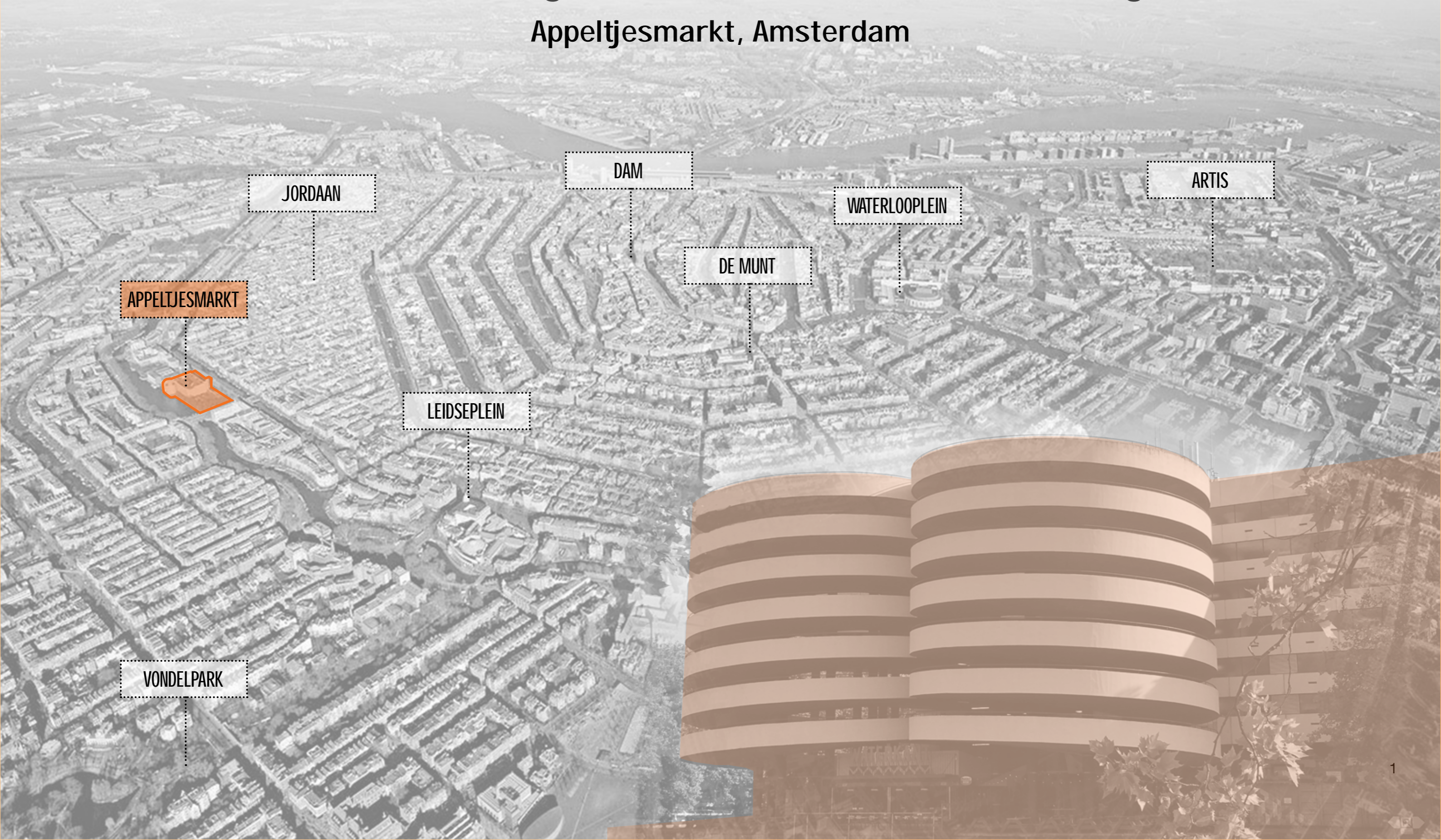


# Research & Analysis Booklet 2016-2017

MSc. 3 Dwelling Graduation Studio, Dutch Housing

Appeltjesmarkt, Amsterdam







PAST

# Summary and Conclusions

The Appeltjesmarkt has been undergoing several transformations in the last four centuries. The timeline on this page gives an overview of the history of the site. In the next pages several snapshots from the timeline are featured. These snapshots show detailed information about the site in a current time and explains the developments that the site underwent.

## Serving the city

The Appeltjesmarkt has always served the city of Amsterdam. The gas company provided the city energy, warmth and light. The apple market provided for vegetables and fruit, coming from the farmlands. The parking garage and the bus station form a place for distribution of people, in and out of the city.

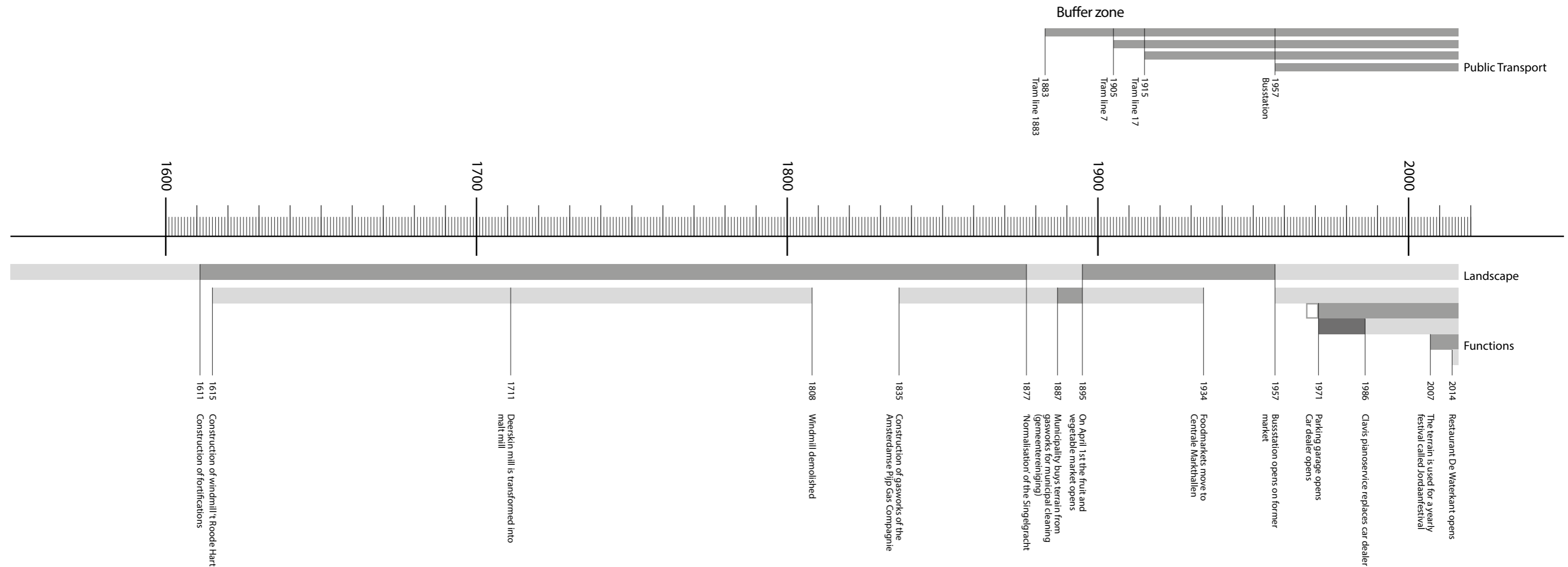
## Constant transformation

Historically, the plot has been a place of constant transformation. Since the moment the city walls were demolished the place has had a multitude of functions and use, but never for a long period of time. The gas company only existed for 60 years, the fruit market stayed for 40 years, and it's about 55 years ago that the bus station was constructed. Not only in the past but also in the last decades some major changes took place. The bus station was accompanied by a parking garage, and recently a large part of the plot was covered with gravel.

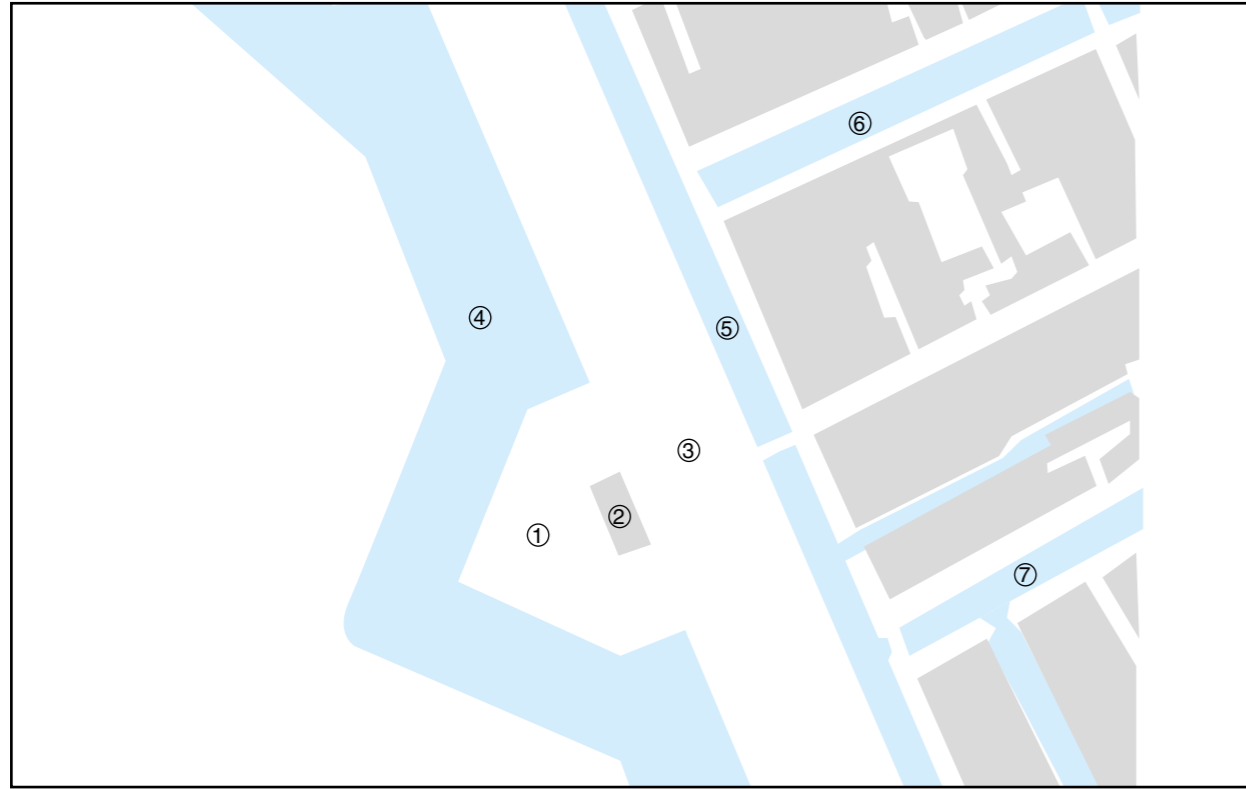
## Annoyance

The main reason for the constant change is that most of the functions caused some sort of annoyance for the neighbourhood or the city at some point. The gas company caused polluting gasses, therefore it was moved to the Westergasfabriek at the edge of the city. The fruit market caused annoyance by blocking the street for normal traffic and all the garbage it left after market hours. Moreover, the fruit market grew and became too big for the Marnixstraat. The bus station and the parking garage are still there, but they also have a negative influence on their surroundings: a constant coming and going of cars and busses, the smell of gas and the prominent visibility of the large concrete structure of the parking garage, which doesn't have the most pleasant look. Because of the constant disappearing and moving of the different functions on the Appeltjesmarkt, the plot was often vacant for use of new functions, for instance when the municipality was looking for a place to construct the parking garage.

While the area along the Marnixstraat, especially our plot, has been changing constantly, the residential developments around the plot stayed more or less the same from the moment that they were constructed. The plot has never been part of the developments in the historical city, nor in the 19th century expansions. Therefore, the area along the Marnixstraat can still clearly be recognized as the former border of the city, now being a transitional zone between these two different parts of the city.



# 1611-1834 Fortifications and Bastions



Site in 1829

1. Stronghold Nieuwkerk
2. Side buildings of the mill
3. Schans (later: Marnixstraat)
4. Singelgracht
5. Lijnbaansgracht
6. Lauriergracht
7. Elandsgracht

The inner city of Amsterdam was built in 4 main expansions. The Apple market is on the outer border of the third one, which was realized from 1610 – 1613. Around the expanded city a new city wall was constructed, along with multiple strongholds, to defend the city against enemies. Stronghold 10 (Nieuwkerk) was located on our site, on it a windmill was built called the Great Stink Mill. Quite a logical name, knowing that the mill was first used as a zeemleer-touwers mill where sheep skins were tanned and processed using urine. With particular wind directions you could smell the mill in the whole city. In 1711 the mill was bought by a brewery and converted into malt mill, until it was demolished in 1808. From 1820 to 1840 the city wall was gradually dismantled, because the defence line moved to the Dutch waterline.



1810 - View from the stronghold to the Elandstraat

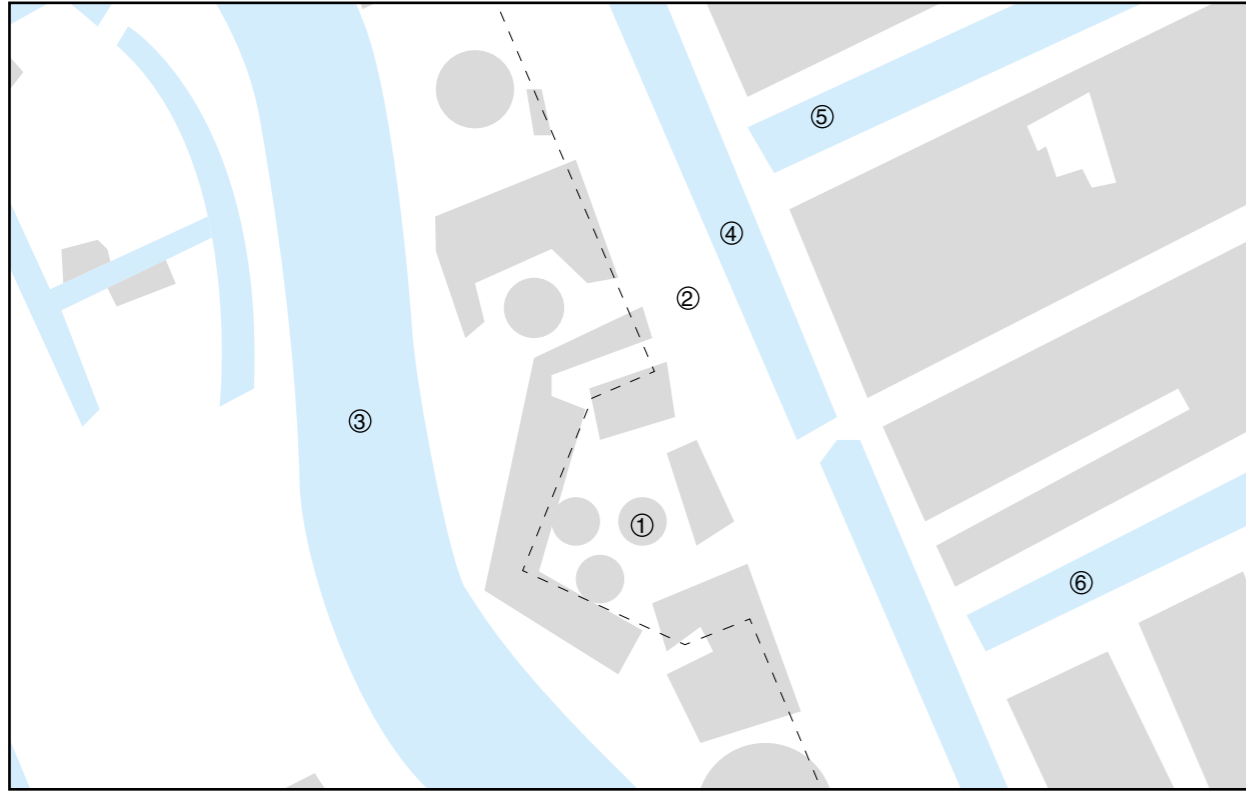


1810 - Stronghold Nieuwkerk after demolition of the mill



1743 - The Great Stinking Mill or Red Heart (De Groote Stink Molen or 't Roode Hart)

# 1834-1895 Gas Factory



Site in 1875

1. Gas factory
2. Schans (later: Marnixstraat)
3. Singelgracht
4. Lijnbaansgracht
5. Lauriergracht
6. Elandsgracht

In other cities the former strongholds were transformed into lush parks, but because of the economical situation of Amsterdam the municipality sold the ground, resulting in all kinds of different buildings for different functions, without a consistent plan. The area around our location was used for industrial purposes, like a sugar refinery, a tannery and a sal ammonia factory. On the stronghold itself, the English Pipe gaz company (later the Amsterdam Pipe Gas Company, a gas plant where gas is distilled from coal) builds its factory. The building outline follows the shape of the stronghold. In 1977 the fortifications are demolished and the Singelgracht is partly filled up to provide an extra strip of land, which gives the factory the opportunity to expand.

In 1850 the former Schans is transformed into the Marnixstraat. In the second half of the 19th century residential blocks for worker families are constructed along the Marnixstraat, starting in the north. Public transport along the Marnixstraat was provided by a horse tram in those days.

In 1877 the gas factory moves to the Haarlemmertrekvaart, we know it nowadays as the Westergasfabriek. The municipality takes over the vacant piece of land of the former factory and starts with sanitation.



1840 - Painting of the Amsterdamse Pijp Gaz Compagnie by Jacobus Pelgrom

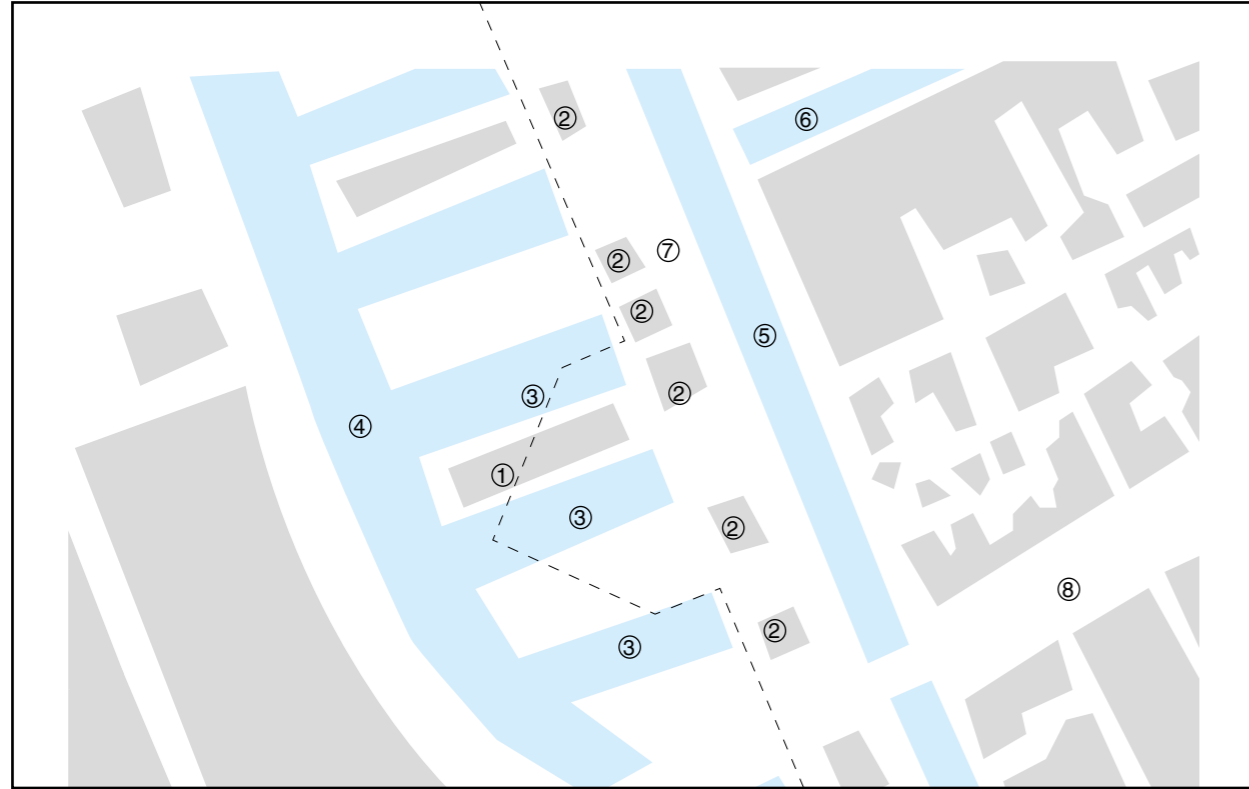


Drawing of English gasworks



Drawing of English gasworks

# 1895-1934 Vegetables and Fruit Market



Site in 1900

1. Warehouse
2. Merchant houses
3. Harbours
4. Singelgracht
5. Lijnbaansgracht
6. Lauriersgracht
7. Marnixstraat
8. Elandsgracht

In 1890 the municipality decides to move all the vegetable-, potato- and fruitmarkets from different places in the city centre to one central groenmarkt (green market). Until that time the main potato- and vegetable market was located along the Prinsengracht, and the fruit market along the Singel, but they caused inconvenience due to the space they used and the mess they made. Moreover, there was too little space on the water for all the vegetable boats. To make the market accessible for boats 7 inner harbours are dug out, warehouses are built on the piers and residential blocks with retail space or storage on the ground floor along the Marnixstraat. The Lauriergracht is connected to the Singelgracht to make traffic by water easier, the Elandgracht is filled up and connected to the Kinkerstraat for traffic by land.

On April 1 1895 the vegetable market was moved to the Marnixstraat in the area between Rozengracht and Passeerdersgracht. The part of the market between Elandsgracht en Lauriergracht was called Appeltjesmarkt (apple market), because this part was for the fruit sellers, the part between Lauriergracht en Rozengracht was called groenmarkt (green market).

The fruit and vegetables were transported by boats from the inlands. They unloaded their goods in one of the inner harbours along the Marnixstraat, where the fruits and vegetables were stored in warehouses, on the ground floor of the residential blocks or auctioned. The merchants sold the fruit and vegetables from shops, handcarts or boats, from the Lijnbaansgracht. Due to all the different merchants en the growth of the city, the Marnixstraat was incredibly busy whenever there was a market. For the tram, that appeared in 1900 it was impossible to go through, so it had to be diverted until the market ended.

Due to growth, hygienic circumstances and growing amounts of traffic, the vegetable- and fruitmarket moved to the central market halls on the Jan van Galenstraat in Amsterdam-West in 1934. Residential Blocks with storage on the ground floor for handcarts of the merchants, and the remnants of the insertion ports for the vegetable boats behind remained for years afterwards.



Overview of the harbours



View from the harbours to the merchant houses

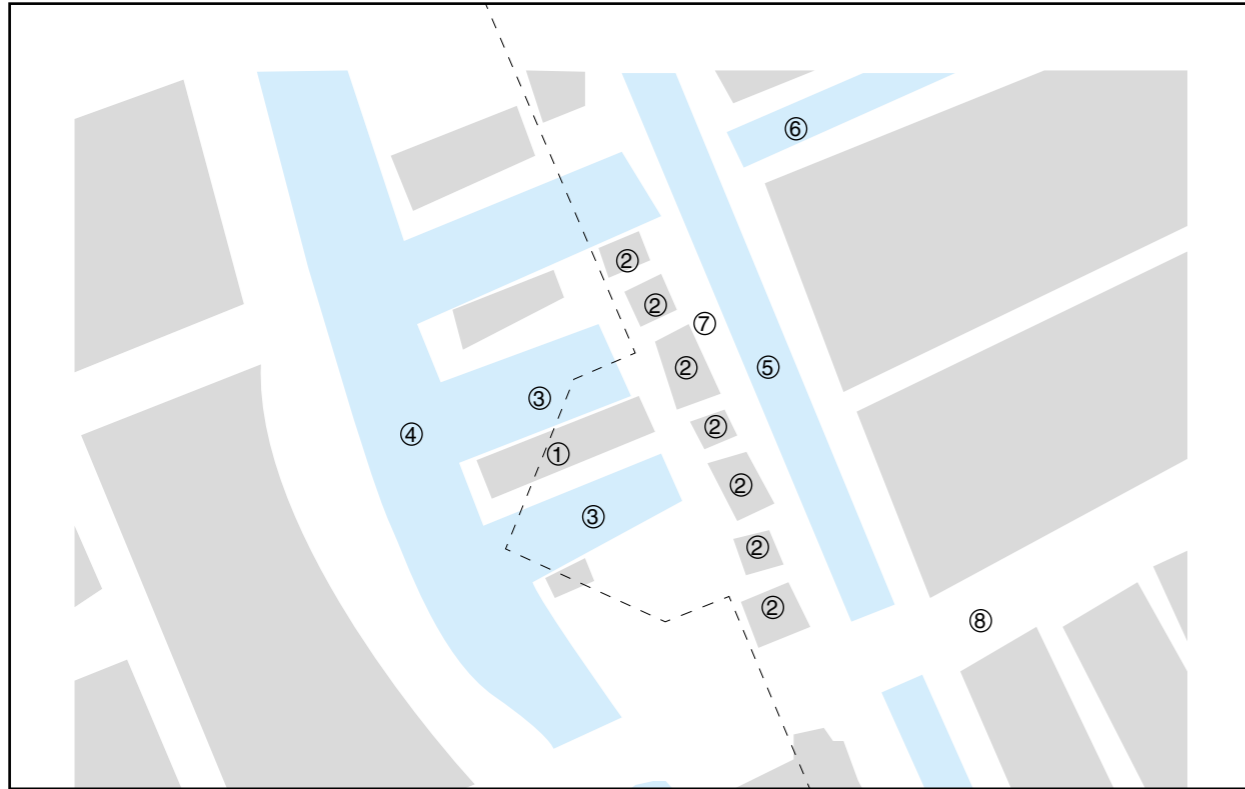


The Marnixstraat and the Lijnbaansgracht



The Marnixstraat during a market

# 1934-1957 Derelicted Area



Site in 1949

- 1. Warehouse
- 2. Residential blocks
- 3. Harbours
- 4. Singelgracht
- 5. Lijnbaansgracht
- 6. Lauriersgracht
- 7. Marnixstraat
- 8. Elandsgracht

The harbours that remained from the market function were filled up from 1934-1957, to make place for a busstation. Motorised traffic began to claim an important role in those times, connectivity of the city by cars became more and more important. As a result of this a new, bigger bridge was being build between de Elandsgracht and de Kinkerstraat in 1956.



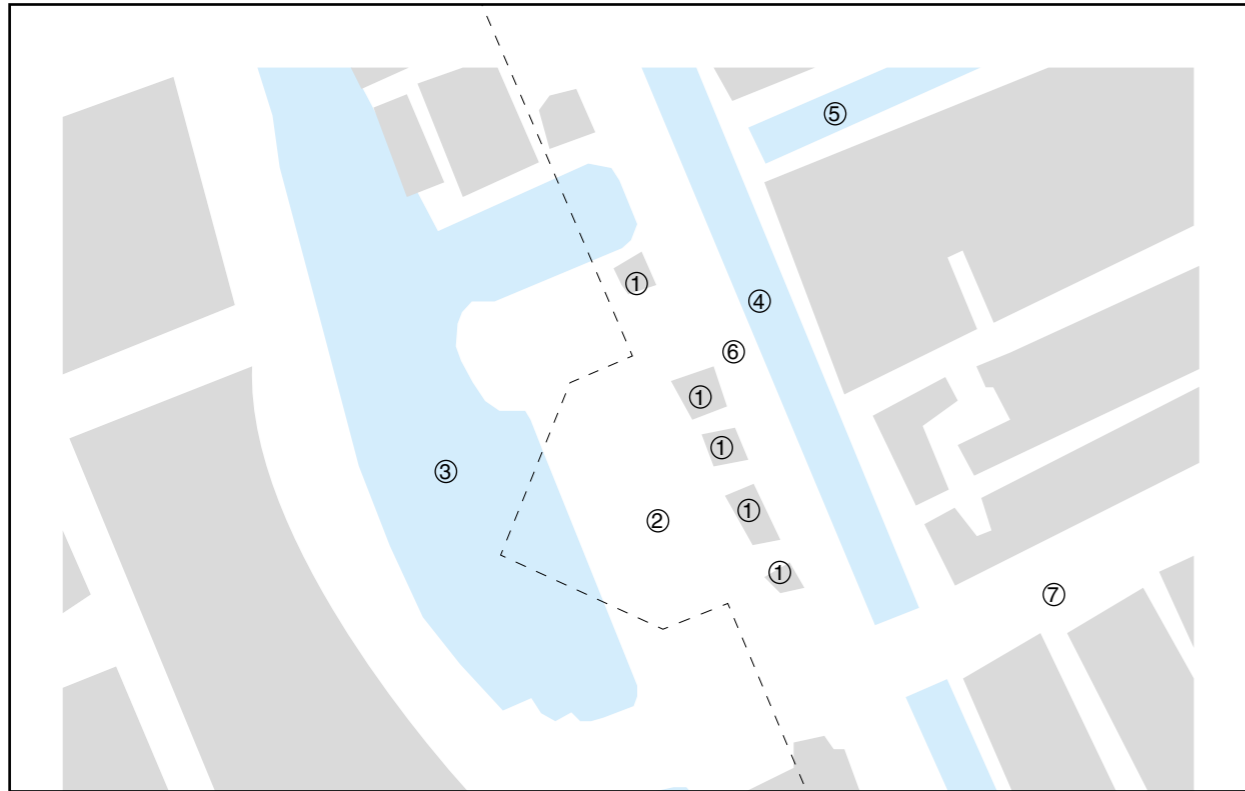
1949 - Aerial view with the location on bottom right



1950 - One of the filled up harbours



# 1957-1966 Bus Station



Site in 1966

- 1. Residential blocks
- 2. Bus station
- 3. Singelgracht
- 4. Lijnbaansgracht
- 5. Lauriersgracht
- 6. Marnixstraat
- 7. Elandsgracht

From 1957 on the terrain was being used as a busstation for the NZH (now connexion). A service building was constructed as a resting space for busdrivers. Also customers could wait there for their bus to arrive while having a cup of coffee. Part of the existing buildings were demolished to make it possible for the busses to go through.

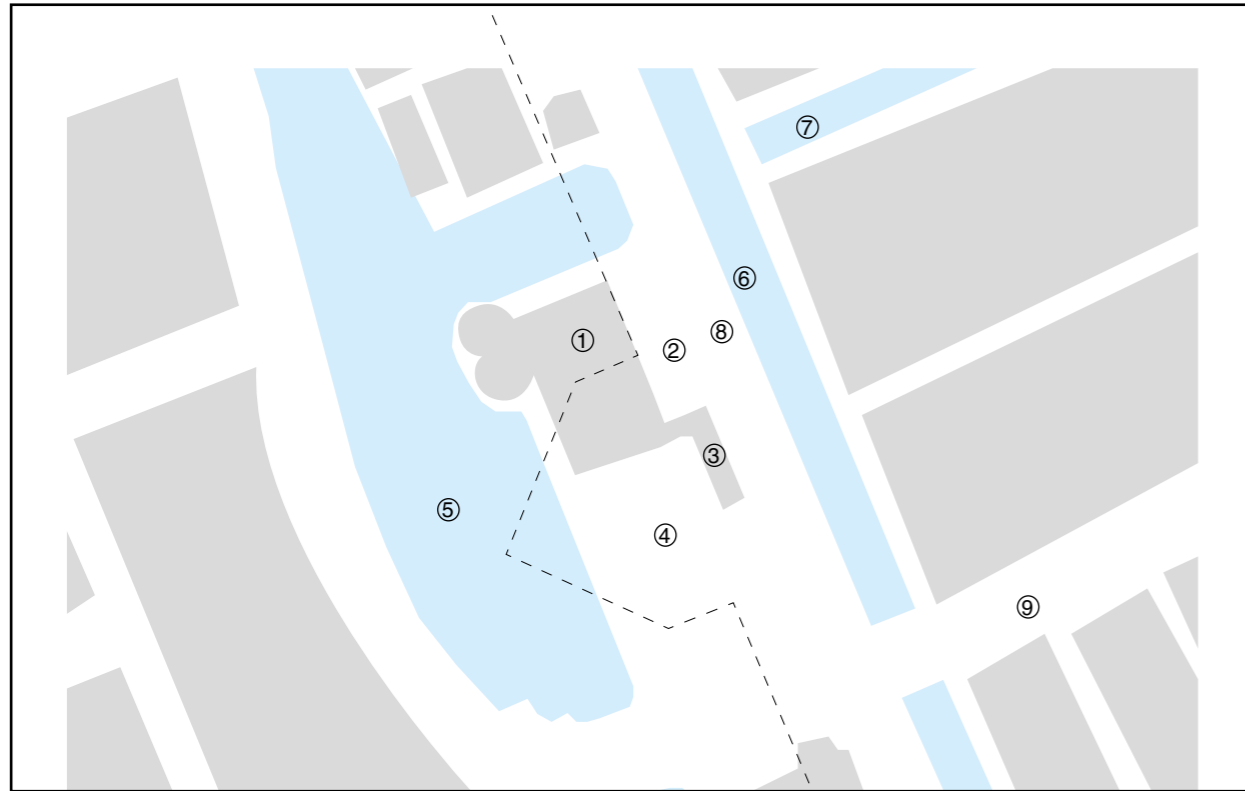


1955 - The bus platform



1968 - View from the Marnixstraat to the location

# 1966-2007 Parking Garage



Site in 2007

1. Parking garage
2. Petrol station
3. Retail space
4. Bus platform
5. Singelgracht
6. Lijnbaansgracht
7. Lauriergracht
8. Marnixstraat
9. Elandsgracht

Due to the increasing amount of cars, Amsterdam had a big parking issue. There weren't enough parking places available, especially in the inner city. The plan to construct a parking garage next to the bus platform was already suggested in 1956, but it took another 10 years before the Europarking was actually built. Along with it, a petrol station and retail space for a car dealer appeared. All the former residential blocks were demolished to make place for these developments. The busplatform remained in use, so the parking garage was lifted to make it possible for the buses to drive underneath.

From 1986, a piano dealer took over the retail space, which is still there nowadays.



1955 - The bus platform

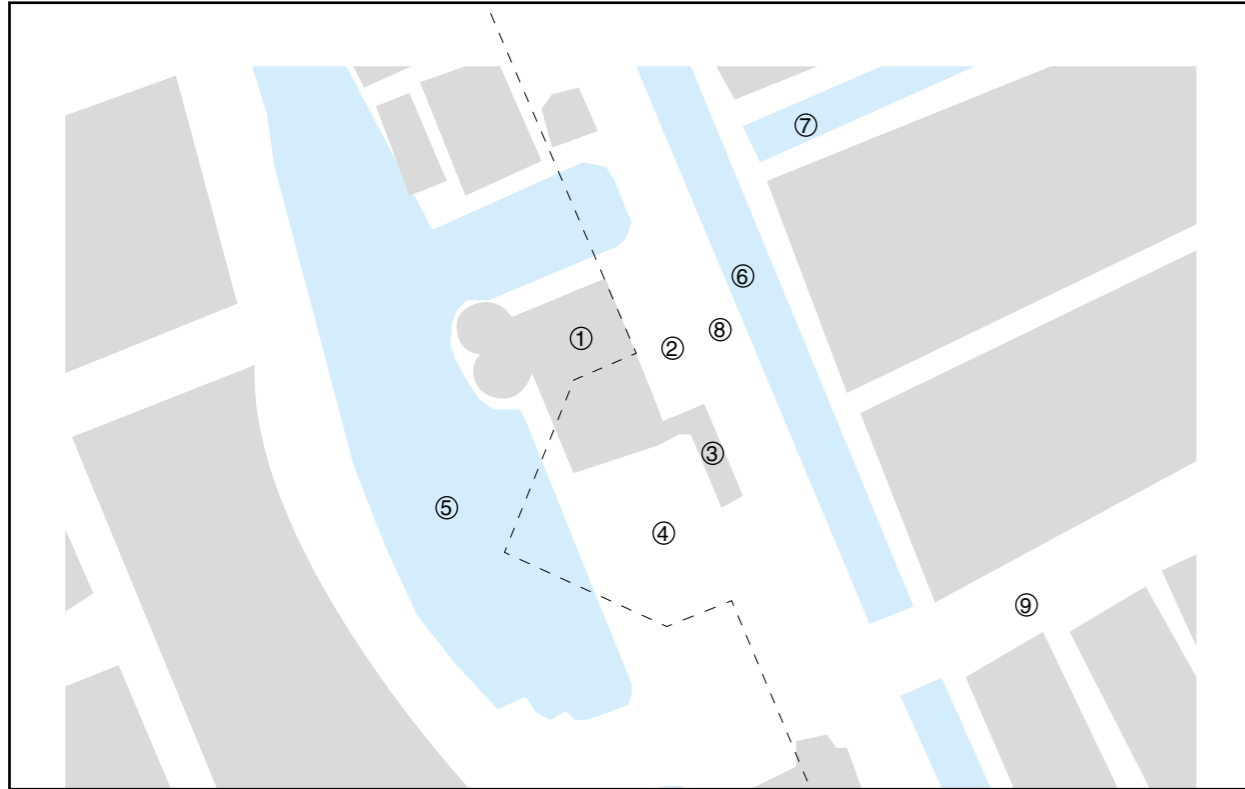


1971 - Parking garage



1973 - Aerial view of the site

# 2007-today Public Functions



site in 2016

1. Parking garage
2. Petrol station
3. Retail space
4. Square covered with gravel
5. Singelgracht
6. Lijnbaansgracht
7. Lauriergracht
8. Marnixstraat
9. Elandsgracht

From 2007 on the terrain has been in use for the annual Jordaanfestival. In 2014 Café Waterkant opened its doors, situated under the spirals of the parking garage. In 2015 the bus platform was reduced in size, a large part was covered with gravel and made only accessible for pedestrians. Some trees were planted and benches were placed.



Jordaanfestival



Café Waterkant



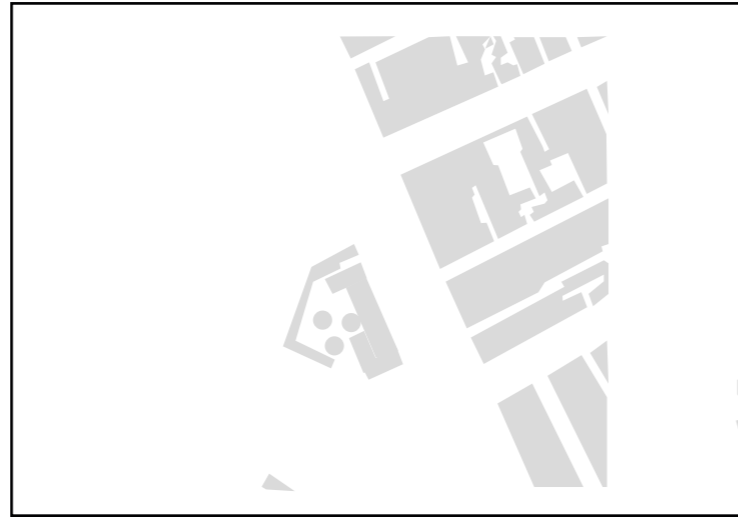
The bus platform before it was covered

# Morphological Development

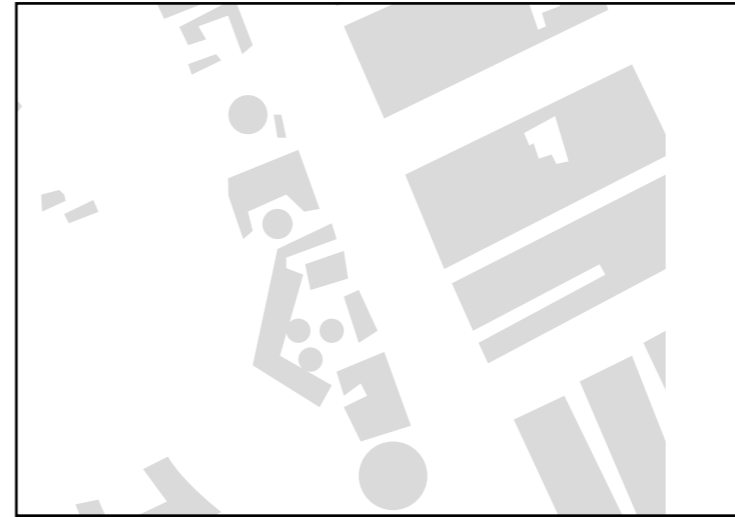
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Before 1800



1842



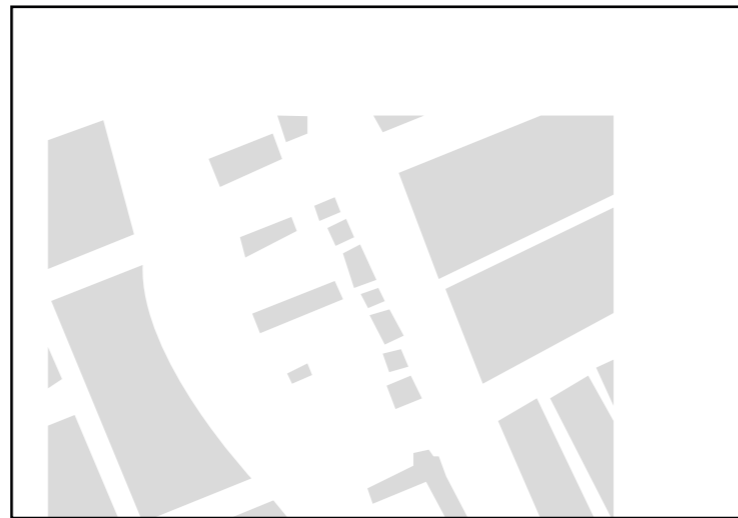
1883



1900



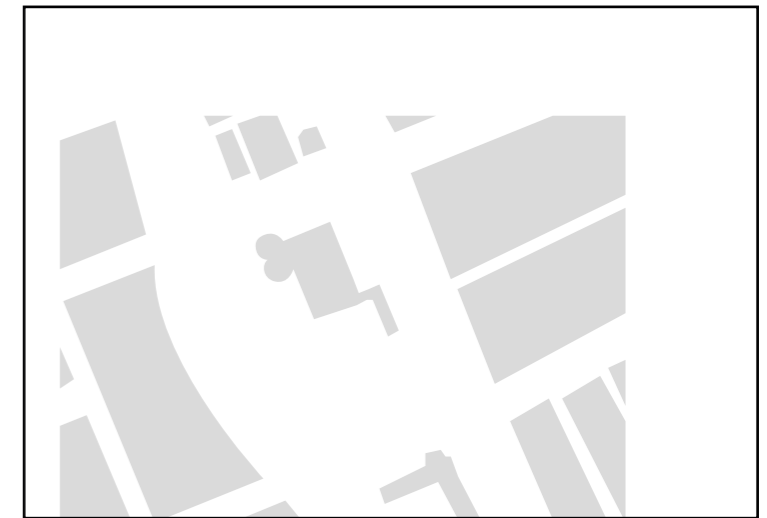
1940  
12



1950



1966



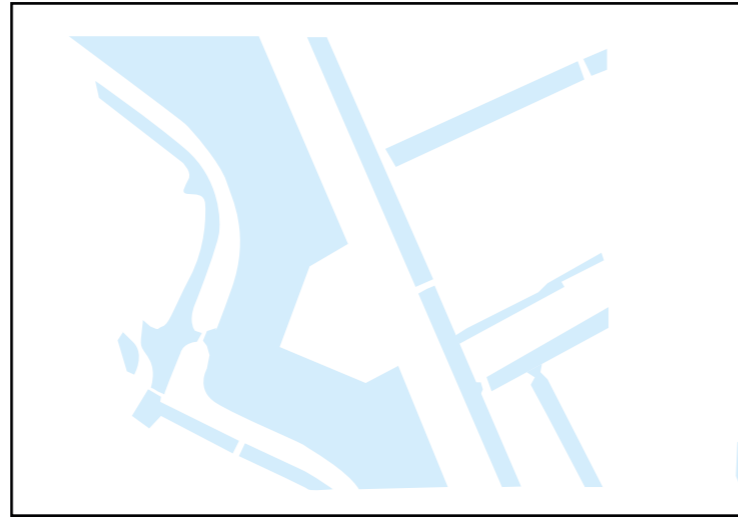
2007

# Development of the Water Structure

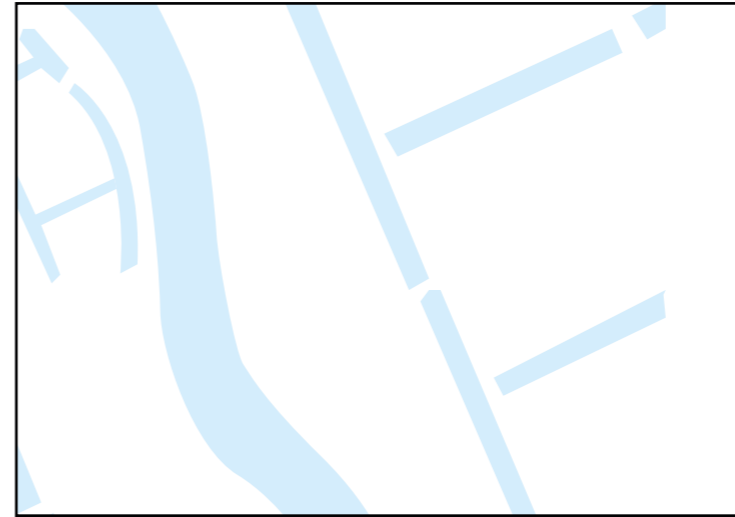
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Before 1800



1842



1883



1900



1940



1950



1966



2007

# Infrastructural Development

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Before 1800



1842



1883



1900



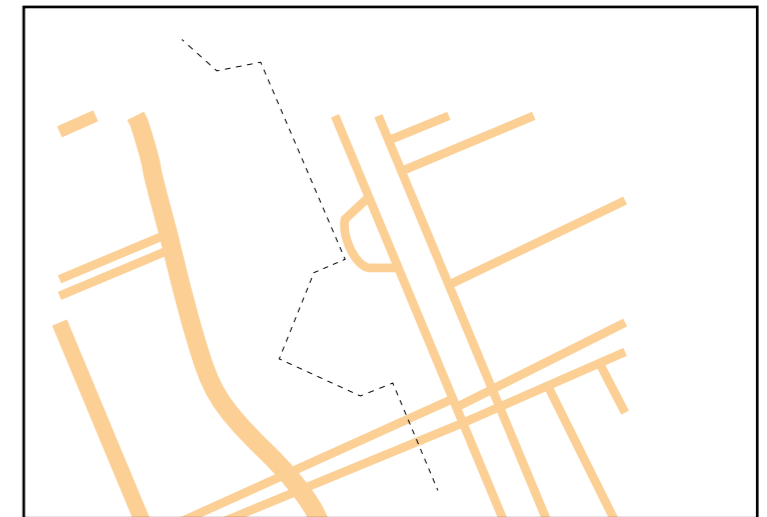
1940  
14



1950



1966



2007

# Piet Zanstra (1905-2003)

Piet Zanstra is the architect of the well-known Europarking garage at the Marnixstraat in Amsterdam. He was born (7 August 1905) and raised in Leeuwarden. After his study hydraulics (MTS Waterbouw) in 1925 Zanstra moved to Amsterdam. He worked as an assistant to architect Dick Greiner. In 1928 he worked three years with W.M. Dudok on the Bijenkorf department store in Rotterdam. After this period he moved to Paris to work with J.P. Kloos on the interiors of the Collège Néerlandais in the Cité Universitaire.

Together with Jan H.L. Giesen and K.L. Sijmons Zanstra set up a design agency in 1932. They build a complex of studio houses at Zomerdijkstraat in Amsterdam, which is known as an early example of the Nieuwen Bouwen in the Netherlands. The designers belonged to the society Groep '32 that regarded Le Corbusier as an example and distanced themselves from the austere New Objectivity movement.

The cooperation between Zanstra, Giesen and Sijmons ended in 1954. Each started his own firm. In the late 1950s and early 1960s Zanstra built various apartment blocks and churches in Amsterdam, The Hague and Rotterdam. Well-known projects in Amsterdam are the flats at Burg. Hogguerstraat, Slotervaart and De Ark. In 1960, he received the H.P. Berlage prize for residential housing in The Hague.

From 1966 Zanstra collaborated with architects De Clerq Zubli and Gmelich Meyling. It was during this period that Europarking multistorey car park at Marnixstraat in Amsterdam came about, with its famous helical spiral-shaped access ramps. Also known as the butt of Zanstra. Zanstra's name is especially linked to the maligned Burgemeester Tellegenhuis house at Jodenbreestraat in Amsterdam - better known as the "Maupoleum" from 1971 (demolished in 1997). In 1975, the firm continued under the name ZZOP (ZZ+P from 1991). Piet Zanstra retired from architecture in 1980 and started painting. He died in Amsterdam on 23 May 2003.

Sources:

- <http://schatkamer.nai.nl/en/ontwerpers/piet-zanstra>
- <http://www.kunstbus.nl/architectuur/piet+zanstra.html>
- <https://www.archined.nl/2003/05/piet-zanstra-1905-2003>
- [https://nl.wikipedia.org/wiki/Piet\\_Zanstra](https://nl.wikipedia.org/wiki/Piet_Zanstra)

## Projects by Piet Zanstra

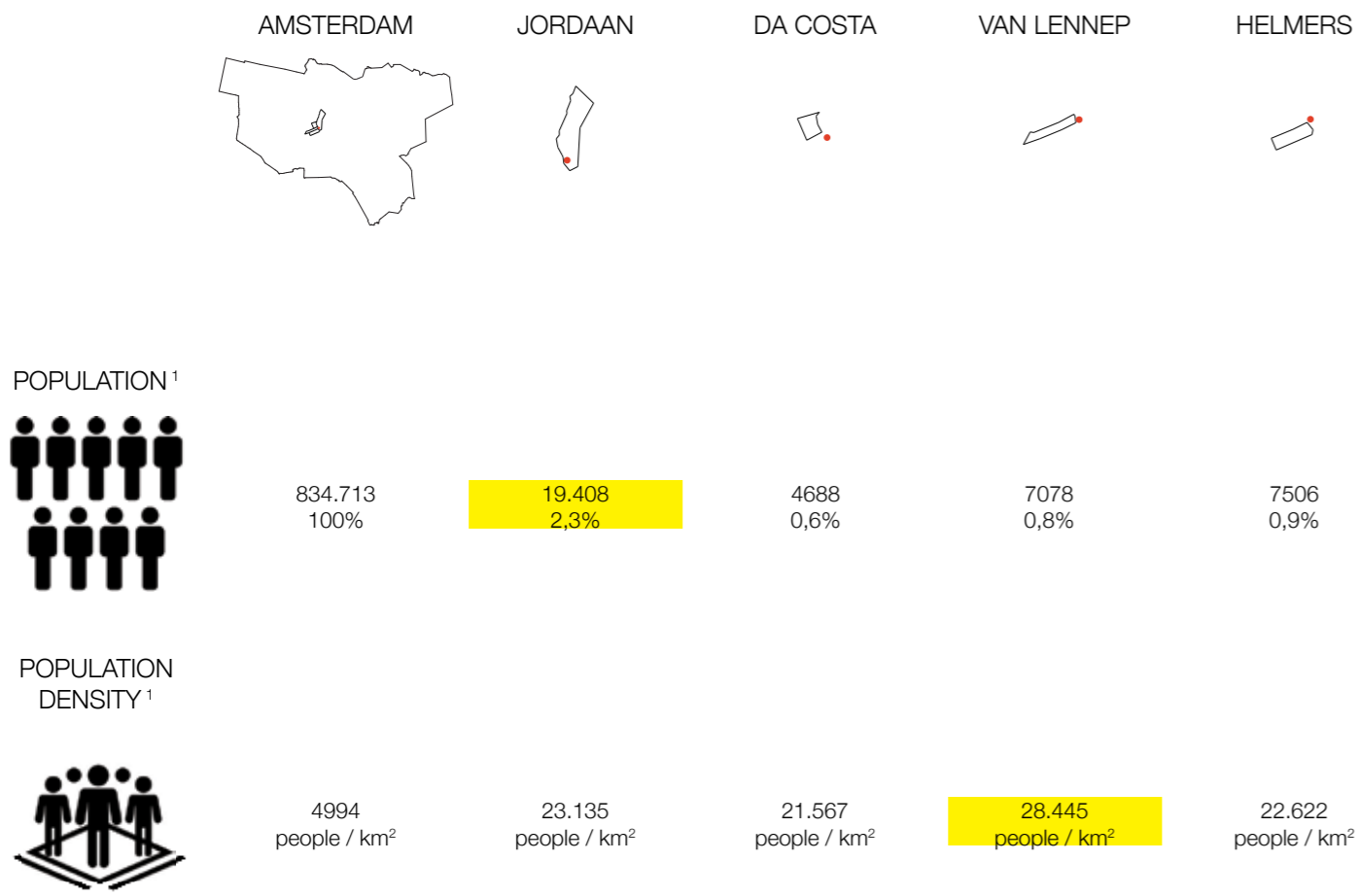
Year	Project	Location
1932	Studio houses Zomerdijkstraat	Amsterdam-Rivierenbuurt
1942	Houses Sloterkade	Amsterdam-Hoofddorppleinbuurt
1957	Two gallery flats Burgemeester Cramergracht	Amsterdam-Slotermeer
1958	Gallery flat Burgemeester De Vluchtlaan 161-345	Amsterdam-Slotermeer
1960	Office building Aurora, Stadhouderskade 2	Amsterdam Oud-West
1961	Reformed church De Ark	Amsterdam-Slotervaart
1962	Panoramaflat	Den Haag
1963	Reformed church De Hoeksteen	Amsterdam-Slotermeer
1964	Reformed church De Bron	Hoogvliet
1964	Housing Van Nijenrodeweg 875-893	Amsterdam-Buitenveldert
1964	Three gallery flats Burgemeester Hogguerstraat	Amsterdam-Slotermeer
1968	Four gallery flats with offices at Weerdestein and Mensinge	Amsterdam-Buitenveldert
1970	Caransa Hotel	Amsterdam-Centrum
1970	Europarking	Amsterdam-Centrum
1970	Reformed church Open Hof	Rotterdam
1971	Maupoleum	Amsterdam-Centrum
1977	Kantoorgebouw Leeuwenburg	Amsterdam-Oost



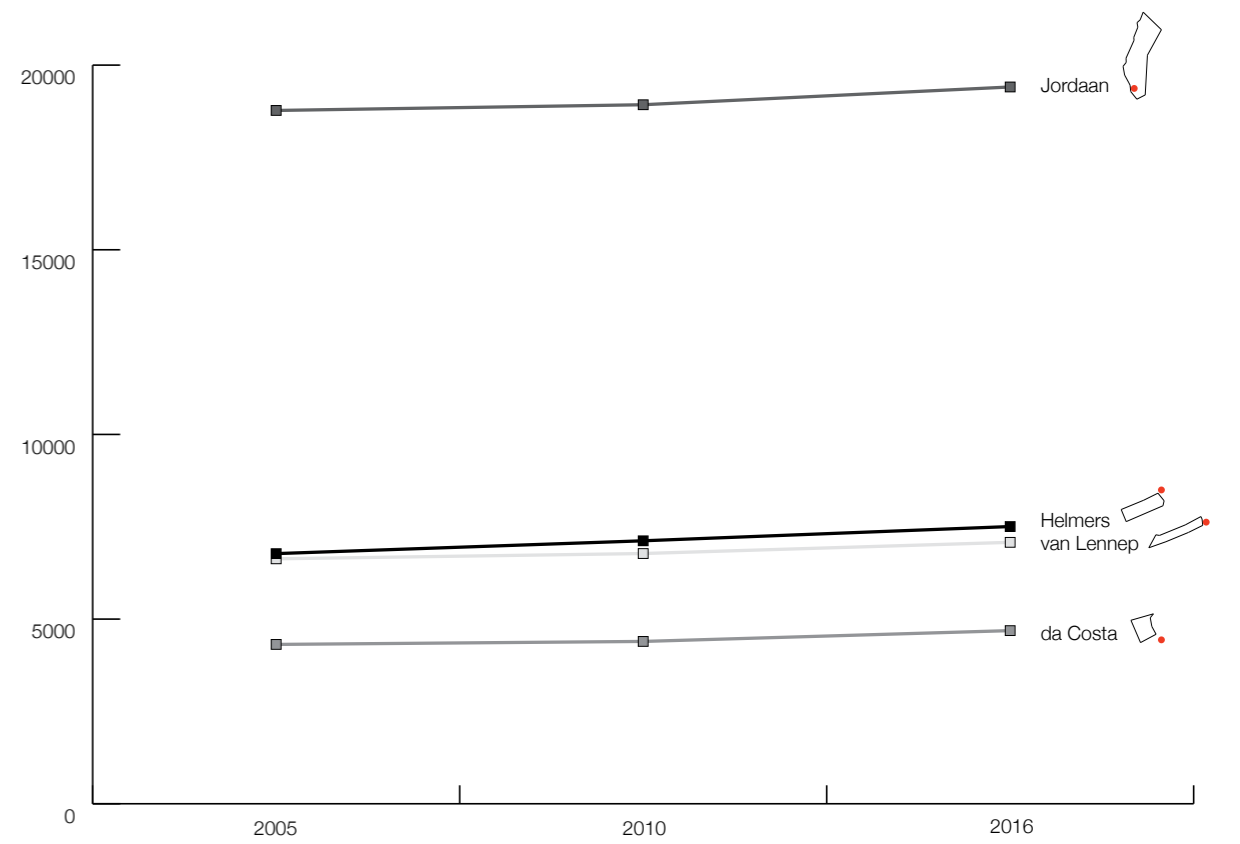


# Present | Demography

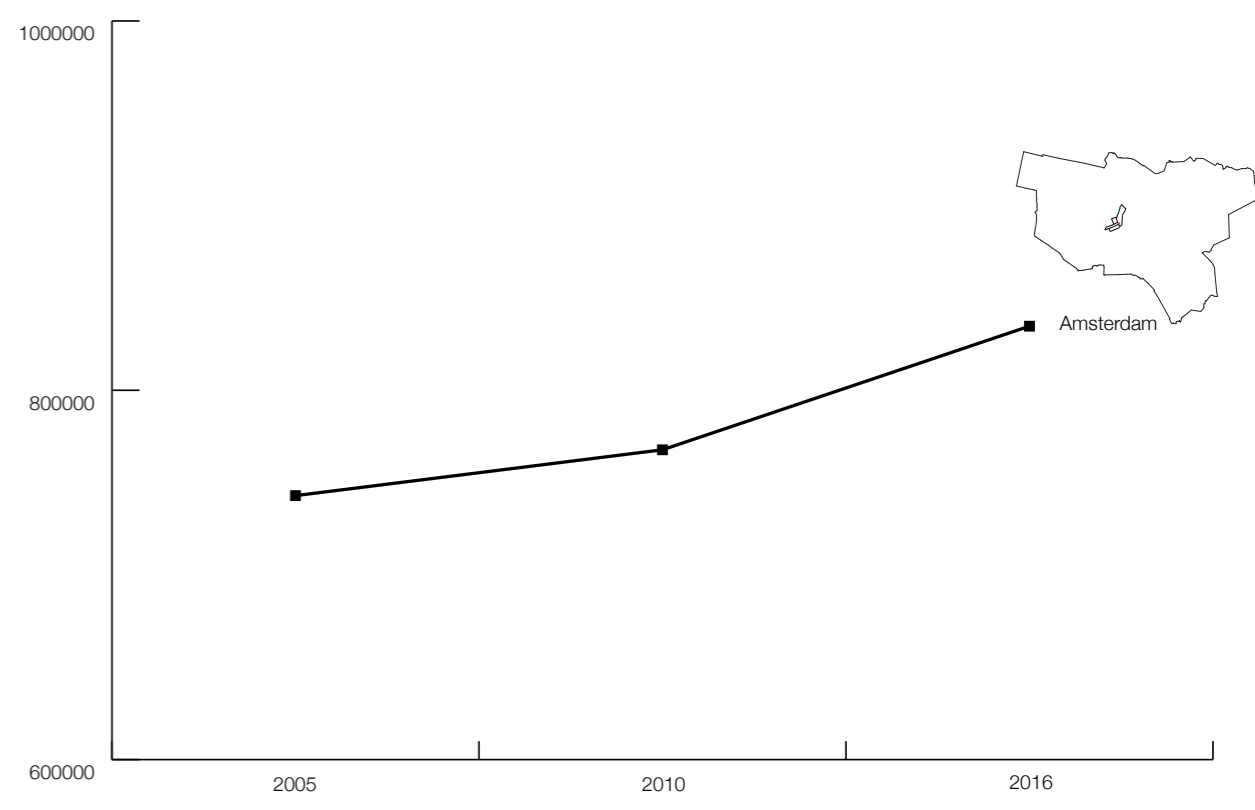
## POPULATION POPULATION



## POPULATION AROUND APPLE MARKET



## POPULATION AMSTERDAM



# Present | Demography

## HOUSEHOLDS GENDER



# Present | Demography

## NATIONALITY AGE



### DUTCH PEOPLE<sup>1</sup>



Neighborhood	Count	Percentage
AMSTERDAM	403.476	48,3%
JORDAAN	12.315	63,5%
DA COSTA	2902	61,9%
VAN LENNEP	3645	51,5%
HELMERS	4796	63,9%

### FROM OTHER COUNTRIES<sup>1</sup>



Neighborhood	Count	Percentage
AMSTERDAM	431.237	51,7%
JORDAAN	7093	36,5%
DA COSTA	1786	38,1%
VAN LENNEP	3433	48,5%
HELMERS	2710	36,1%

### WESTERN<sup>1</sup>

Neighborhood	Percentage
AMSTERDAM	16%
JORDAAN	24%
DA COSTA	23%
VAN LENNEP	19%
HELMERS	23%

### NON-WESTERN<sup>1</sup>

Neighborhood	Percentage
AMSTERDAM	35%
JORDAAN	12%
DA COSTA	14%
VAN LENNEP	29%
HELMERS	12%

### SURINAME<sup>1</sup>

Neighborhood	Percentage
AMSTERDAM	8%
JORDAAN	2%
DA COSTA	3%
VAN LENNEP	6%
HELMERS	2%

### TURKEY<sup>1</sup>

Neighborhood	Percentage
AMSTERDAM	5%
JORDAAN	1%
DA COSTA	1%
VAN LENNEP	3%
HELMERS	1%

### MAROCCO<sup>1</sup>

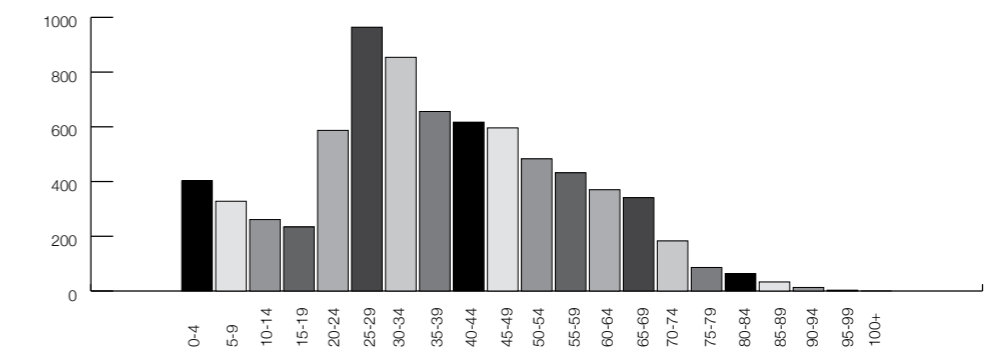
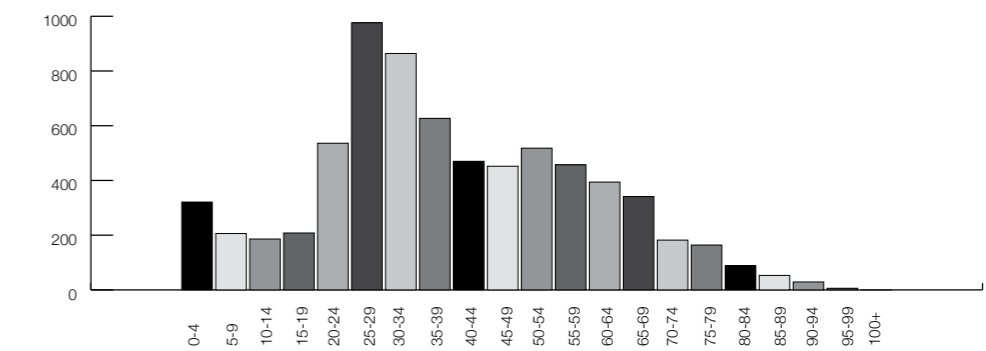
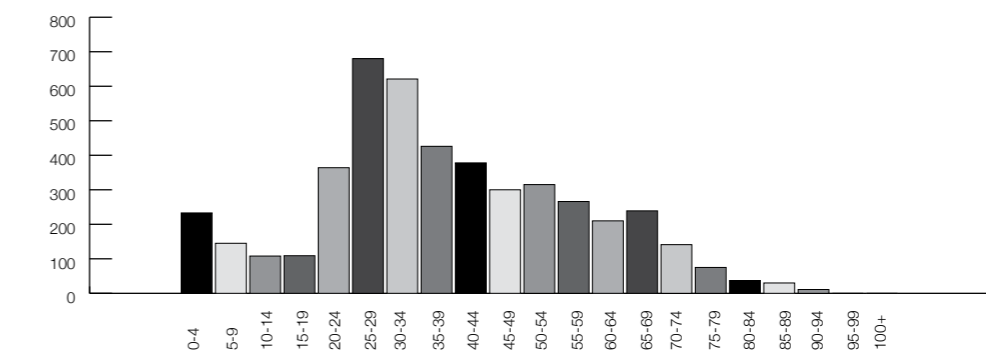
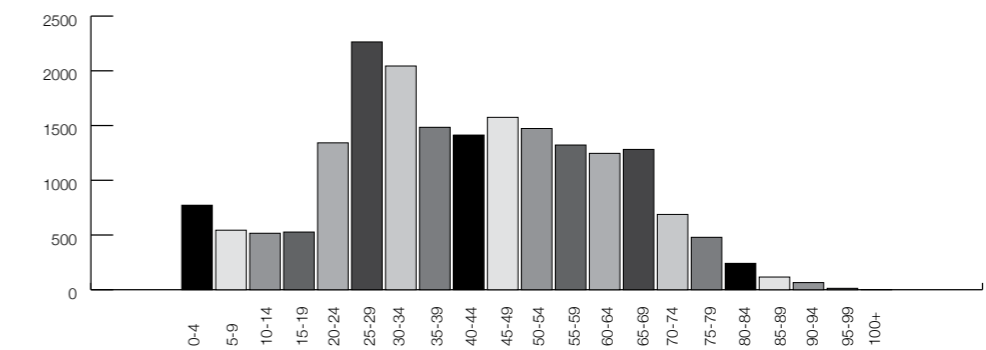
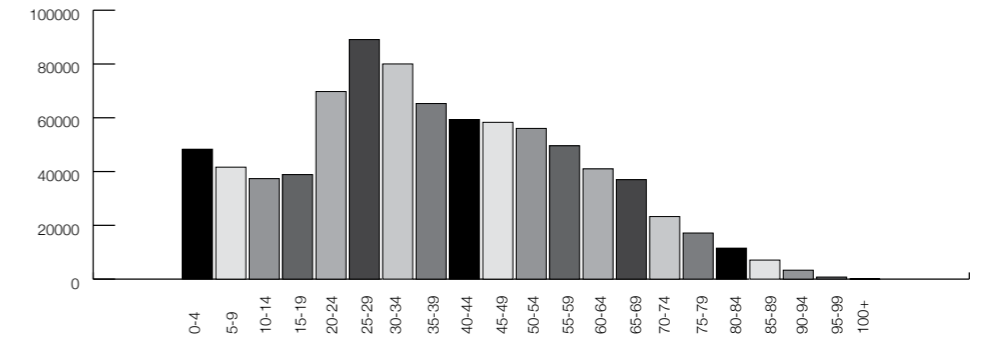
Neighborhood	Percentage
AMSTERDAM	9%
JORDAAN	1%
DA COSTA	3%
VAN LENNEP	9%
HELMERS	1%

### DUTCH ANTILLES<sup>1</sup>

Neighborhood	Percentage
AMSTERDAM	1%
JORDAAN	2%
DA COSTA	1%
VAN LENNEP	1%
HELMERS	1%

### OTHER<sup>1</sup>

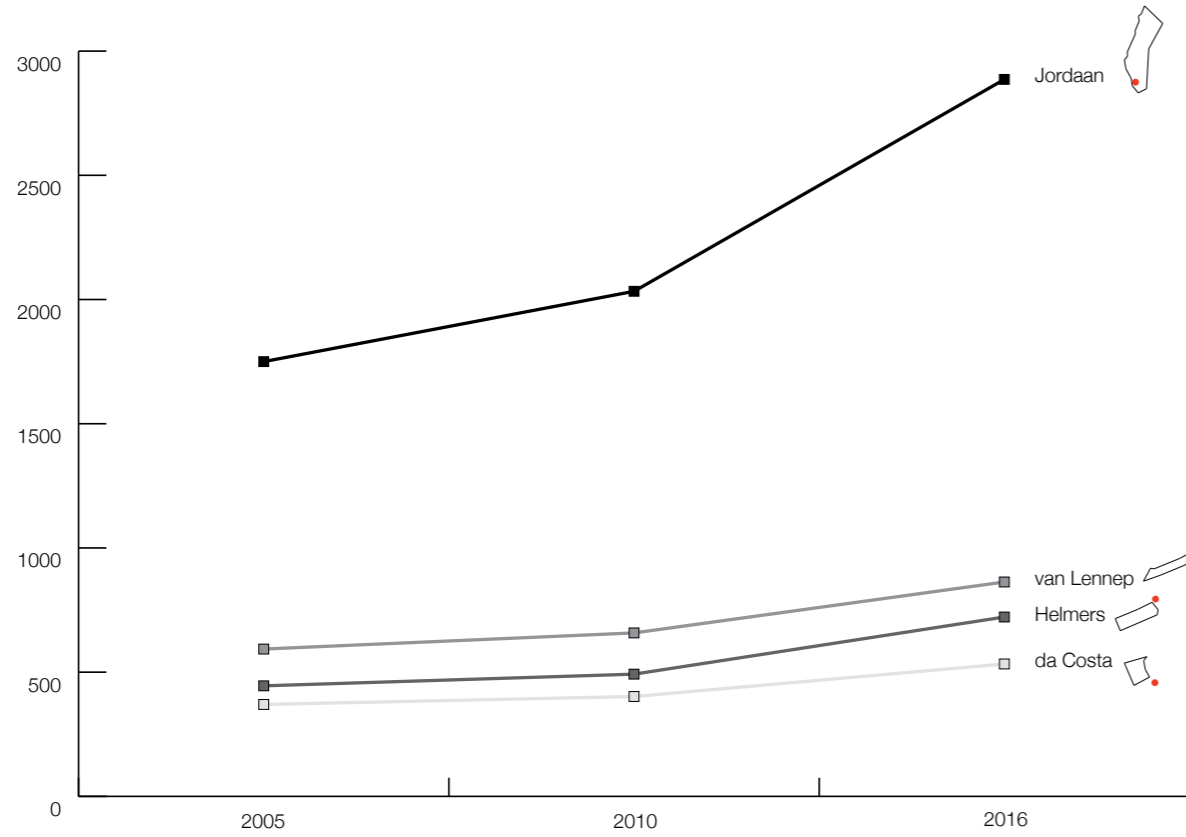
Neighborhood	Percentage
AMSTERDAM	1%
JORDAAN	7%
DA COSTA	7%
VAN LENNEP	10%
HELMERS	6%



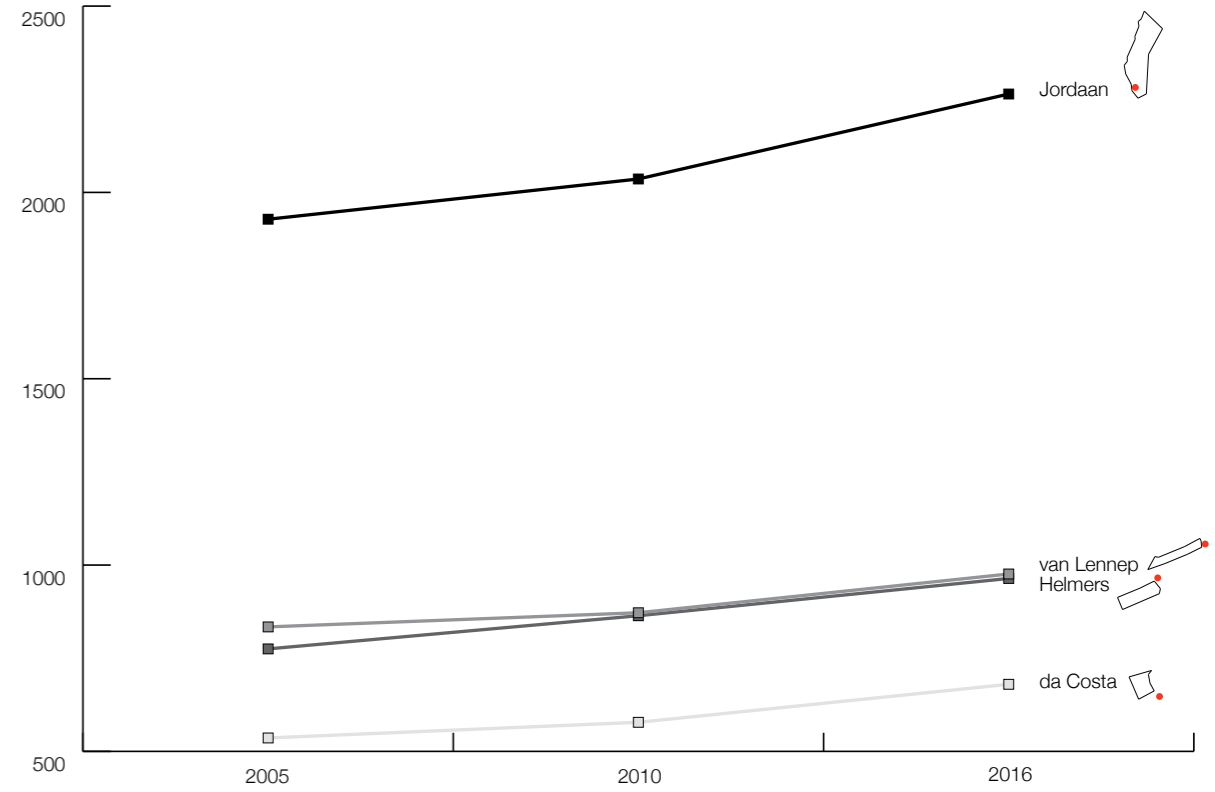
# Present | Demography

AGE AGE

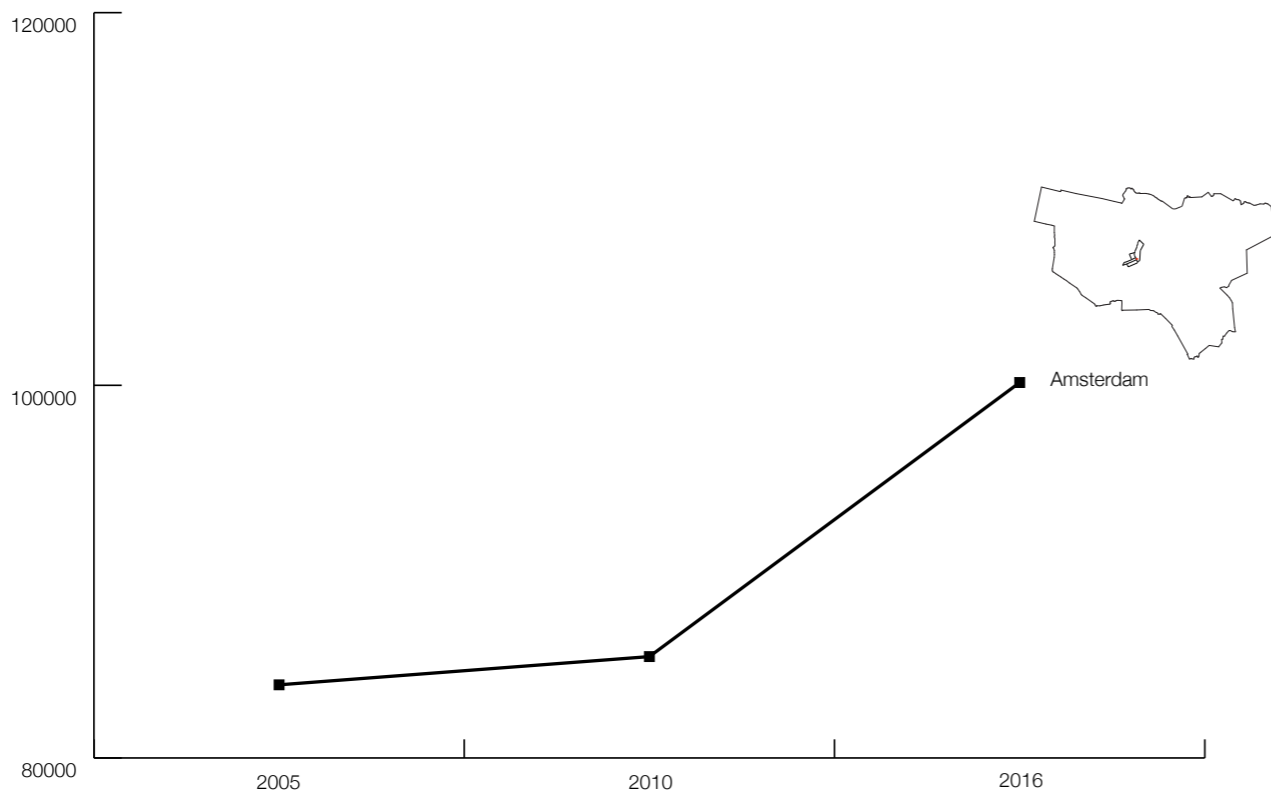
65+ PEOPLE  
AROUND  
APPLE MARKET<sup>1</sup>



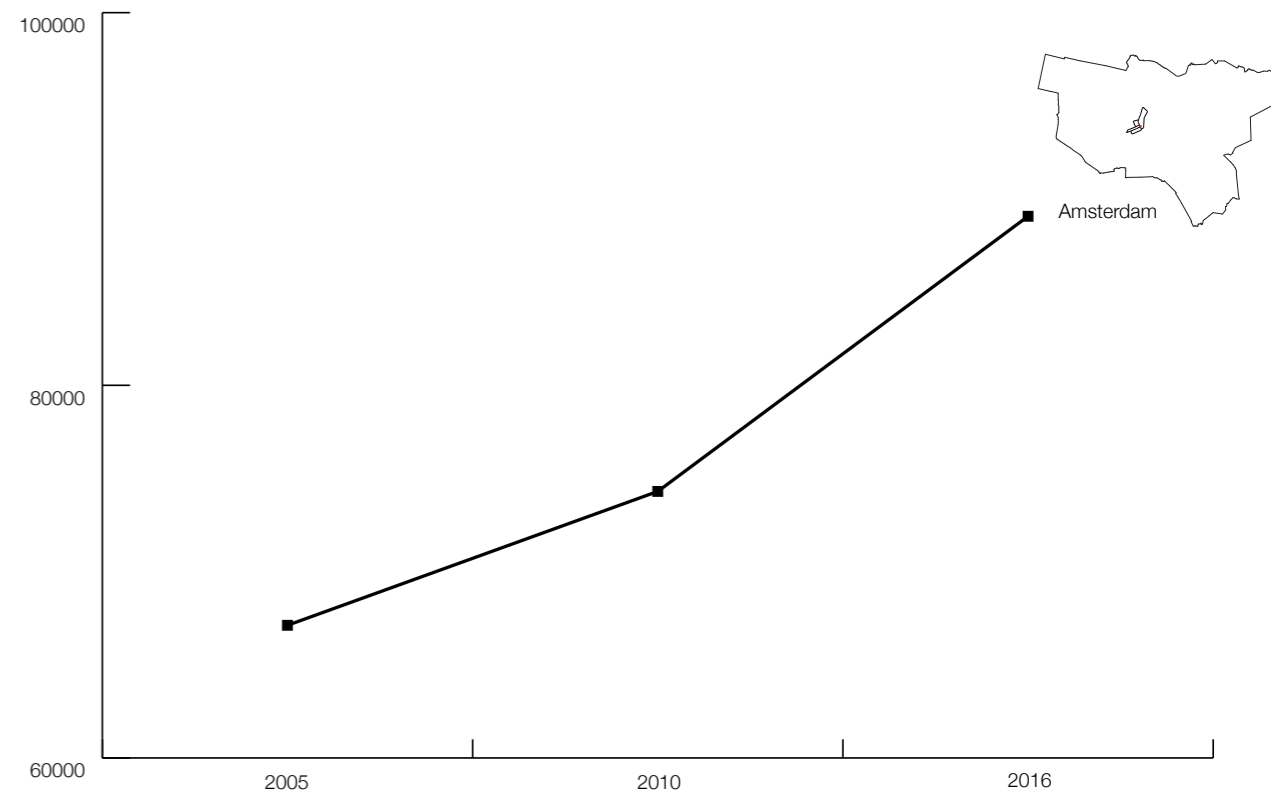
25-29 y/o  
AROUND  
APPLE MARKET<sup>1</sup>



65+ PEOPLE  
AMSTERDAM<sup>1</sup>



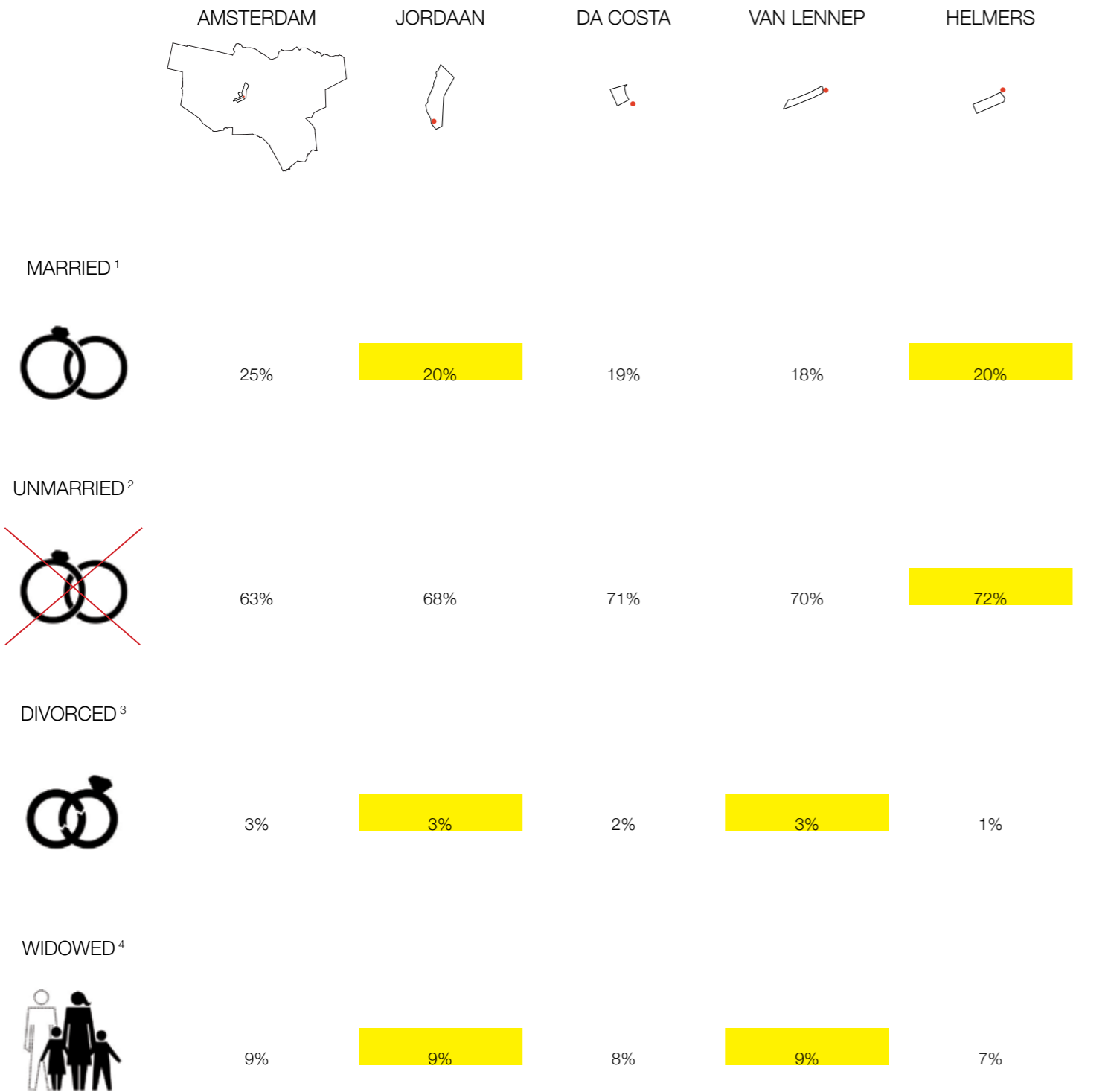
25-29 y/o  
AROUND  
APPLE MARKET<sup>1</sup>



# Present | Demography

## MARITAL STATUS

## EDUCATION



# Present | Demography

## (UN)EMPLOYMENT INCOME

AMSTERDAM

JORDAAN

DA COSTA

VAN LENNEP

HELMERS



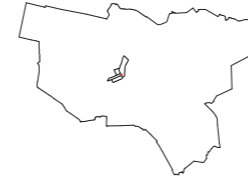
AMSTERDAM

JORDAAN

DA COSTA

VAN LENNEP

HELMERS



### EMPLOYMENT<sup>1</sup>



493.429  
59,1%

8423  
43,4%

1551  
33,1%

1584  
22,4%

3680  
49,0%

### UNEMPLOYMENT<sup>2</sup>



64.272  
7,7%

1824  
9,4%

436  
9,3%

658  
9,3%

698  
9,3%

### NOT ACTIVE<sup>3</sup>



27%

25%

24%

30%

22%

### INCOME PER HOUSEHOLD<sup>1</sup>



31.393 / year

30.175 / year

31.268 / year

25.885 / year

35.377 / year

### INCOME PER INCOME RECEIVER<sup>2</sup>



23.000 / year

28.000 / year

27.000 / year

22.000 / year

30.000 / year

### LOW INCOMES<sup>3</sup>



40%

37%

37%

45%

33%

### HIGH INCOMES<sup>4</sup>



22%

28%

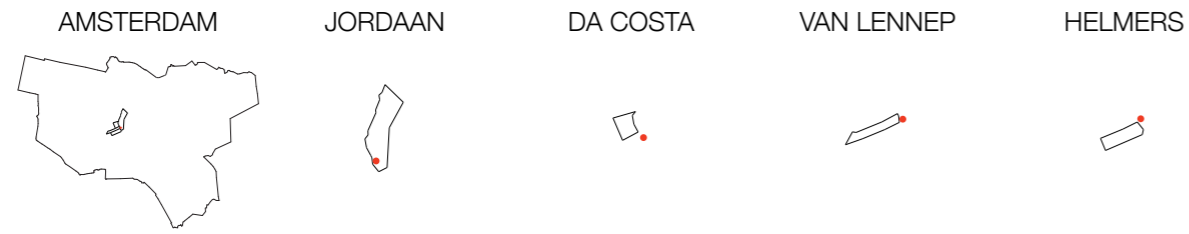
25%

16%

36%

# Present | Demography

## CONCLUSIONS CONCLUSIONS



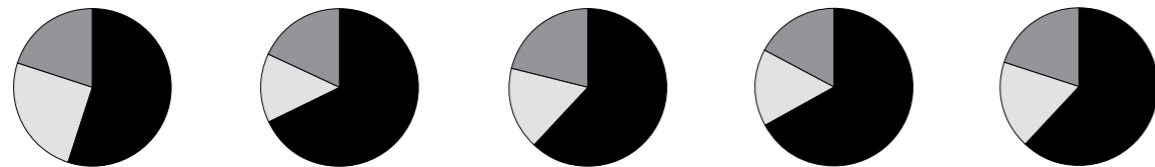
**POPULATION** Increase of the amount of people in Amsterdam as a whole, but also in the neighbourhoods around the Apple market.

**MARITAL STATUS** There are a lot of unmarried people in Amsterdam and in the neighbourhoods, probably because of the amount of 25-29 years old living in Amsterdam.

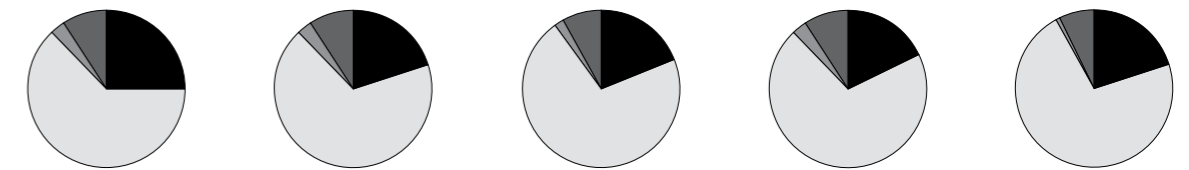
**HOUSEHOLDS** A lot of one-person households, probably due to the age 25-29 years old. High percentage 25-29 years old could also be the reason that there are less households with children compared to Amsterdam.

**EDUCATION** In the neighbourhoods around the Apple Market are living more high educated and less low educated people.

with children  
one person  
without children



not married  
married  
widowed  
divorced



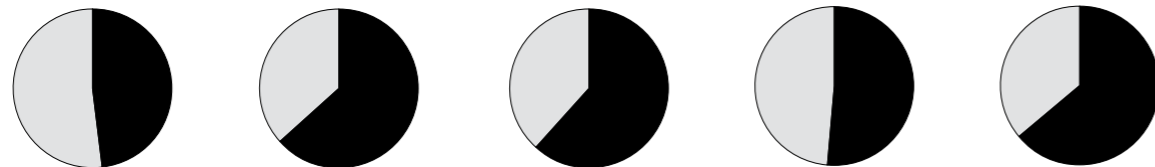
**GENDER** Percentage of man and woman is approximately equal, there are no really big differences between the neighbourhoods.

**(UN)EMPLOYMENT** In the neighbourhoods around the Apple Market the percentage of unemployment is higher compared to the percentage of unemployment in Amsterdam.

**NATIONALITY** Compared to Amsterdam the neighbourhoods around the Apple market are quite Dutch. The neighbourhood with the most non-Dutch people is the van Lennepbuurt. This neighbourhood is also having the highest percentage of non-western people.

**INCOME** The amount of high incomes is highest in the Helmersbuurt and the amount of low incomes is highest in the van Lennepbuurt.

other  
Dutch



**AGE** In Amsterdam, but also in the neighbourhoods around the Apple market, the quantity of 25-29 years old is the biggest.

**NEIGHBOURHOODS** In the van Lennepbuurt there are living more low educated people, less high educated people, there is less income per household and a low percentage of high incomes.

### POPULATION

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)

### HOUSEHOLDS

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)  
2 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_percentage\\_eenpersoonshuishoudens](http://www.cbsinuwbuurt.nl/#buurten2015_percentage_eenpersoonshuishoudens)  
3 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_huishoudens\\_met\\_kinderen](http://www.cbsinuwbuurt.nl/#buurten2015_huishoudens_met_kinderen)  
4 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_percentage\\_huishoudens\\_zonder\\_kinderen](http://www.cbsinuwbuurt.nl/#buurten2015_percentage_huishoudens_zonder_kinderen)  
5 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_gemiddelde\\_huishoudgrootte](http://www.cbsinuwbuurt.nl/#buurten2015_gemiddelde_huishoudgrootte)

### GENDER

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)

### NATIONALITY

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)

### AGE

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)

### MARITAL STATUS

1 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_percentage\\_gehuwden](http://www.cbsinuwbuurt.nl/#buurten2015_percentage_gehuwden)  
2 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_percentage\\_ongehuwden](http://www.cbsinuwbuurt.nl/#buurten2015_percentage_ongehuwden)  
3 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_percentage\\_gescheiden](http://www.cbsinuwbuurt.nl/#buurten2015_percentage_gescheiden)  
4 | [http://www.cbsinuwbuurt.nl/#buurten2015\\_percentage\\_verweduwden](http://www.cbsinuwbuurt.nl/#buurten2015_percentage_verweduwden)

### EDUCATION

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)

### (UN)EMPLOYMENT

1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)  
2 | <http://www.napnieuws.nl/2013/02/05/hoer-hoog-is-de-werkloosheid-in-uw-stadsdeel/>  
3 | [http://www.cbsinuwbuurt.nl/#buurten2010\\_percentage\\_niet\\_actieven](http://www.cbsinuwbuurt.nl/#buurten2010_percentage_niet_actieven)

### INCOME

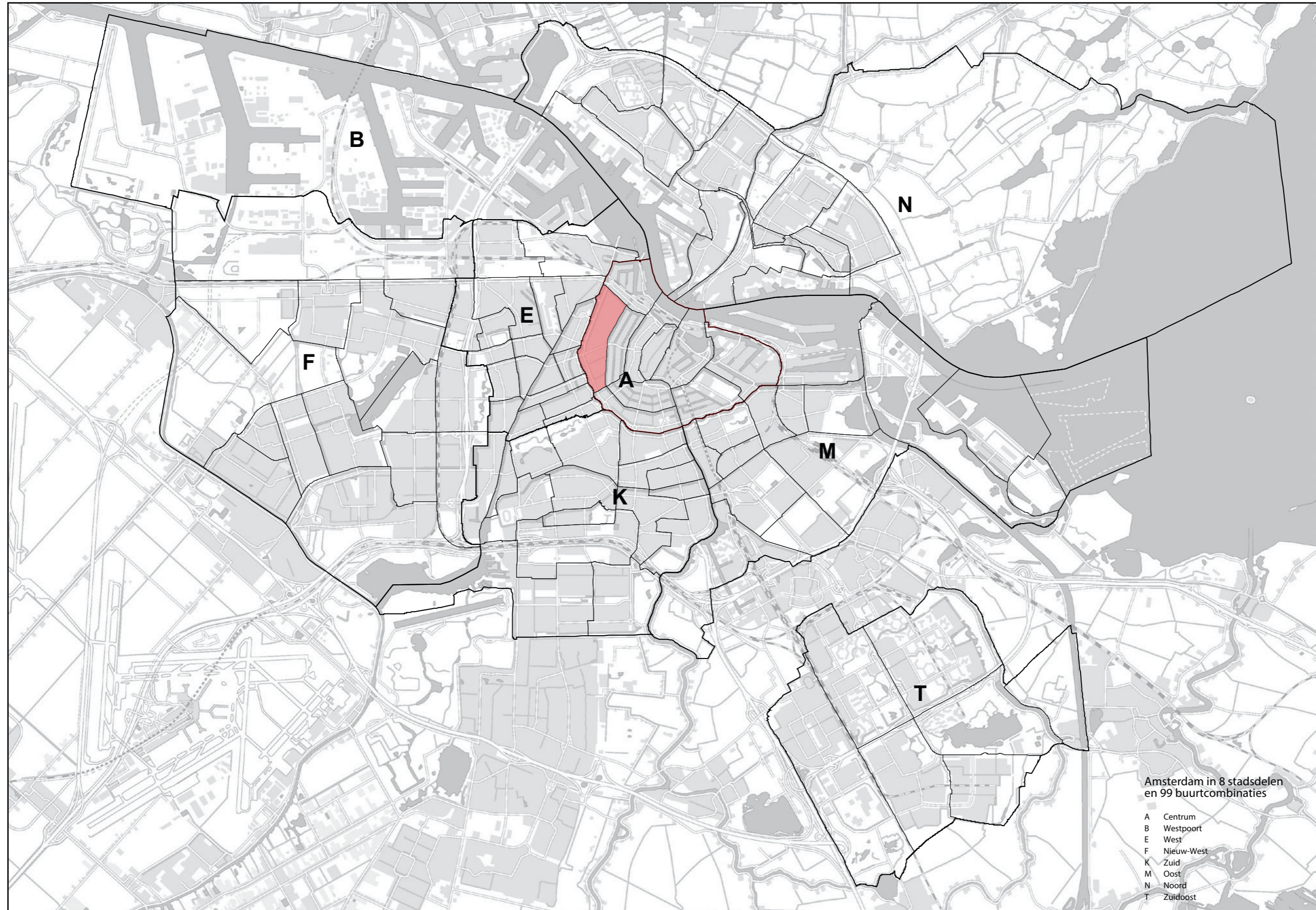
1 | [http://www.ois.amsterdam.nl/visualisatie/dashboard\\_kerncijfers.html](http://www.ois.amsterdam.nl/visualisatie/dashboard_kerncijfers.html)  
2 | [http://www.cbsinuwbuurt.nl/#buurten2010\\_gemiddeld\\_inkomen\\_inkomensontvanger](http://www.cbsinuwbuurt.nl/#buurten2010_gemiddeld_inkomen_inkomensontvanger)  
3 | [http://www.cbsinuwbuurt.nl/#wijken2013\\_percentage\\_personen\\_met\\_laag\\_inkomen](http://www.cbsinuwbuurt.nl/#wijken2013_percentage_personen_met_laag_inkomen)  
4 | [http://www.cbsinuwbuurt.nl/#sub-wijken2013\\_percentage\\_personen\\_met\\_hoog\\_inkomen](http://www.cbsinuwbuurt.nl/#sub-wijken2013_percentage_personen_met_hoog_inkomen)





# Present | Morphology

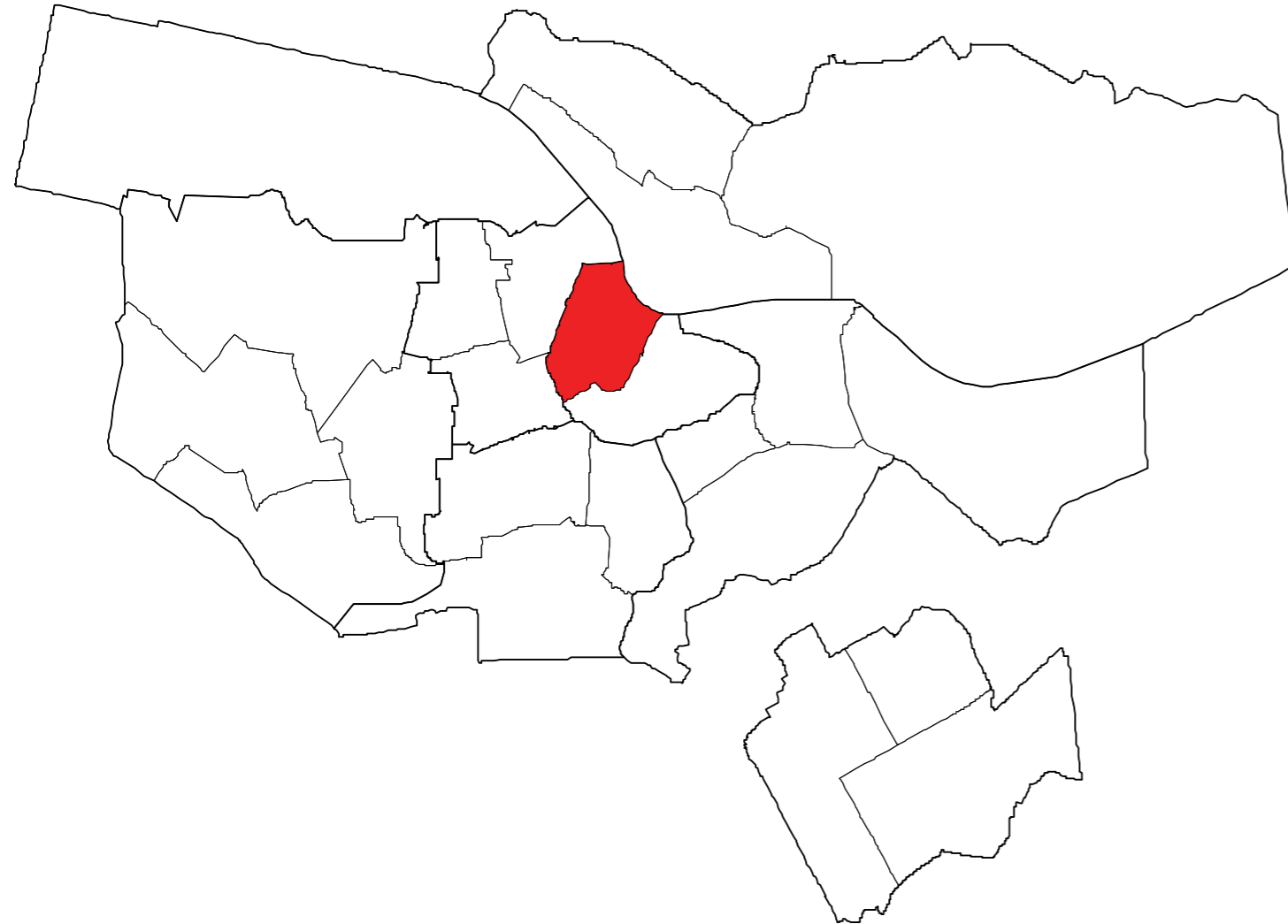
AMSTERDAM



# Present | Morphology

## CITYPART CENTRUM WEST

The Apple Market is situated in the neighbourhood De Jordaan. It's part of the west side of Amsterdam centrum.



# Present | Morphology

CONTOURS

Legend

■ Private

□ Public



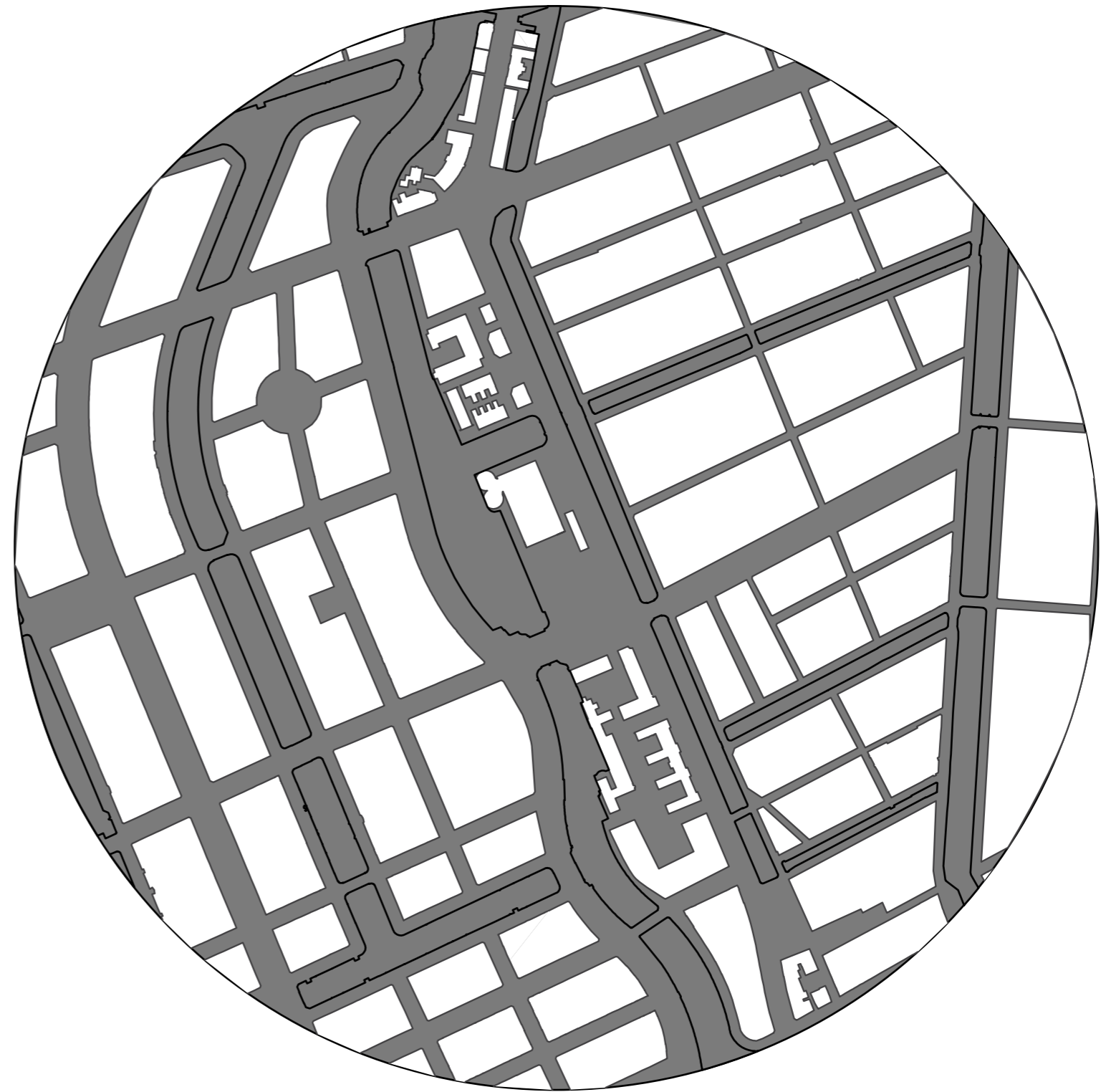
1:5000

# Present | Morphology

CONTOURS

Legend

- Private
- Public



1:5000

# Present | Morphology

building density

Legend

- Building
- Non-building

This map shows the difference in density between the east and west part of the Applemarket. The east side, which is part of the so called 'grachtengordel' is clearly more dense compared to the west side which is not part of the 'grachtengordel' anymore.

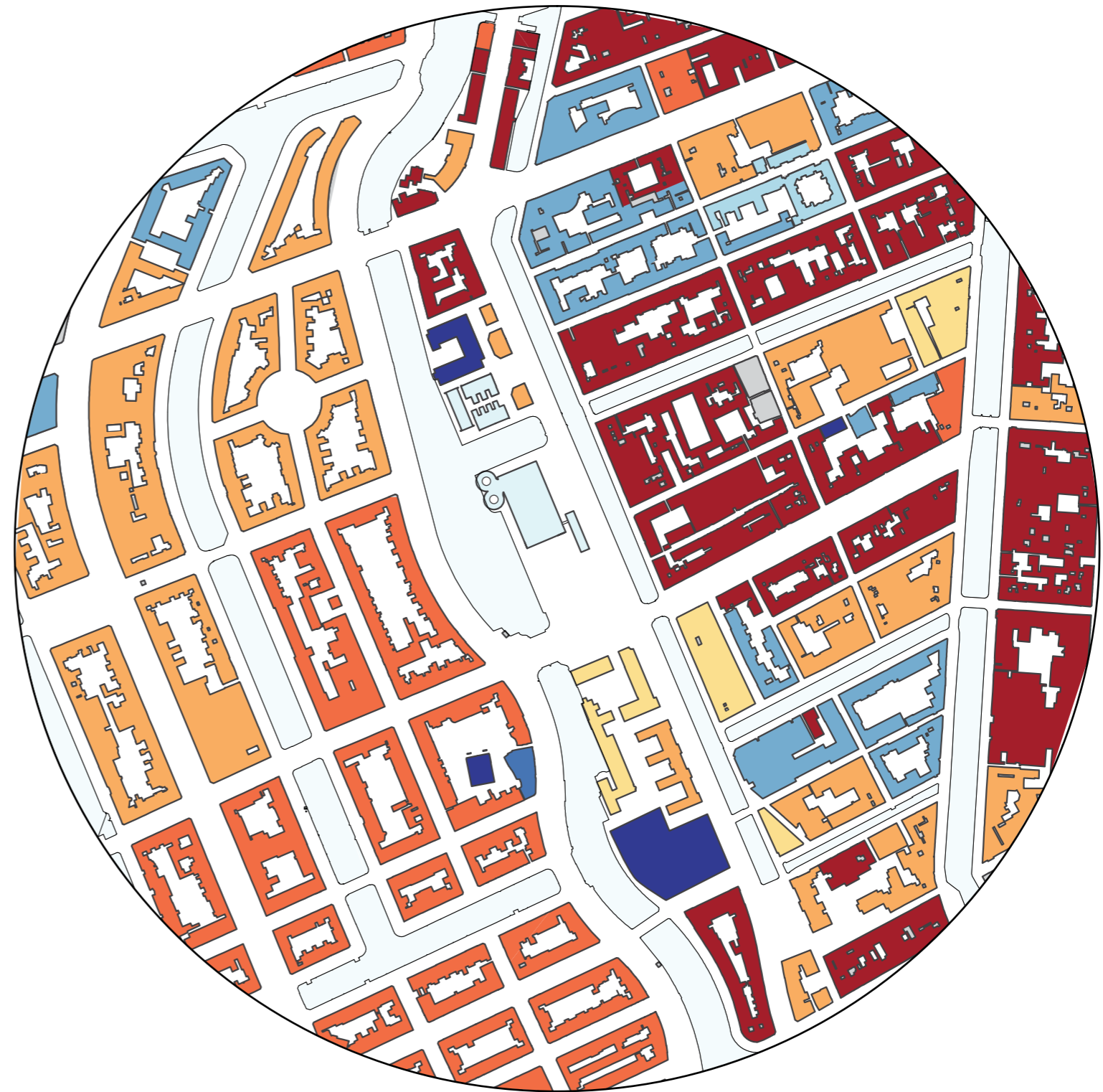
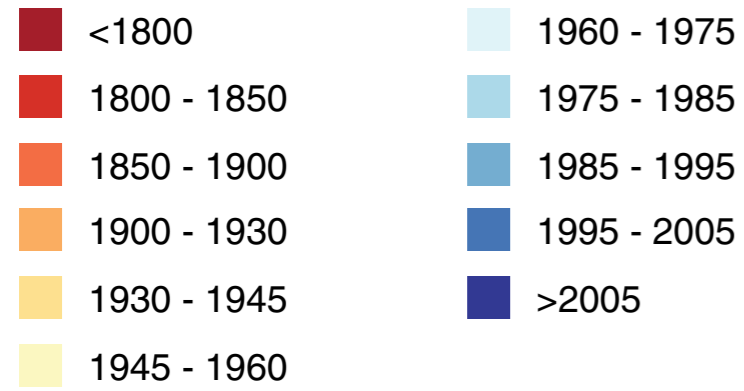


1:5000

# Present | Morphology

## BUILDING AGE

### Legend

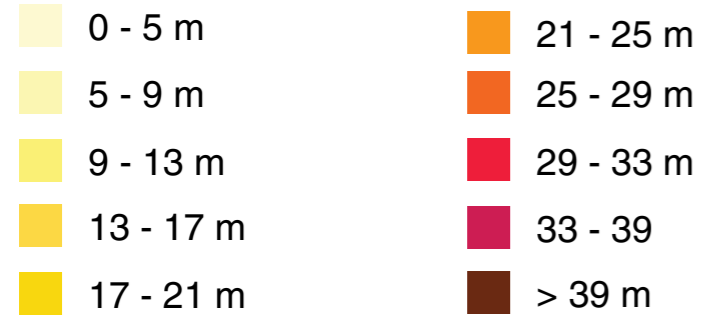


1:5000

# Present | Morphology

## BUILDING HEIGHT

### Legend



1:5000



# Present | Morphology

WATER

Legend

Water

A. Singelgracht

B. Elandsgracht

C. De Costagracht

D. Bilderdijkgracht

E. Prinsengracht

Houseboats

Building volume

F. Rozengracht

G. Lauriergracht

H. Looiersgracht

H. Passeerdersgracht



1.



2.



3.



4.

1:5000

# Present | Morphology

dwellings

Legend

 dwellings

This map shows all the dwellings in the area in a circle of 500 meters on the groundfloor.



1:5000

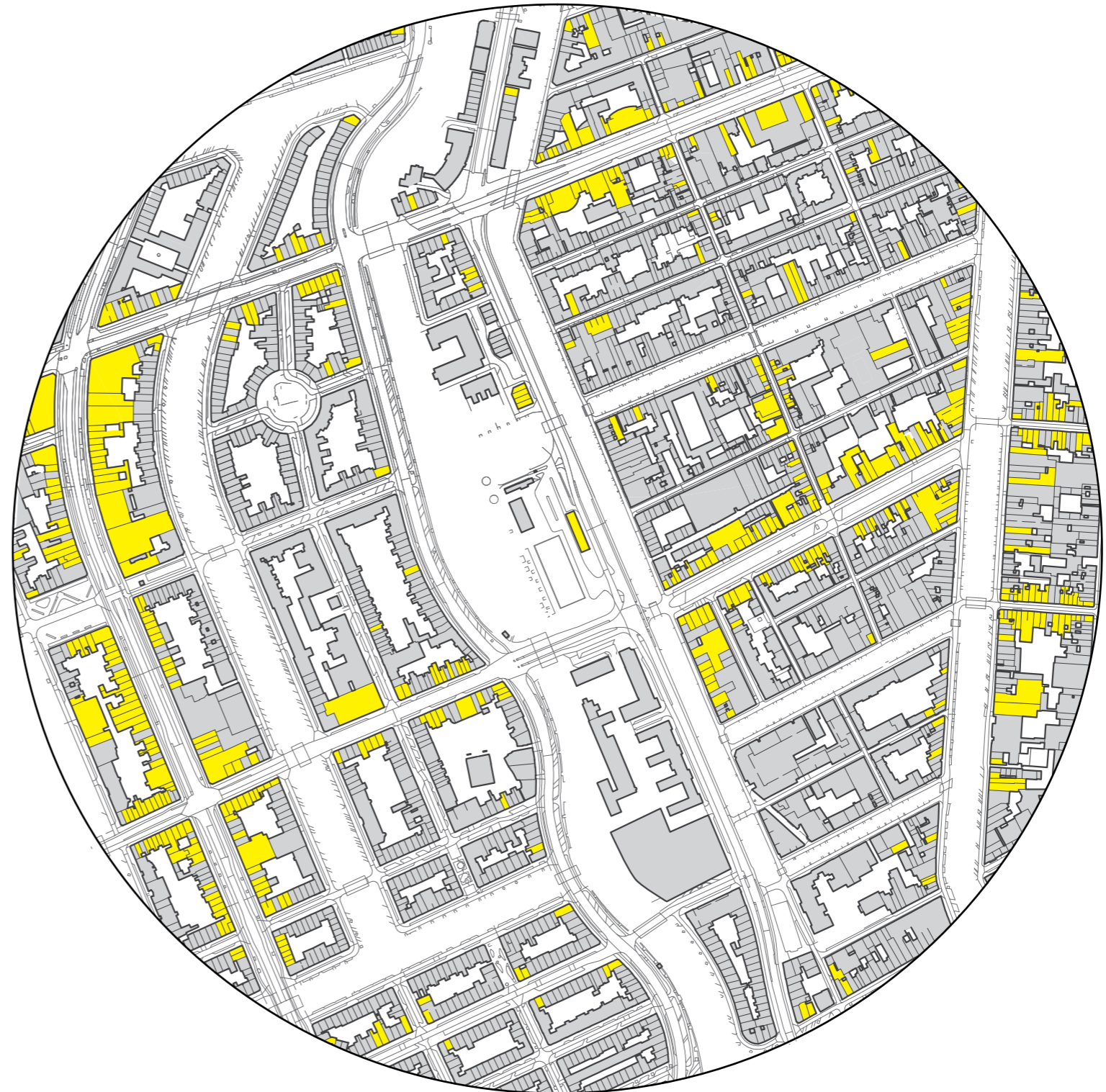
# Present | Morphology

retail

Legend

 retail

This map shows all the retail in the area in a circle of 500 meters. The retail consists of shops, supermarkets, massage-salons, galleries etc. In all probability the upper levels contain dwellings.




1:5000

# Present | Morphology

offices

Legend

 offices

This map shows all the offices in the area in a circle of 500 meters. In all probability the upper levels contain dwellings.




1:5000

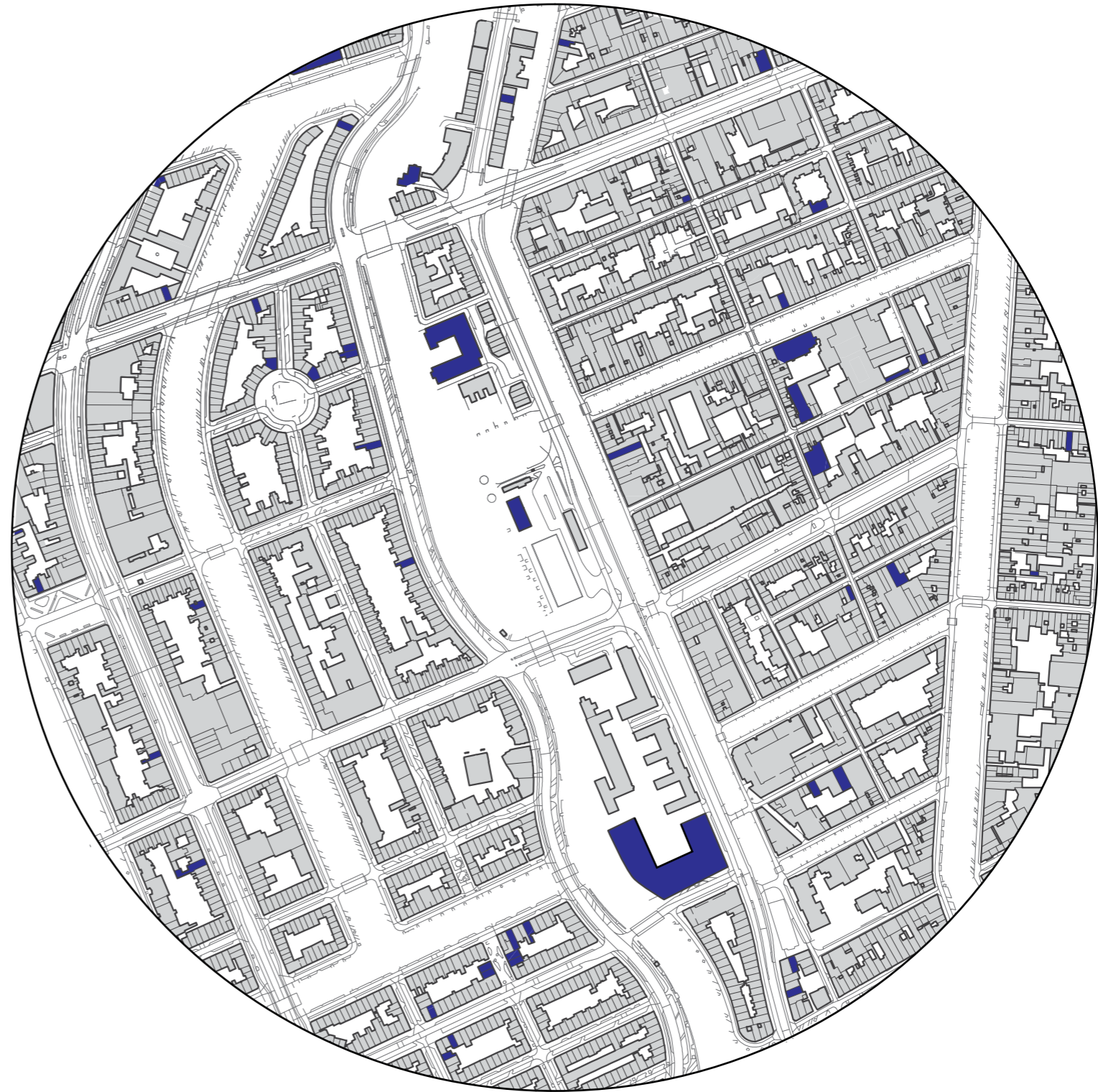
# Present | Morphology

healthcare

Legend

 healthcare

This map shows all the healthcare in the area in a circle of 500 meters. The healthcare consists of healthpractice, residential care complex, day- and nightcare etc.



1:5000

# Present | Morphology

## FUNCTIONS

### Legend

- Dwelling
- Retail
- Offices
- Healthcare
- Other



1:5000

# Present | Morphology

Qpark europarking



Qpark is a public parking garage with 700 parking spaces. Therefore it's a huge building and determines to a large extent the appearance of the plot.

de Waterkant



The Waterkant, a place to have a nice drink and / or meal, is inspired by a part of Paramaribo on the Surinam river. It's a place to relax, connect and enjoy. It's a place where people get to know each other, regardless of origin, gender, age or social class.

Clavis piano's



Clavis piano's is a piano shop where one can purchase or rent piano's and pianofortes.

petrol station



The Texaco is one of the few petrol stations within the canalbelt of Amsterdam

the stoelenproject



The stoelenproject is the most approachable evening and night relief centre of Amsterdam. The shelter is sober, but safe, warm and free. Every evening and night it holds 45 homeless people.



square

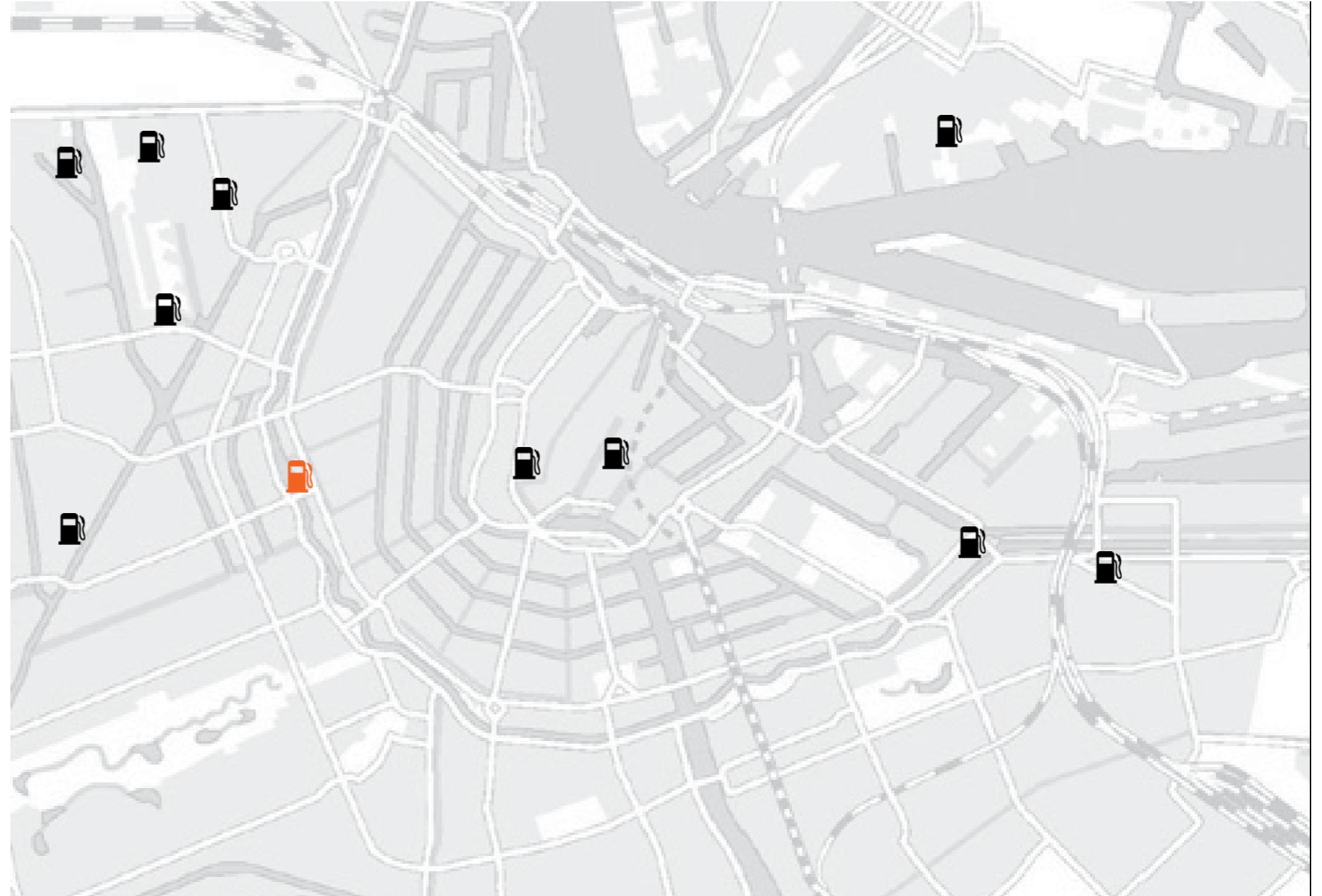


This square is an open space covered with gravel with benches on the side where people can relax. The Jordaan festival is held here annually.

# Present | Morphology

## petrol stations

There are only a few petrol stations within the canal-belt. Most of them are located in the outer area of the city.



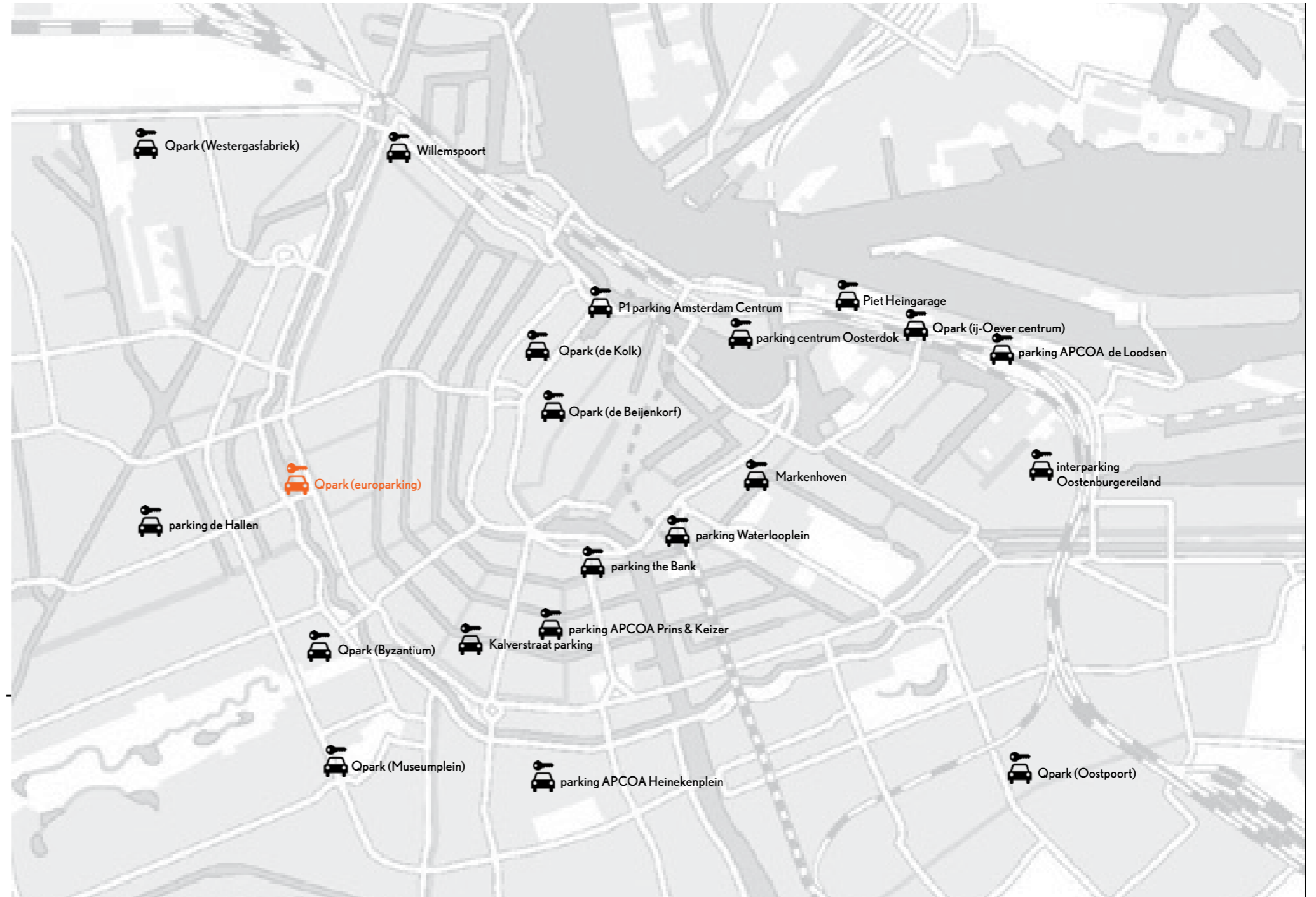


# Present | Morphology

## parking garages

Parking centrum Oosterdok	1369 parking spaces
<b>Qpark (europarking)</b>	<b>  700 parking spaces</b>
Qpark (museumplein)	586 parking spaces
Qpark (Oostpoort)	586 parking spaces
Piet Heingarage	580 parking spaces
interparking Oostenburgereiland	500 parking spaces
Qpark (de Bijenkorf)	487 parking spaces
Qpark (Westergasfabriek)	480 parking spaces
Qpark (Byzantium)	450 parking spaces
parking APCOA De Loodsen	446 parking spaces
P1 Parking Amsterdam centrum	434 parking spaces
Qpark (de Kolk)	400 parking spaces
Qpark (ij-oever centrum)	400 parking spaces
Markenhoven	352 parking spaces
Parking APCOA Heinekenplein	256 parking spaces
parking Waterlooplein	180 parking spaces
Parking de Hallen	166 parking spaces
parking APCOA Prins & Keizer	140 parking spaces
Kalverstraat parking	130 parking spaces
parking the Bank	110 parking spaces
Willemspoort	109 parking spaces
Parking de Hoofdstad	

With it's 700 parking spaces, Qpark (europarking) is a parking lot with one of the most parking spaces. The 700 parking spaces of Qpark (europarking) is 8 percent of the total parking spaces (8861). The average price of the parking garages varies from 2,00 - 2,50 per half hour and 40,00 - 45,00 per day.



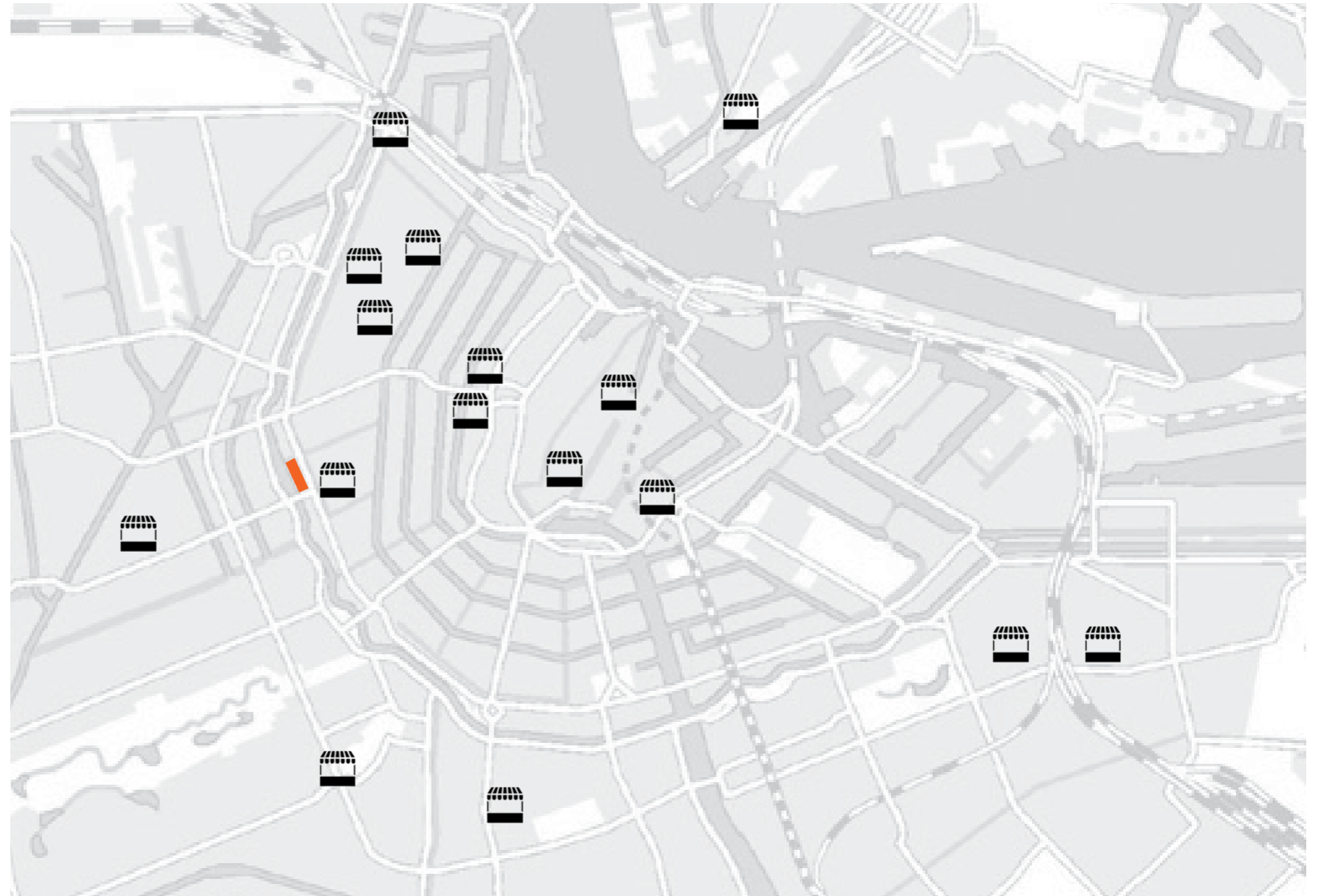
# Present | Morphology

## markets

This map shows all the neighborhood markets in Amsterdam. These bustling markets are characteristic for the local atmosphere with their colors, scents and scenes. A visit to the market is one of the best ways to discover the authentic culture in a strange city. Most of the neighborhood markets are open throughout the whole year.

These markets consist of organic farmers' markets, flea markets and special markets.

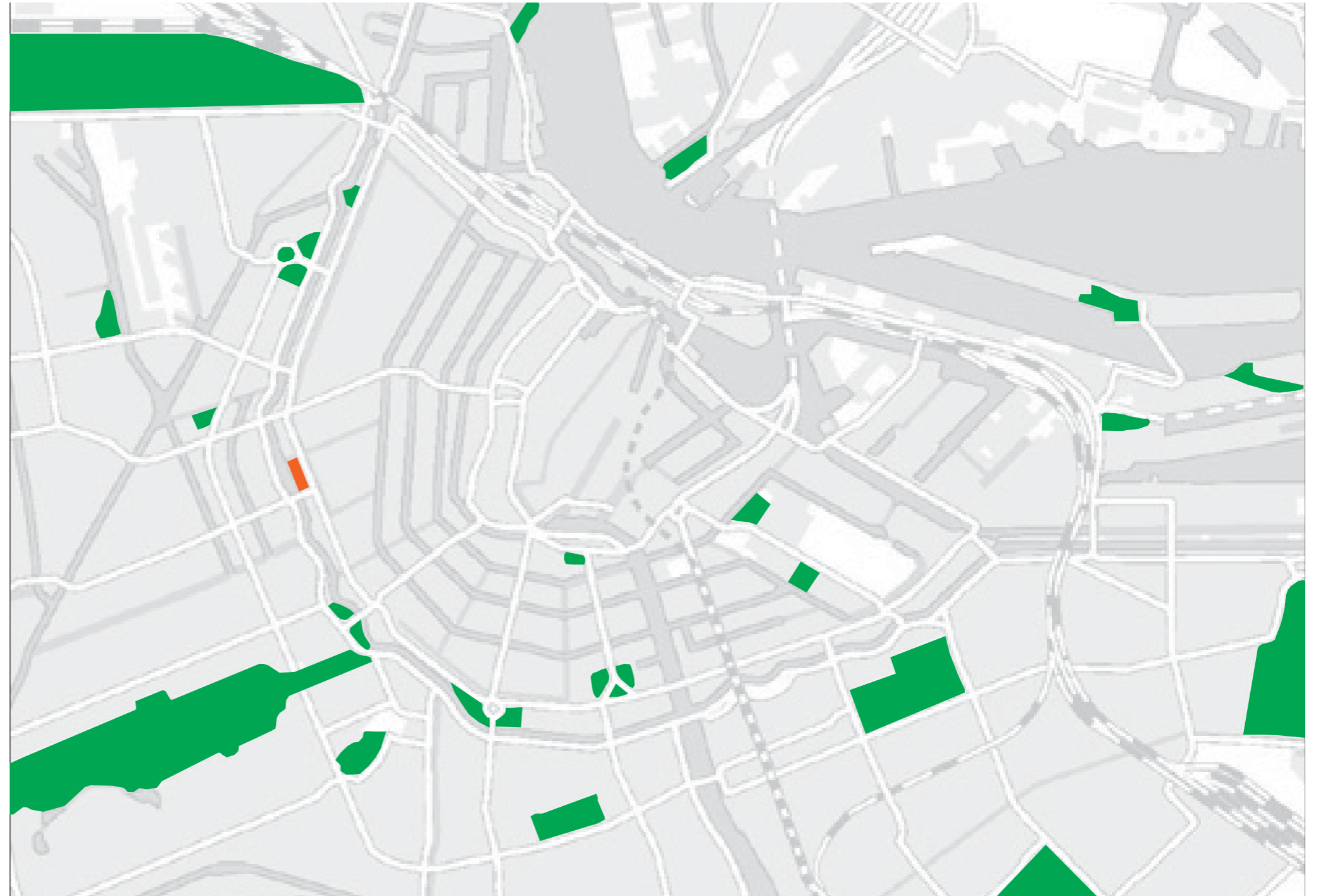
The market next to the Applemarket is called the Antiques centre Amsterdam and it is the largest permanent indoor antique market in the Netherlands.



# Present | Morphology

parks

This map shows all parks in Amsterdam.



# Present | Morphology

PROPERTY VALUE / M2

Legend



CONCLUSION:

- the closer to the citycenter, the more valuable the plots
- our plot lies within the most expensive parts of Amsterdam

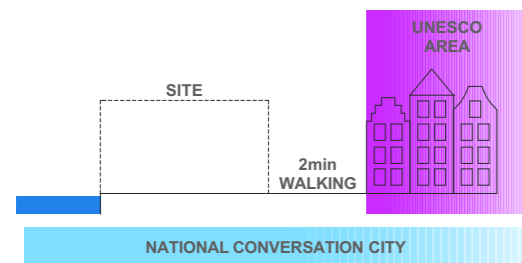
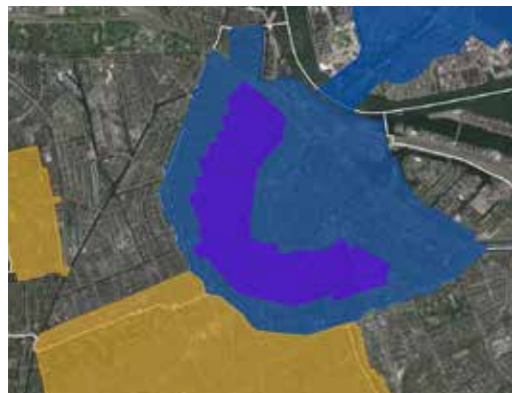
1:5000

# Present | Typology

## HERITAGE

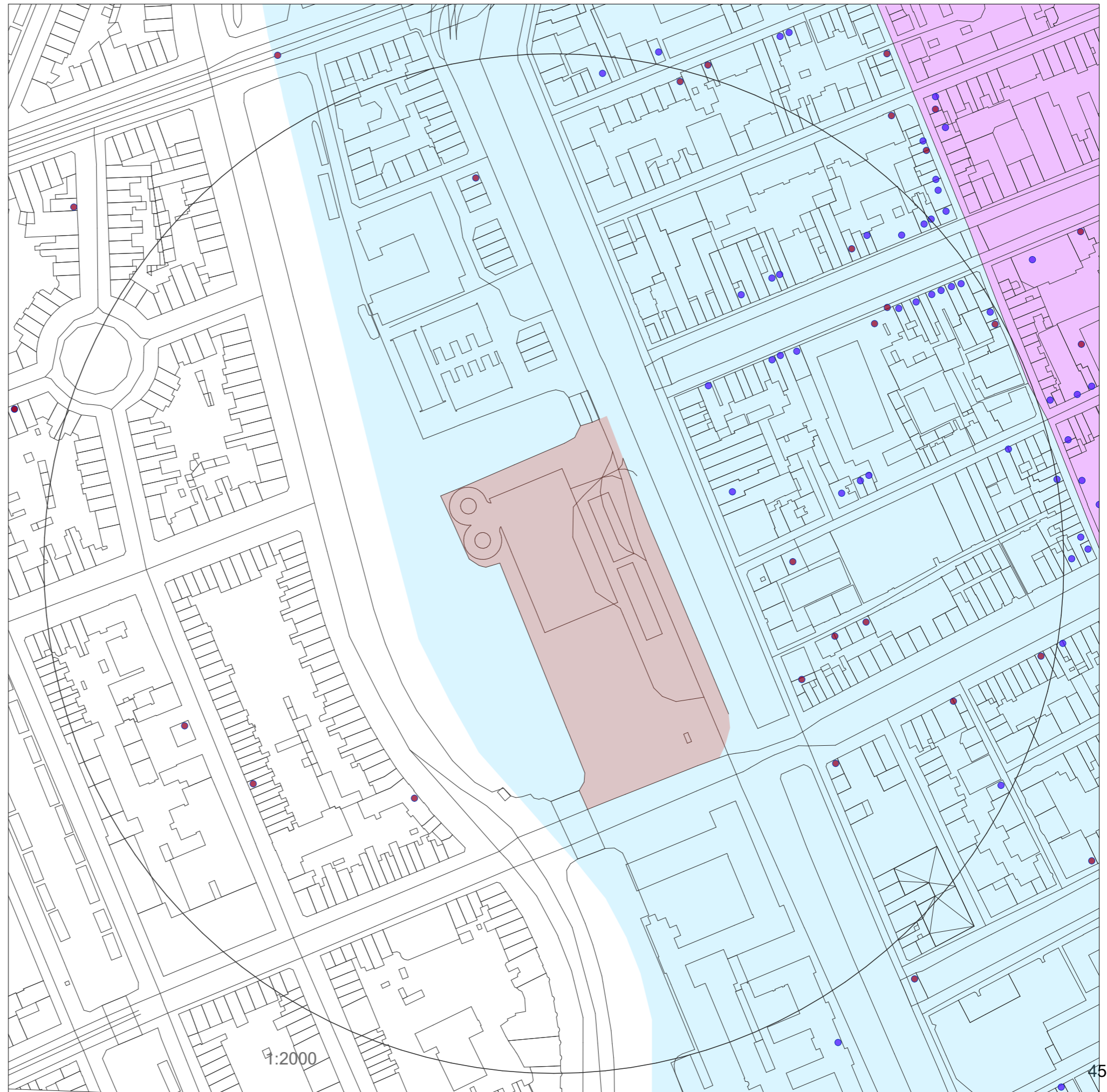
### Legend

- UNESCO World heritage
- National monument
- Local monument
- National conversation city
- Potential conversation city



### CONCLUSION:

- very attractive location, 2min walking to the UNESCO area & part of national conversation city; still relative big freedom compared to UNESCO area



# Present | Accessibility

## ACCESSIBILITY - TIME


1 Vondelpark  
Bike within 7min (1.6km)  
Foot within 18min (1.4km)  
PublicTransport 11min (every 5min)

2 Rembrandt park  
Bike within 10min (2.1km)  
Foot within 30min (2.1km)  
PublicTransport 11min (every 8min)

3 Western park  
Bike within 9min (2.1km)  
Foot within 27min (2.1km)  
PublicTransport 13min (every 10min)



Amsterdam centraal  
car 10min (2.6km)  
foot within 30min (2.3km)  
bike within 10min (2.3km)  
PublicTransport 12-14min (every 4-5min)

 Highway access 10min by car

## CONCLUSION:


- Very attractive location for all age groups


# Present | Accessibility

## TRANSPORT

### Legend

- Plusnetwork + Corridor CAR
- Plusnetwork PUBLIC TRANSPORT
- Plusnetwork BICYCLE
- Plusnetwork PEDESTRIANS
- Downtown area
- Canals
- Highway

 Amsterdam Elandsgracht - 7, 10, 17

 Amsterdam Elandsgracht - 170, 172, 174, 272, 280, 752, 753, 754, 758, 197, N70, N97

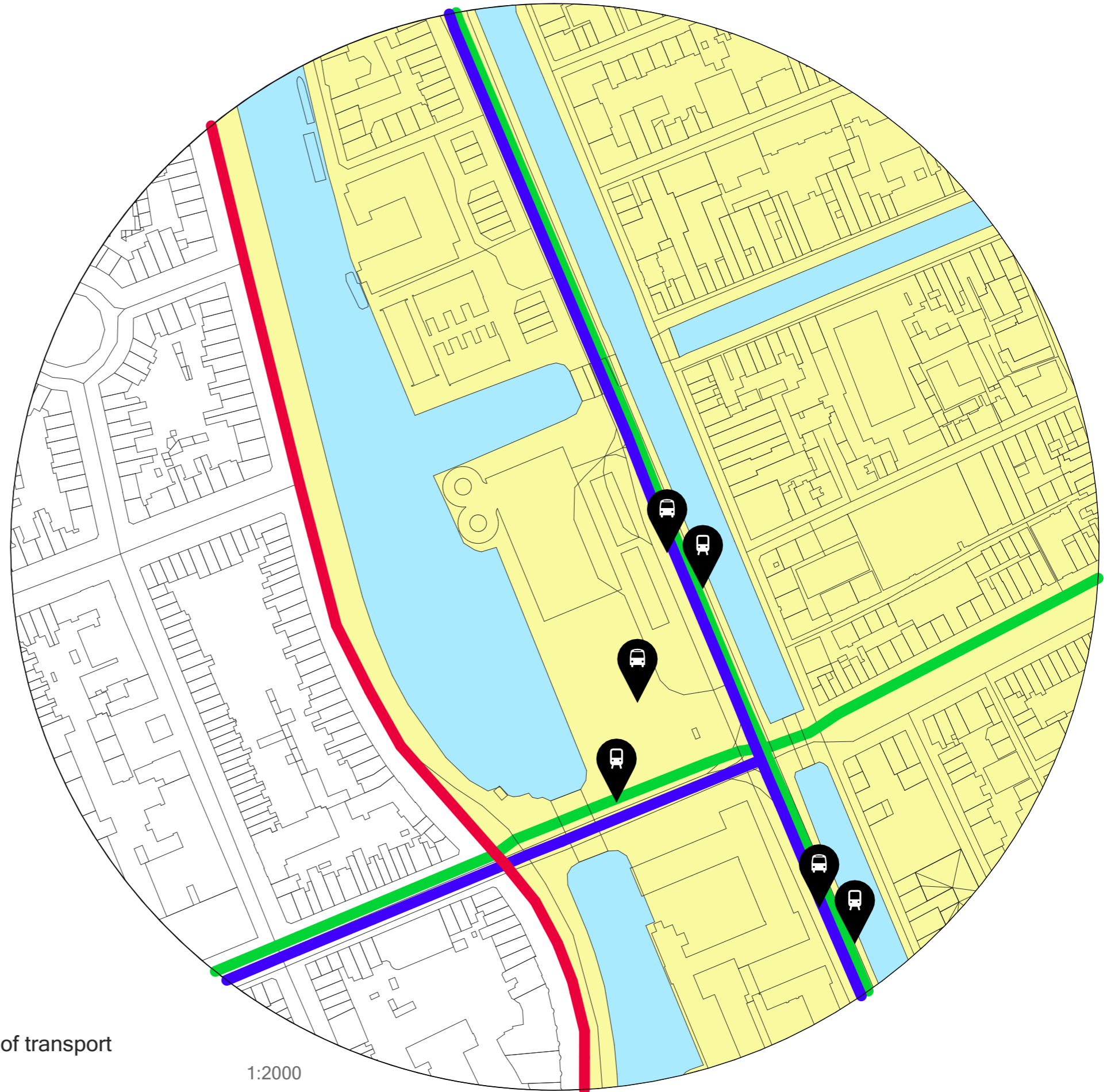
departure every 10min

 Highway access 10min by car



### CONCLUSION:

- great location in terms of access for all mayor modes of transport
- ideal for people without car



# Present | Accessibility

## CAR STATISTICS

### CARS PER HOUSEHOLD

### CARS PER KM2

### CONCLUSION



0.3

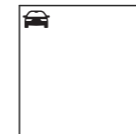


4774

little amount of cars per household because of city center location



0.5

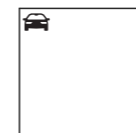


1379

cars per household rise while cars per m2 go down - obvious since further townparts are included



0.7



1 026

Rotterdam has more cars per household and a smaller amount of cars per m2 - the city is more spread than Amsterdam



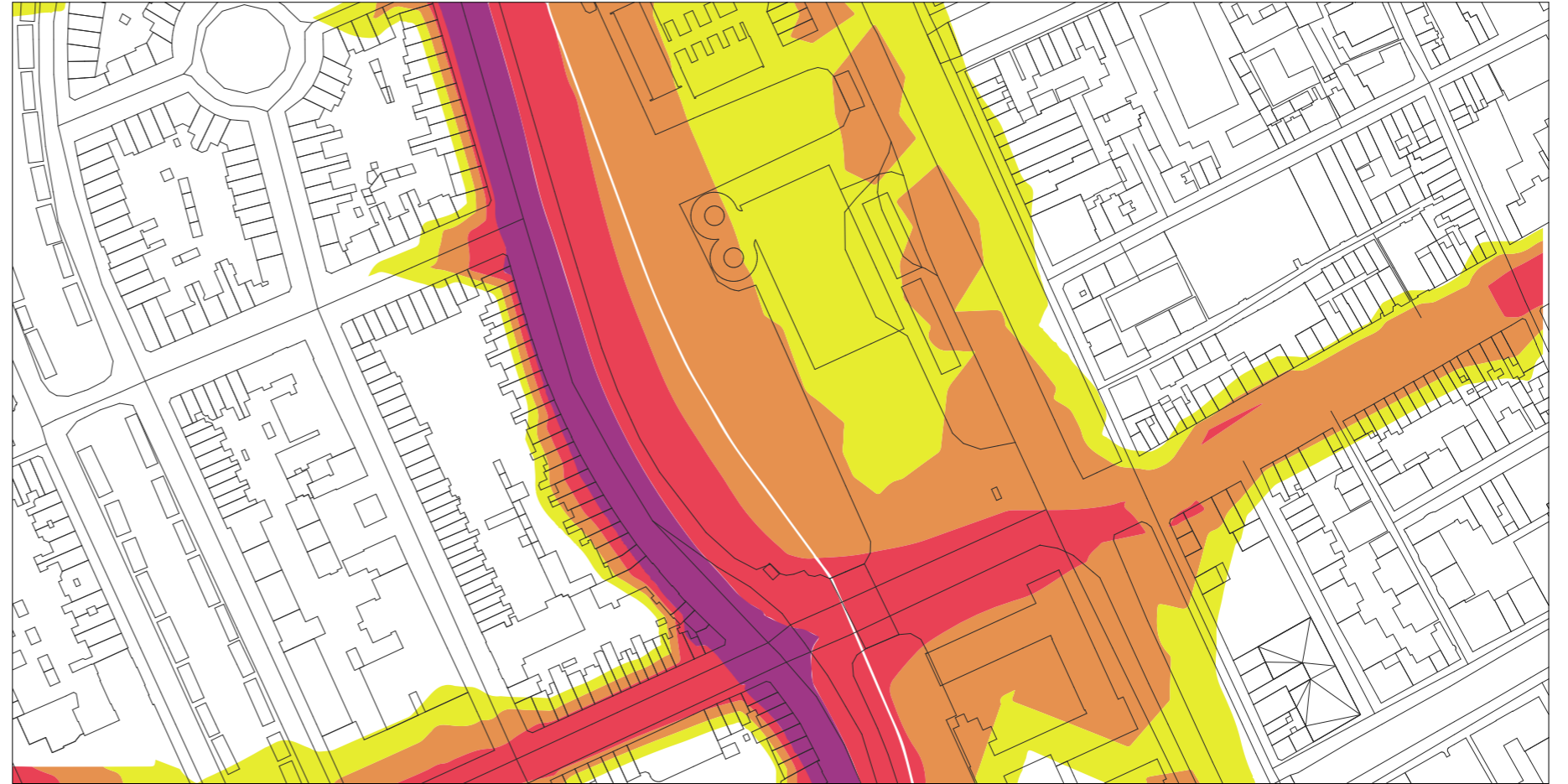
# Present | Accessibility

## NOISE

### Legend

- 70 dB or more
- 65 - 70 dB
- 60 - 65 dB
- 55 - 60 dB
- 50 - 55 dB (only at night)

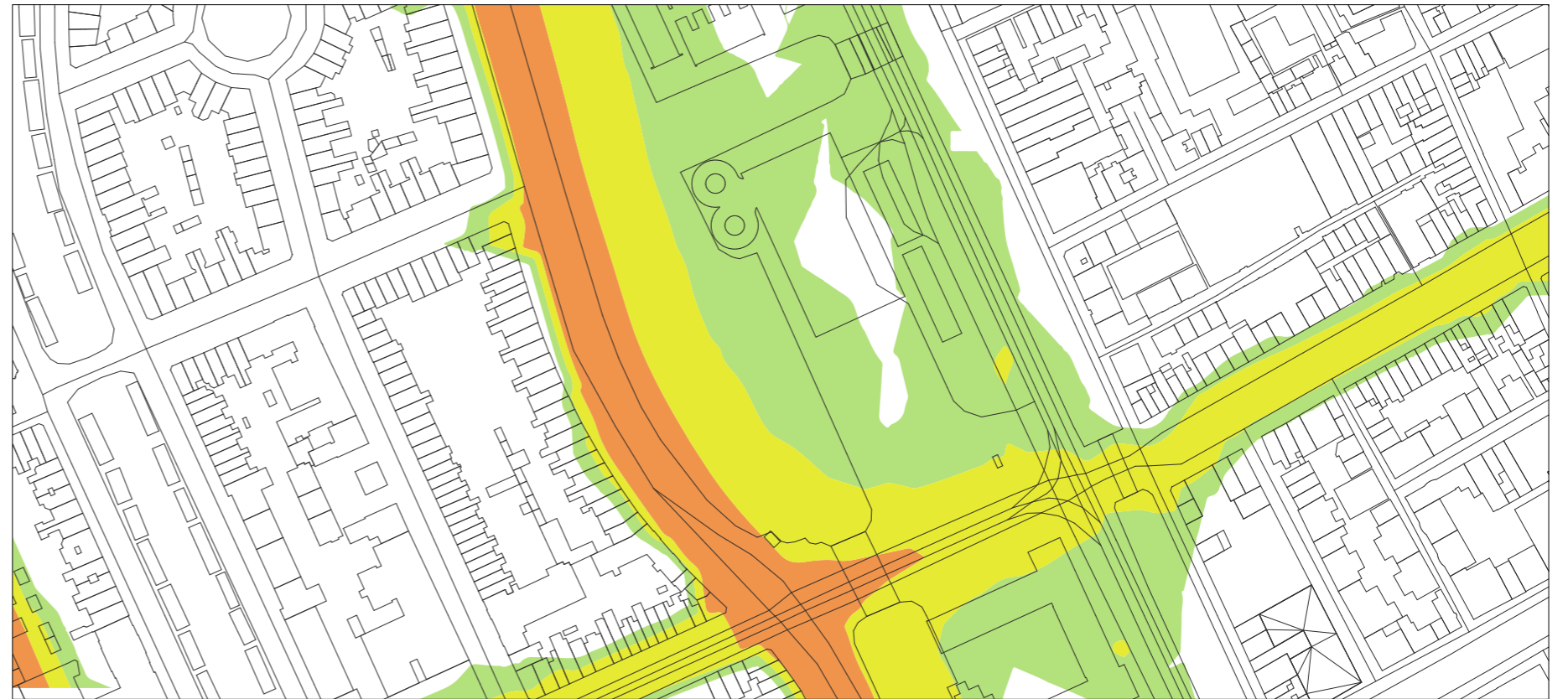
DAY



## CONCLUSION:

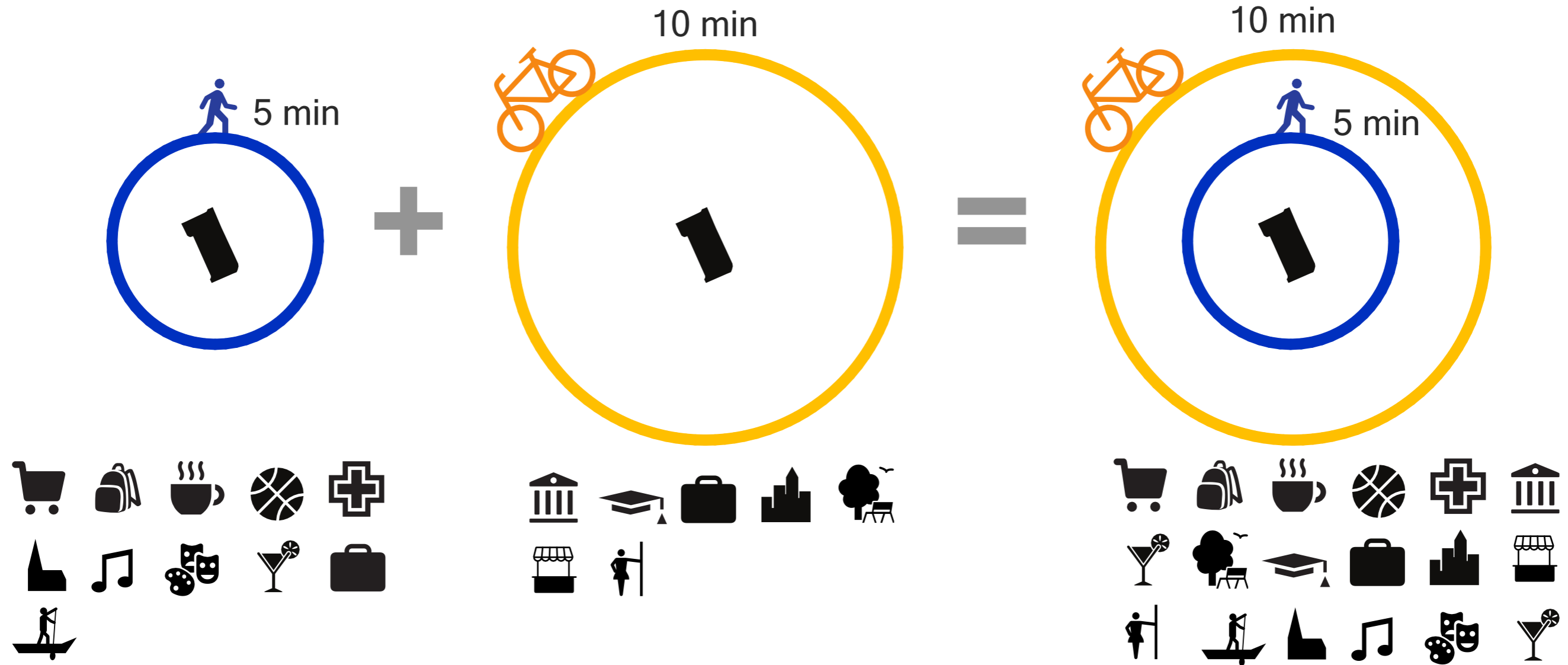
- acceptable noise for inner city housing
- much better conditions than at Nassaukade street (Singelgracht creates distance to the noise source)
- worst conditions at the site are at the S-E corner

NIGHT



# Present | Accessibility

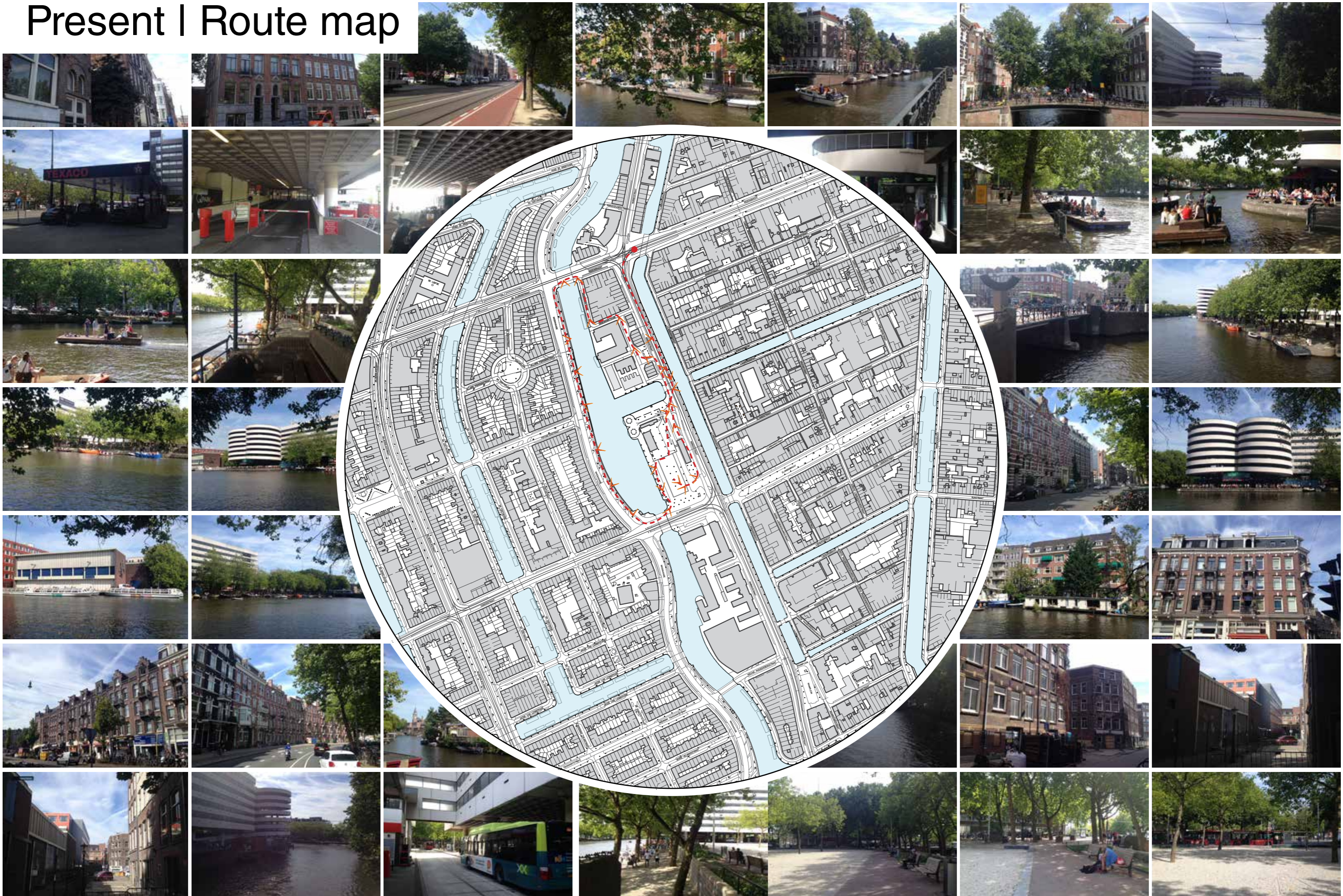
## ACCESSIBILITY



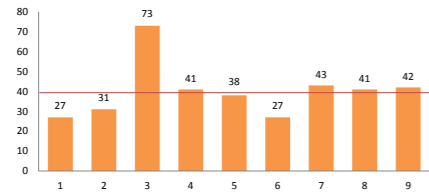
### CONCLUSION:

- Big variety of diverse activities in accessible distance
- Location suitable for all age groups
- Car does not have to be used on an every day base

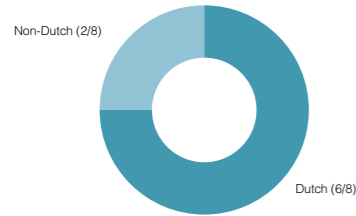
# Present | Route map



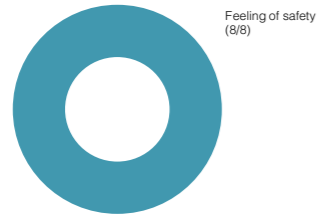
# Present | Interviews



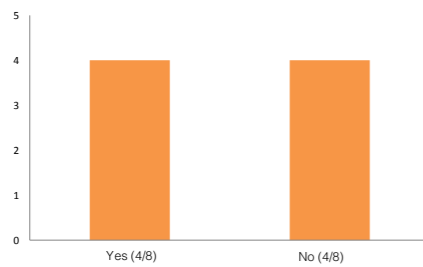
**Age dispersion**



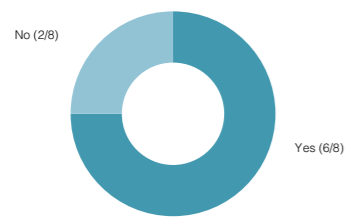
**Nationality**



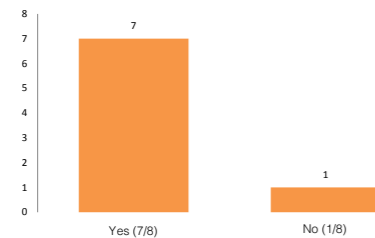
**Feeling of safety**



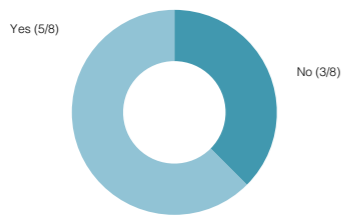
**Misses the uniqueness of the area**



**Would like to get rid of the parking lot**



**Need for more green areas**



**Need for more public functions**

**01. Paolo, ice cream seller from Naples**

Age: 41  
Nationality: Italian

- Lives in the suburbs of the city, definitely enjoys Amsterdam
- Works in the ice cream booth on the site
- Like the area especially looking at people from his booth
- Doesn't like the public toilet nearby
- He would definitely demolish the parking lot

**02. Pascal, self employed from Amsterdam**

Age: 42  
Nationality: Tanzanian

- Lives in the city center
- Has his business in Amsterdam, comes to the park every day for having lunch here
- Doesn't like the pebbles in the park, would much more like grass and fountains where children can play, like that he would come here more often with his children
- He is not disturbed by the parking lot
- Would like more restaurants in the area
- Definitely prefers old buildings over new ones

**03. Anne, pensioner from Amsterdam**

Age: 73  
Nationality: Dutch

- Lives in the city center of Amsterdam
- Comes through the Apple market every Saturday when going to the market
- Likes the old buildings of Amsterdam but doesn't like modern buildings
- Definitely wouldn't want to live only in Amsterdam
- Considers the city safe, even at night
- Likes that the inhabitants of the city are so multinational

**04. Naz, occasional worker from Amsterdam**

Age: 41  
Nationality: Pakistan

- Lived in London, Spain and Portugal before, but likes the Netherlands the most because it is the most liberal and considers that important for raising children
- Doesn't like the parking lot
- Feels safe in the city and on the peninsula of the Apple market but doesn't like this place when the homeless shelter is open because of the drug addicts
- Would like to add street food stalls (grab and go), and not some fancy restaurants
- Would like more unique public activities on the peninsula that attract people from Amsterdam to the place, like bowling, etc.
- Likes the old houses

**05. Joost, bus driver from Amsterdam**

Age: 38  
Nationality: Dutch

- Bus driver, comes frequently but for a short time to the peninsula
- Doesn't like the parking garage but if removing he would like some parking space instead somewhere else
- Doesn't like the pebbles on the square, would like fountains and grass
- Feels safe in the city
- Doesn't like the homeless shelter under the parking lot

**06. Renske and Jan, economists from Amsterdam**

Age: 27, 31  
Nationality: Dutch

- Live in the building NW to the peninsula of the Apple market
- Well aware of what's going on in the neighborhood
- Would definitely not want more retail in the new complex
- Would not keep the parking lot for the future developments, also consider it too expensive
- Would like more green in the area
- Like the promenade leading to the De Waterkant

**07. Eduart, student from Amsterdam**

Age: 27  
Nationality: Dutch

- Walks his dog here very often
- Lives in the city center
- Doesn't like that they put pebbles instead of grass on the square, feels a bit useless like this
- Would not want more retail or dining functions on the peninsula
- Would like to add more cultural functions
- Definitely would like to keep the De Waterkant and the promenade and the possibility of mooring the boats
- Likes the old houses but doesn't like the modern ones

**08. Daphne, teacher and shopkeeper from the countryside**



Age: 43  
Nationality: Dutch

- Consultant in the piano shop on the site
- Lives 25 km away from Amsterdam in the countryside
- Definitely doesn't want to live in Amsterdam because of the traffic and noise
- Doesn't like the homeless shelter so close because of the drug addicts though they don't really disturb her
- Feels safe in Amsterdam
- Very curious about what could be done in the area
- Likes the old houses and the view on them over the water

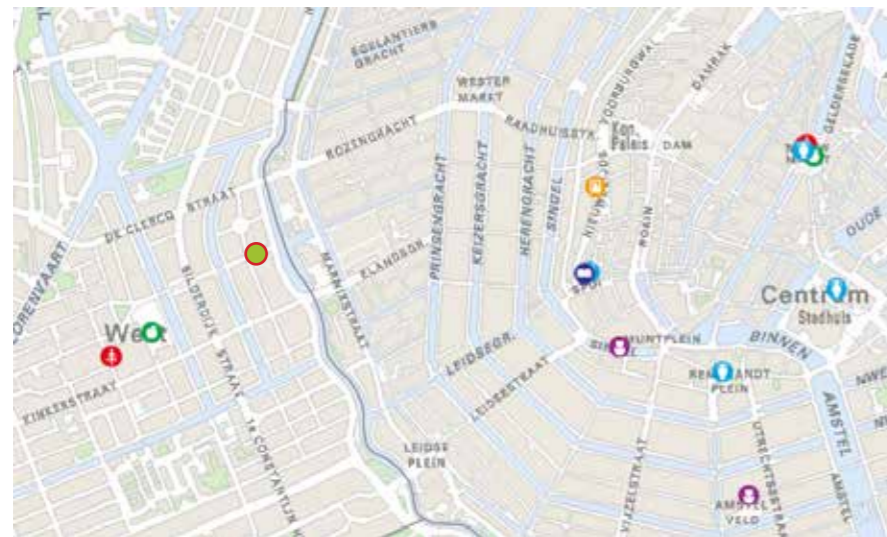
# Present | Cafes, Bars

## CAFES & BARS IN THE AREA

### Legend

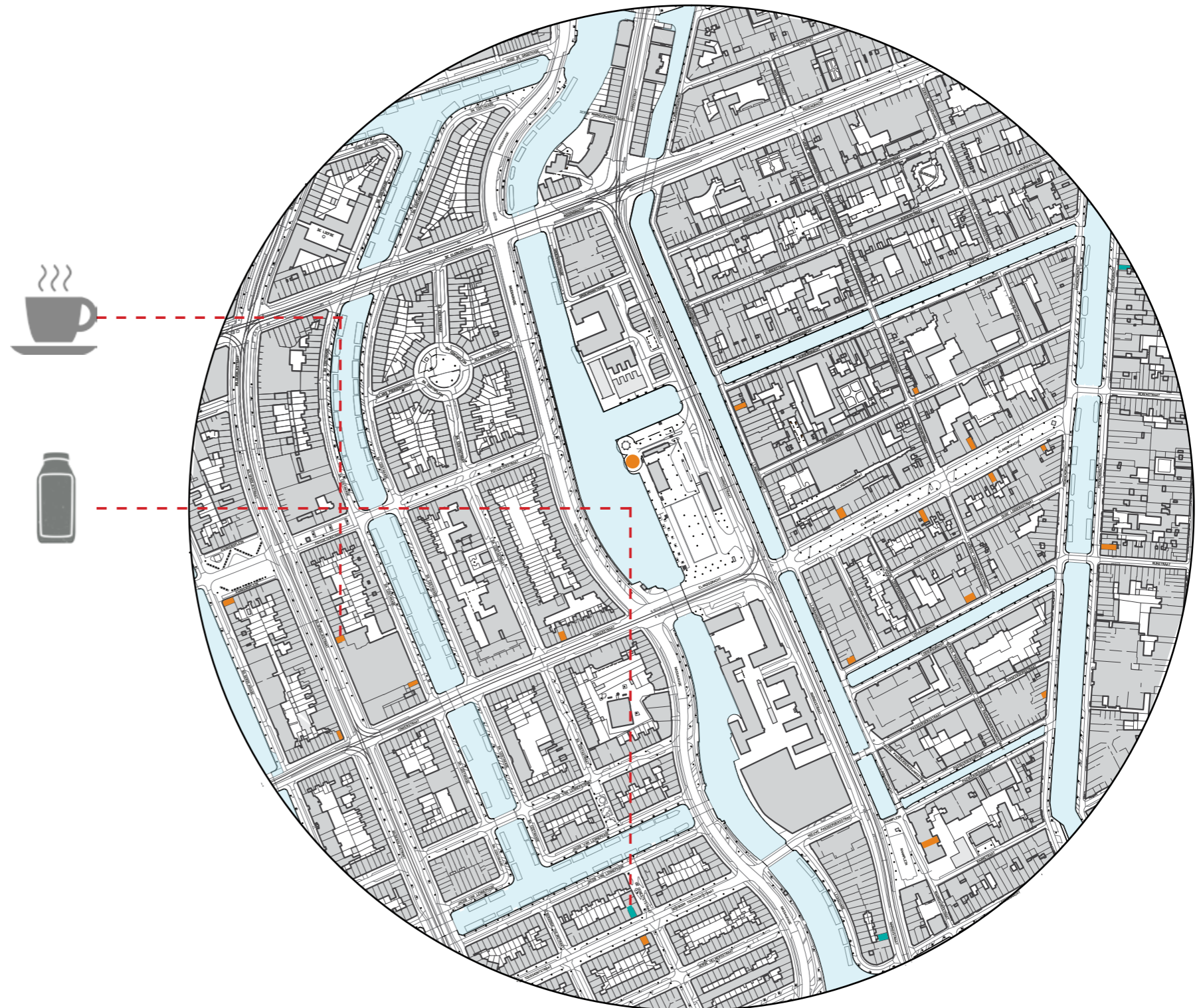
-  Juicery
-  Cafe

### Markets of Amsterdam



### SITE INFO

- 18 cafes and 3 juicereries are located within a 500m radius
- The majority of the cafes are located in NE-SW direction: the directions of the city center and the museum areas
- Cafes are mainly located on corners with those of higher ranking being on the canal sides



1:5000

# Present | Hotels

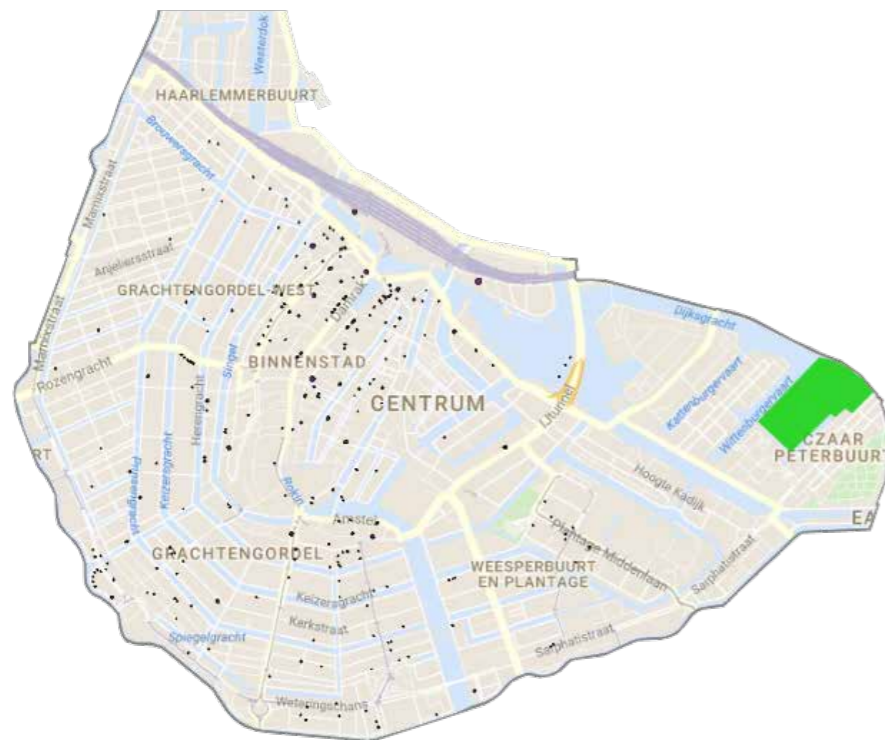
## HOTELS IN THE AREA

### Legend

■ Hotel

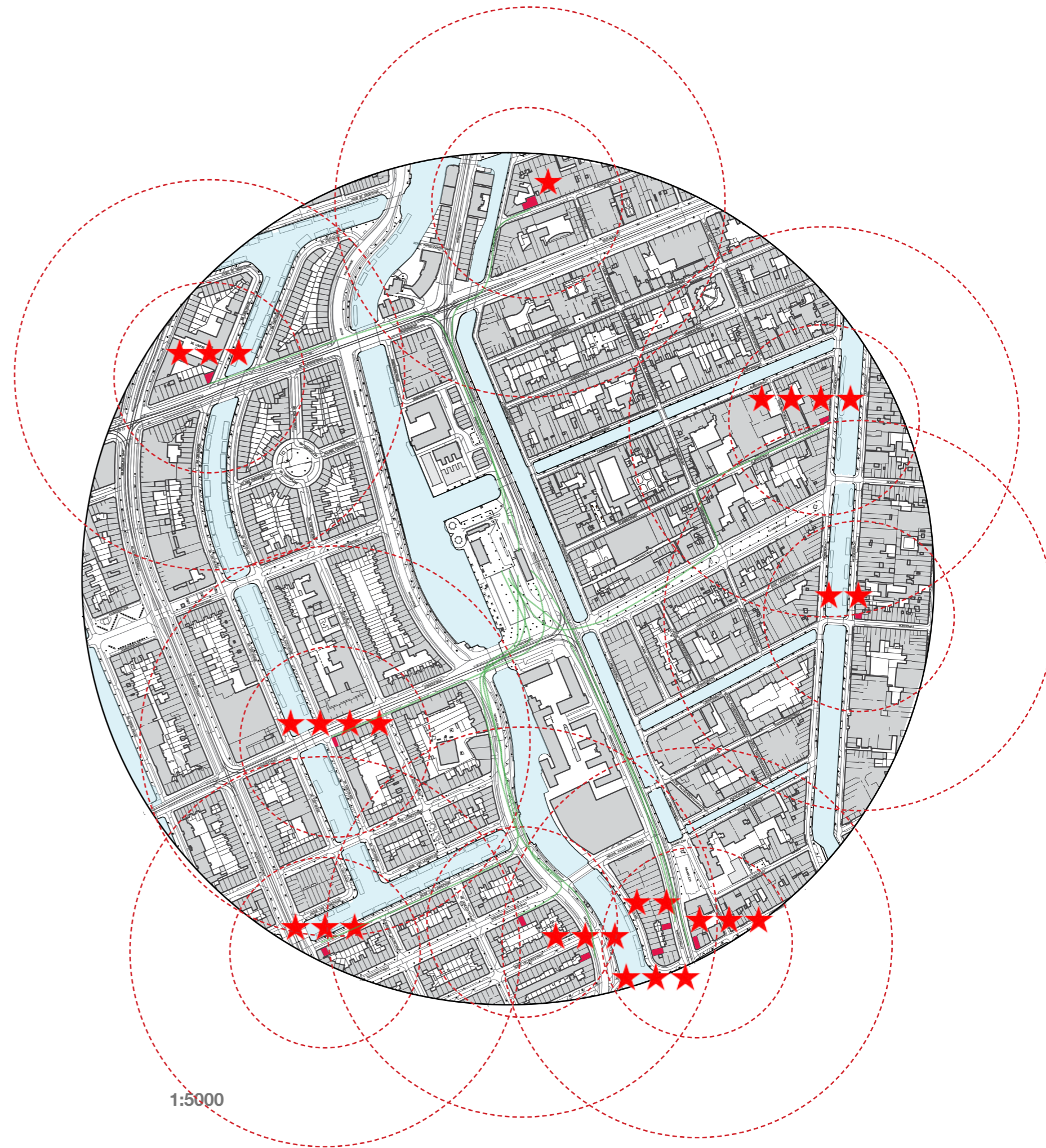
★ Hotel rating

○ 50m, 100m radii of hotels



### SITE INFO

- 11 hotels within 500m radius from the site
- Hotels are mainly located on corners or close to corners
- Hotels are along the streets that have canals
- The area has 3-4 star hotels (due to close proximity of downtown area, and museums)



1:5000

# Present | Restaurants

## RESTAURANTS IN THE AREA

### Legend

 Restaurants

### Restaurants of Amsterdam



### SITE INFO

- Within the 500m radius range of the site 16 restaurants are located
- The closest restaurant is 25m away
- The average distance of restaurants from the site within this range is 240m

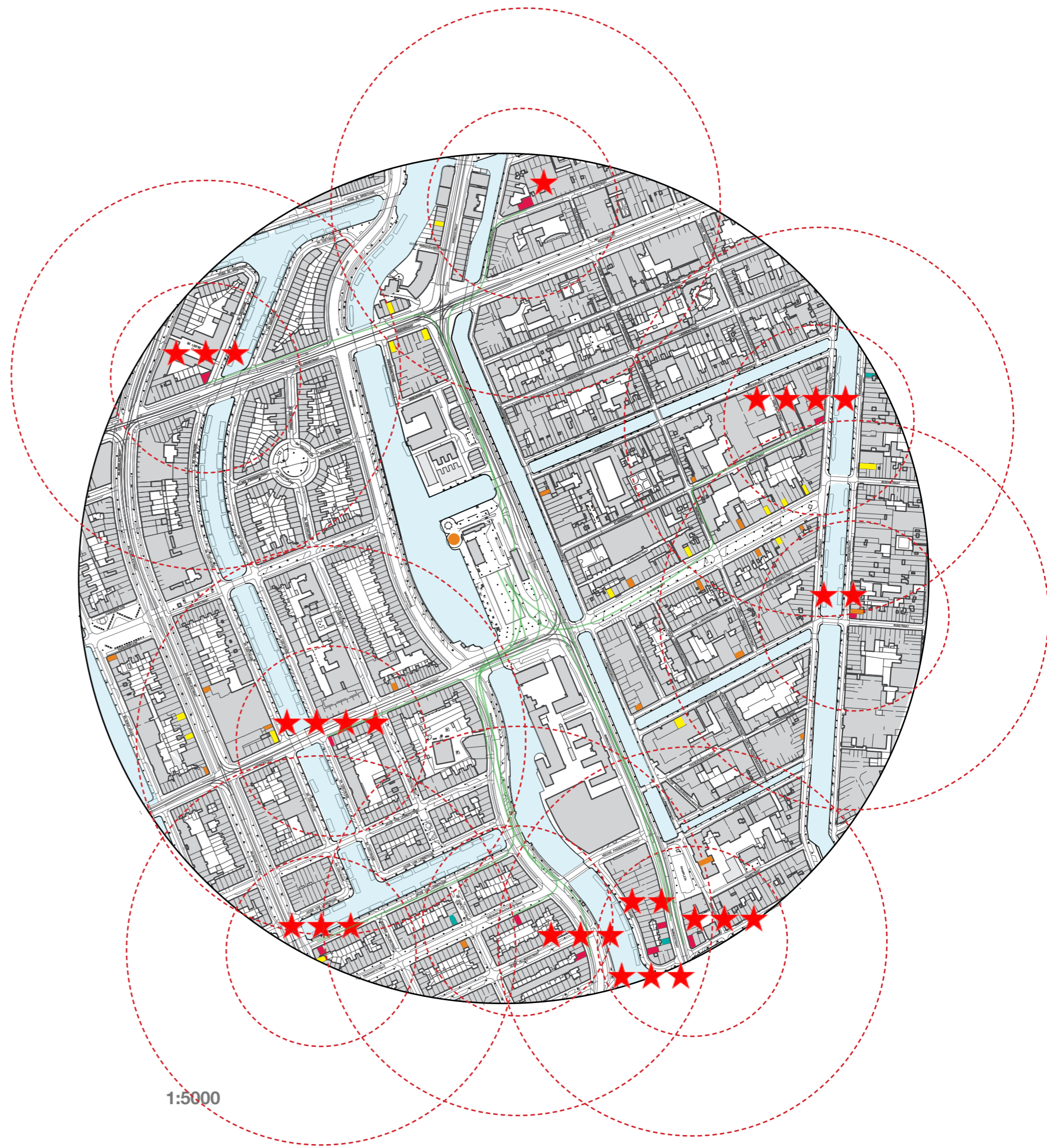
1:5000

# Present | Hospitality

## RELATIONS OF HOTELS TO THE SITE AND TO THEIR SURROUNDINGS

### Legend

-  Hotel
-  Restaurant
-  Juicery
-  Cafe
-  Hotel rating
-  50m, 100m radii of hotels
-  Shortest way to site from hotel



### CONCLUSIONS

- Within 50m each hotel has at least 2 restaurants
- Within 100m each hotel has at least 3 restaurants and a cafe
- Restaurants and cafes are mainly located within the 100m radius of hotels
- More hotels result in more restaurants in the overlapping areas

1:5000

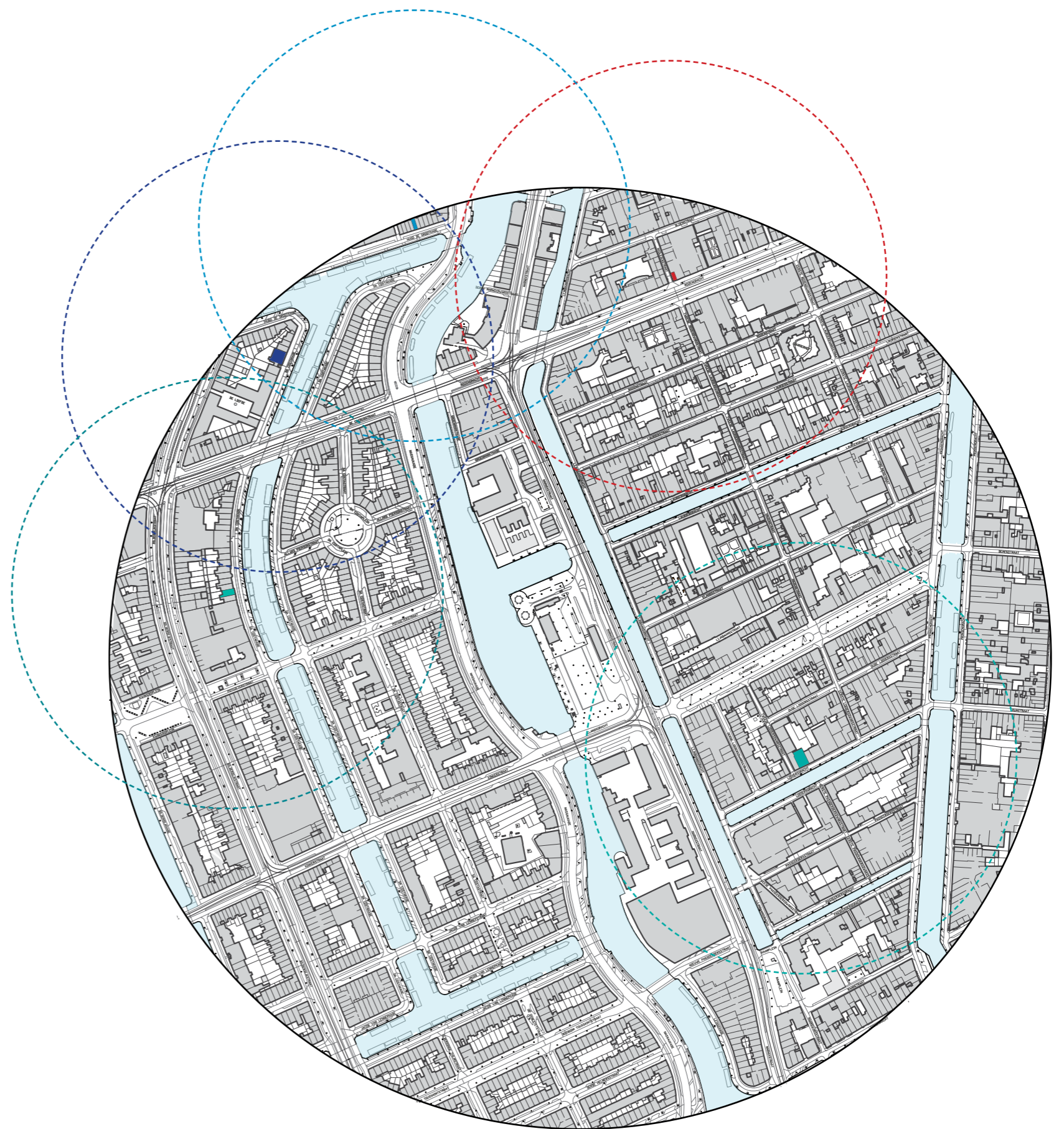
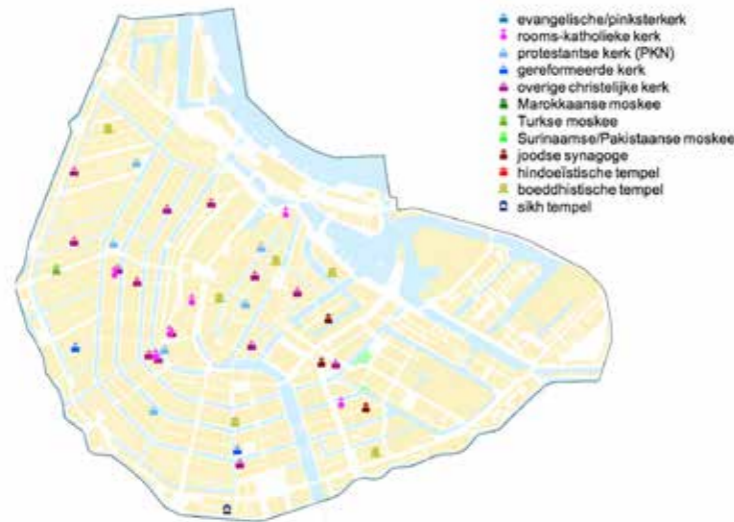
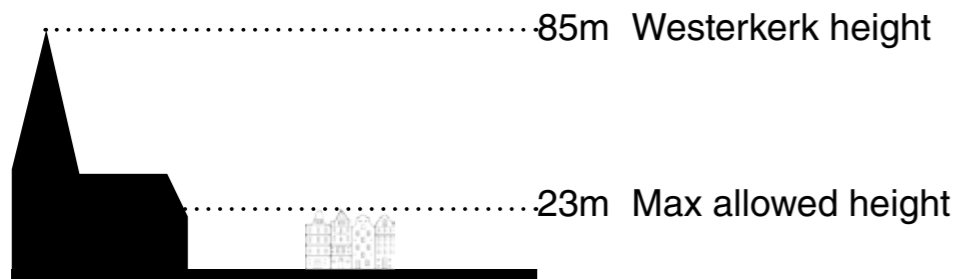


# Present | Churches

## CHURCHES, TEMPLES AND THEIR AGGLOMERATION

### Legend

- Roman Catholic Church
- Protestant Church
- Reformed Church
- Christian Church other
- Turkish Mosque
- 100m vicinity of temples and churches



1:5000

# Present | Waterways

## CANAL CRUISE ROUTES

### Legend

- - - Route #1
- - - Route #2
- - - Route #3

### Lock complex IJmuiden



### SITE INFO

- 20+ km of waterways throughout the city
- Over a dozen canal cruise companies in the city



Main canal cruise routes

# Present | Ecology

## WILDLIFE HABITAT AND POLLUTION IN THE CITY

### Legend

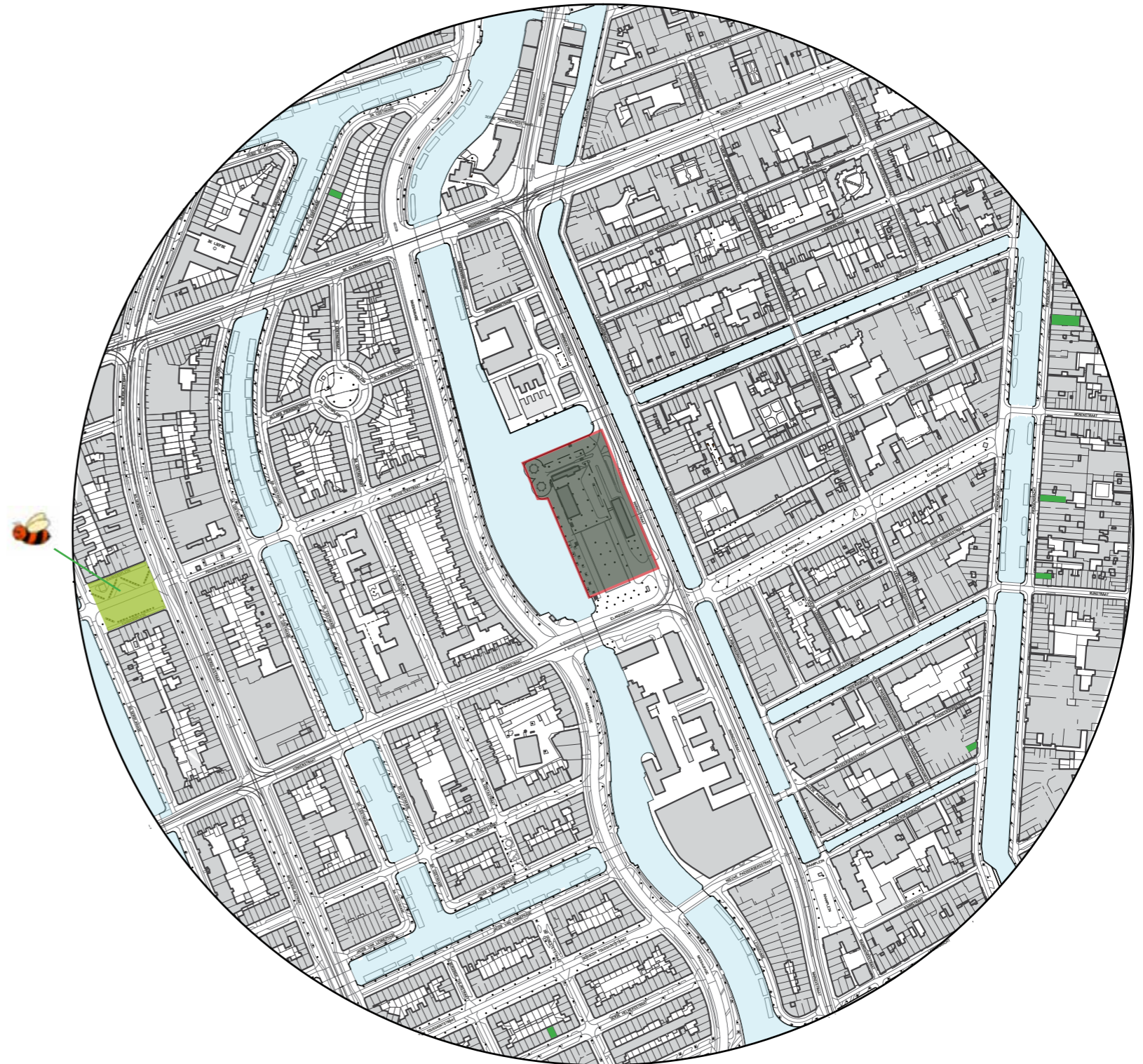
- Groundwater Pollution
- Green roofs
- Wild Bees
- Wild Bees

Gas factory on the site in the XIX<sup>th</sup> century



### SITE INFO

- Large scale ground water pollution due to the gas factory and sugar refinery plants that existed on the site in the XIX<sup>th</sup> century
- Within a 500m radius zone 6 green roofs were developed, thus ensuring a local micro retreat from the city
- Located further away from parks, within 500m, the major wildlife habitat consists of wild bees








1:5000

# Present | Ecology

## TREE PLANTATIONS OF THE SITE

### Legend

-  Trees 100+ years
-  Special Plants
-  Trees with 30-50cm dia Trunk
-  Trees with 50+cm dia Trunk
-  Wall Plants

### Site impression from the Nassaukade



### SITE INFO

- Richly populated waterfronts with trees
- Mainly deciduous tree species
- Within a 500m radius mainly trees with 30-50cm diameter trunks
- Within the close vicinity of the site several 100+ years old protected trees on the canal sides
- Within the urban blocks several exotic and protected tree species that were planted by the local inhabitants

1:5000

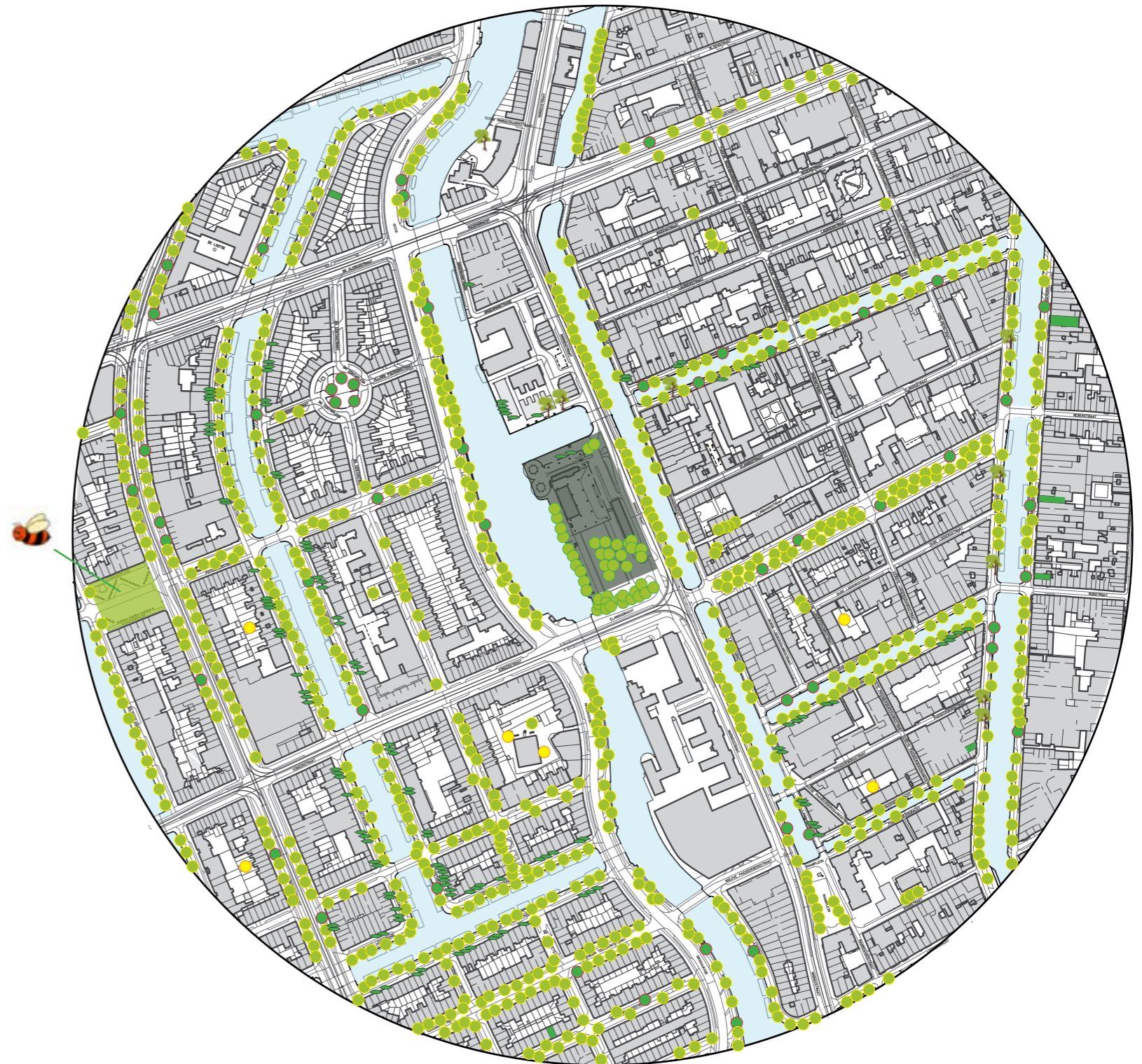
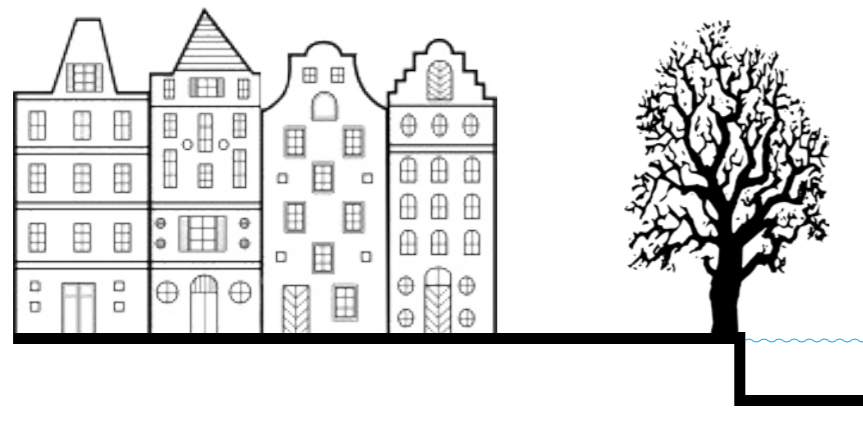
# Present | Ecology

## URBAN ECOLOGY AND ITS RELATIONS TO THE BUILT ENVIRONMENT

### Legend

-  Groundwater Pollution
-  Green roofs
-  Wild Bees
-  Trees 100+ years
-  Wild Bees
-  Special Plants
-  Trees with 30-50cm dia Trunk
-  Trees with 50+cm dia Trunk
-  Wall Plants

### Tree comparison with facades



### CONCLUSIONS

- Large scale groundwater pollution on the site due to the former gas factory
- More than 55 large trees (trunk diameter 30-50cm) are located on the site
- 17 out of these are potentially threatened by a possible construction
- Almost every street contains at least one 100 years+ tree with 50cm+ trunk diameter

1:5000











# FUTURE

Alexandra Bergsma  
Laurens Kaatee  
Roely Rijpkema  
Gonzalo Samaniego

## TABLE OF CONTENTS



Living



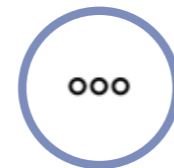
Working



Mobility



Flora & Fauna



Others



References

Conclusion

### Demography

Ageing will be more dominant due to the high percentage it has in Amsterdam. Expected is that there will be also an influx of young professionals.

### Increase of population

The prognoses is that the population of Amsterdam will increase with **70.000 people** up to 2040.

### Increase of dwellings

Due to the increase of population **40.000 dwellings** are expected to be needed up to 2040. The focus area's for these new dwellings are shown on this map.

### Demand

The growing demand for dwellings will come from urban families, high educated starters and top incomes. There is a negative trend in the need for social housing.

### Studenthousing & shortstay

Amsterdam will have an increasing demand for studenthousing aswell as shortstay (expats).

### Metropolitan area

Connecting the city of Amsterdam with neighboring cities will offer more choice in terms of living to it's population

### Identity

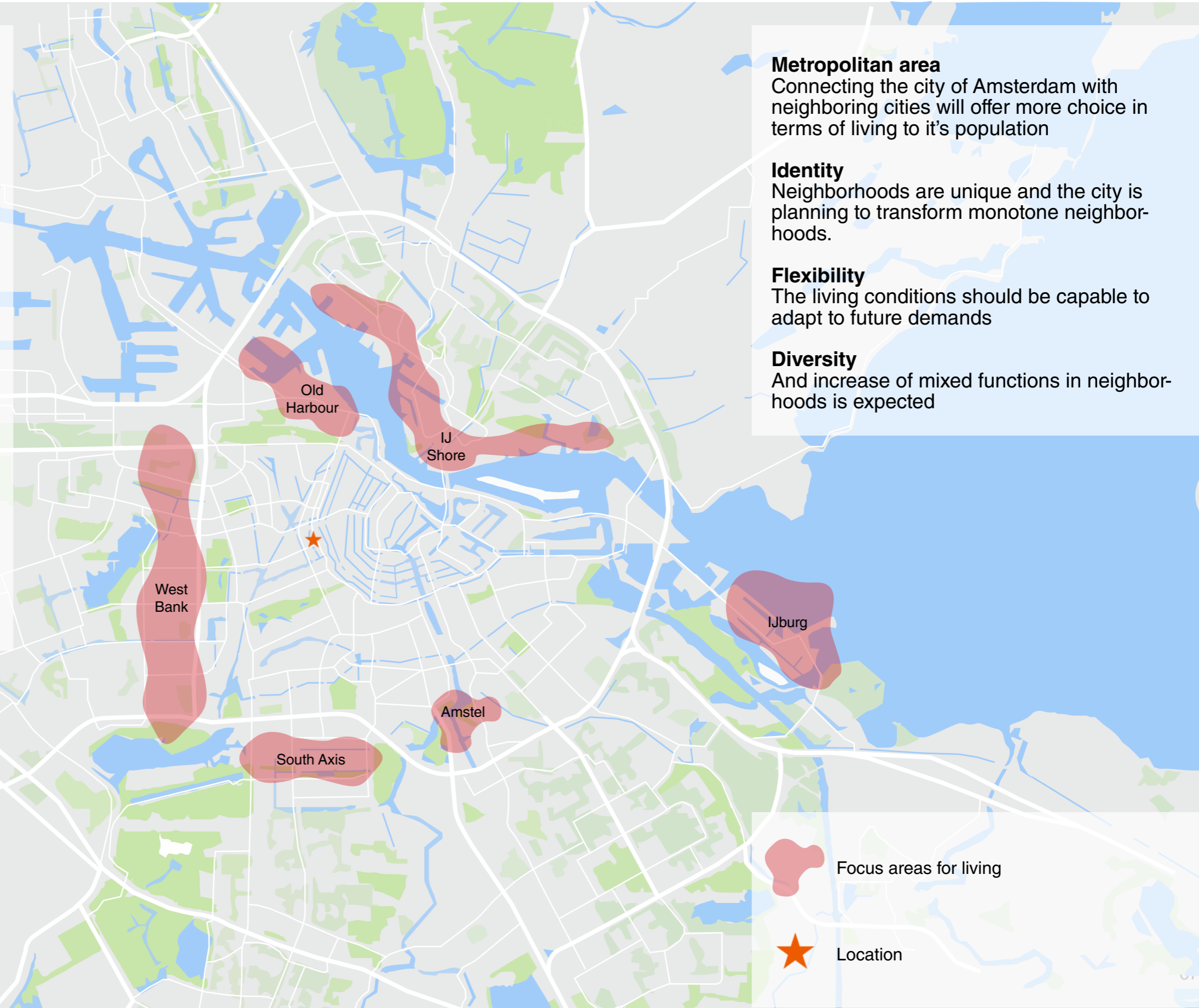
Neighborhoods are unique and the city is planning to transform monotone neighborhoods.

### Flexibility

The living conditions should be capable to adapt to future demands

### Diversity

And increase of mixed functions in neighborhoods is expected



## Entrepreneurship

Amsterdam has the ambition to grow in terms of the number of small companies (start ups).

## The right place

Diversity is important in greater Amsterdam but there are also a few hubs present and they are expected to grow due to their location (South Axis, Schiphol Airport and Sloterdijk).

## Transformation

Many old harbors and industrial sites are the place new opportunities arise. Amsterdam is aiming to allocate places for starting business mainly in the creative sector.

## STRONG SECTORS

### Financial & Business Services

Amsterdam is the countries financial heart and has many worlds largest financial corporations located in the city. It generates 22,5 % of the gross regional product.

### IT

Half of the countries IT revenue is generated in Amsterdam and it is expected to keep growing

### Creative Industries

Many creative industries are based in Amsterdam and this notion generates attracts more in the future

### Life Sciences

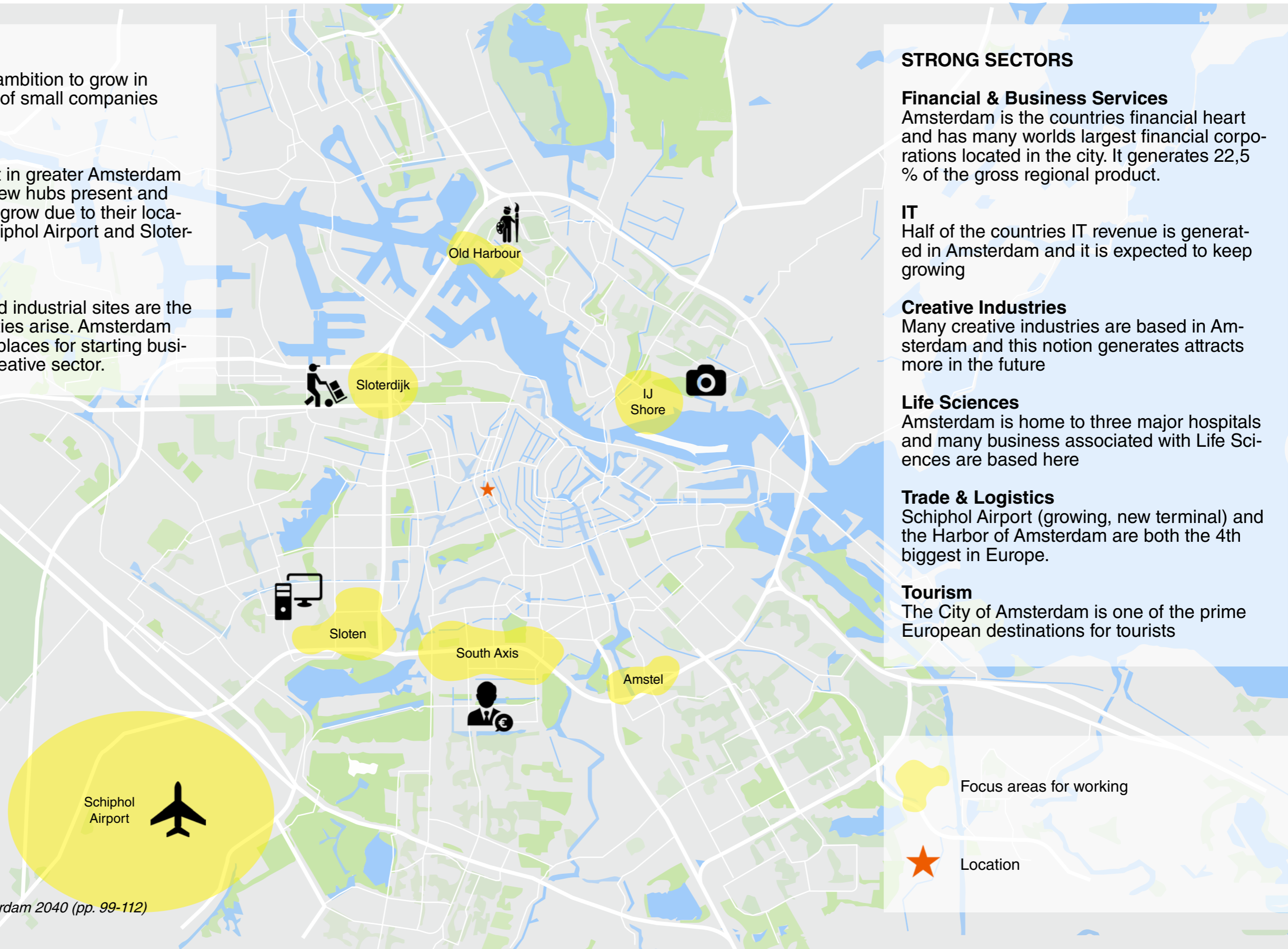
Amsterdam is home to three major hospitals and many business associated with Life Sciences are based here

### Trade & Logistics

Schiphol Airport (growing, new terminal) and the Harbor of Amsterdam are both the 4th biggest in Europe.

### Tourism

The City of Amsterdam is one of the prime European destinations for tourists

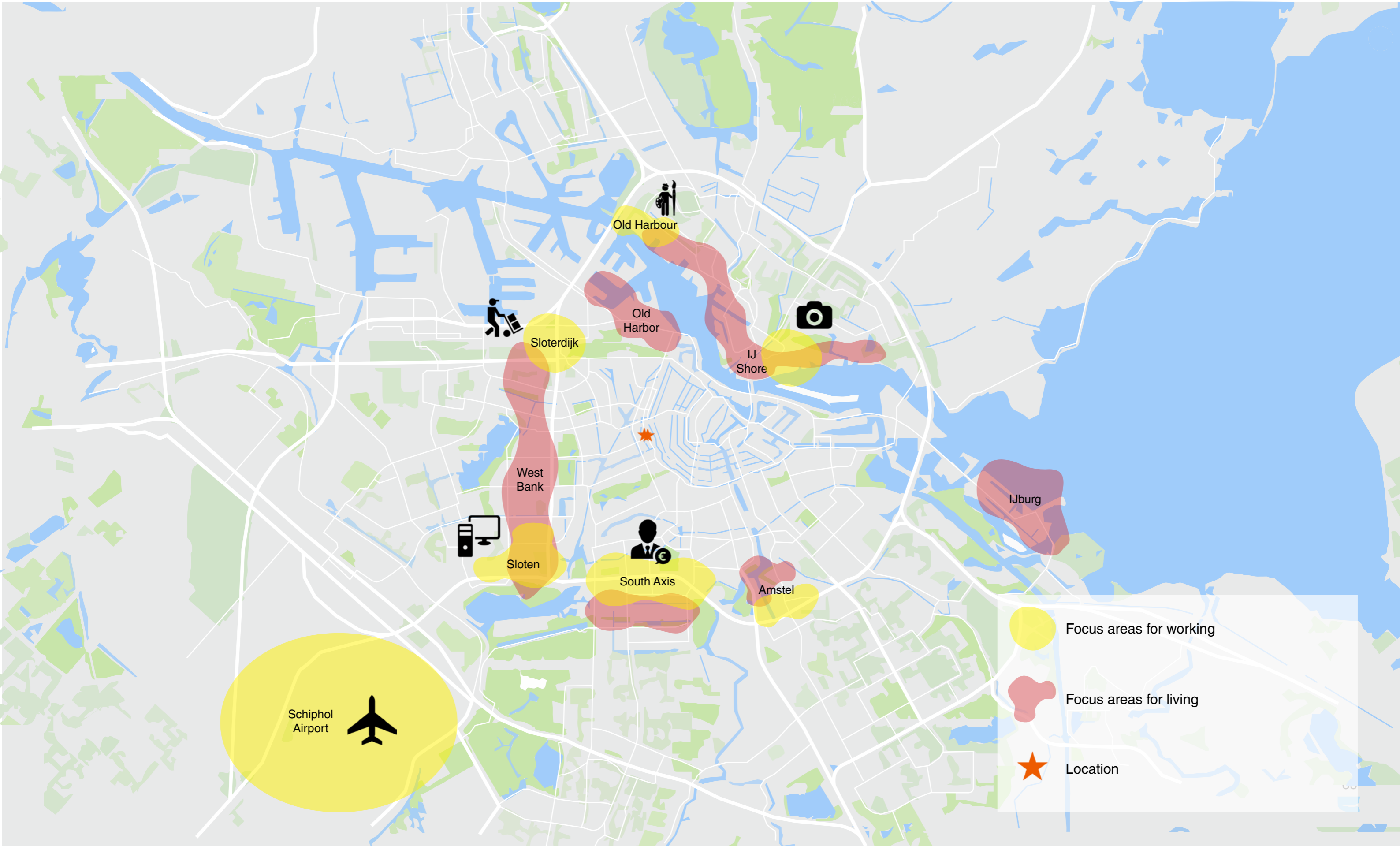


Focus areas for working

Location



# LIVING + WORKING





# 2010-2020: NEW LIVING-WORKING DEVELOPMENTS

## 1. Buiksloterham: 2008-2030

2700 dwellings, 2000 DIY dwellings

## 2. Houthaven: 2010-2020

2700 dwellings, 70 boat houses

## 3. Katharinacomplex: 2016-

132 dwellings, diverse spaces

## 4. Oostpoort Oost: 2015-

400 dwellings, retirement complex

## 5. Marineterrein: 2015-

To be specified

## 6. Center Area North: 2015-

To be specified

 In development

 New developments



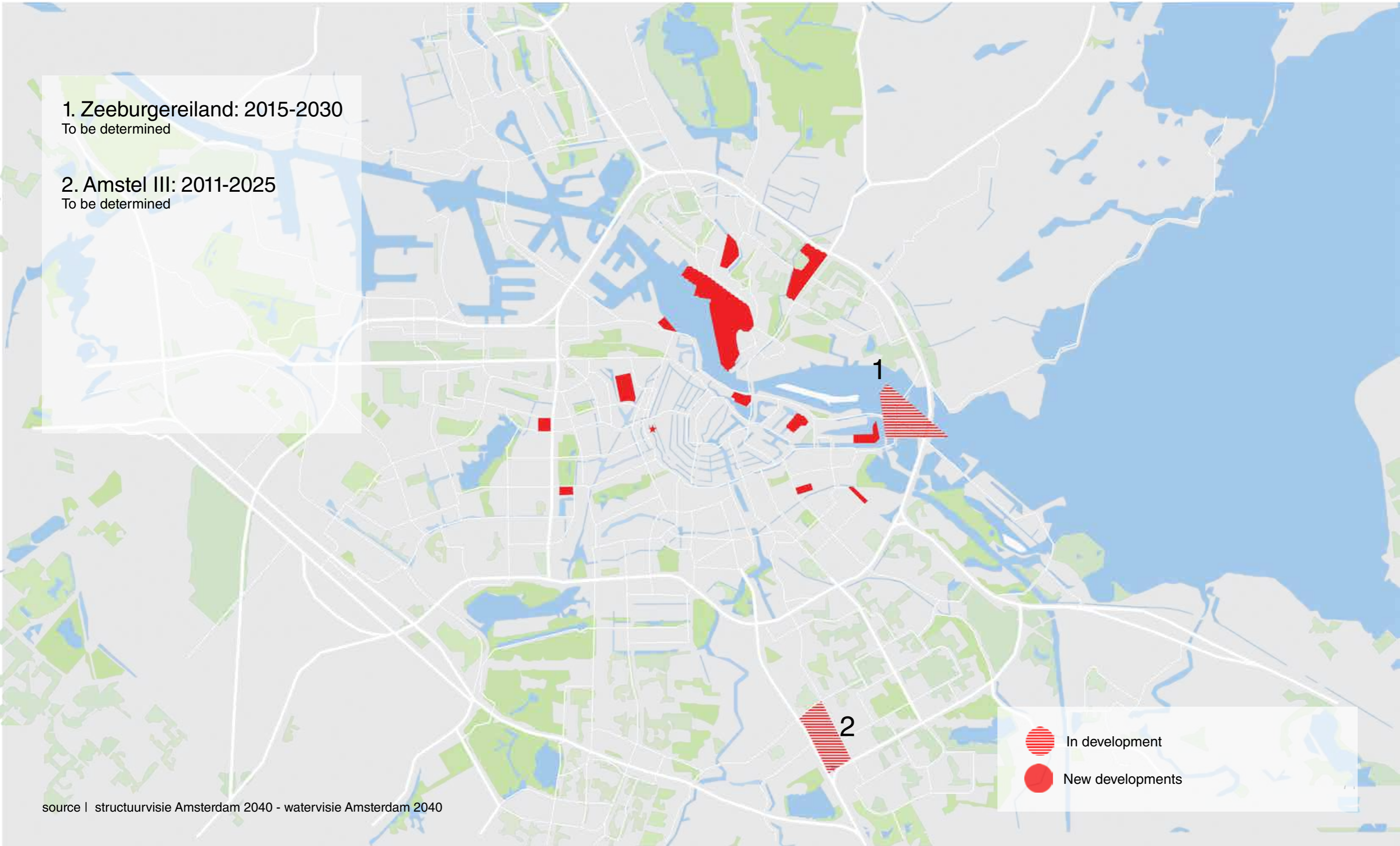
# 2020-2030: NEW LIVING-WORKING DEVELOPMENTS

1. Zeeburgereiland: 2015-2030

To be determined

2. Amstel III: 2011-2025

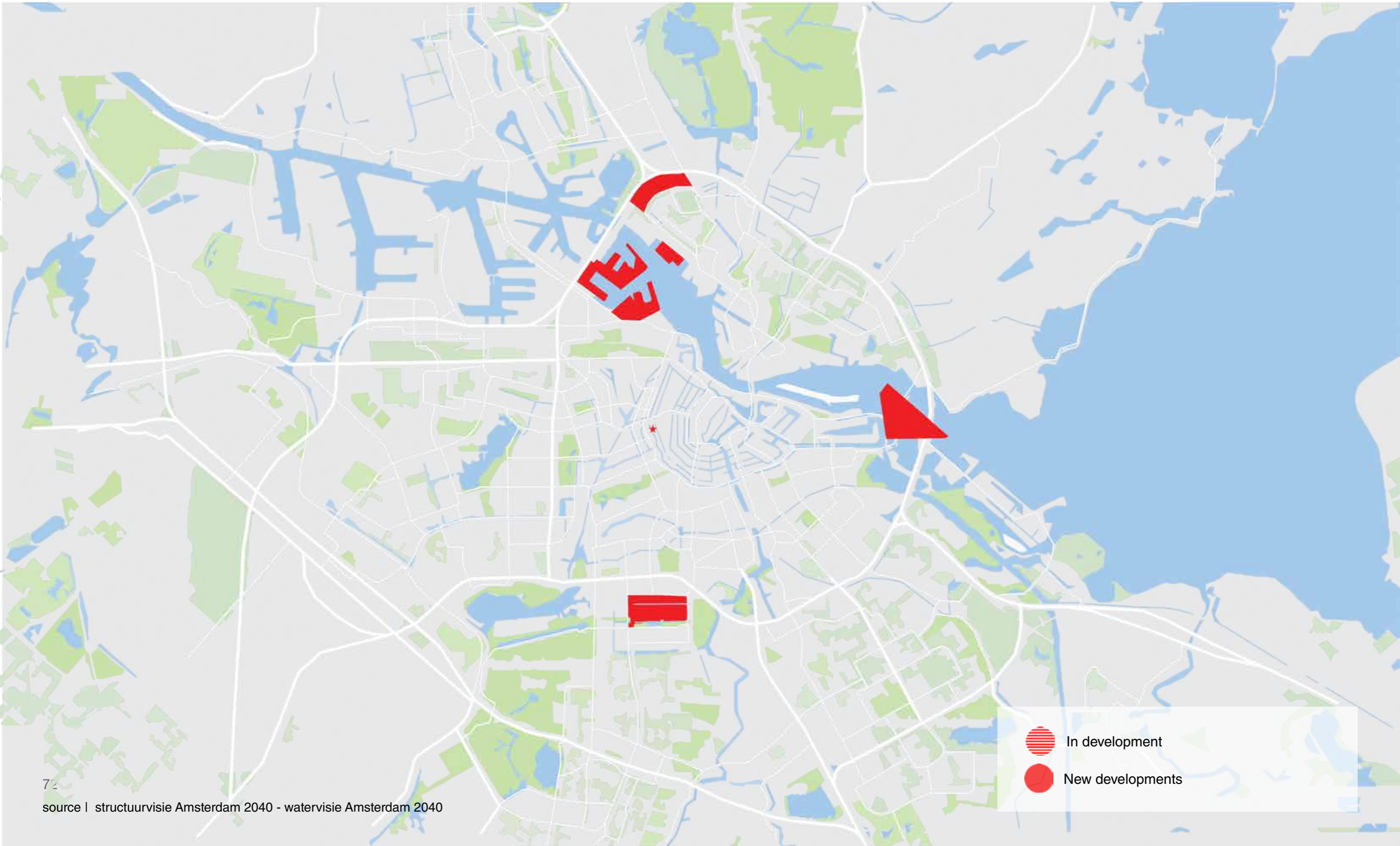
To be determined



-  In development
-  New developments



# 2030-20XX: NEW LIVING-WORKING DEVELOPMENTS







# 2010-20XX: NEW LIVING-WORKING DEVELOPMENTS

## Amsterdam West: dwellings (units)

	2010-2020	2020-2030	2030-20xx	Total
Expansion	1550	880	0	2450
Havenstad	1100	1870	0	2950
Other	1450	0	0	1450
Total	4100	2750	0	6850

## Amsterdam West: offices (m2)

	2010-2020	2020-2030	2030-20xx	Total
Expansion	3000	0	0	3000
Other	1000	0	0	1000
Total	4000	0	0	4000



# 2010-20XX: NEW LIVING-WORKING DEVELOPMENTS

## Amsterdam Centrum: dwellings (units)

	2010-2020	2020-2030	2030-20xx	Total
Expansion	1090	560	0	1650
Total	1090	560	0	1650

## Amsterdam Centrum: offices (m2)

	2010-2020	2020-2030	2030-20xx	Total
Expansion	92000	15000	0	106000
Total	92000	15000	0	106000



# MOBILITY

# Public transport



Better public transport is one of the statements the municipality of Amsterdam is making in the 'structuurvisie'. This means for example a better connection to the green areas around the city.

The New North-South metro line will be ready in 2017. The municipality is thinking about extending this line towards Schiphol and Amstelveen. Besides this, there is also an option for an East-West metro line. These last three options are just ideas and not close to reality at the moment.

- New North - South metro line ready in 2017
- option North-South Schiphol metro line
- option North-South Amstelveen metro line
- option East-West metroline
- Station Amsterdam Zuid will become second public transport intersection of Amsterdam after the Central Station
- Location



# MOBILITY

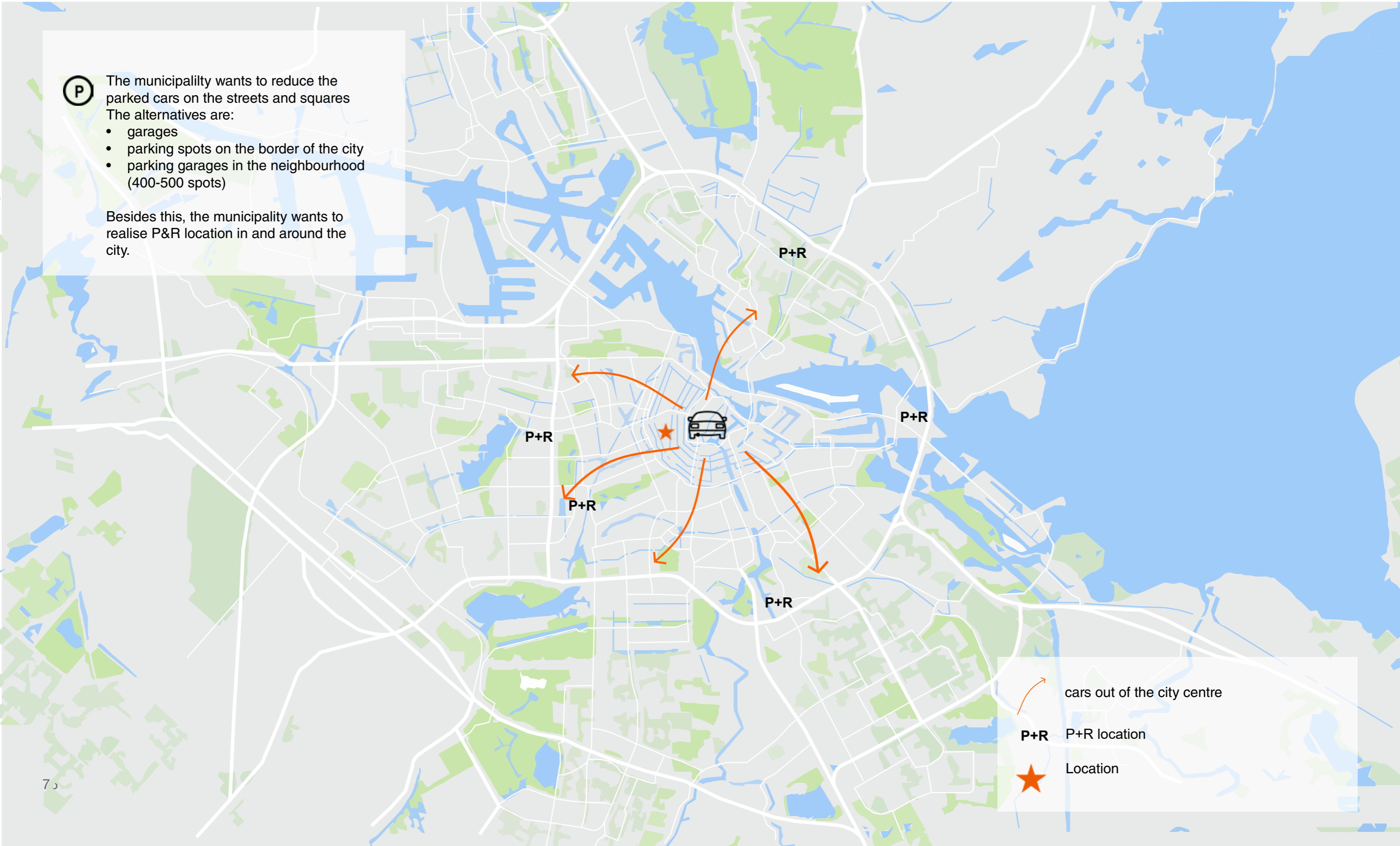
# Parking



The municipality wants to reduce the parked cars on the streets and squares  
The alternatives are:

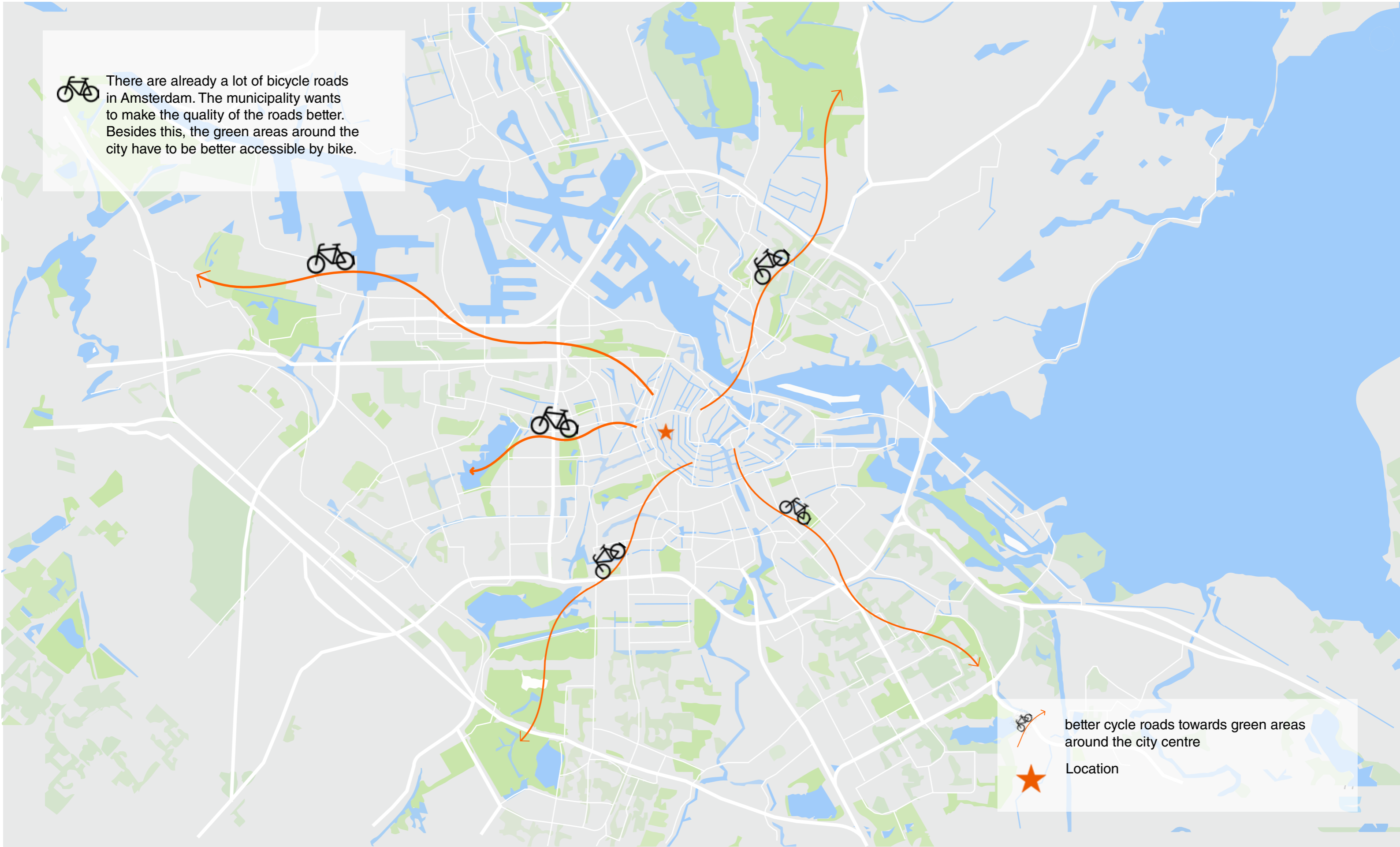
- garages
- parking spots on the border of the city
- parking garages in the neighbourhood (400-500 spots)

Besides this, the municipality wants to realise P&R location in and around the city.





There are already a lot of bicycle roads in Amsterdam. The municipality wants to make the quality of the roads better. Besides this, the green areas around the city have to be better accessible by bike.



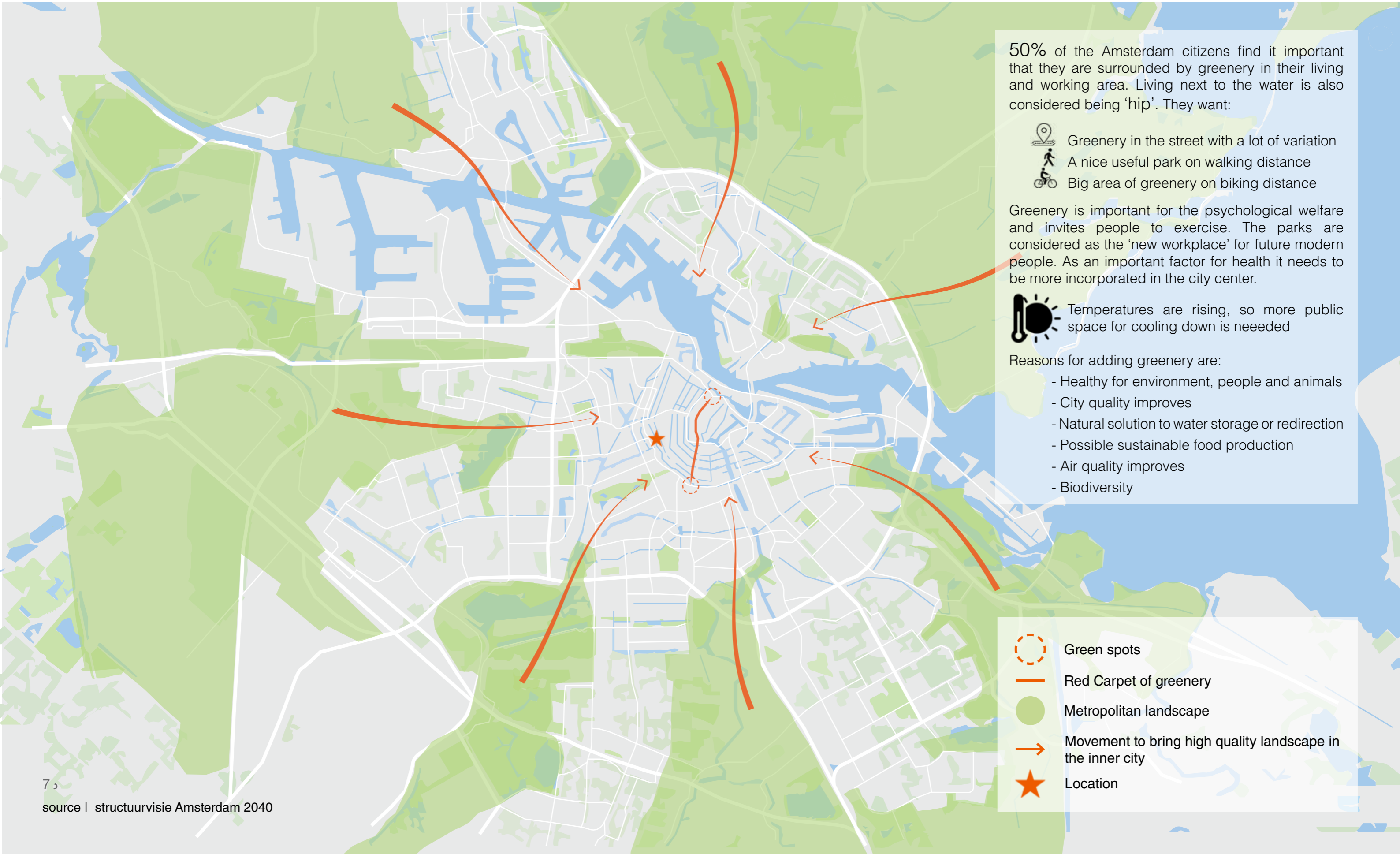
better cycle roads towards green areas around the city centre






Location




# FLORA & FAUNA



50% of the Amsterdam citizens find it important that they are surrounded by greenery in their living and working area. Living next to the water is also considered being 'hip'. They want:






-  Greenery in the street with a lot of variation
-  A nice useful park on walking distance
-  Big area of greenery on biking distance

Greenery is important for the psychological welfare and invites people to exercise. The parks are considered as the 'new workplace' for future modern people. As an important factor for health it needs to be more incorporated in the city center.

 Temperatures are rising, so more public space for cooling down is needed





Reasons for adding greenery are:

- Healthy for environment, people and animals
- City quality improves
- Natural solution to water storage or redirection
- Possible sustainable food production
- Air quality improves
- Biodiversity

-  Green spots
-  Red Carpet of greenery
-  Metropolitan landscape
-  Movement to bring high quality landscape in the inner city
-  Location

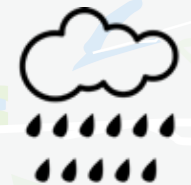


The canals are part of the identity of Amsterdam and interfering with this is not allowed. Amsterdam would like to incorporate activities better on the canals and integrate it better with the public spaces on land. Examples are:




-  Greenery and parks
-  Catering
-  Viewpoints for walking and biking
-  Transport over water

There is a future climate problem of hot and dry summers versus wet and cold winters. Risks because of drought are:

- Wooden foundation pillars are left exposed
- No available cooling water
- Consequences for parks and greenery
- Risks of fish deaths and algae overgrowth

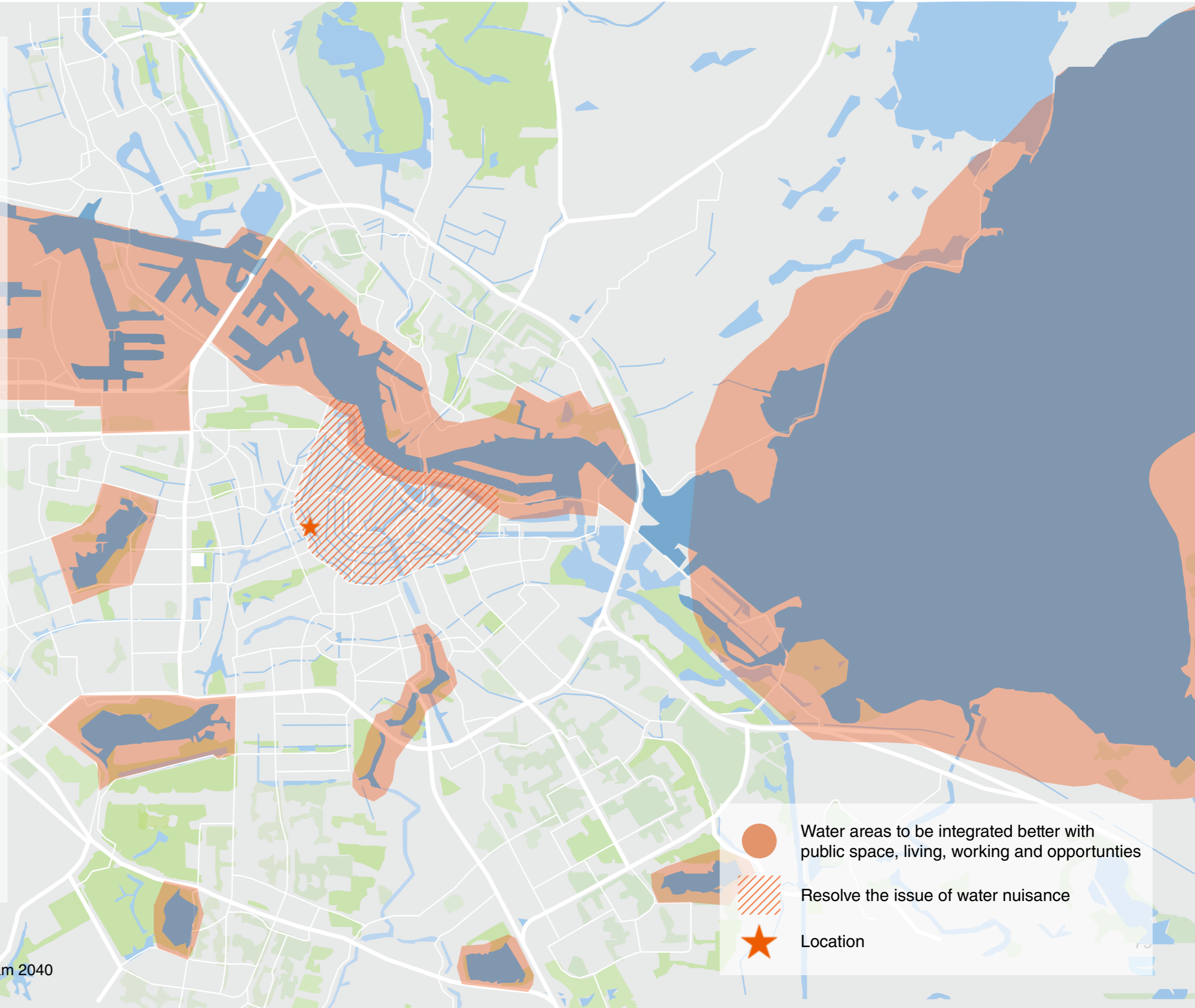
 The resilience of the city needs to be 50 mm rain per 1 hour  
From which 10% can be surface water




Greenery as solution for too much water

-  - Soil surface catches water
-  - Trees and bushes evaporate water
-  - Trees, parks, greenery, fountains and watersquares reduce summerheat and provide a comfortable humidity in the air.
- Reduction of NO2, CO2 and pollution

Water as solution for sustainable energy  
Gaining energy from the ground water is a proven and existing technique. Amsterdam has a few more points they want to see in the future:

- Collective solutions for ground water energy and stimulating this
- Gain warmth from waste water and organic components



-  Water areas to be integrated better with public space, living, working and opportunities
-  Resolve the issue of water nuisance
-  Location

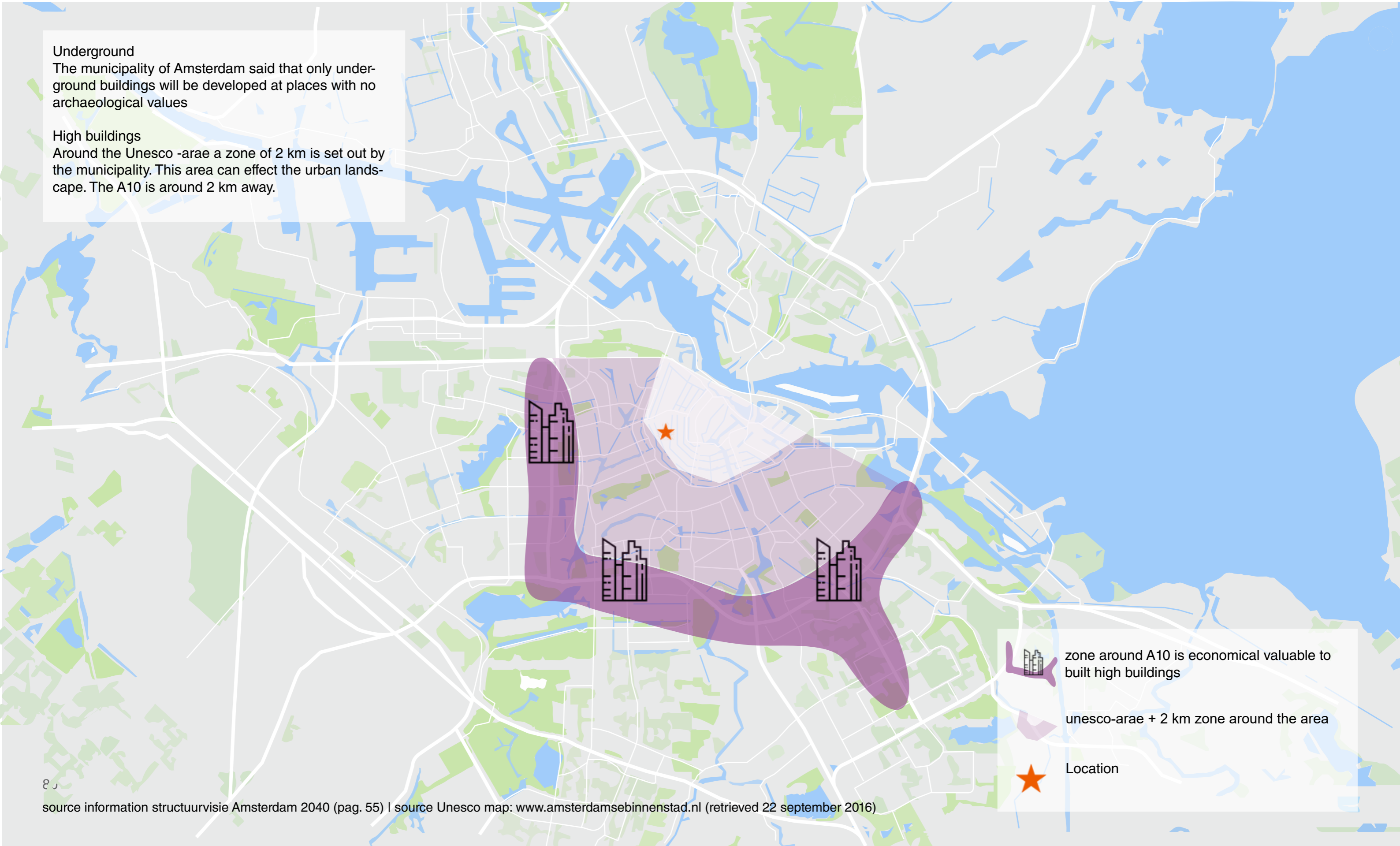





# OTHERS

## High buildings & Underground

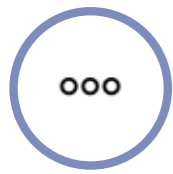
**Underground**  
The municipality of Amsterdam said that only underground buildings will be developed at places with no archaeological values

**High buildings**  
Around the Unesco -arae a zone of 2 km is set out by the municipality. This area can effect the urban landscape. The A10 is around 2 km away.



-  zone around A10 is economical valuable to built high buildings
-  unesco-arae + 2 km zone around the area
-  Location





For a few years now the project 'New Amsterdam climate' has been around. This project is all about a clean and livable city. For the future it is necessary that this project gets more attention. The system used in the project is called the Trias Energetica. There are three categories in this system.

1. Energy saving and reduction
2. Usage of sustainable energy
3. Efficient use of fossil energy

Since 2015 Amsterdam has a climate neutral organisation. Amsterdam intends to go for a sustainable climate neutral city and being independent from fossil fuel. They also want:

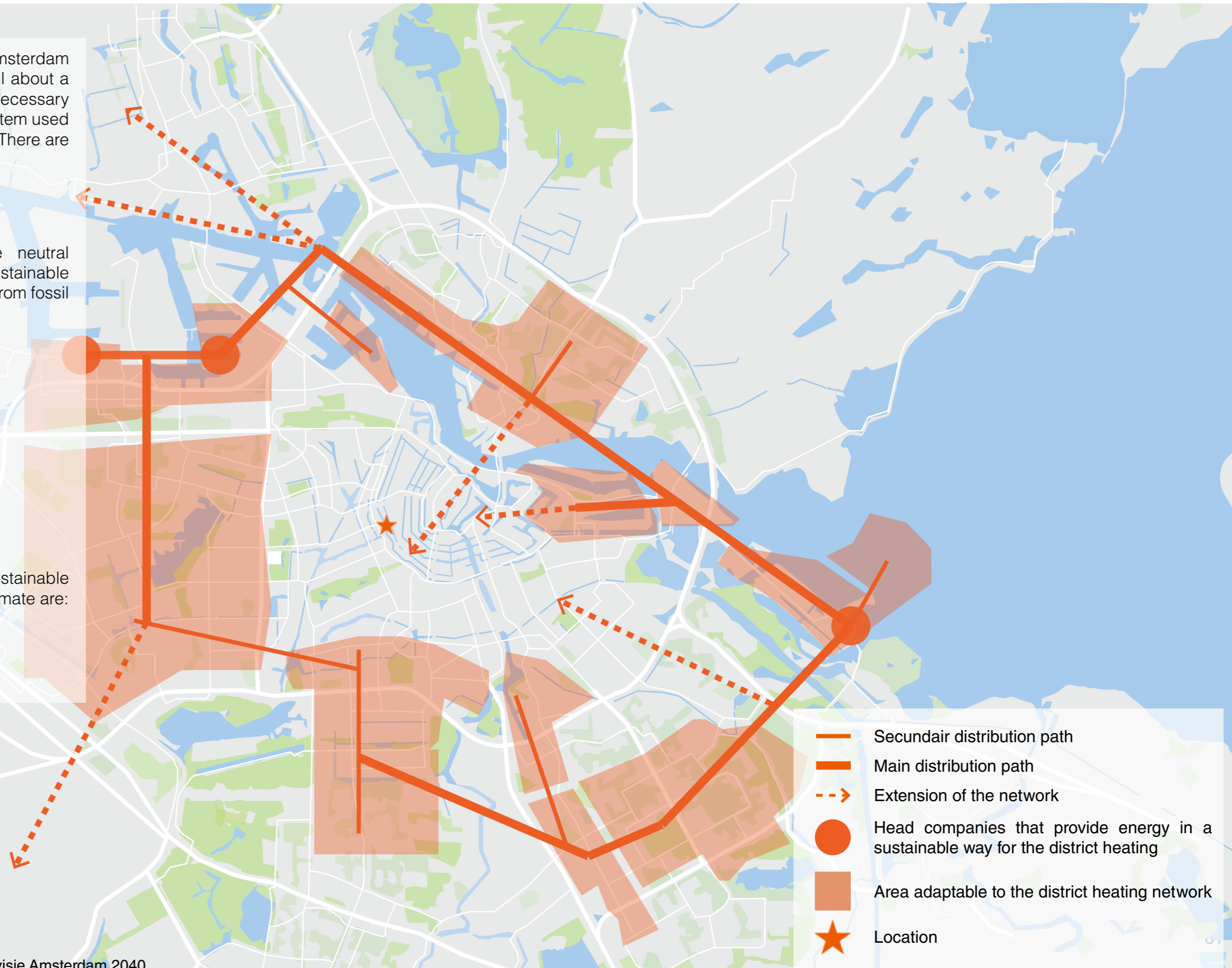
- 40% CO2-reduction in 2025, (compared to 1990)
- 75% CO2-reduction in 2040, (compared to 1990)

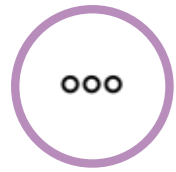
Existing possibilities for sustainable energy:

- District heating
- Cooling networks
- Energy storage
- Wind energy
- Green and wet roofs
- Neutral building climate

Areas the government wants to adapt to a sustainable approach and adapt to New Amsterdam Climate are:

1. Built Environment
2. Clean transport
3. Port & Industrial
4. Renewable energy





# OTHERS

# Target groups



## ELDERLY

In the upcoming decade there will be a major increase of elderly people in Amsterdam due to two main reasons. First of all the age group (65 and up, baby-boom generation) is one of the biggest in Amsterdam and is already present on the market.

Reason 2 is comes from a shift in behavior. More and more people in this age group decide to stay in the city instead of moving out.



## URBAN FAMILIES

More and more families prefer the city rather than rural area's. This means that besides the living amenities on dwelling scale, such as a bigger kitchen, extra room, and spacious balcony or outdoor space, also the public space need to adapt to the need of young children.

Safe places to play, schools, day-care and sport facilities are all part of this increase of urban families in the city



## YOUNG PROFESSIONALS

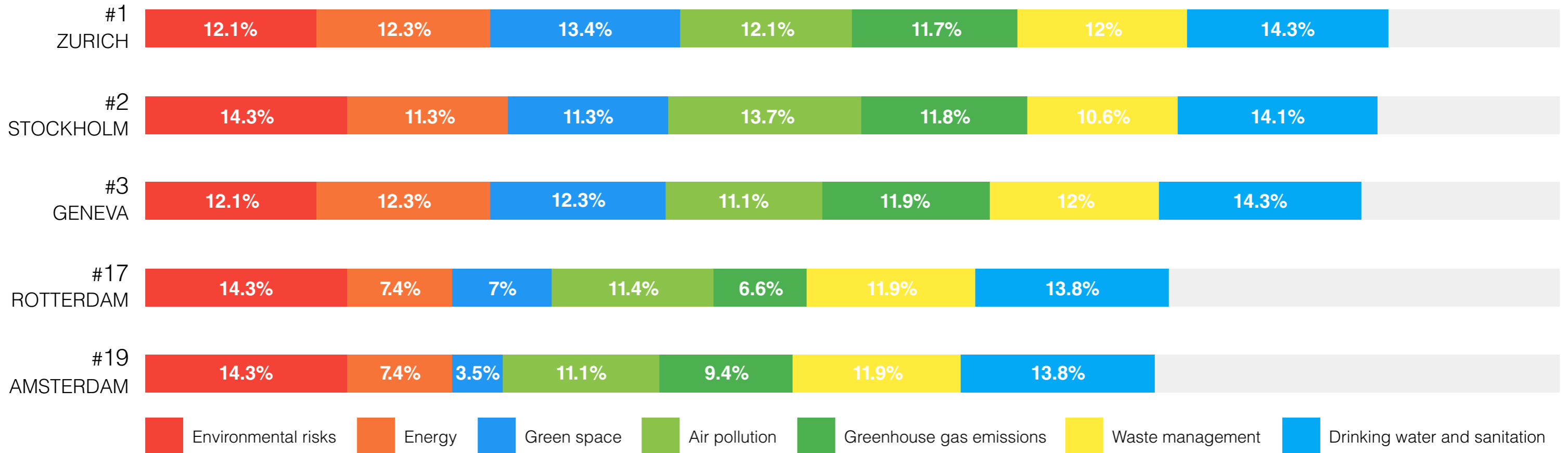
Amsterdam is one of the most popular cities in the Netherlands for high educated people to start their career. The professions are very diverse and generates a demand in many segments of the market.

From affordable living space to upper segment dwellings.



## TOP INCOME

The ambition of Amsterdam is to improve and grow as a city that is attractive for big corporations and businesses. This means also to be able to accommodate people with a top income. Although this is currently a small portion of the market it is believed that it will increase.



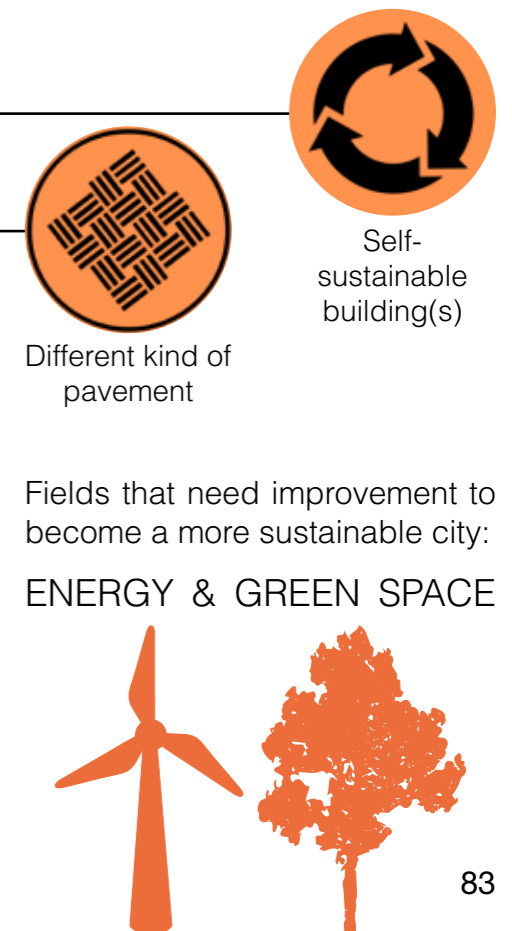
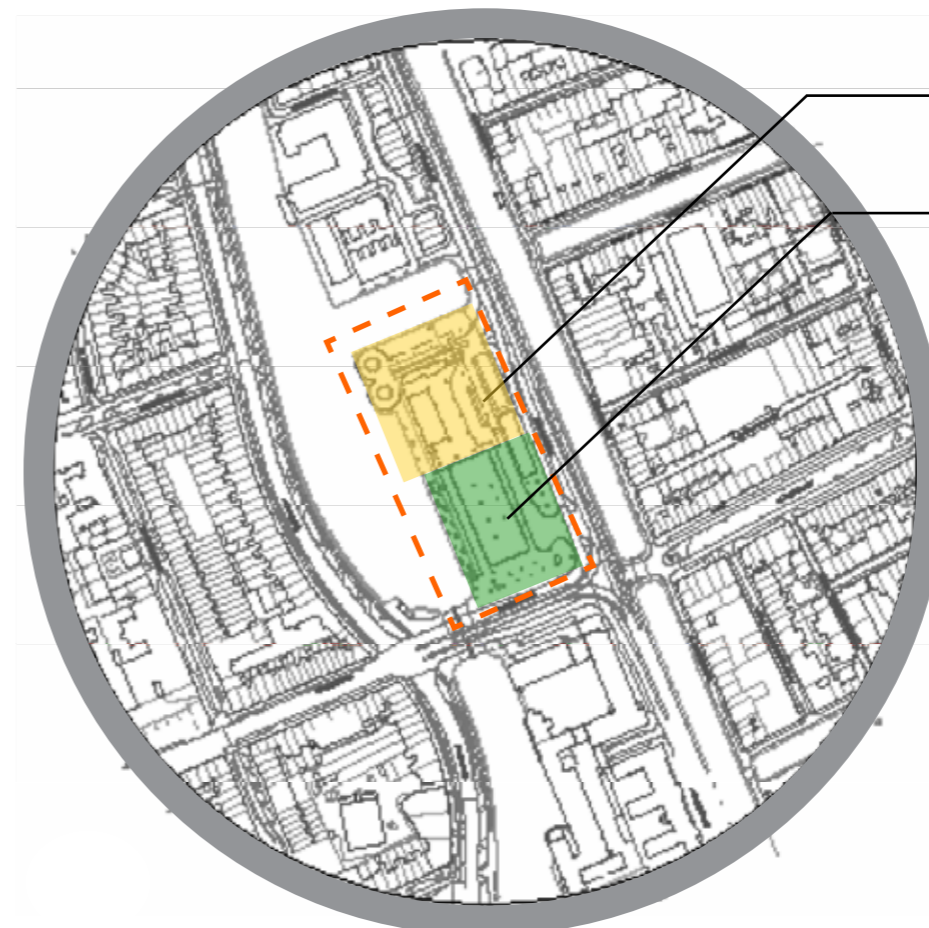
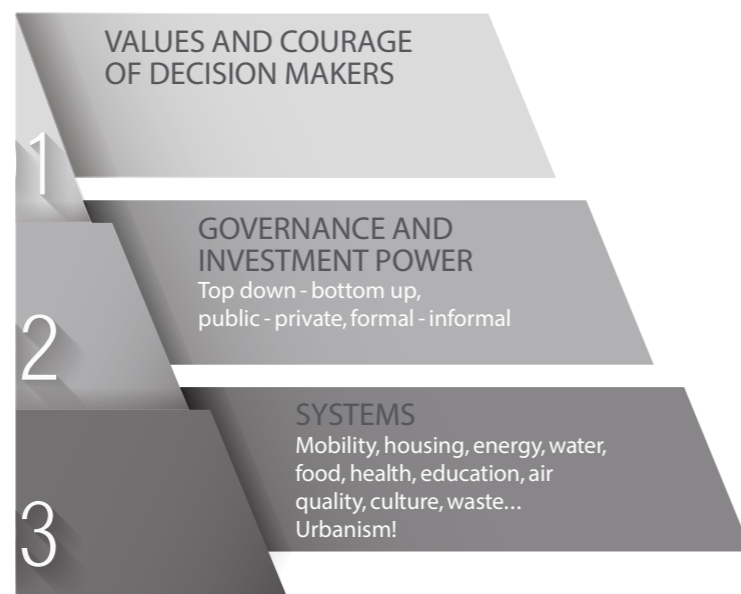
## CITY ECOSYSTEM ASSESSMENT - THREE LAYERED SYSTEM

Zurich has a better score due to a few things  
Amsterdam can improve on. These are:

- investment in efficient and renewable energy
- sustainable public transport system
- willingness to increase public awareness of environmental issues
- the big amount of quality green spaces
- project 2000 watt per capita in 2050

For the water issue, Amsterdam can take an example in Rotterdam. They have:

- multifunctional flood protection
- water plaza
- innovative water storage



## COP

### Municipal adjustments



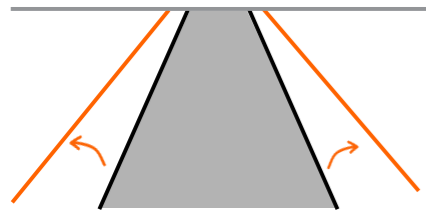
green passage for fast cycling, more green light on this road.



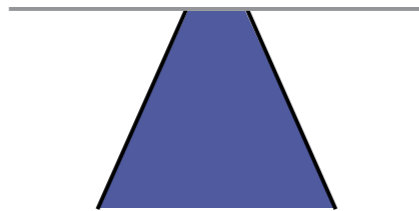
all cabs have bike carriers (costs are 3 euro)



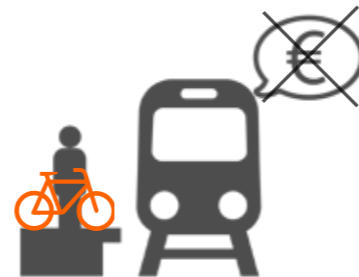
inner-city with bicycles for free



more broad cycle roads



blue coloured bicycle roads



take bicycle for free in the train

### User behaviour

- quality of the bicycles is better
- people do not cycle next to each other
- not much bicycles stealing
- helmets are normal, around 25-30% are wearing this
- people almost never cycle by red light
- people clearly indicate when they brake or turn

source:

<http://www.fietsen.123.nl/fietsnieuws/kopenhagen-verdringt-amsterdam-als-fietsstad> (retrieved 27 september 2016)

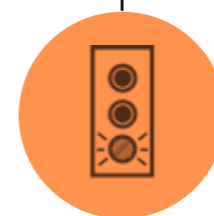
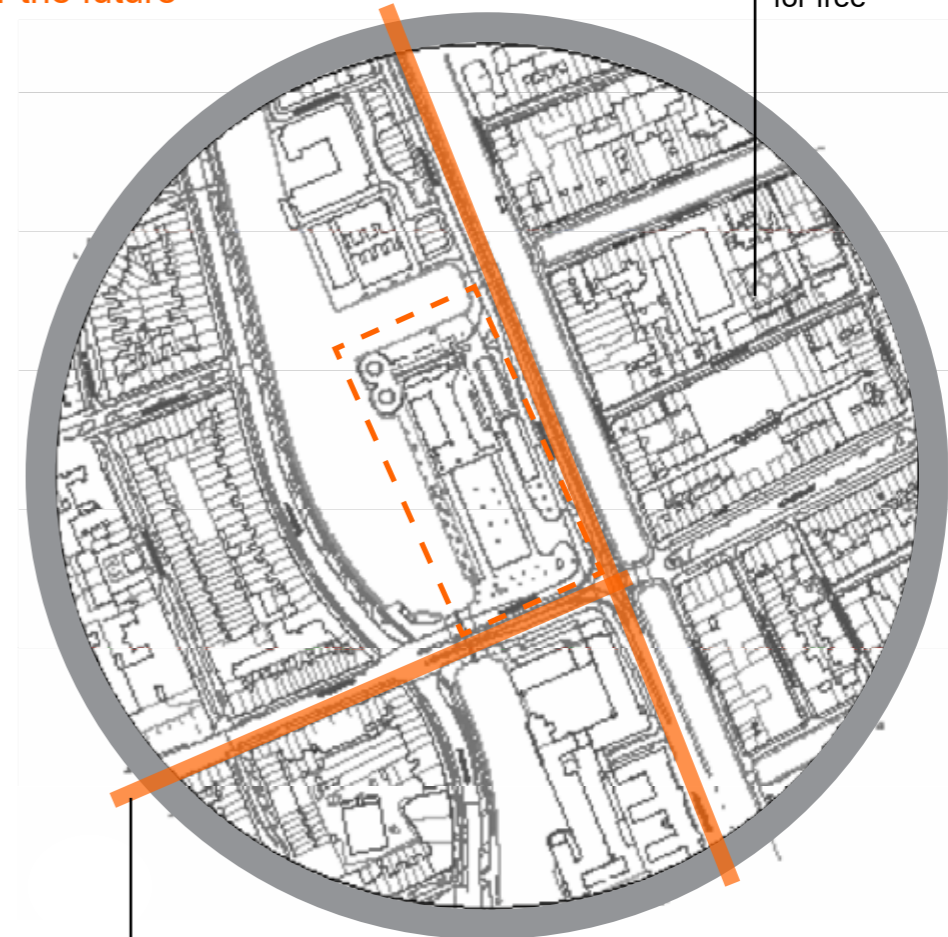
[http://www.fietsberaad.nl/library/repository/bestanden/Fietsers\\_in\\_Kopenhagen\\_Fv23.pdf](http://www.fietsberaad.nl/library/repository/bestanden/Fietsers_in_Kopenhagen_Fv23.pdf) (retrieved 27 september 2016)

## AMS

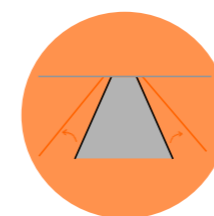
### Possibilities for the future



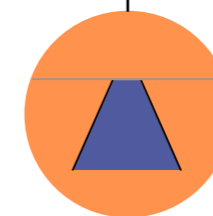
inner-city with bicycles for free



green passage for fast cycling, more green light on this road.



more broad cycle roads



blue coloured bicycle roads

# References | Amsterdam vs. Hong Kong

## Public transport

Future of Urban Mobility, ADL, 2011

# AMS

# HKG

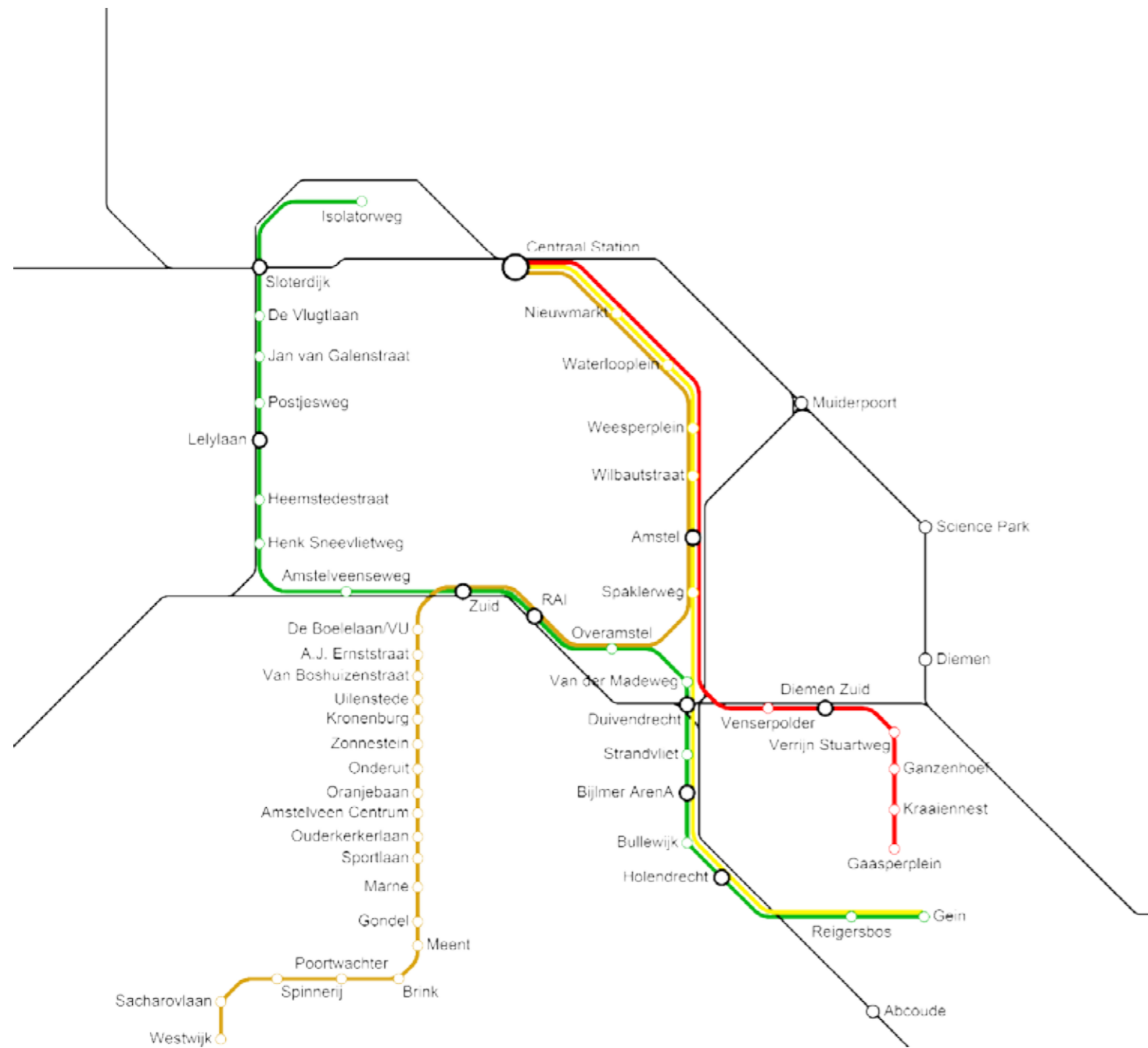
Share of public transport (%)	56	84	Share of public transport (%)
Car sharing performance (points)	5	1	Car sharing performance (points)
Shared bikes per million citizens (u/mil)	301,5	0	Shared bikes per million citizens (u/mil)
Penetration of smart cards (u/cit)	1	2,9	Penetration of smart cards (u/cit)
Transport-related fatalities (u/mil)	27	23	Transport-related fatalities (u/mil)
Transport-related CO2 emmissions (g/cit/year)	1100	378	Transport-related CO2 emmissions (g/cit/year)
Vehicles registered (u/cit)	0,40	0,08	Vehicles registered (u/cit)
Average travel speed (km/h)	34	25,1	Average travel speed (km/h)
Average travel time home-work (min)	22	39	Average travel time home-work (min)
Overall satisfaction (points)	13	12	Overall satisfaction (points)

# References | Amsterdam vs. Hong Kong

# Public transport

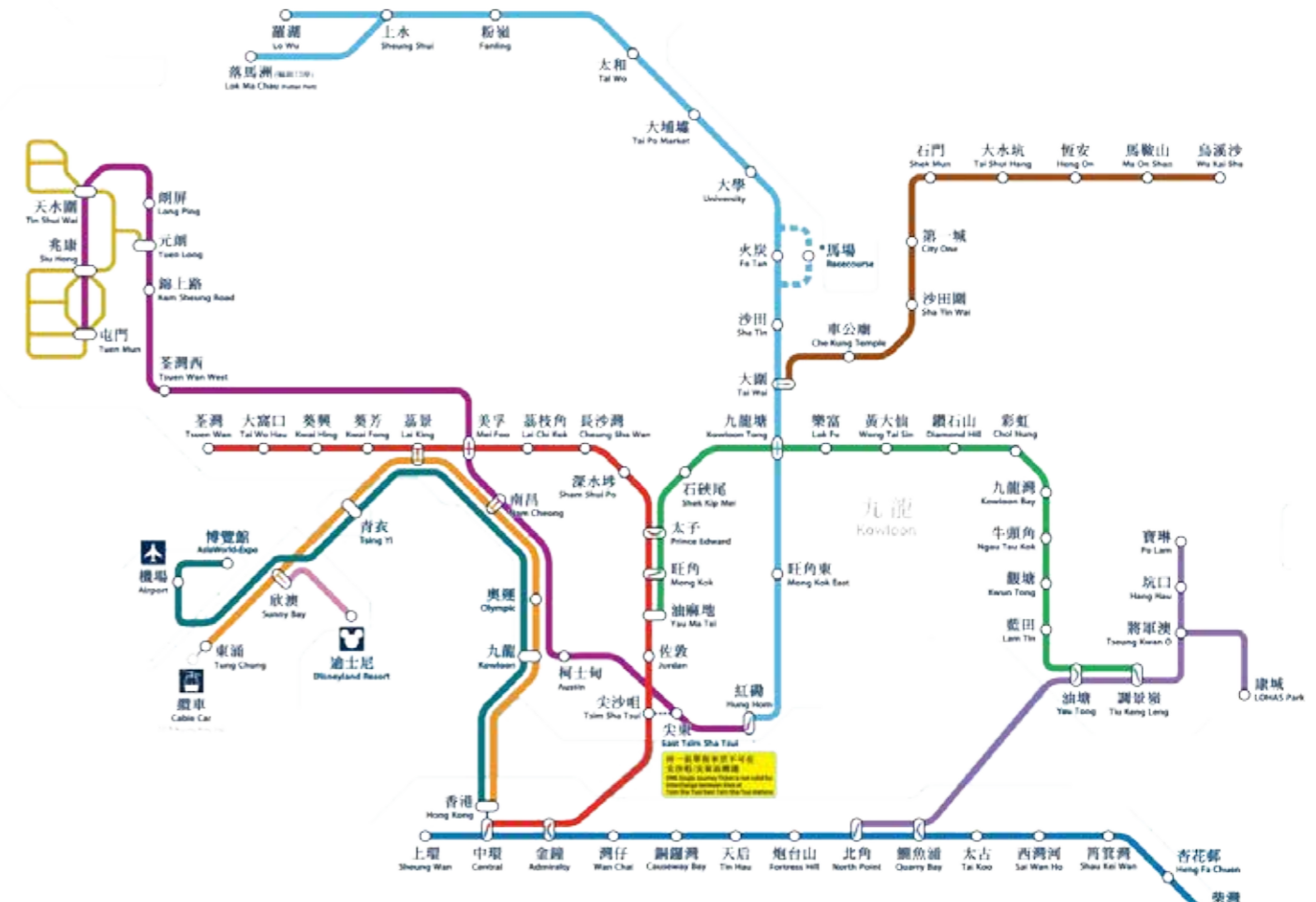
Metro lines

# AMS



86  
POP: 0,84 mil

# HKG



POP: 7,2 mil



## Living

- The municipality is planning 1650 new dwellings in the neighbourhood of the plot before 2030
- The municipality is planning 106000 new offices in the neighbourhood of the plot before 2030
- Ageing will be more dominant
- influx of young professionals.
- Increase of population; 70.000 people up to 2040.
- Increase of dwellings; 40.000 dwellings up to 2040.
- growing demand for dwellings will come from urban families, high educated starters and top incomes.
- There is a negative trend in the need for social housing.
- increasing demand for student-housing as well as short-stay
- The living conditions should be capable to adapt to future demands
- an increase of mixed functions in neighbourhoods is expected



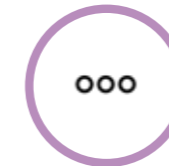
## Working

- Important sectors now and in the future
  - Financial & Business Services
  - IT
  - Creative Industries
  - Life Sciences
  - Trade & Logistics
  - Tourism



## Mobility

- less cars
- reduction of parked cars on the street and on the squares
- more bicycles
- better quality of the bicycle roads
- better connection to green areas in and around the city



## Others

- The plot is in the area in which high buildings can effect the urban landscape.
- The main targetgroups are elderly, urban families, young professionals and top income.
- the focus needs to be on sustainable energy and green spaces

## Flora & Fauna

- bring high quality landscaping in the inner city.
- reduce the flood risk.





