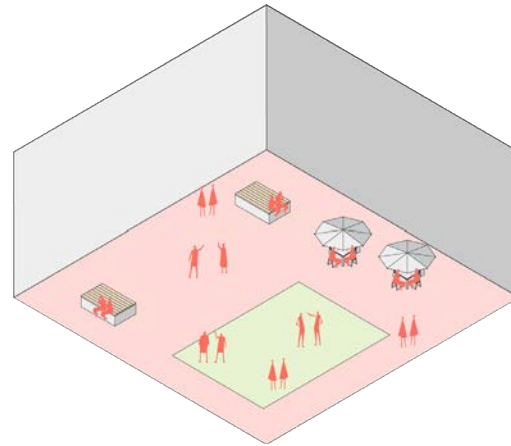
3. Greenary



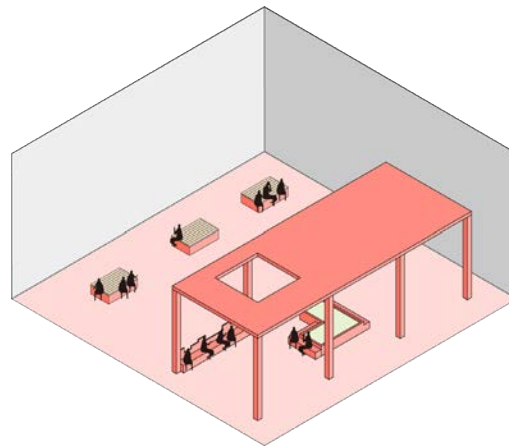
4. Flexibility



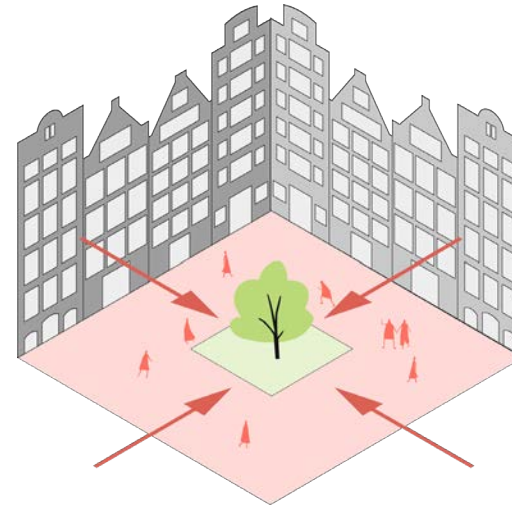
5. Sociability



6. Rest function



7. Accessibility



### The needs of residents

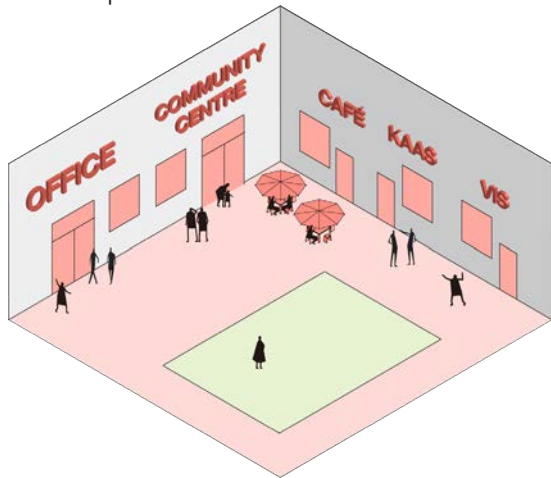
Van Perlo's (2013) research on the determining residents' preferences for public squares in towns.

Jurkovic (2014) worked on how citizens expect about green public space.

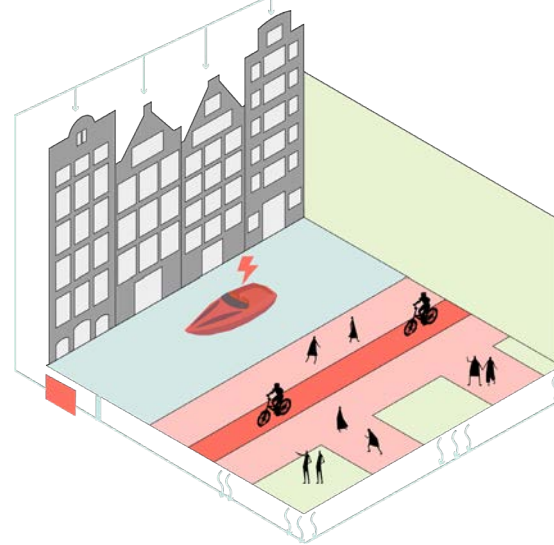
Brookfield's (2016) believe that a good living environment should have walkable amenities, peaceful environments, sociable spaces and leafy locales.

Based on three researches above and the actual situation in Amsterdam Centrum, the projects conclude that residents' need for public space have 7 factors.

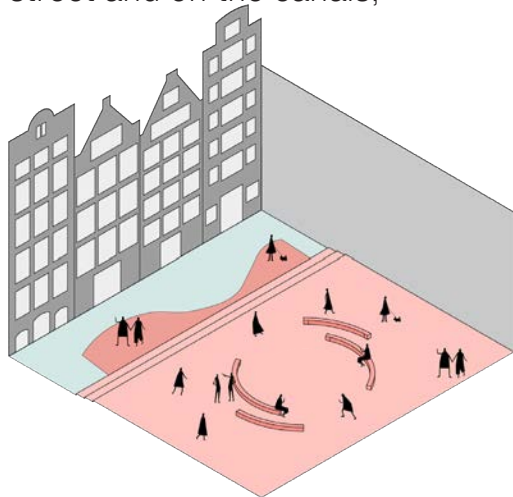
Ambition 2: Attractive mixed-use development



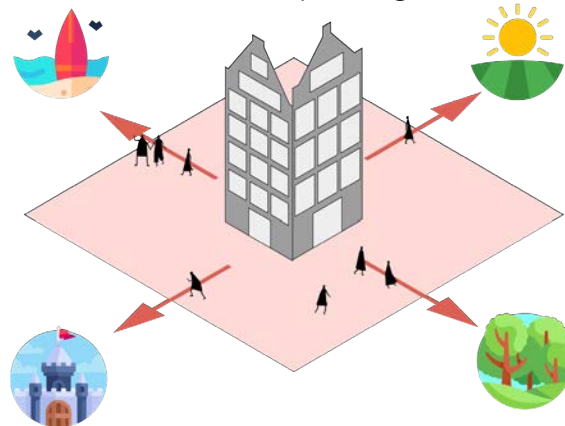
Ambition 5: Sustainable recreation and facilities



Ambition 3: More space on the street and on the canals;



Ambition 6: Dispersing visitors

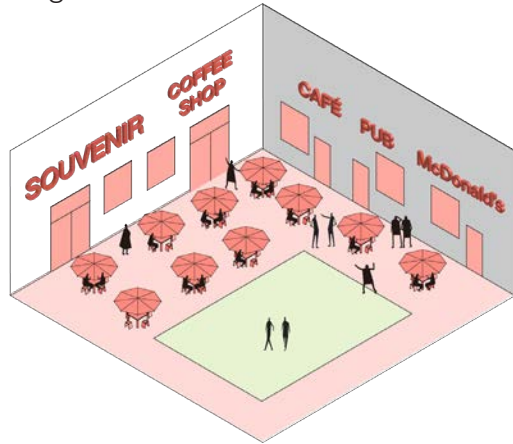


## The needs of Municipality

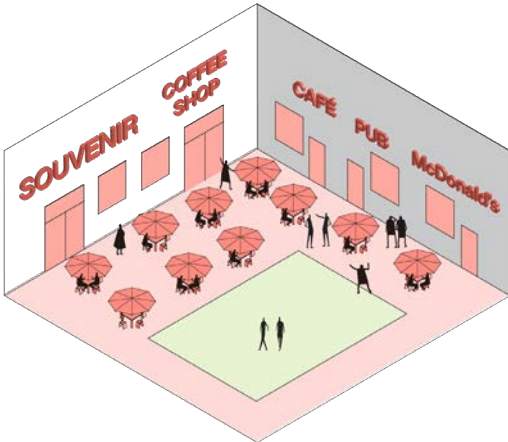
The municipality of Amsterdam introduced “city in balance” strategy to cope with existing overtourism situation, which aims to balance the relationship between tourists and residents.

Four ambitions provide vision for how the public spaces in city centre will develop in the future.

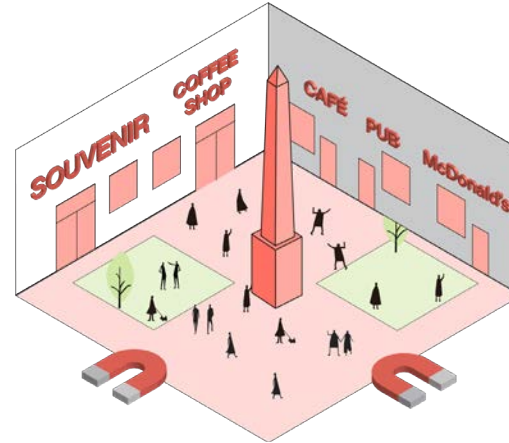
1. Invading some public spaces for larger business area.



2. Public spaces can support more consuming activities.

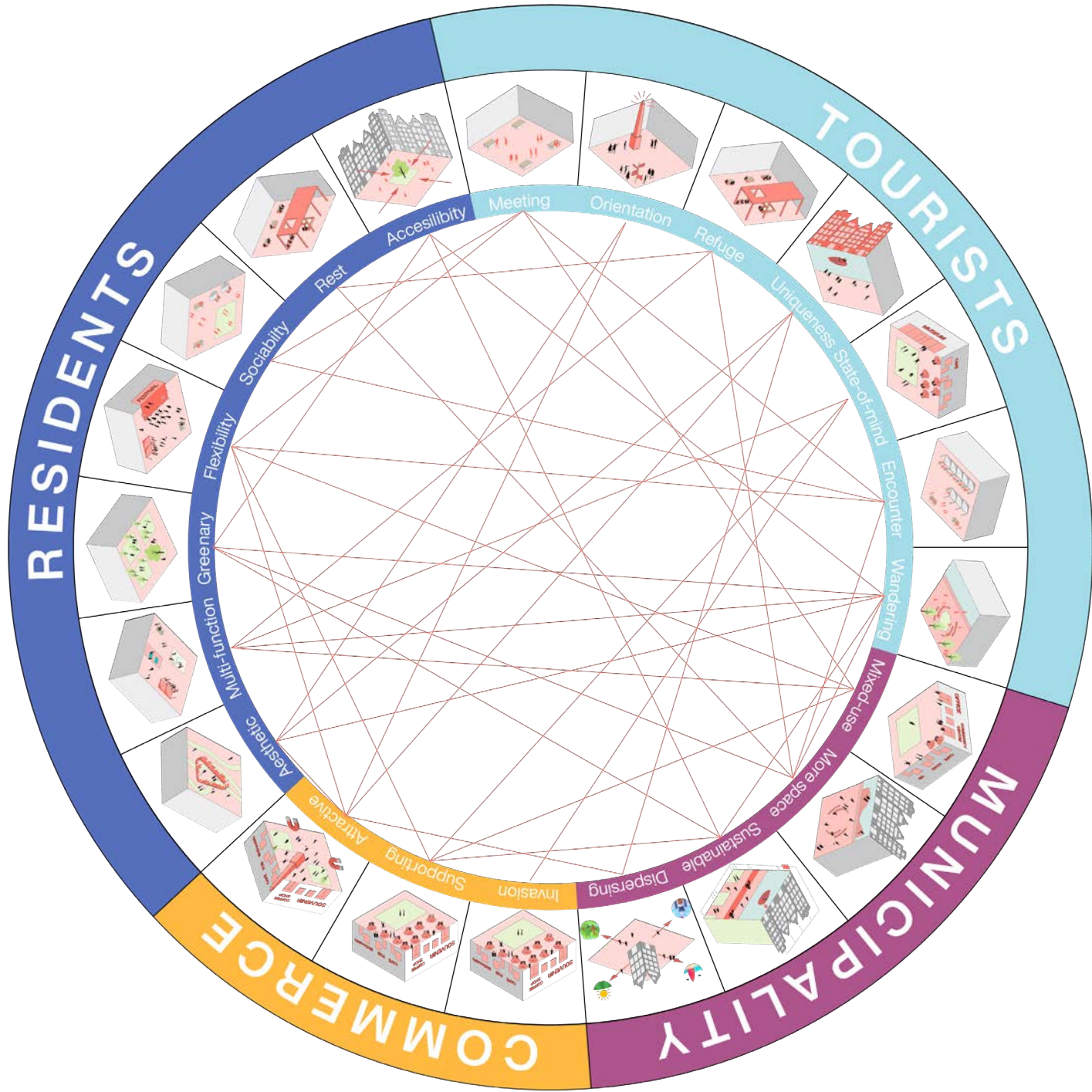


3. The quality of public space can be improved so that more consumers are attracted.



## The needs of Commerce

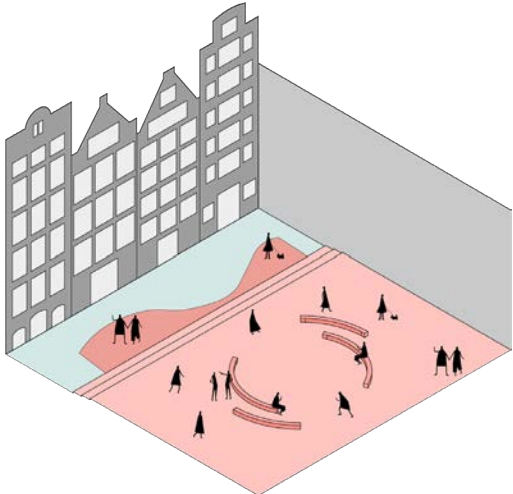
The needs of commerce are usually negative for the experience of tourists and residents; According to PPS (2003)'s research on the relationship between commercial and public space, every commerce is more focusing on profit.



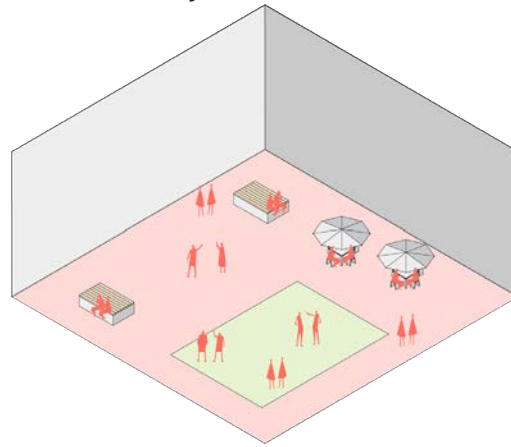
## Guiding principles

By interconnecting all the needs, the project concludes the most overlapped and important needs; so that the guiding principles for design can be formulated.

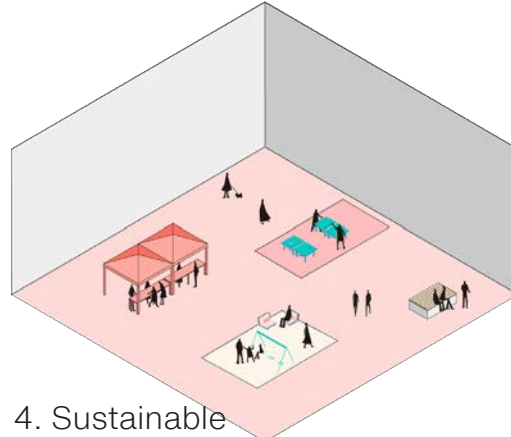
### 1. Larger capacity (The main aim)



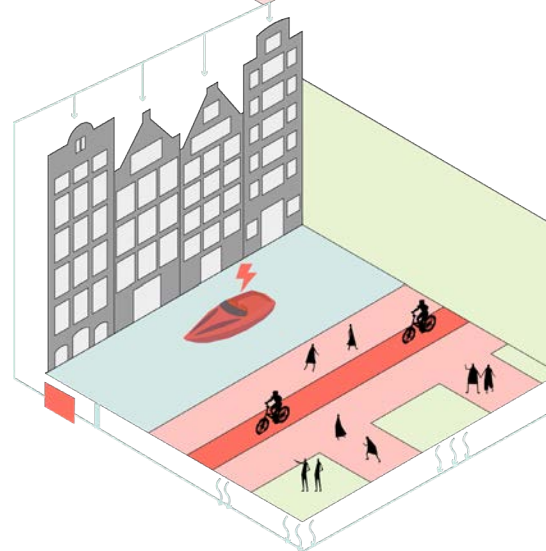
### 2. Sociability



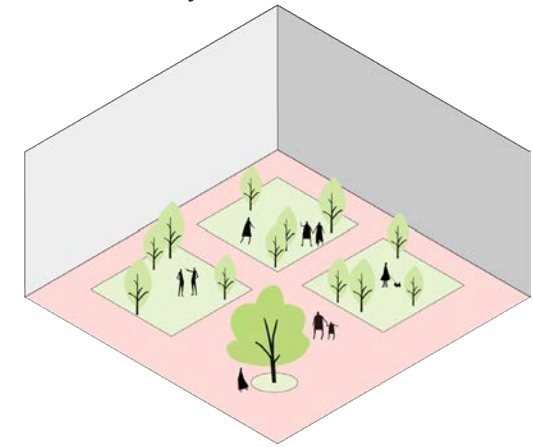
### 3. Multi-functional



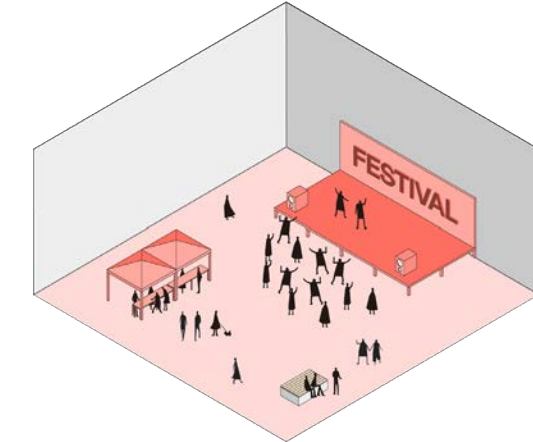
### 4. Sustainable



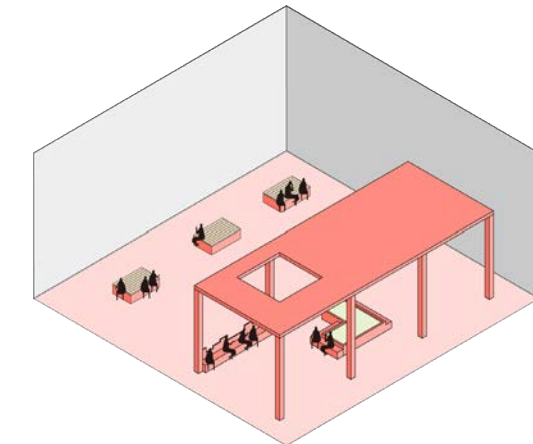
### 5. Greenary



### 6. Flexibility



### 7. Rest function



# 5. Urban Design

## Pilot Area 1: Leiseplein

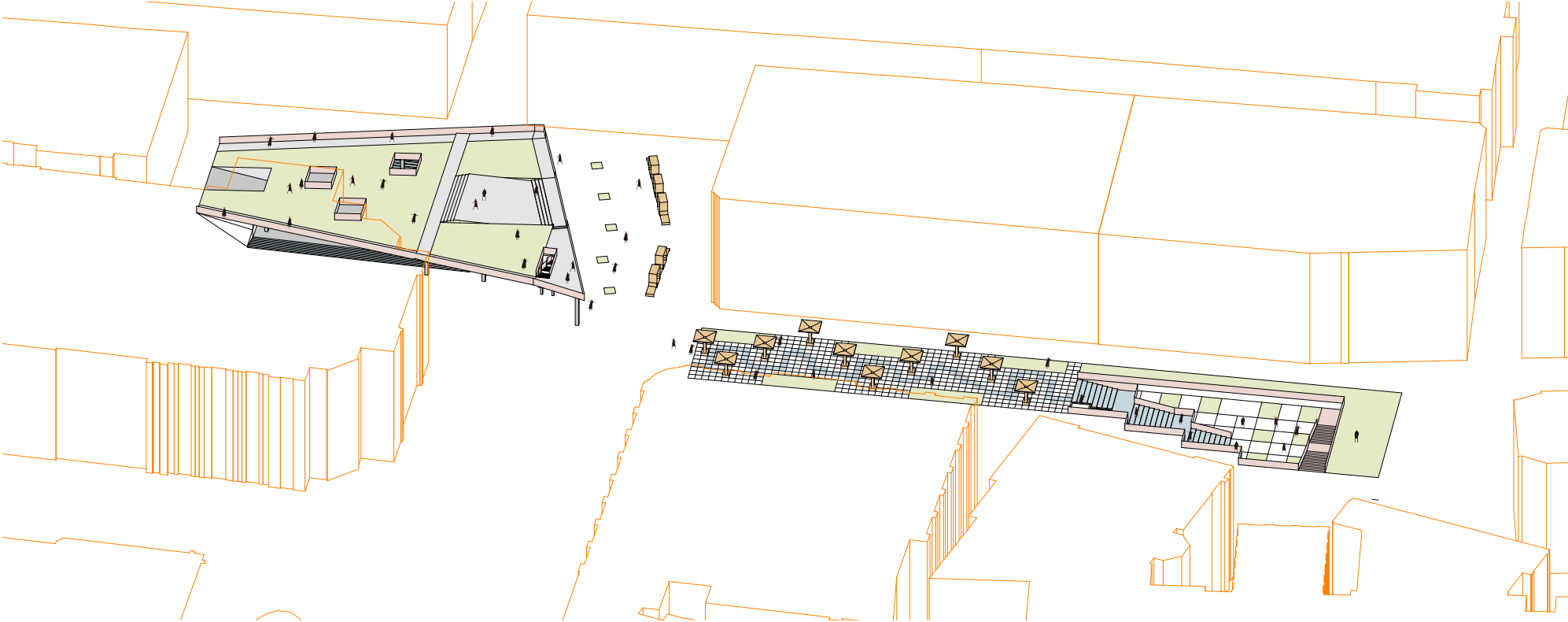


## Pilot Area 1: Leiseplein



1. Rooftop lawn
2. Rooftop Theatre
3. Lookout
4. Rain harvesting pavilion
5. Sunken bike storage
6. Water Square

Pilot Area 1: Leiseplein



## Pilot Area 2: Oudezijds Voorburgwal



Pilot Area 2: Oudezijds Voorburgwal

