

DeTourism



P5 Presentation
Isamu Goitani
16-6-2025

Presentation starts at 11:00

DeTourism

Exploring spatiotemporal dimensions to mitigate overtourism and enhance urban livability

Isamu Goiati
1st Mentor: Claudiu Forgaci
2nd Mentor: Achilleas Psyllidis
Studio: Metropolitan Ecologies of Places
16-6-2025 P5 Presentation



Overtourism

Prague battles with the consequences of overtourism

DW (2024)

Overtourism: Can travel hotspots cope with the crowds?

BBC (2024)

Climbing Mount Everest becomes more expensive in bid to tackle overtourism

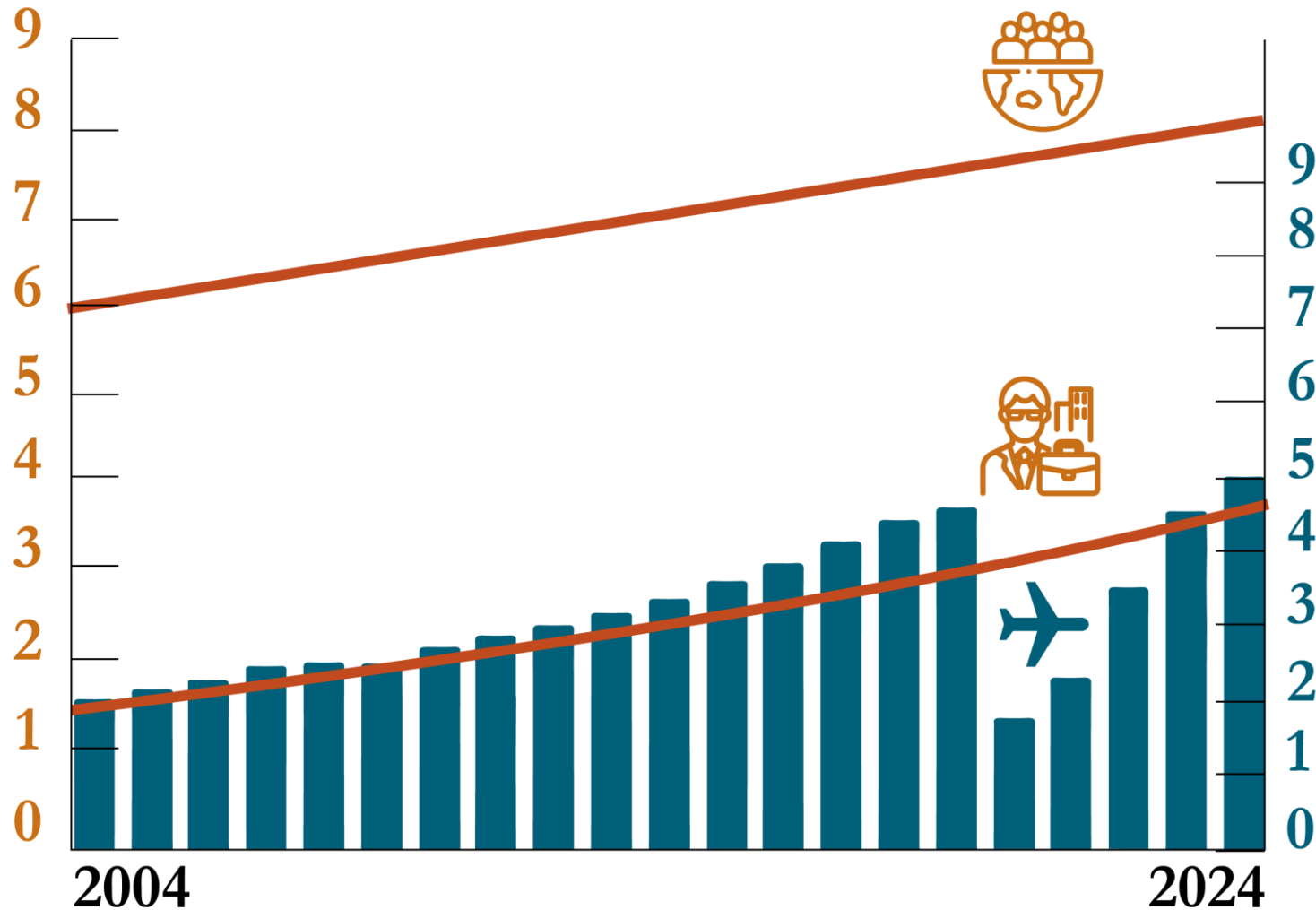
Independent (2025)

Overtourism was the buzzword of 2024. This summer looks to be just as crowded and chaotic

CNN (2025)

Global Population
In Billions
Source: (Kharas, 2017)

Global Middle Class
In Billions
Source: (Kharas, 2017)



Number of passengers
by the global airline
industry in Billions
Source: (Statista, 2024)

Overtourism



Source: Responsible Travel (2024)

Amsterdam, The Netherlands



Source: NY Times (2024)

Fujikawaguchiko, Japan



Source: CNN (2025)

Venice, Italy

Amsterdam

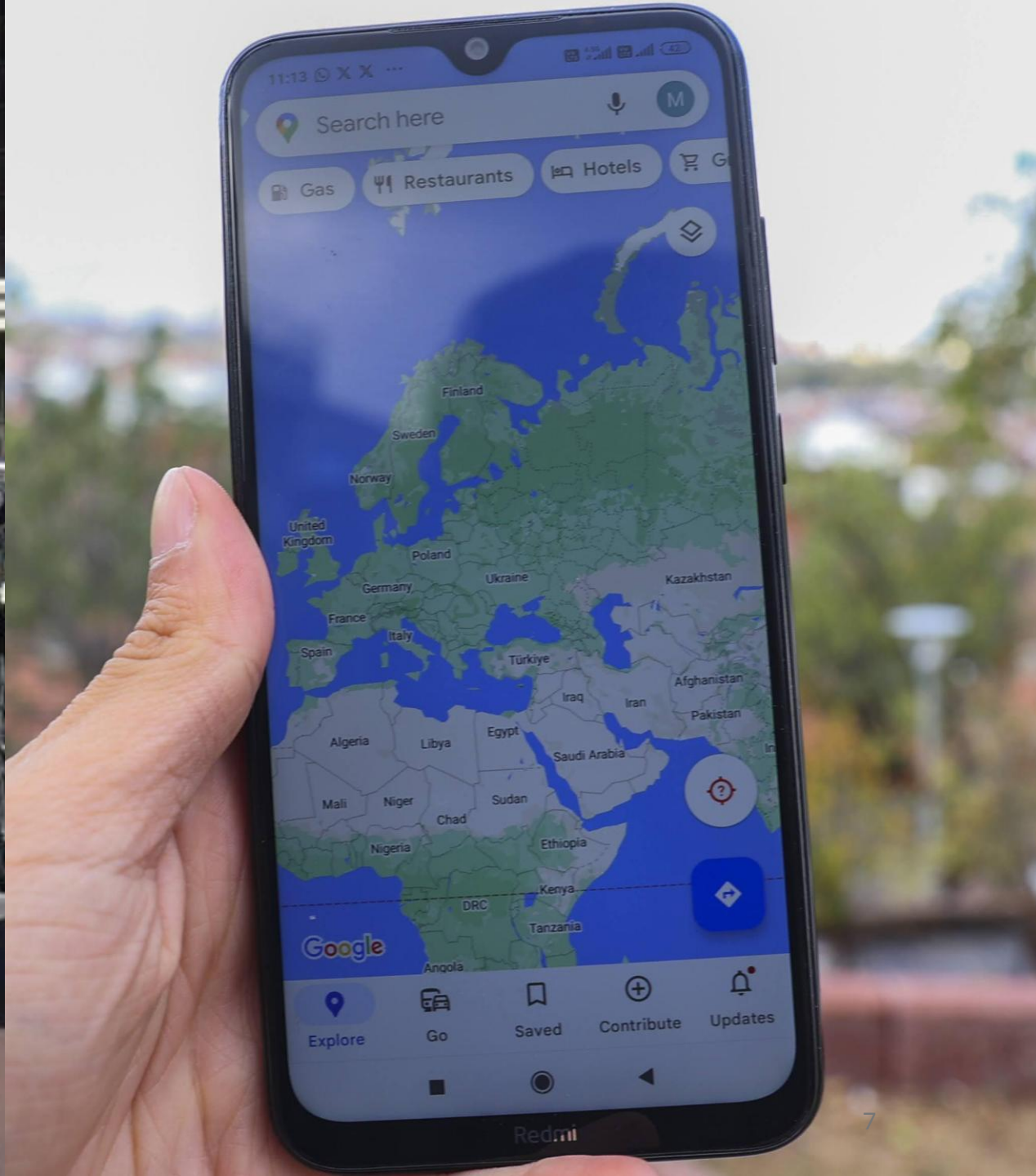
- Growing amount of visitors
- Managing symptoms
- Not grasping the complexity
- Amsterdam 2050



Source: Amsterdam Municipality



Source: Grachten 9+ (2023)



New Tourism

- Digital path, Digital footprint
- Google Reviews and Popular Times
- Spatial insights



Source: EU Intelligent Cities (n.d.)

Problem Statement

- Growing challenge, Failing strategies
- Symptoms focused, Not on the System

- Untapped data, Big potential
- Translating into spatial insight
- Data-driven strategy

Content

I. Conceptual Framework

II. Research Question

III. Analysis

I. Overtourism

II. Spatiotemporal Pressure

III. Carrying Capacity

IV. Finding a DeTour

V. Strategizing a Detour

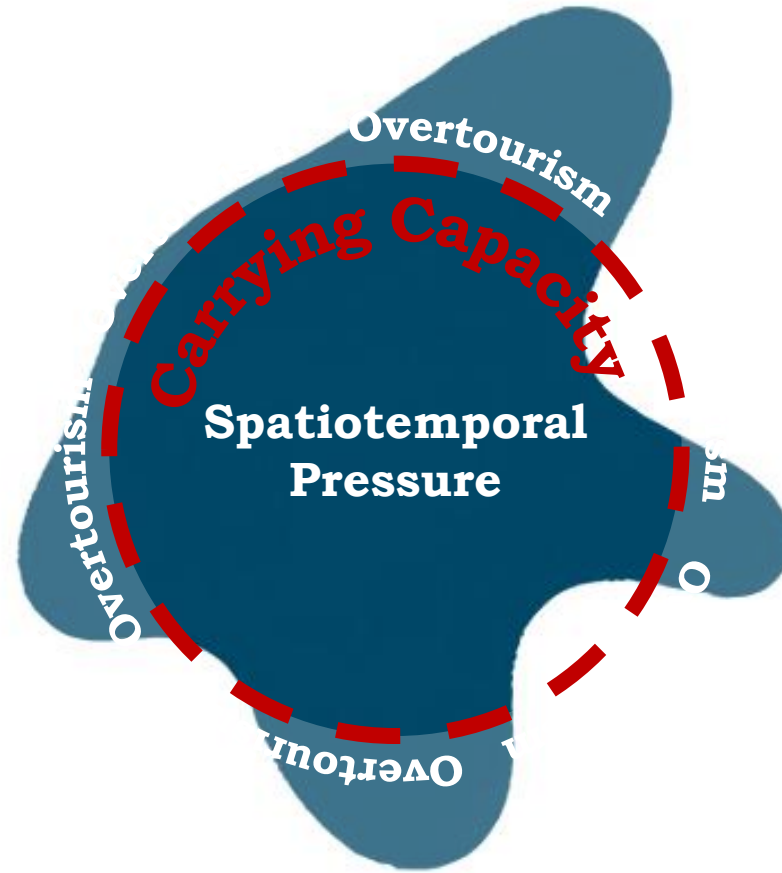
VI. Conclusion



Conceptual Framework



Conceptual Framework



Research question

How can a data-informed strategy, based on spatiotemporal and morphological urban dimensions, be developed to better understand and address overtourism in Amsterdam?

Research question

How can a data-informed strategy, based on spatiotemporal and morphological urban dimensions, be developed to better understand and address overtourism in Amsterdam?

- What are the current moments, places and impacts of overtourism in Amsterdam? (Overtourism)
- What are the spatiotemporal dynamics of tourism flows in Amsterdam? (Spatiotemporal Pressure)
- How does the urban environment influence the impact of tourist pressure on liveability? (Carrying Capacity)
- How can a data-informed strategy contribute to addressing overtourism in Amsterdam?

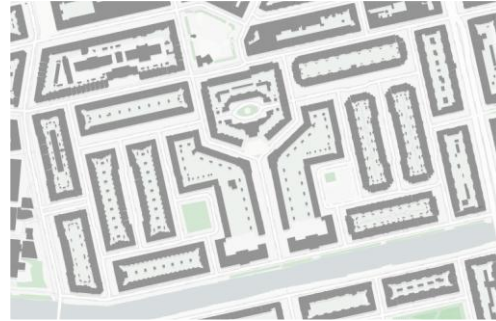
Framework

Spatial

City



Neighbourhood

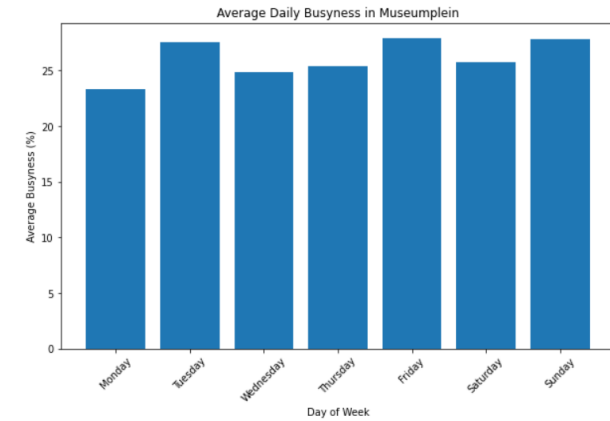


Street

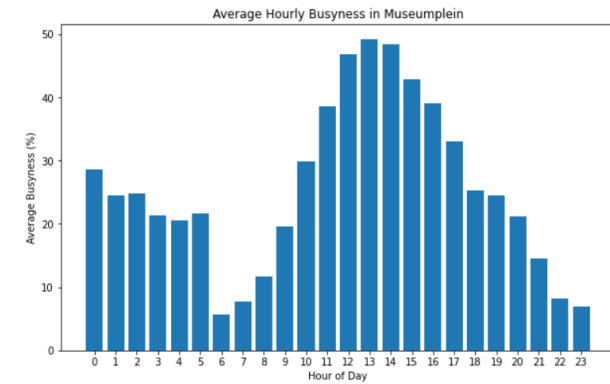


Temporal

Week



Day



Tourist Activities

Event venues



Activities



Cultural & Historic



Cannabisshops



Green recreation



Dining & Cafe



Shopping



Nightlife & Entertainment

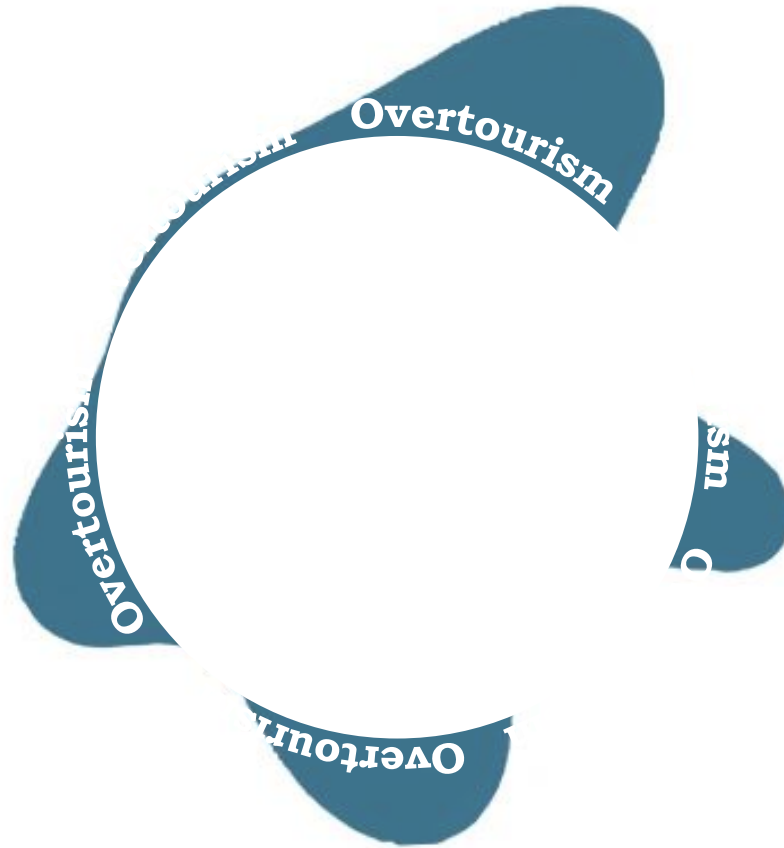


Conference



Overtourism

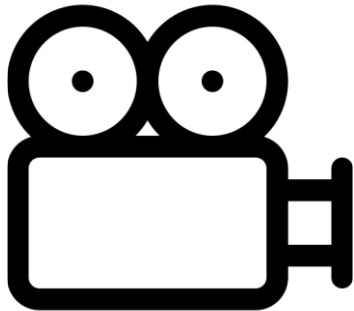
What are the current moments, places and impacts of overtourism in Amsterdam?



Overtourism

What are the current *moments*, *places* and *impacts* of overtourism in Amsterdam?

Documentaries



Articles



Documents



Platforms



Overtourism

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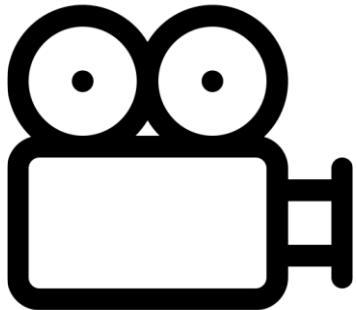
“The Red Light District in particular has been exposed to heavy tourism pressure, especially in the evening.”

“The most vulnerable areas are located in the Centre city district, but also in the East, West and South district crowdedness and nuisance are increasing.”

“Oosterpark, the Jordaan, De Pijp, the Dapperbuurt and Vondelpark, see more pressure on their liveability, despite efforts of the municipality to work on it by stricter rules for private holiday rental, making shopping offer more attractive for citizens and campaigns”

“on Thursday the trolley cases come in, and they leave on Sunday evening or Monday morning.”

Documentaries



Articles



Documents



Platforms



Overtourism

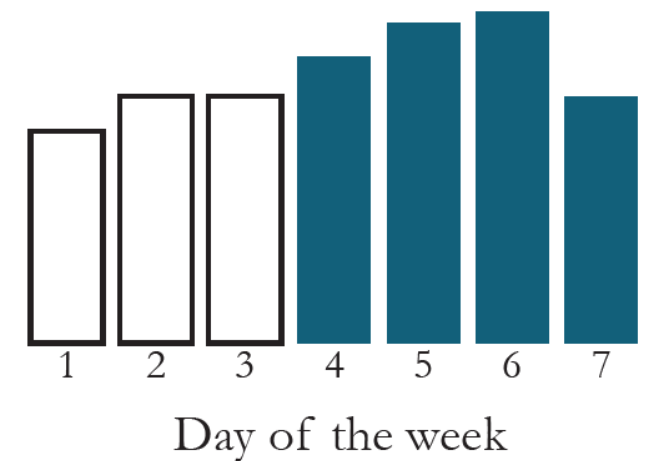
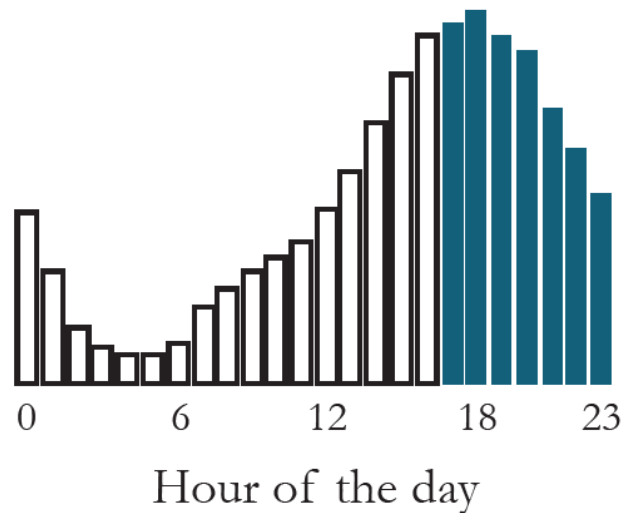
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Overtourism

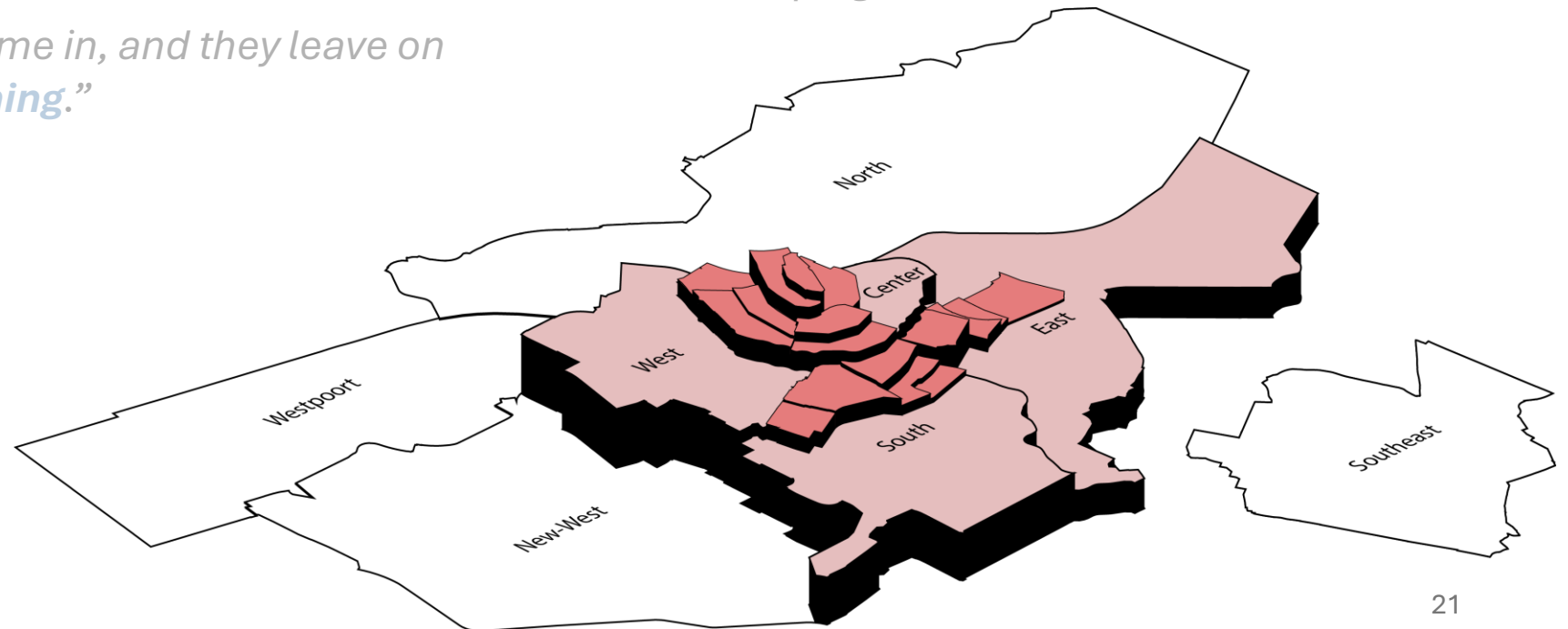
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Familiarity



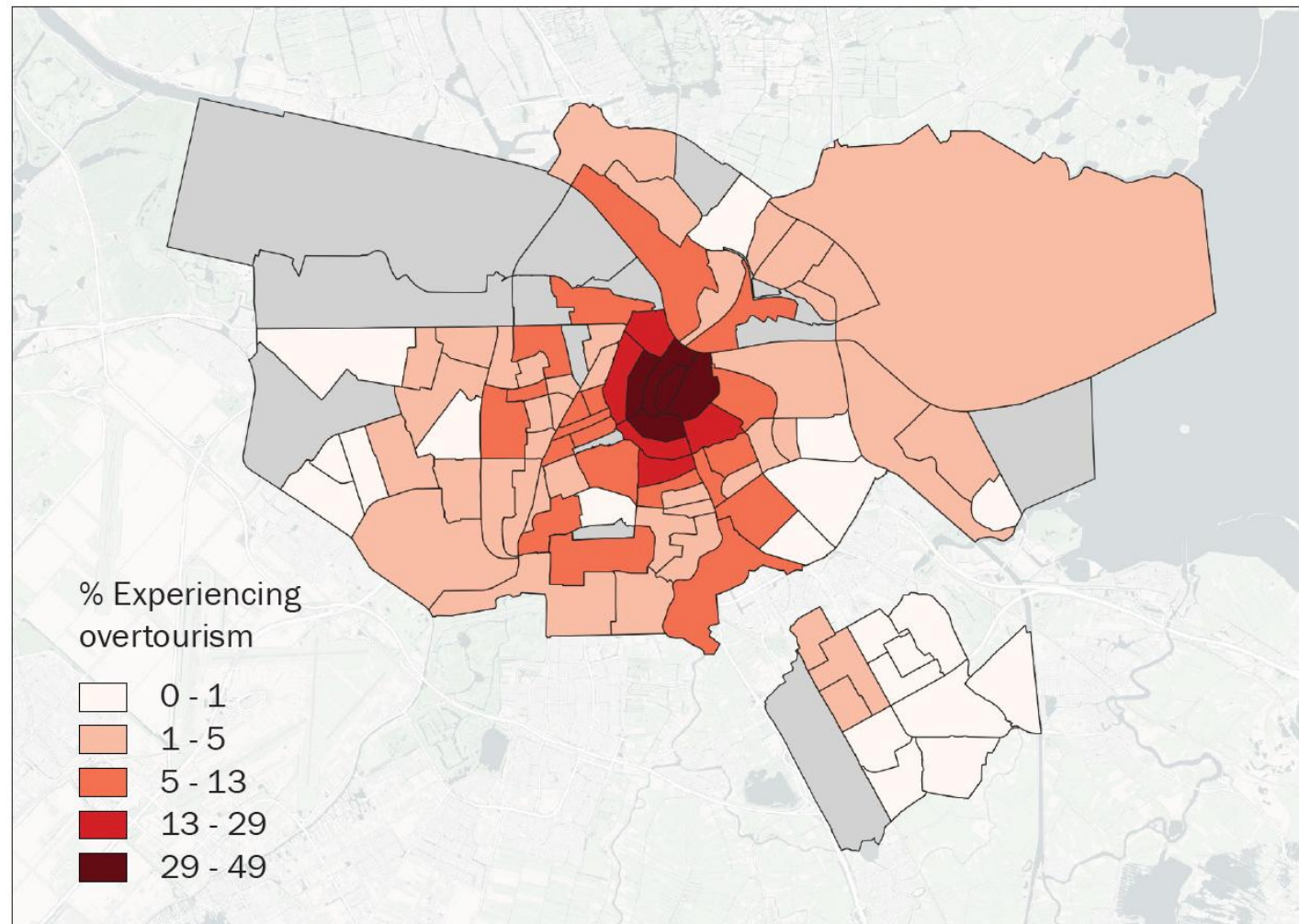
Local economy



Nuisance/Overcrowded

Overtourism

What are the current moments, places and impacts of overtourism in Amsterdam?



Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?



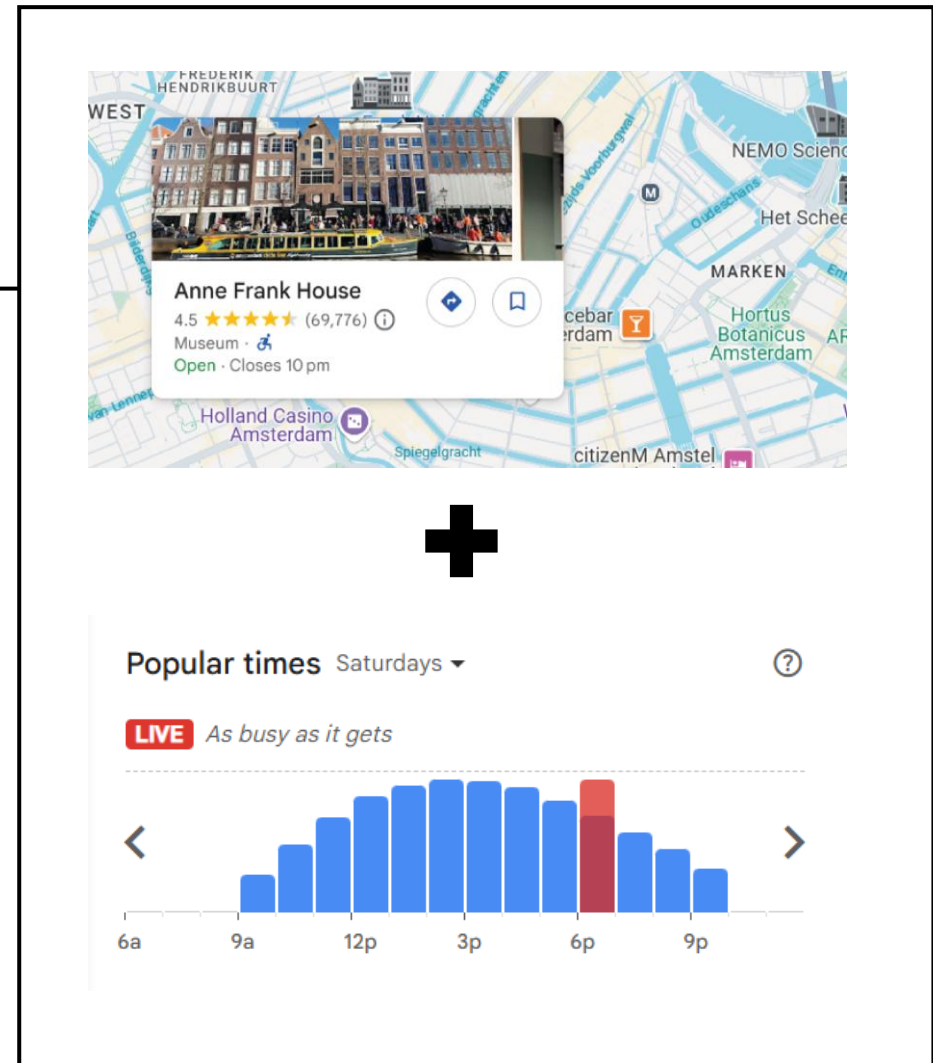
Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Data Scraping



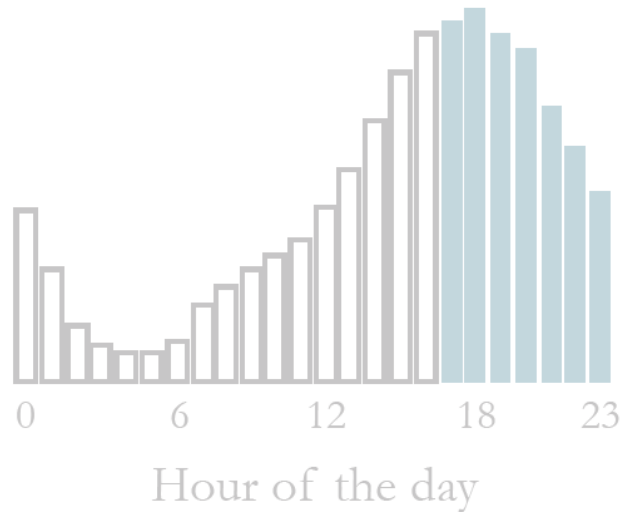
- Used across the world
 - Across demographics
 - 2+ Billion monthly users
- (Abner Li, 2024; Pawar, 2024)



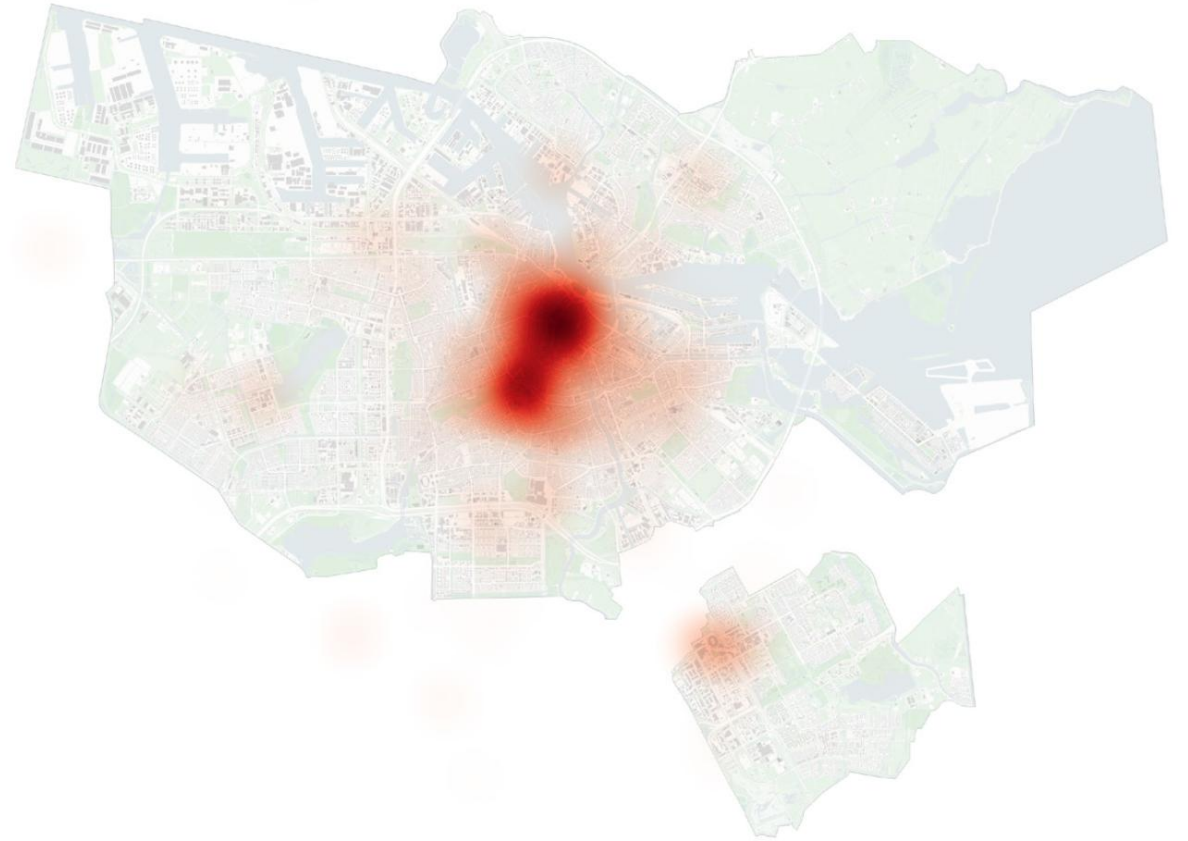
Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Temporal



Spatial

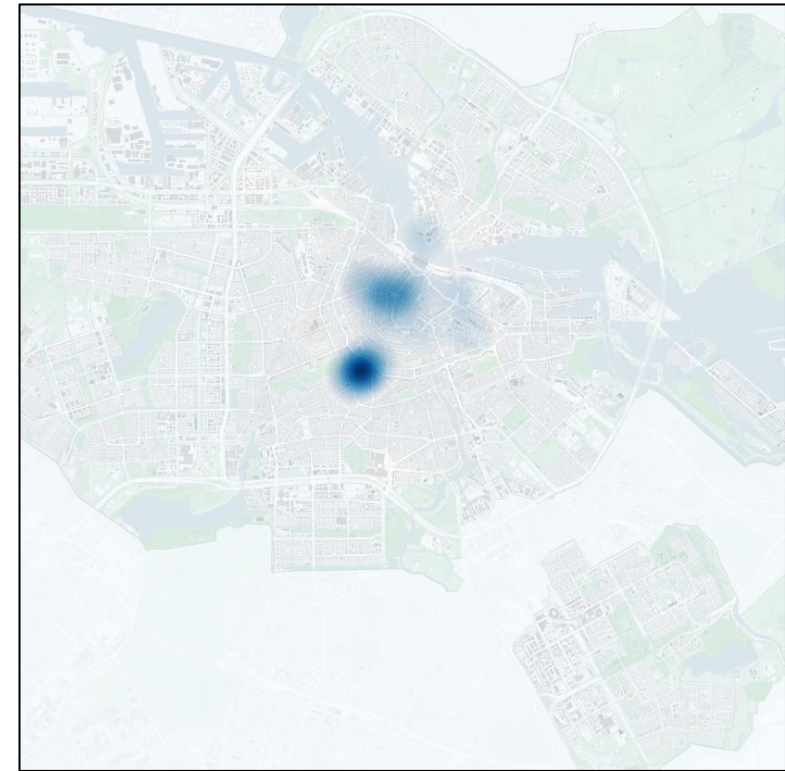


Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Spatial

Cultural & Historic

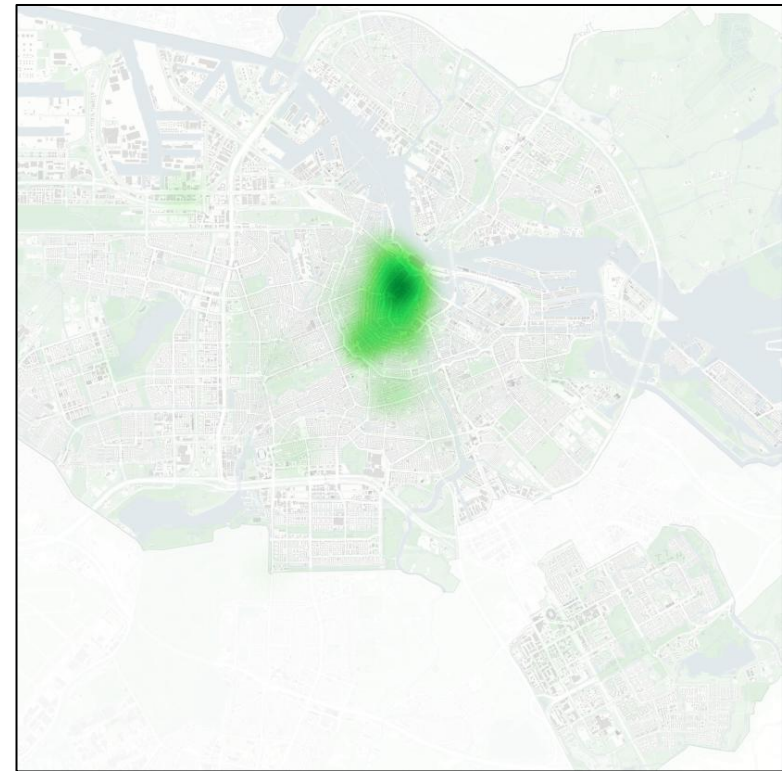


Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Spatial

Cannabisshops

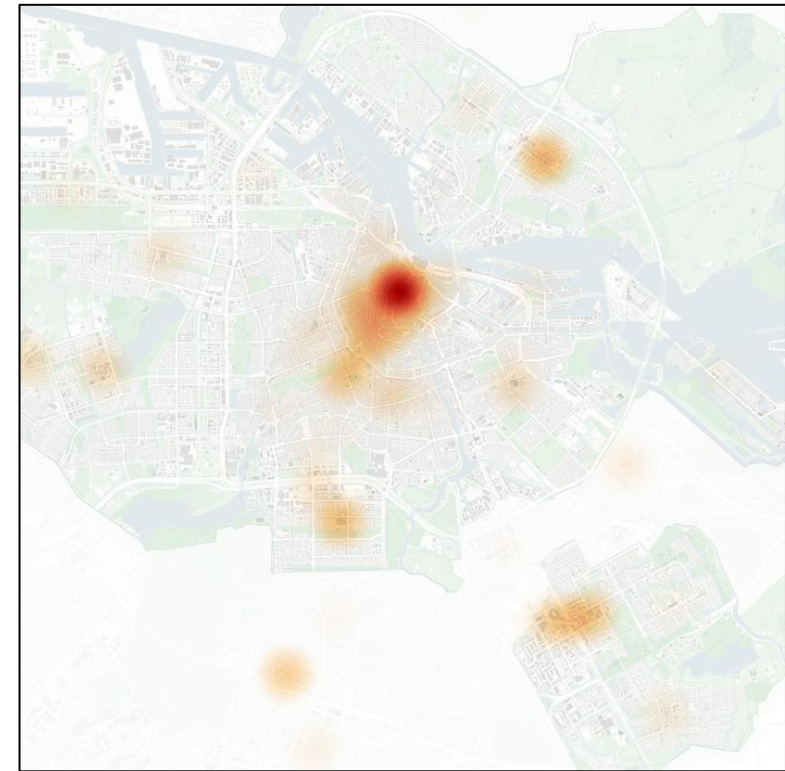


Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Spatial

Shopping

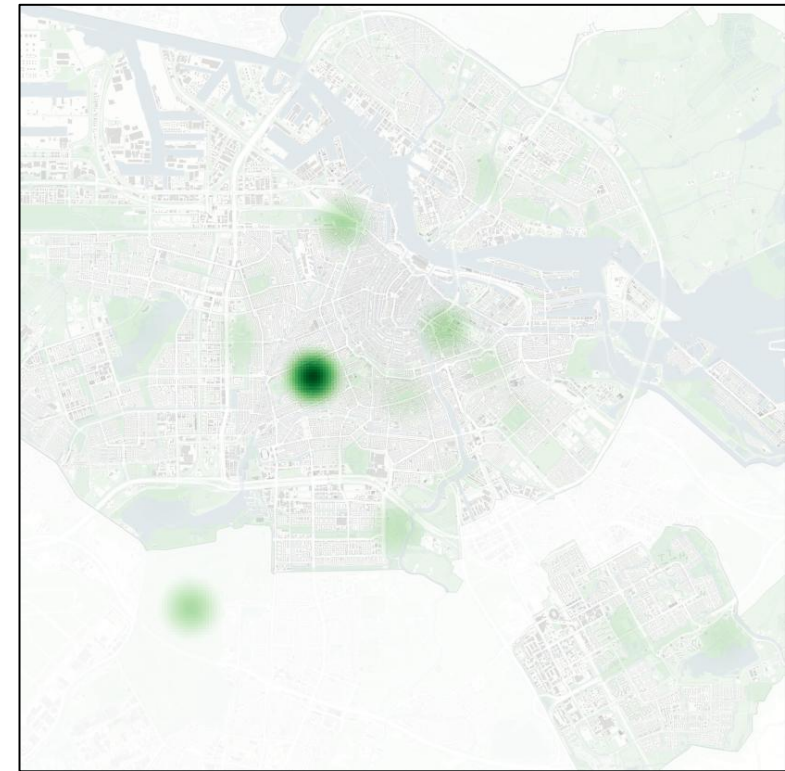


Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Spatial

Green recreation

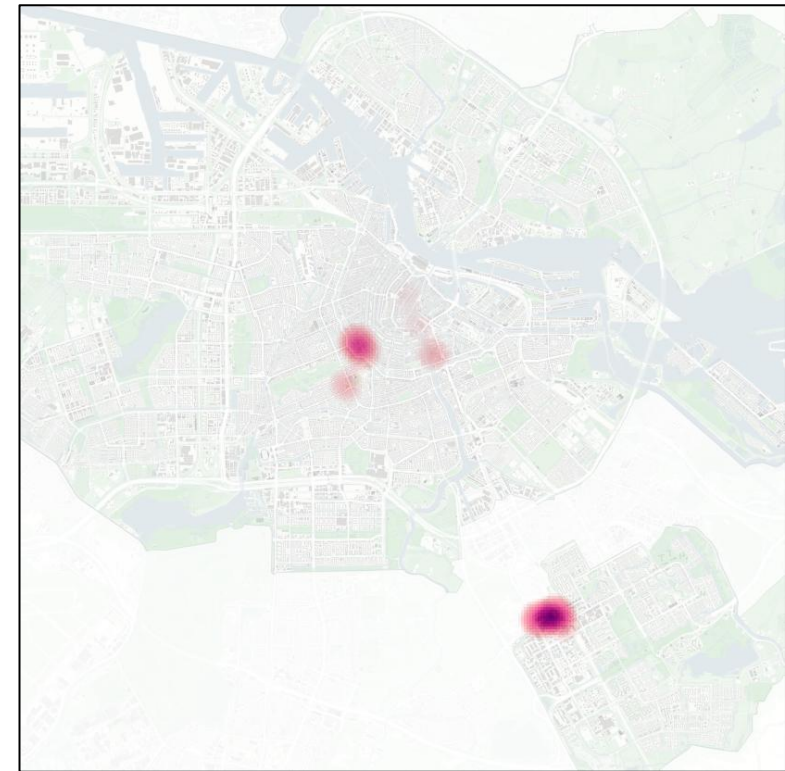


Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Spatial

Event venues

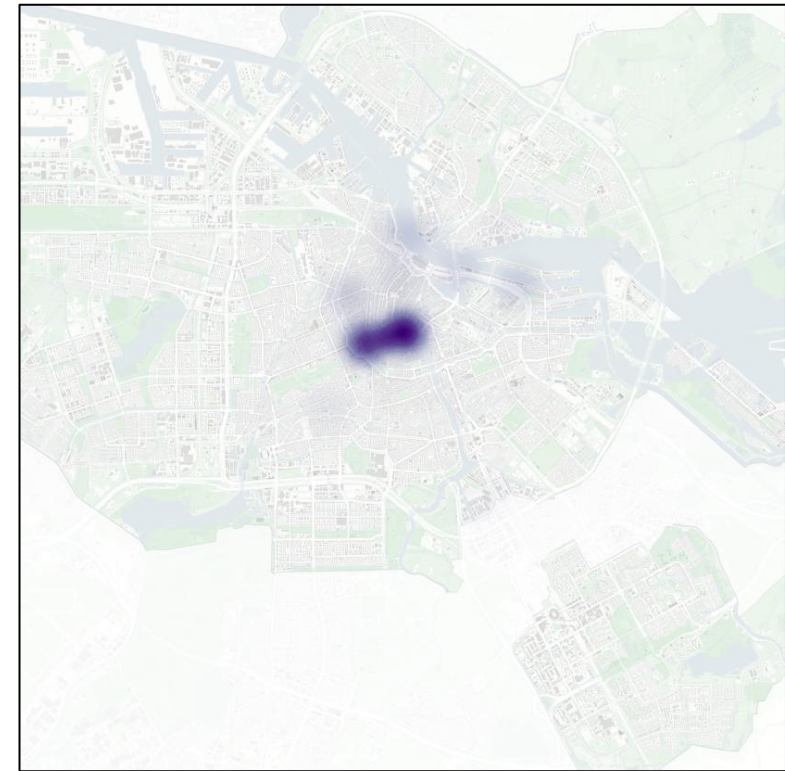


Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Spatial

Nightlife & Entertainment

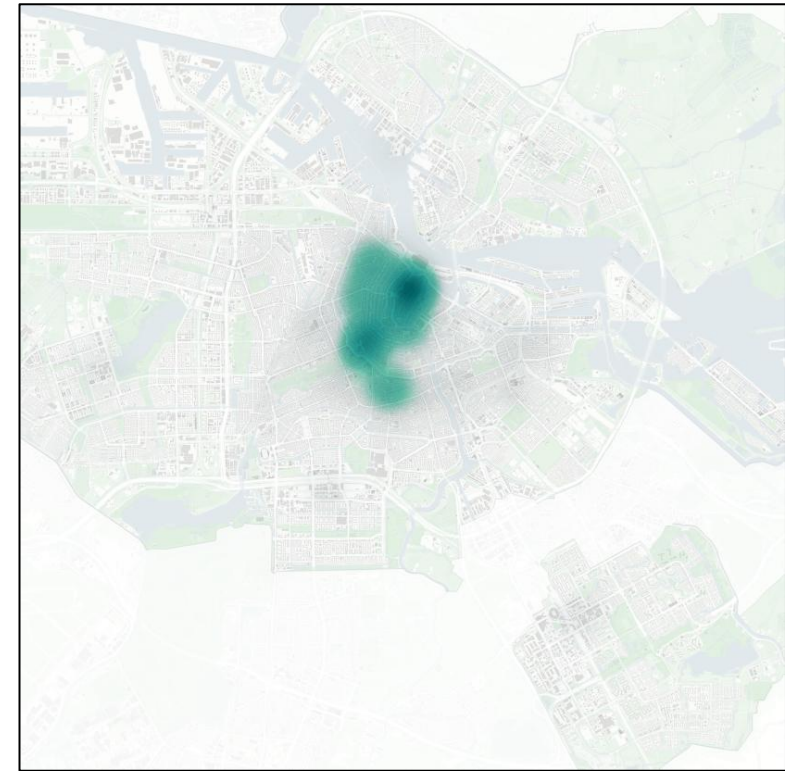


Spatiotemporal Pressure

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Spatial

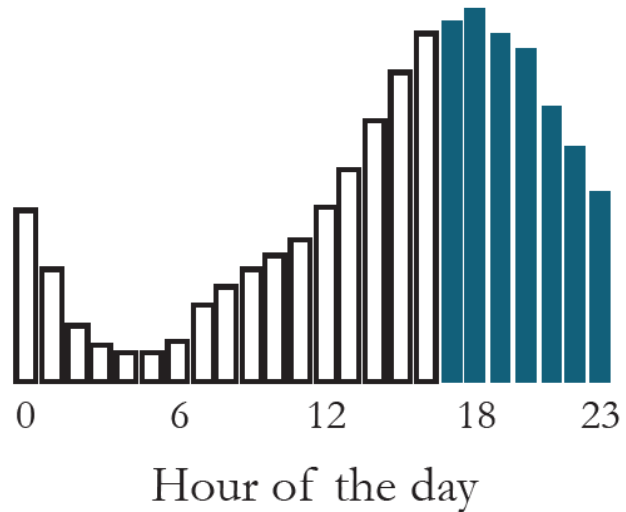
Dining & Cafe



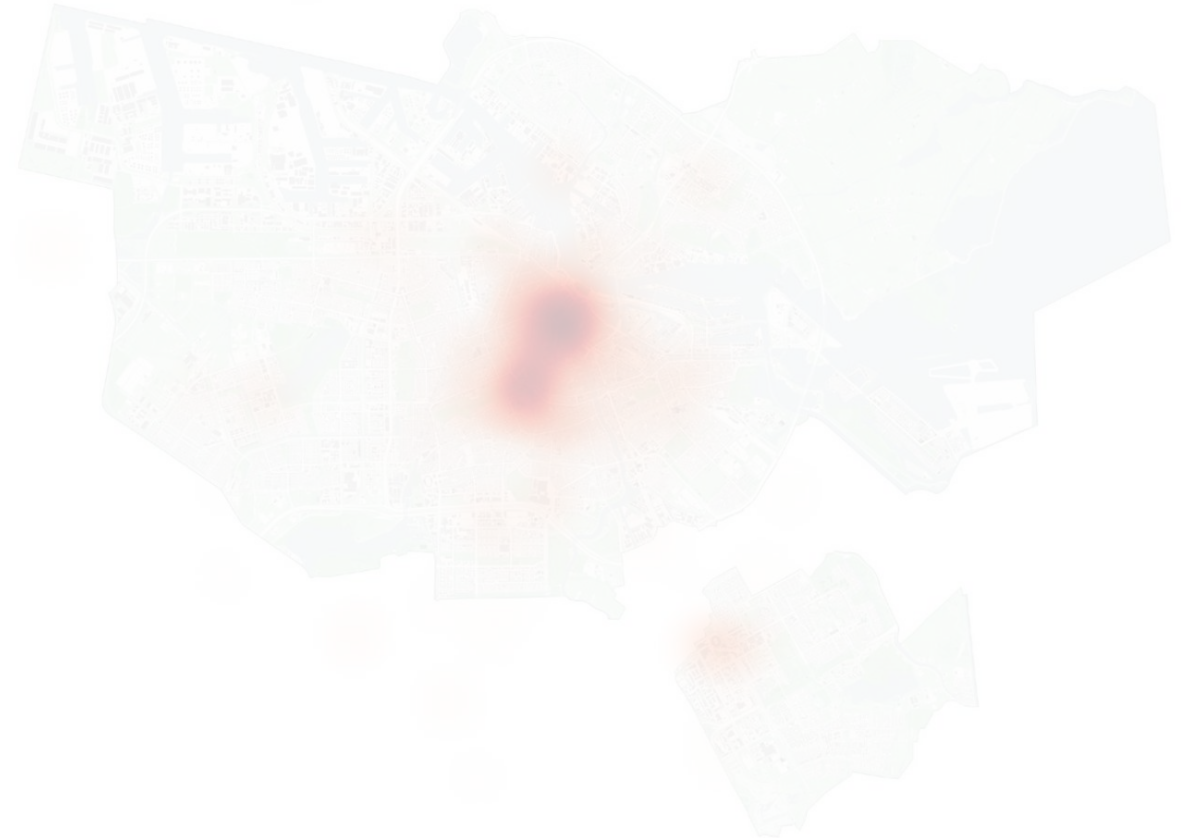
Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Temporal



Spatial



Spatiotemporal Pressure

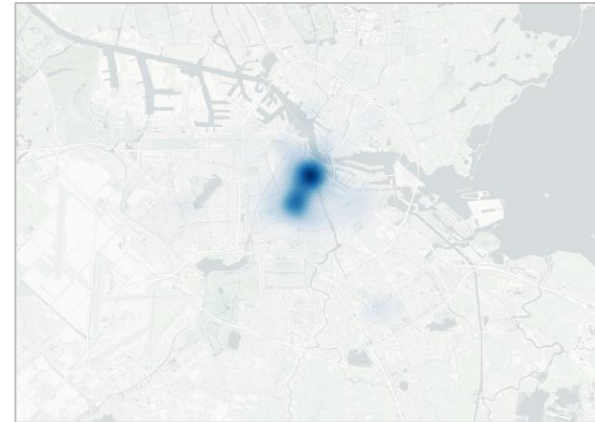
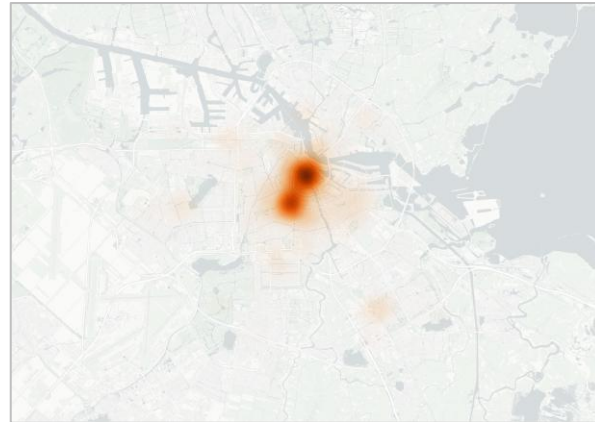
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Temporal

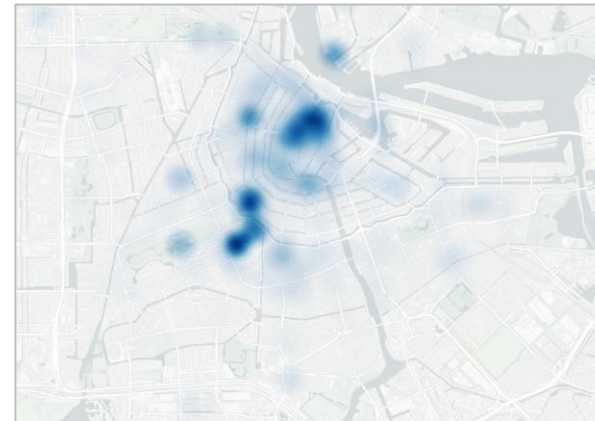
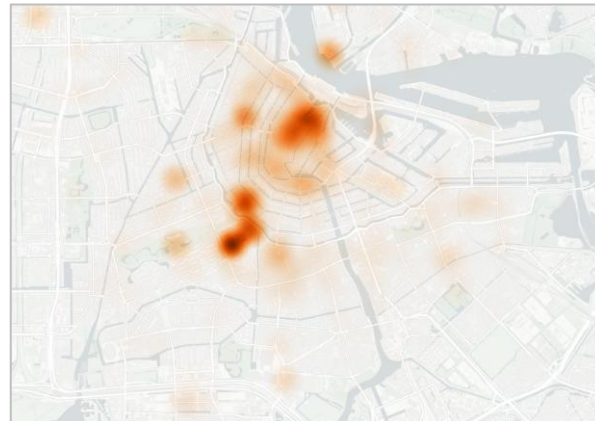
Weekday

Weekend

City



Inner-city



Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Temporal

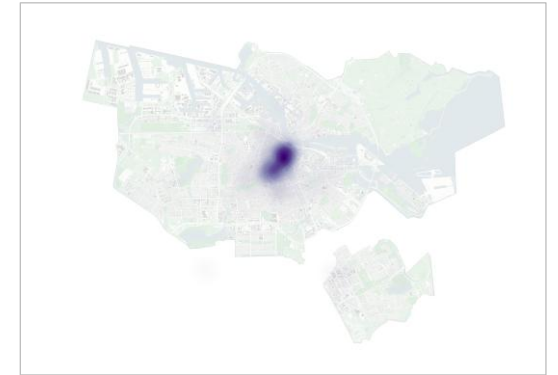
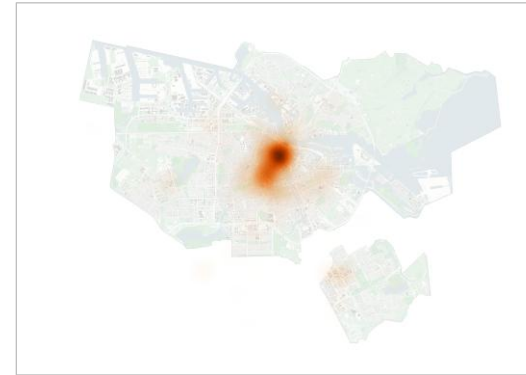
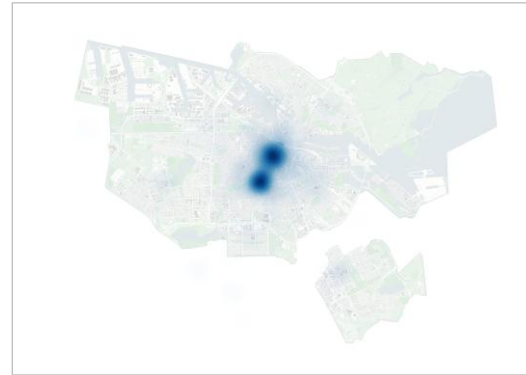
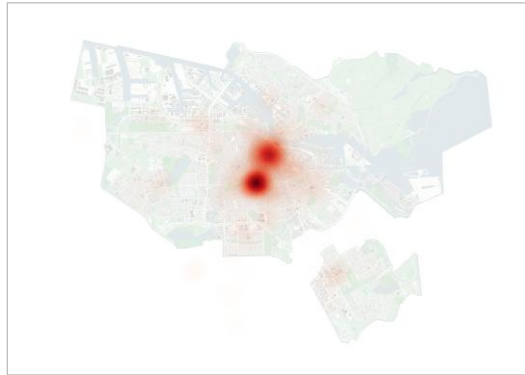
Morning

Afternoon

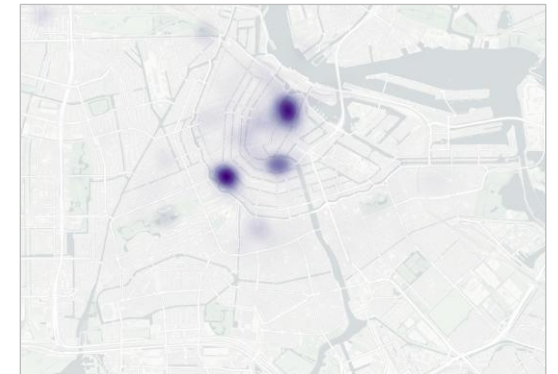
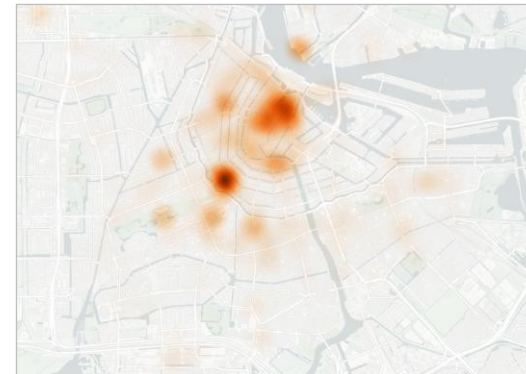
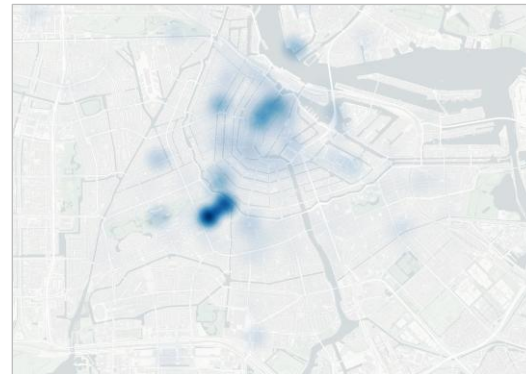
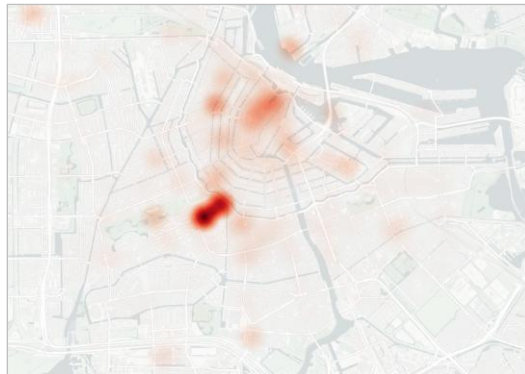
Evening

Night

City



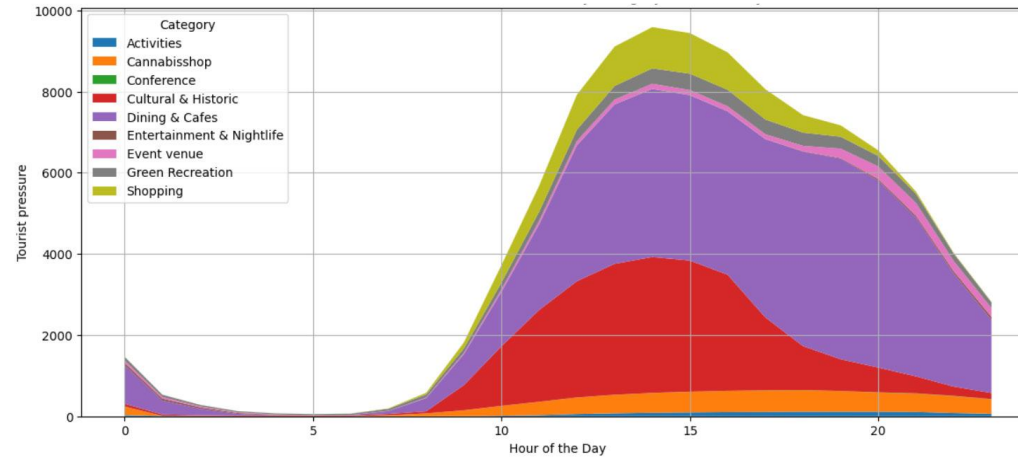
Inner-city



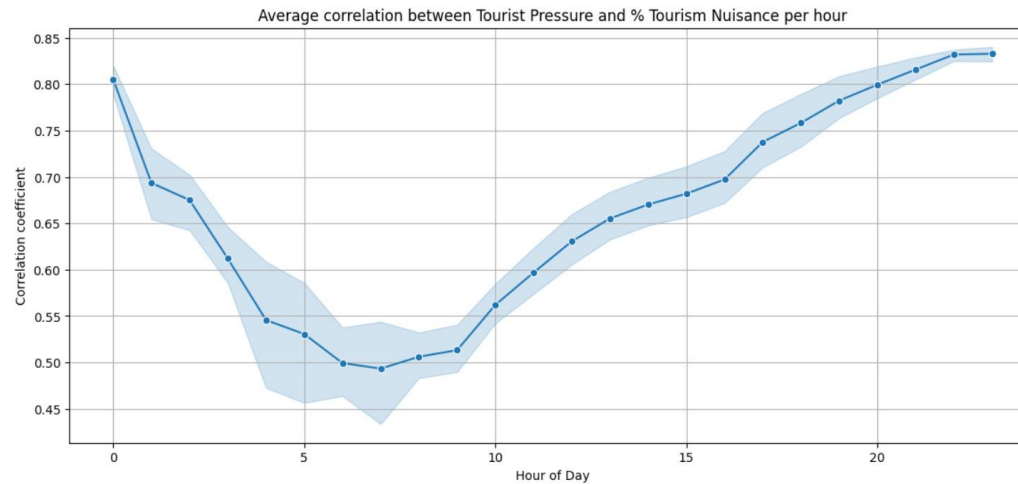
Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Tourist pressure



Correlation
Pressure And Nuisance



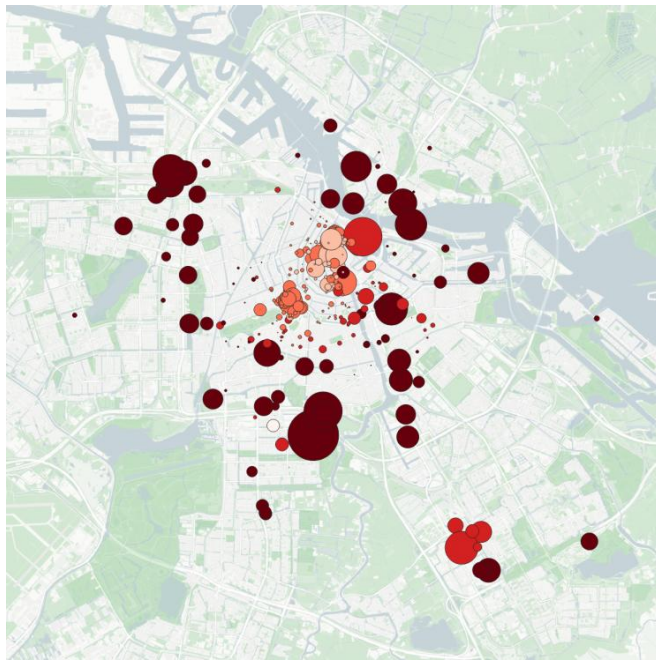
Spatiotemporal Pressure

What are the spatiotemporal **dynamics** of tourism flows in Amsterdam?

Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Origin -> Destination
within 15 min.



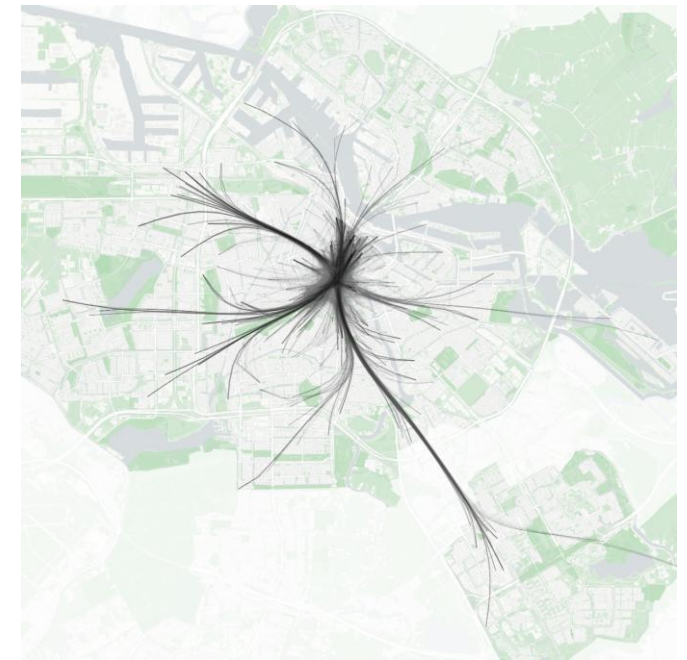
0 - 50 - 100
% within 15 min.

Amount
Hotelbeds

Combining activities



City Flows



Carrying capacity

How does the urban environment influence the impact of tourist pressure on liveability?



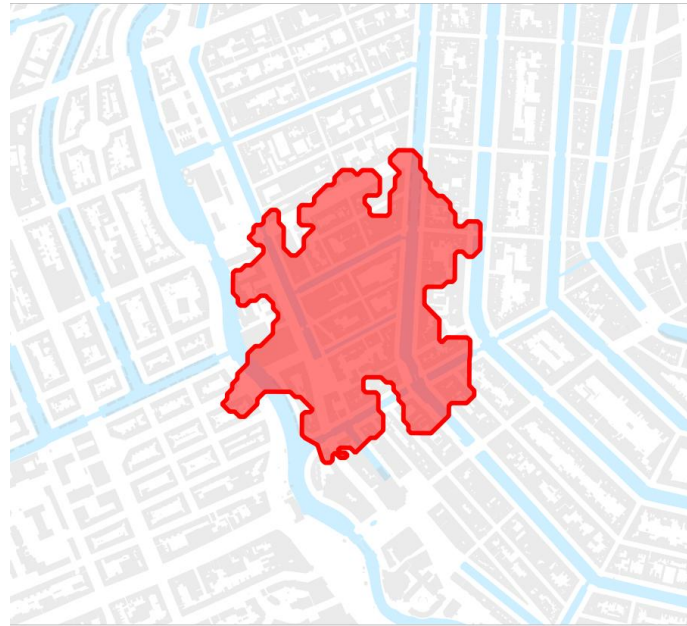
Carrying capacity

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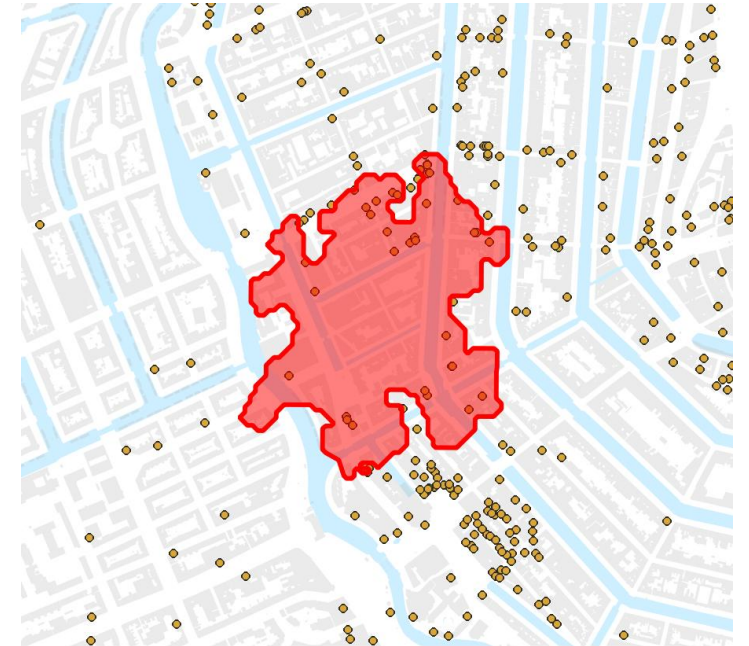
1. Hotel



2. Walking/Cycling/Public Transport
Isochrone



3. Pressure/Morphology



Carrying capacity

Network capacity

City Scale



Neighbourhood scale



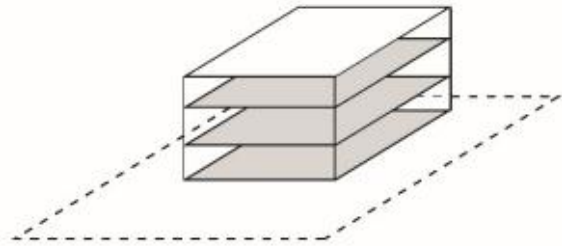
Carrying capacity

Space capacity

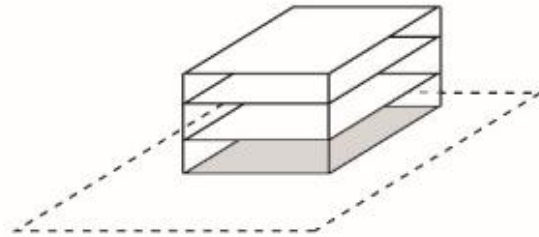
FSI

GSI

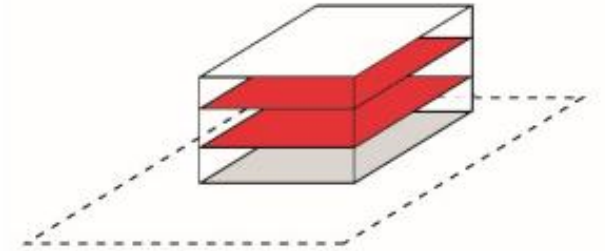
MXI



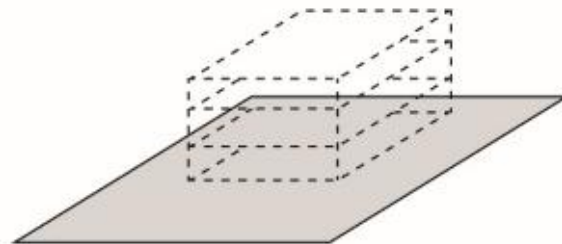
Built floor area



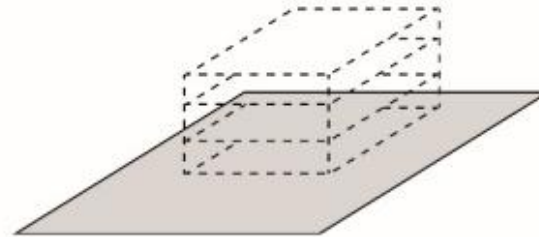
Footprint



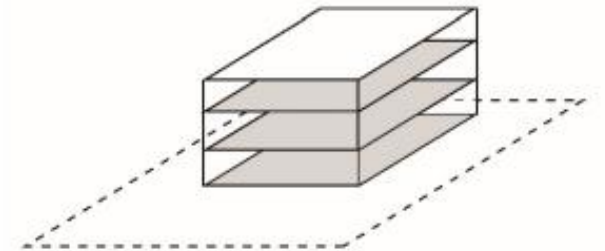
Built floor area residential



Plot size



Plot size

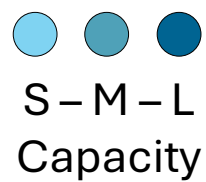
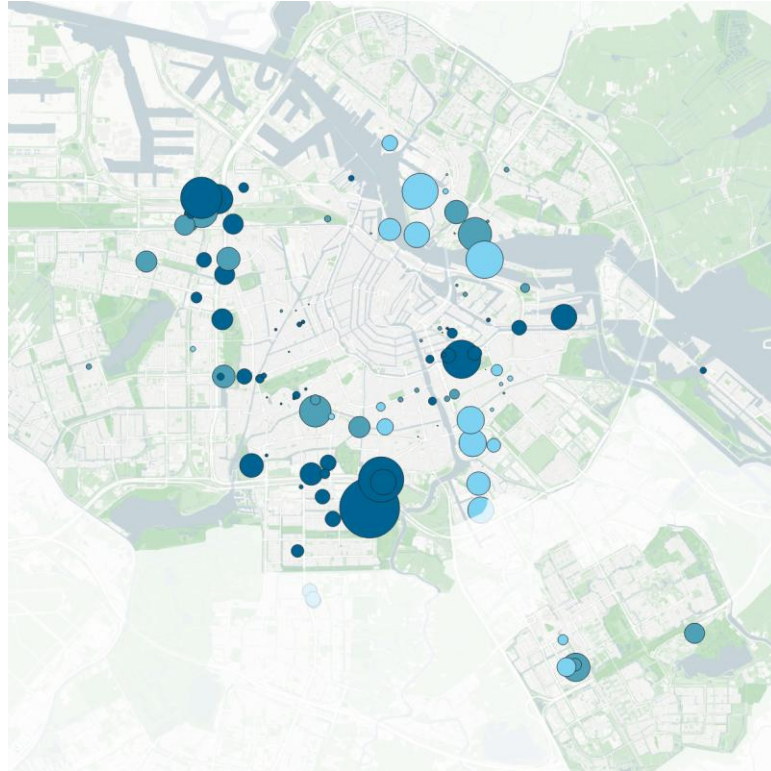


Built floor area

Carrying capacity

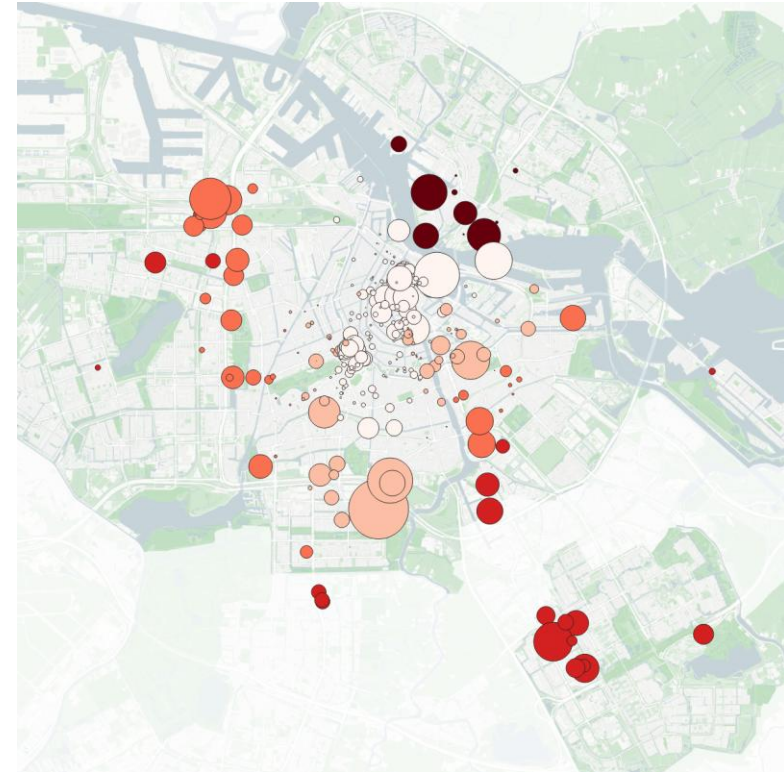
Network Capacity

Low Pressure



Space Capacity

FSI



Carrying capacity

Urban environment

Private Space

“I don’t want to sit outside because it’s way too busy, way too much noise.”

Pedestrian Space

“People just walk past each other and don’t recognize each other, that’s the ugly thing.”

Built Space

“Outside it’s only noise, noise, and screaming and shouting. You can’t relax in your own street.”

Carrying capacity

Urban environment

Private Space



Pedestrian Space



Built Space



Carrying capacity

Urban environment

Moderation Analysis

Moderators

M2 of Private Space / Pedestrian Space / Built Space

Independent variable

Tourist Pressure

Dependent variable

Tourism nuisance
(Overtourism)

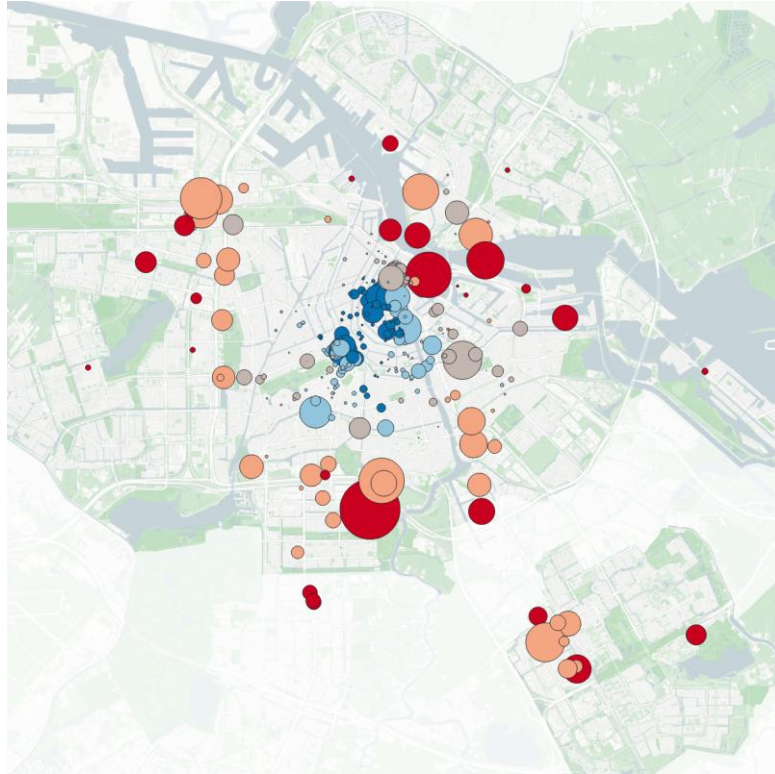
Results

- Tourist pressure alone explains 54%
- With moderation explains 80%
- **More private space, weakens link**
- More pedestrian space, no link
- **More built space, strengthens link**

Carrying capacity

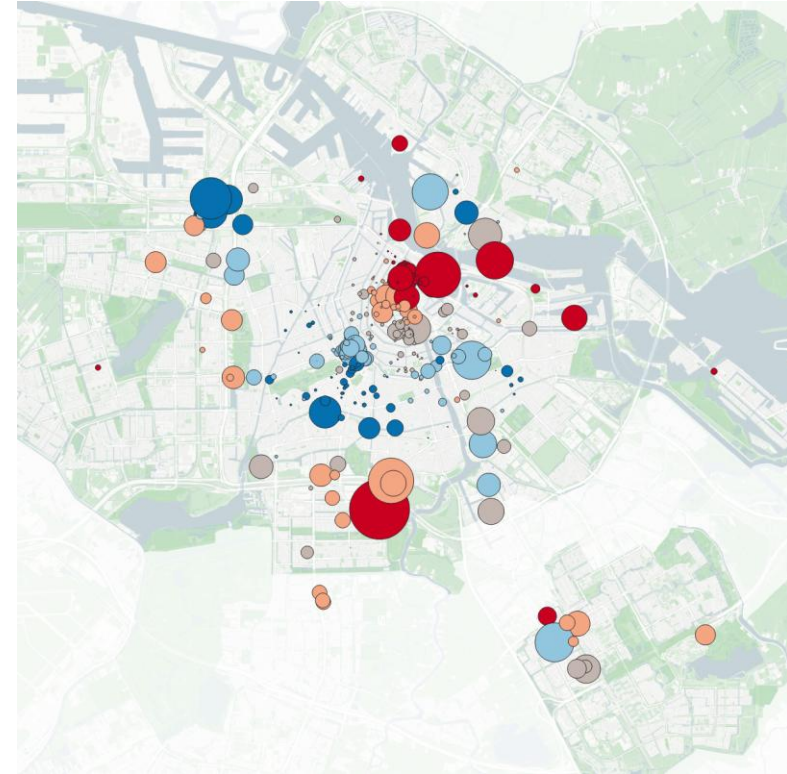
Urban environment

Built space

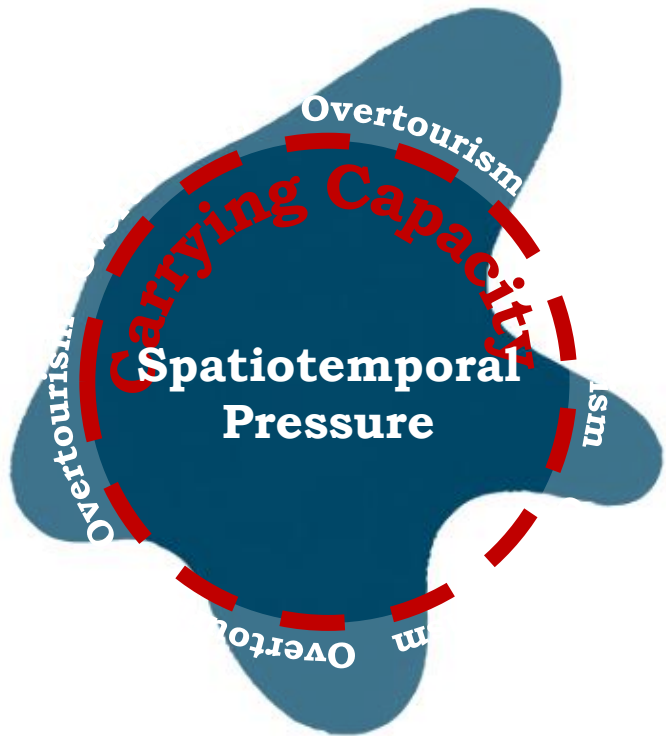


— ● ● ● ● ● +
Amount of built space

Private space



— ● ● ● ● ● +
Amount of private space

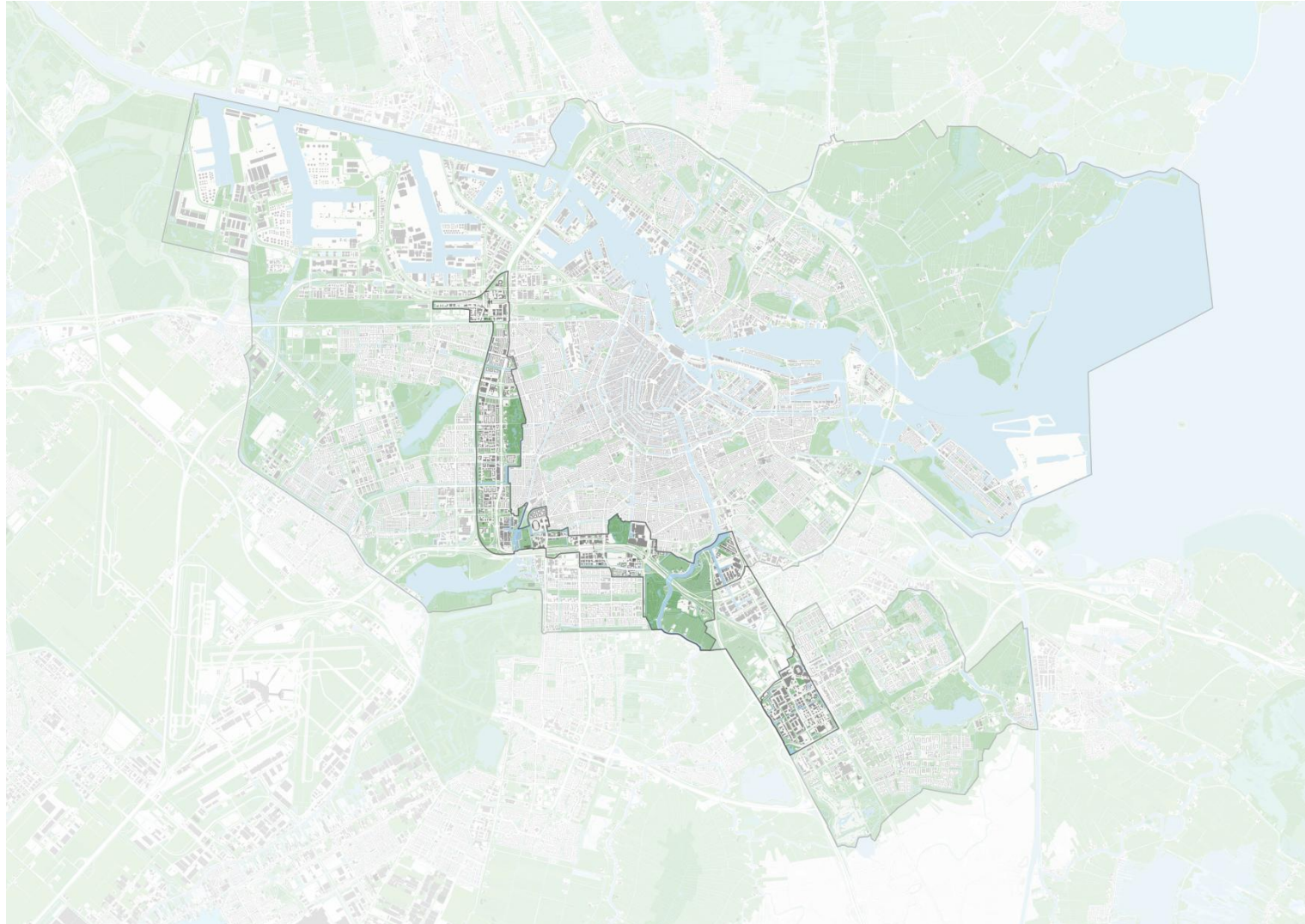


The Detour

How can a data-informed strategy contribute to addressing overtourism in Amsterdam?

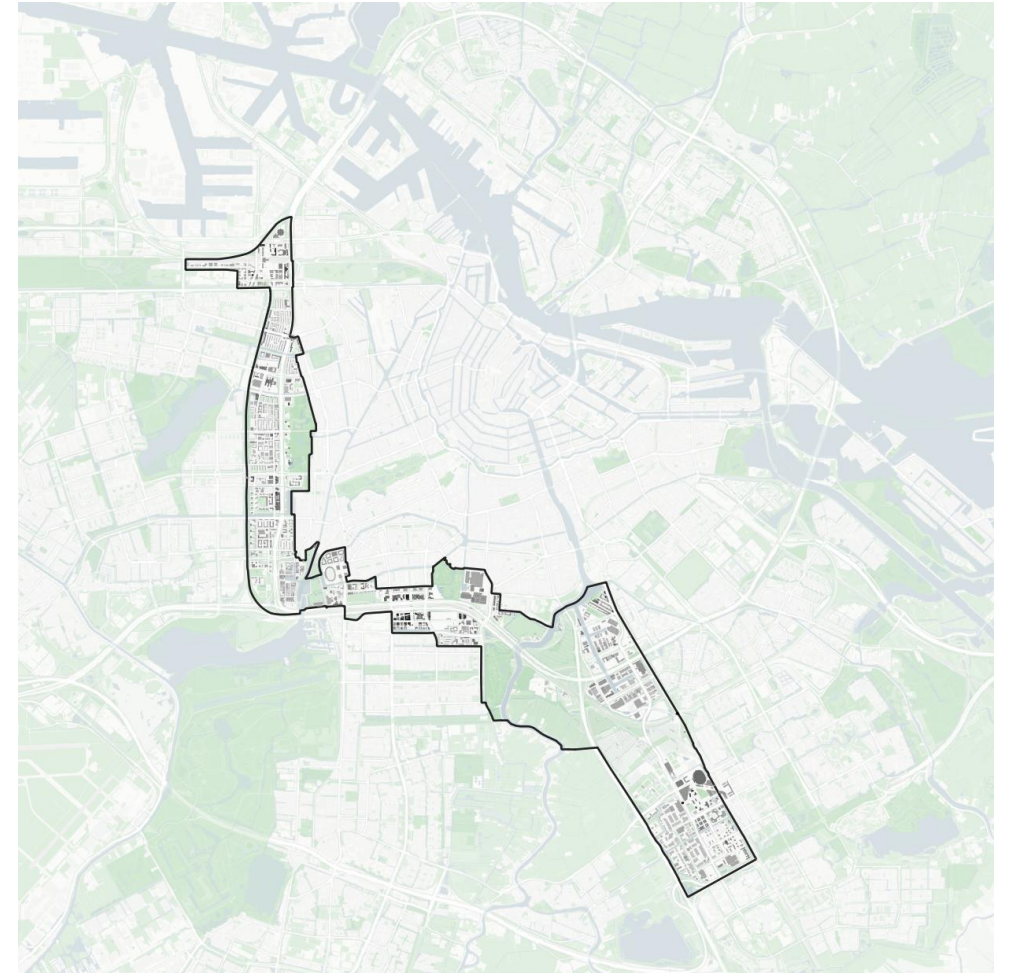
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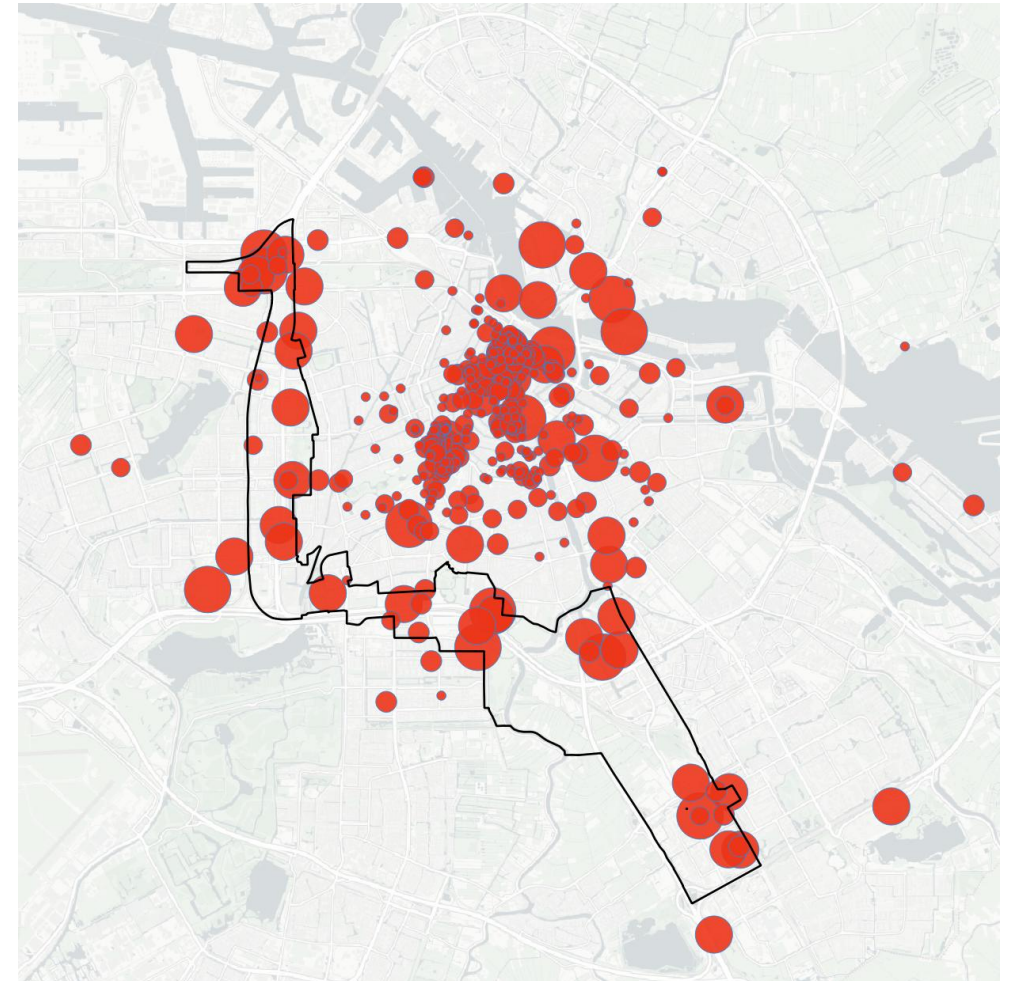
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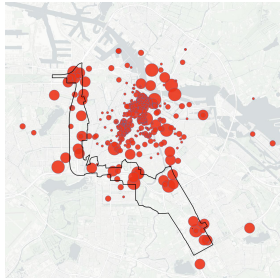
Hotelbeds



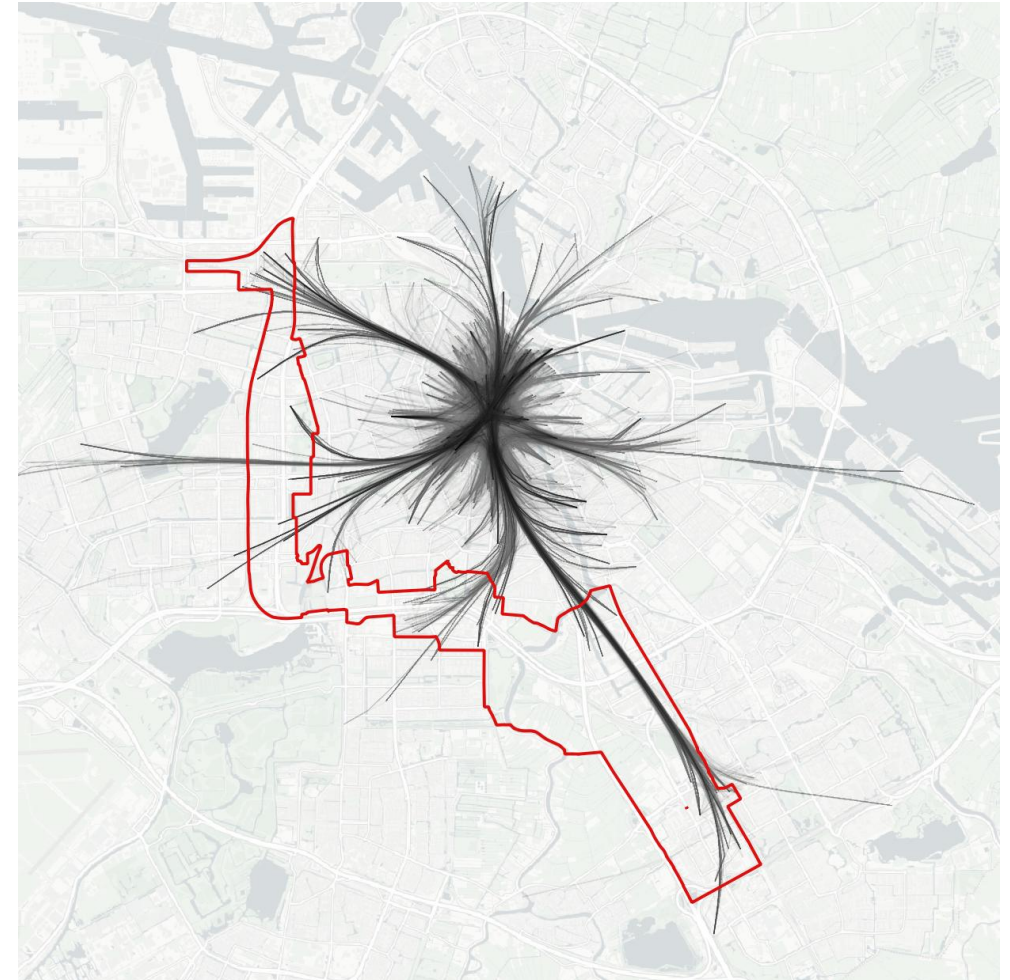
The Detour

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Hotelbeds



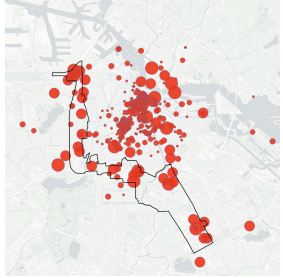
Flows



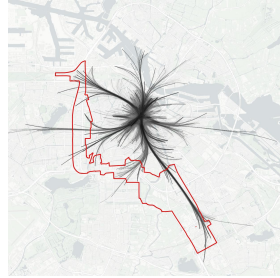
The Detour

How can a data-informed strategy contribute to addressing overtourism in Amsterdam?

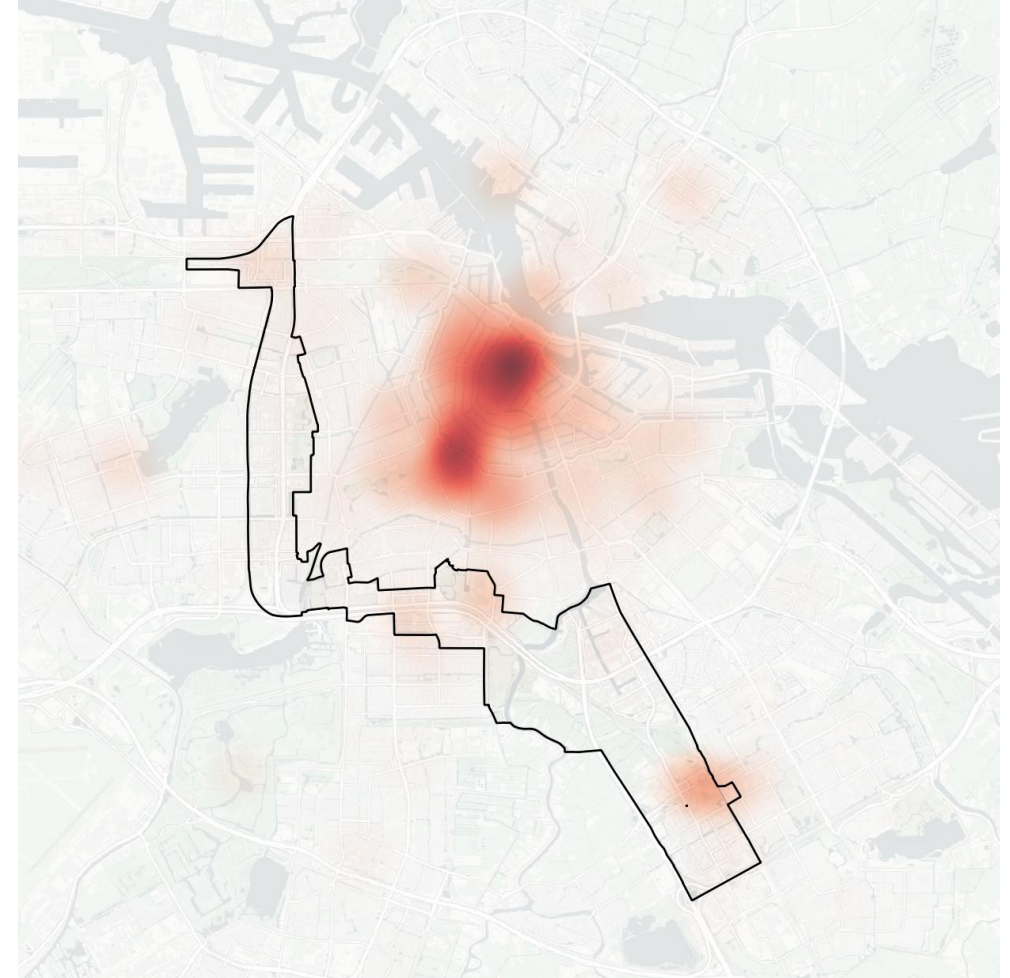
Hotelbeds



Flows



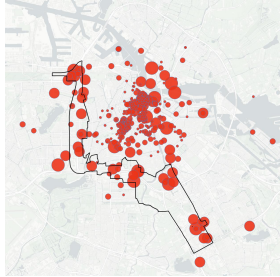
Pressure



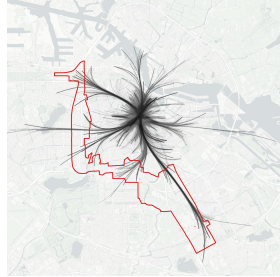
The Detour

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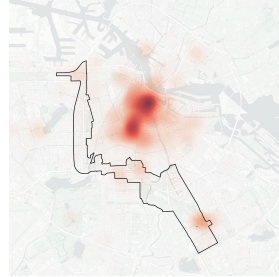
Hotelbeds



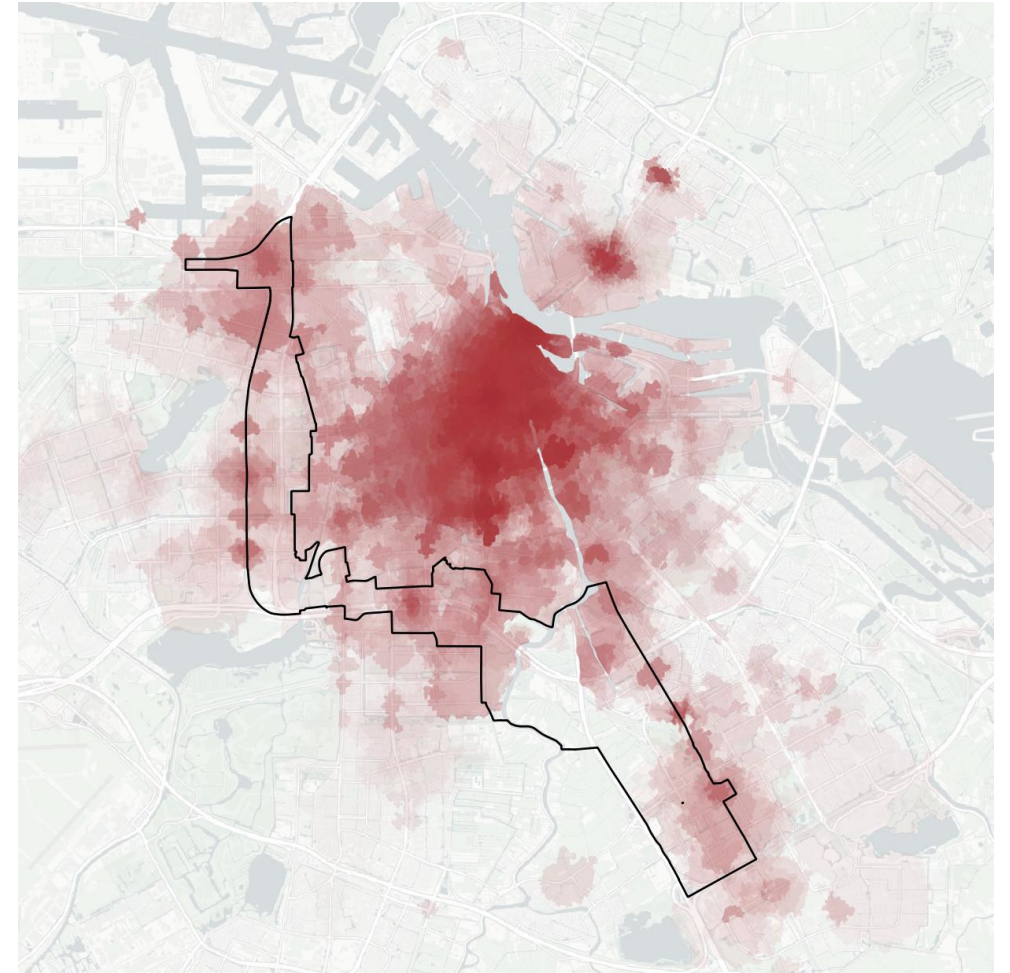
Flows



Pressure



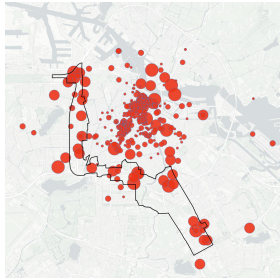
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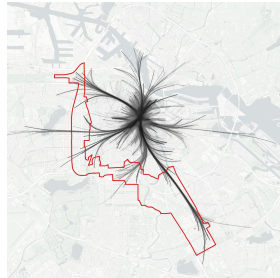
The Detour

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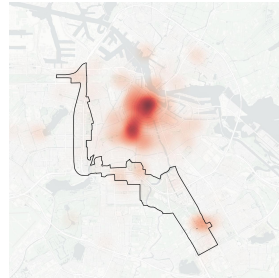
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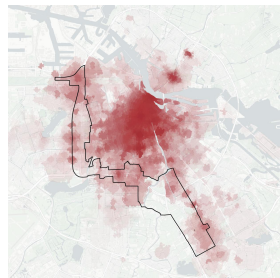
Flows



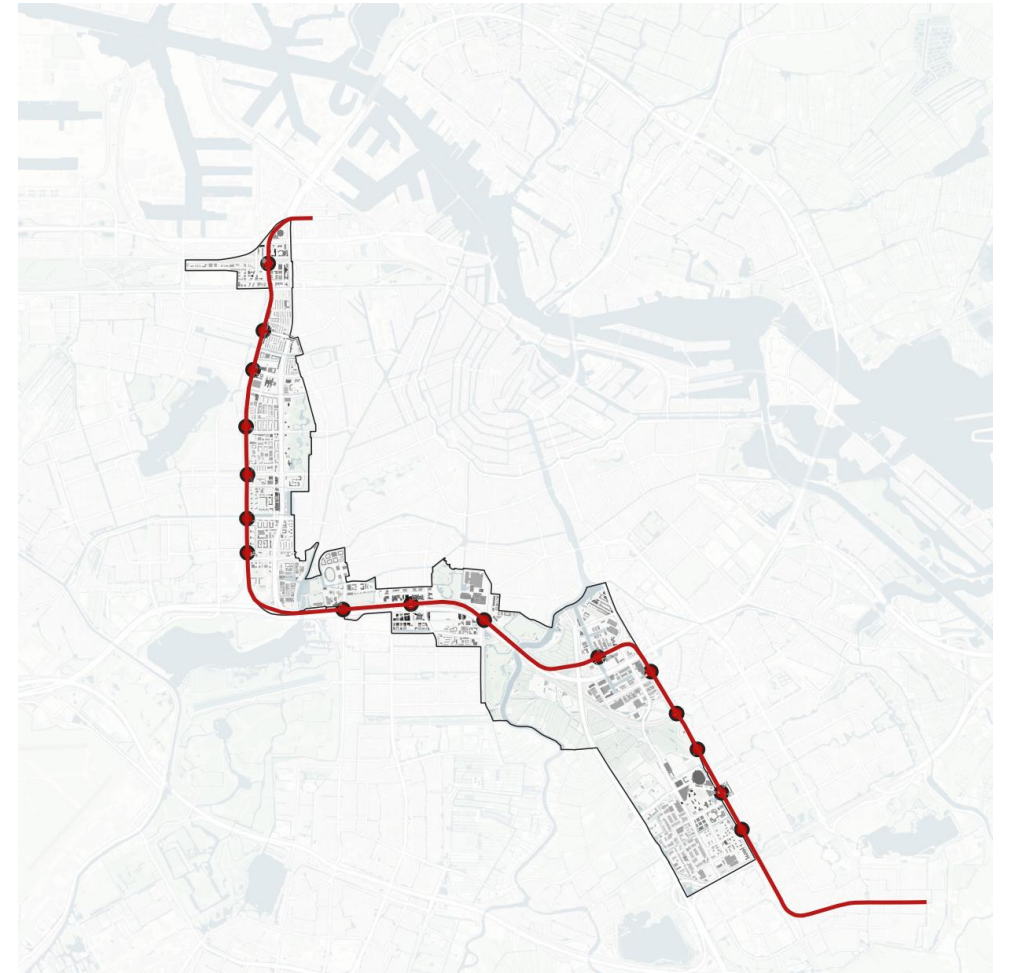
Pressure



Accessible



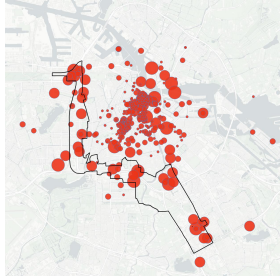
Metroline



The Detour

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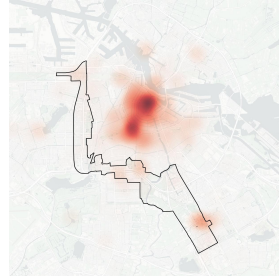
Hotelbeds



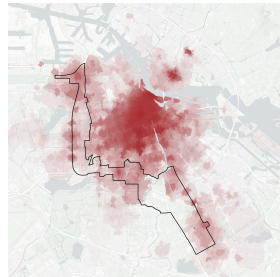
Flows



Pressure



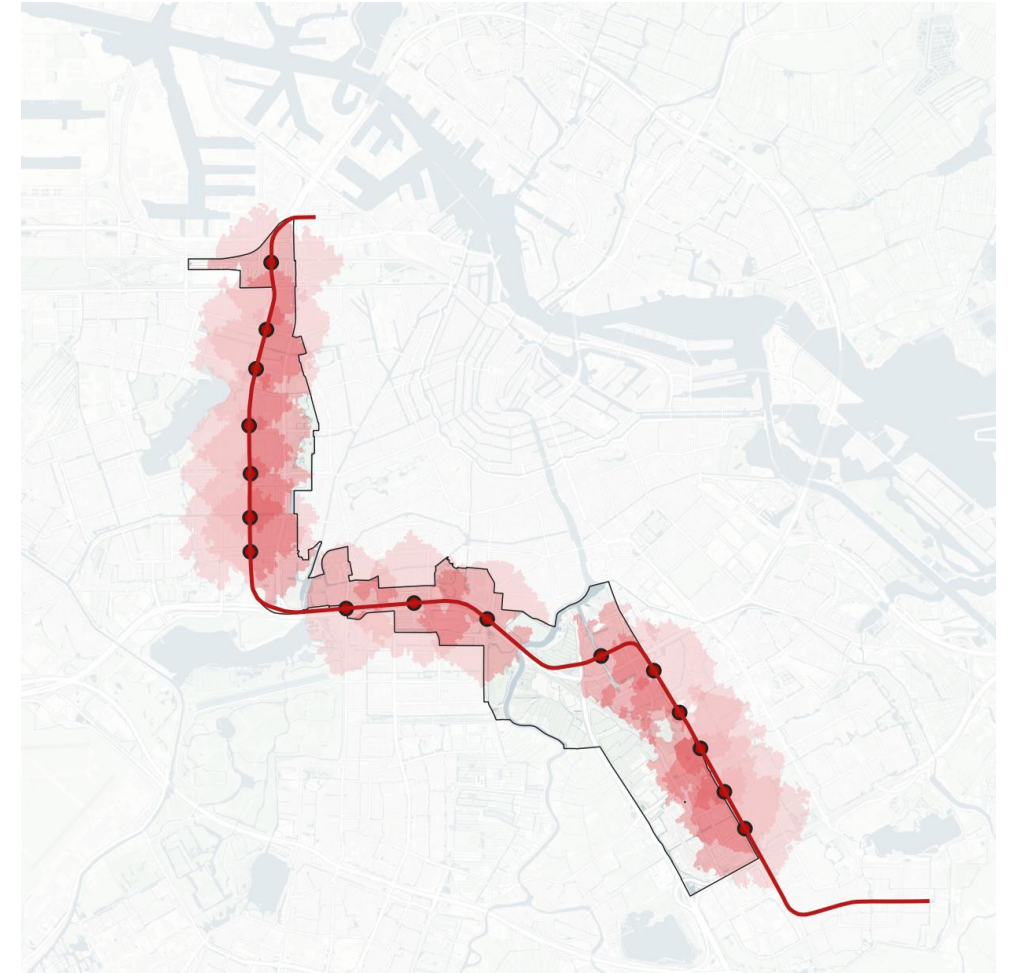
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Metroline



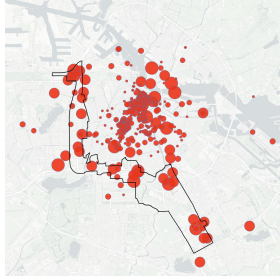
Coverage



The Detour

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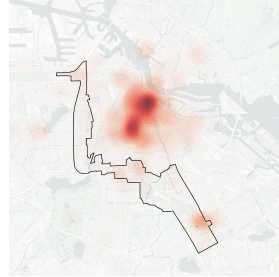
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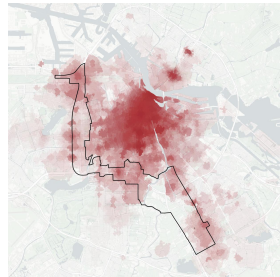
Flows



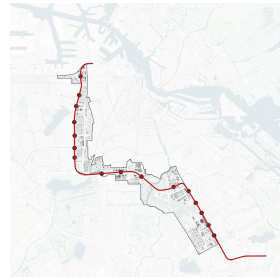
Pressure



Accessible



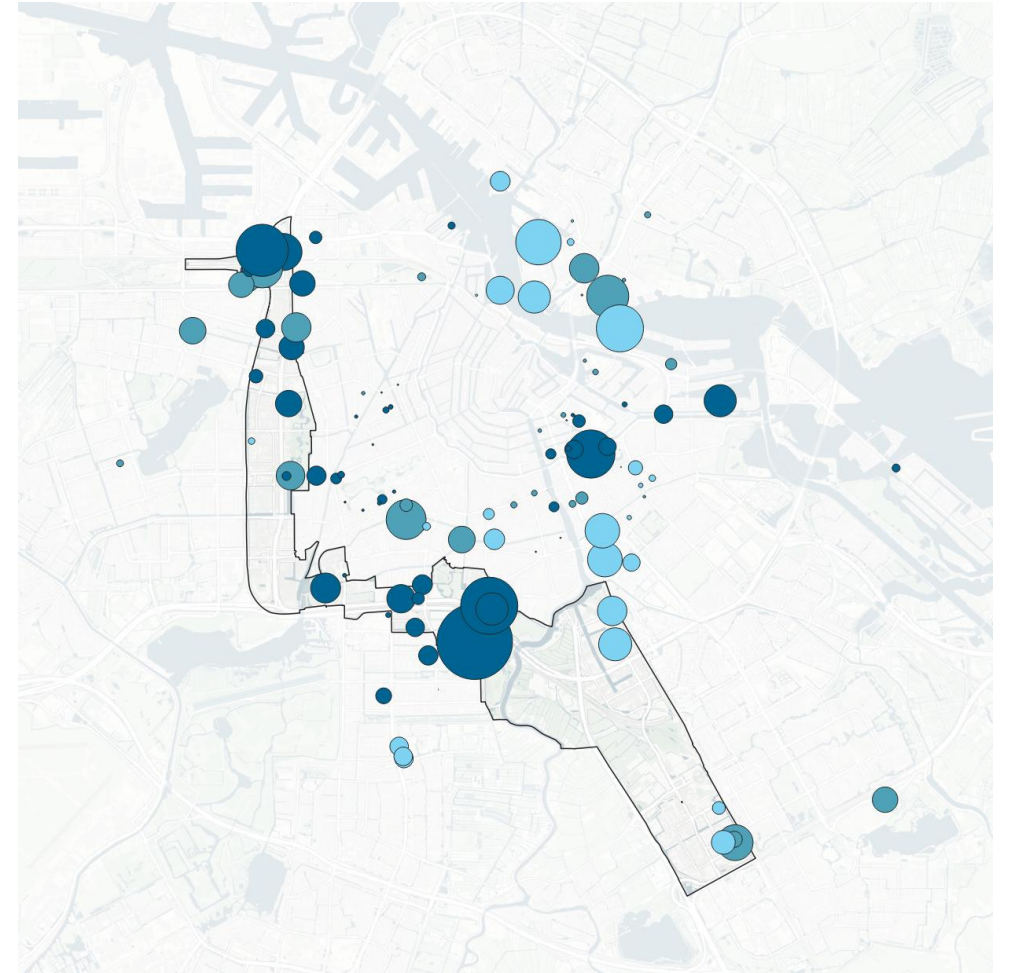
Metroline



Coverage



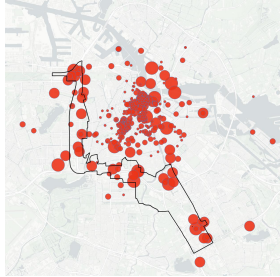
Network



The Detour

How can a data-informed strategy contribute to addressing overtourism in Amsterdam?

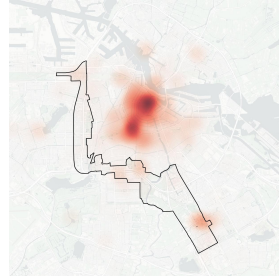
Hotelbeds



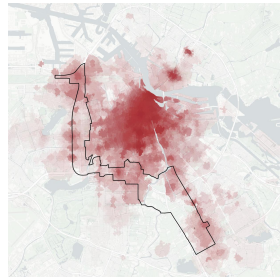
Flows



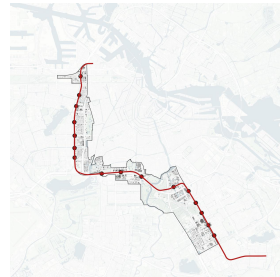
Pressure



Accessible



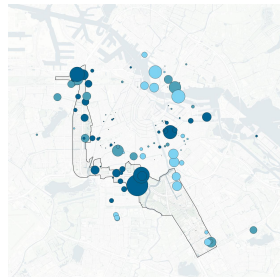
Metroline



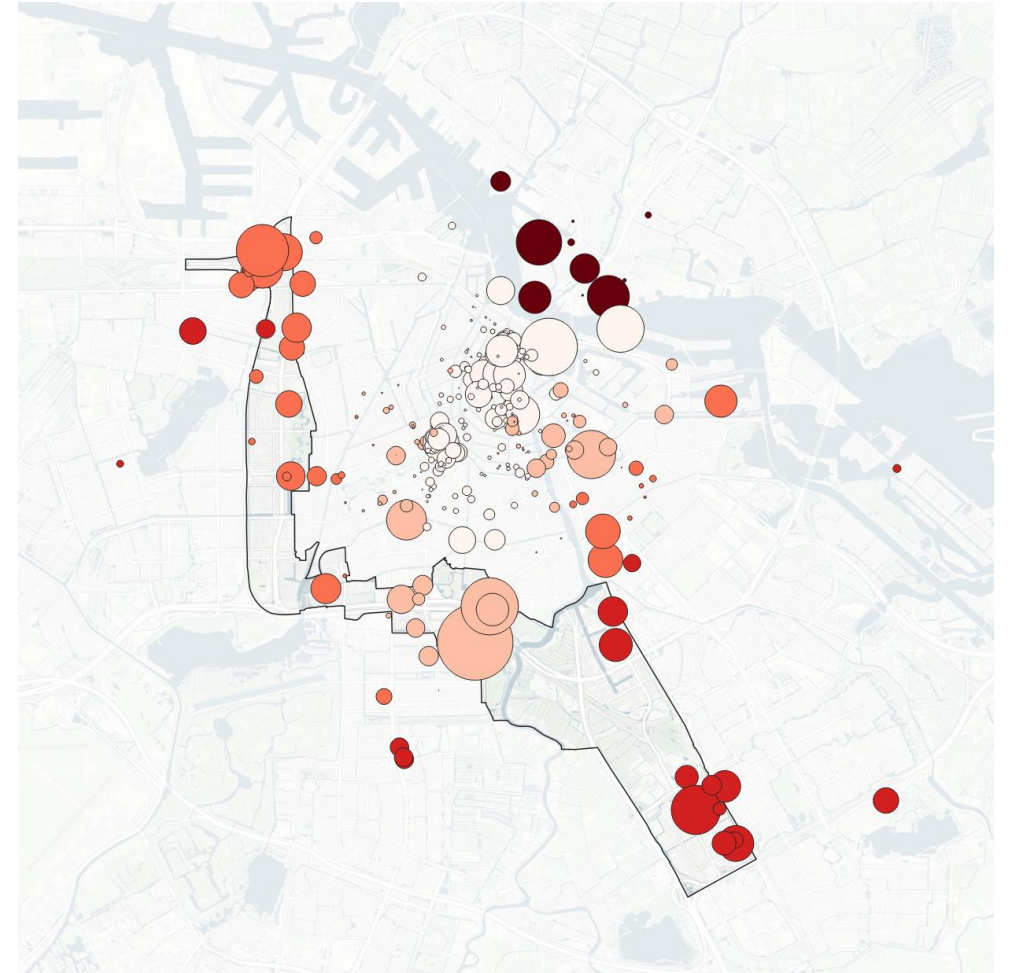
Coverage



Network



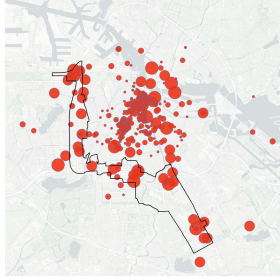
FSI



The Detour

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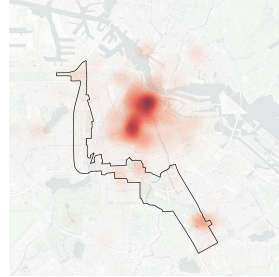
Hotelbeds



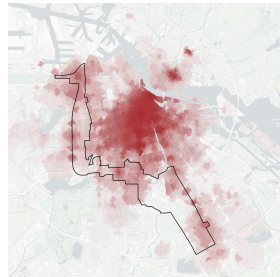
Flows



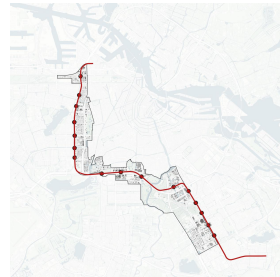
Pressure



Accessible



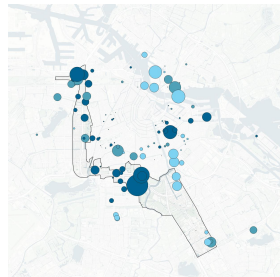
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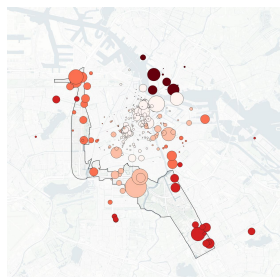
Coverage



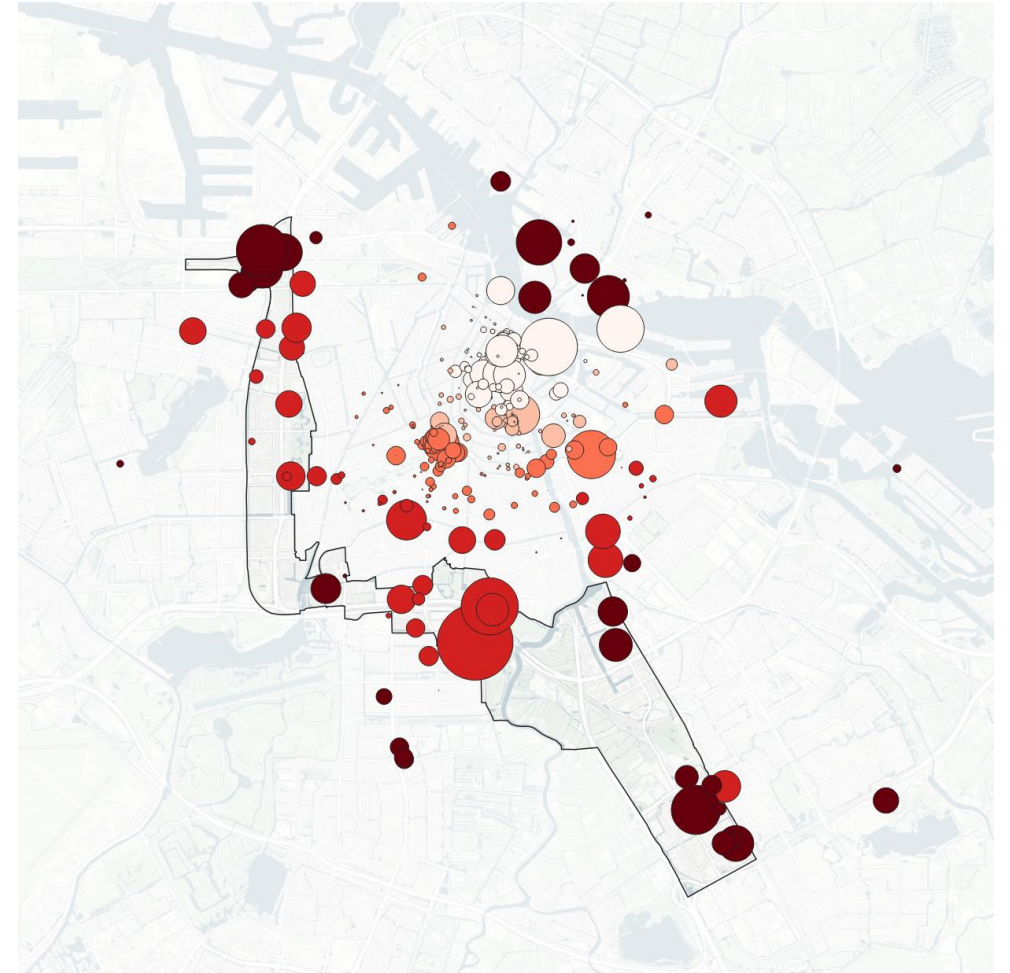
Network



FSI



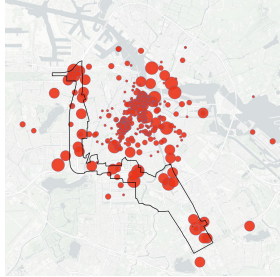
GSI



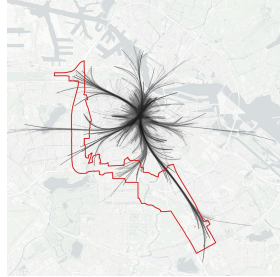
The Detour

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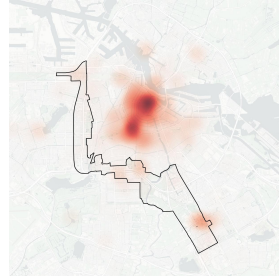
Hotelbeds



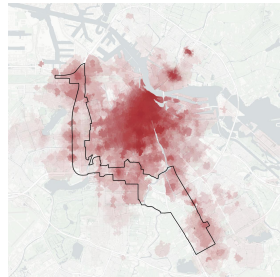
Flows



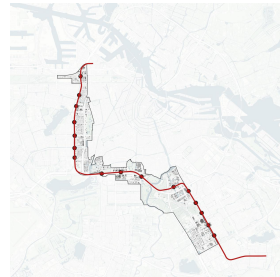
Pressure



Accessible



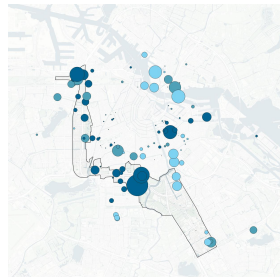
Metroline



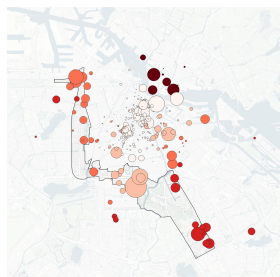
Coverage



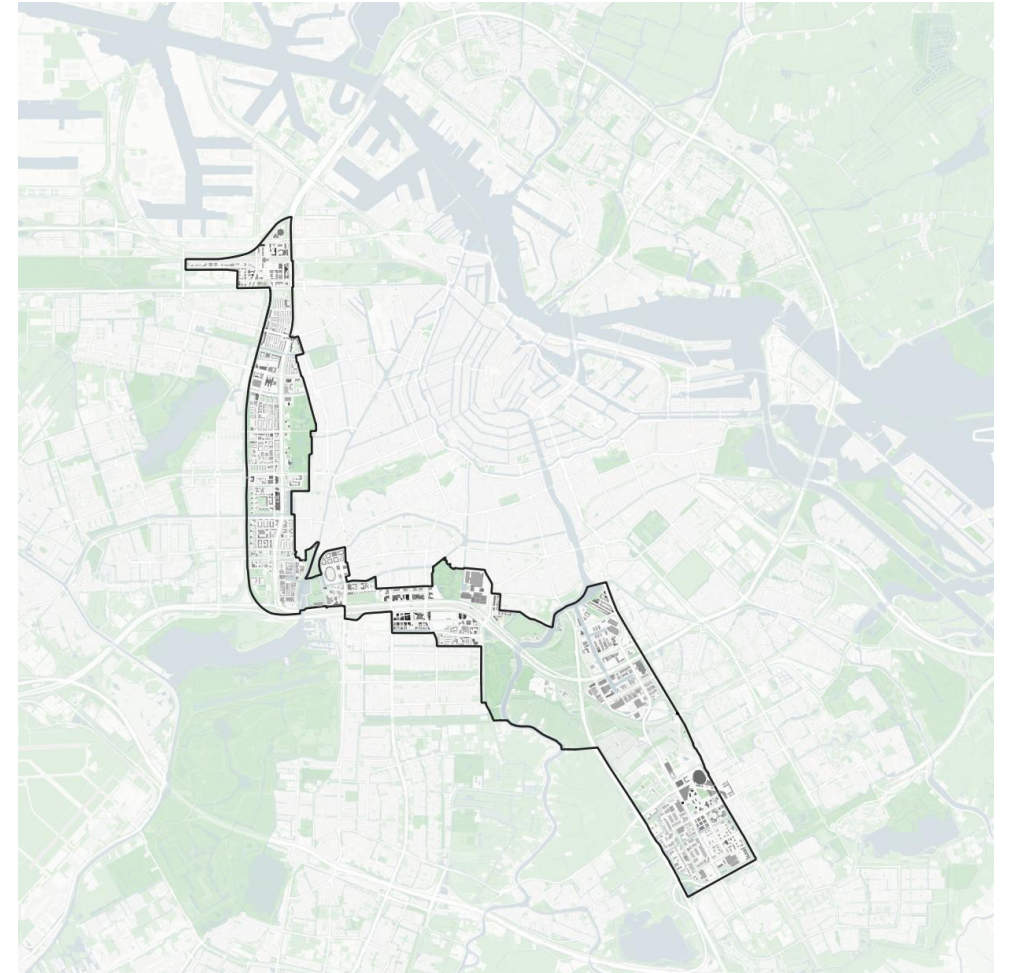
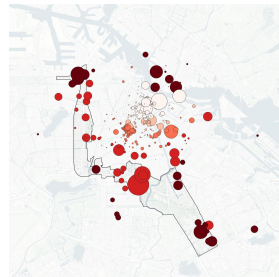
Network



FSI



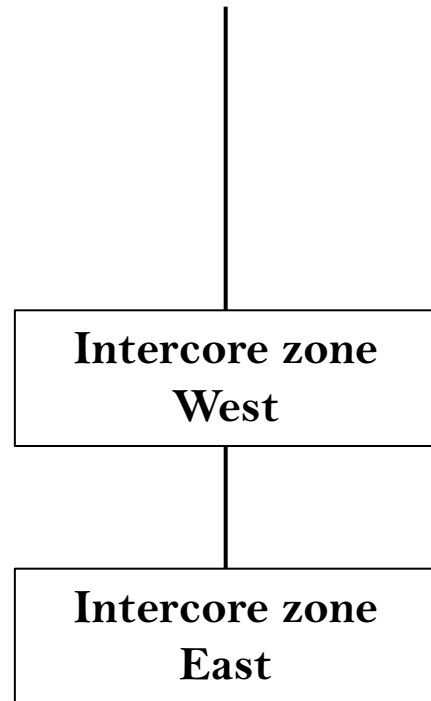
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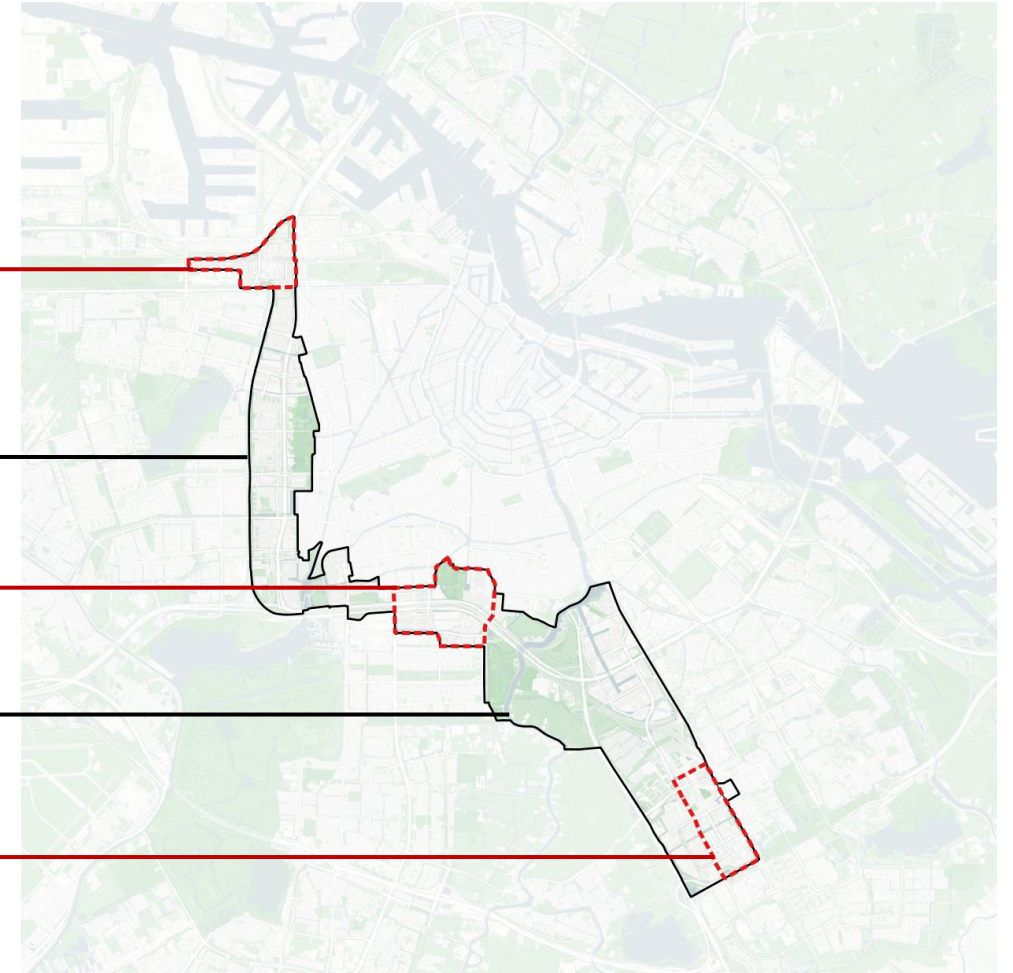
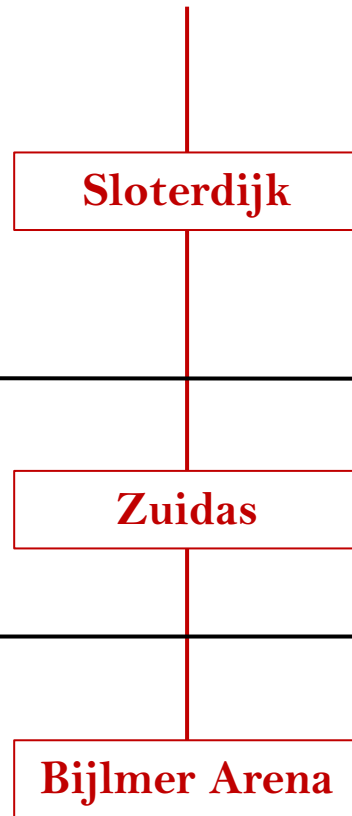
The Detour

How can a data-informed strategy contribute to addressing overtourism in Amsterdam?

2 Intercore zones

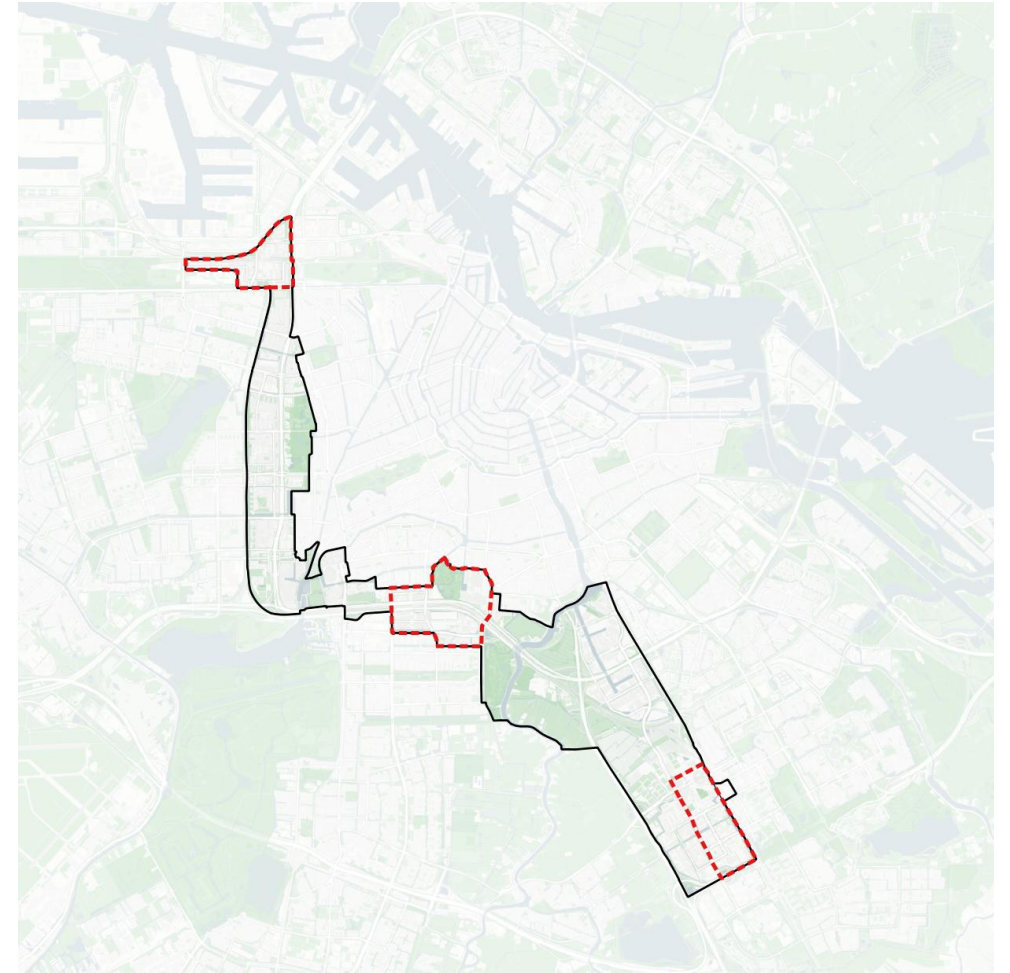


3 Cores



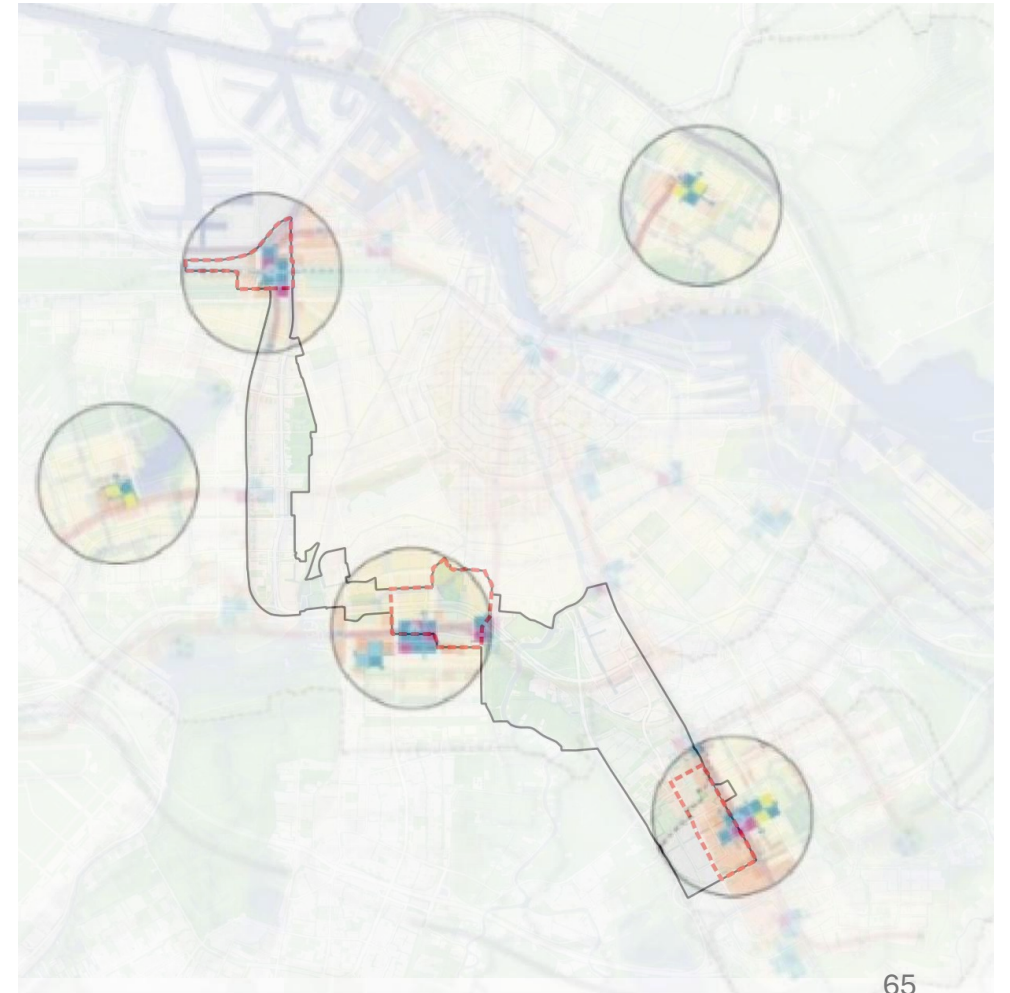
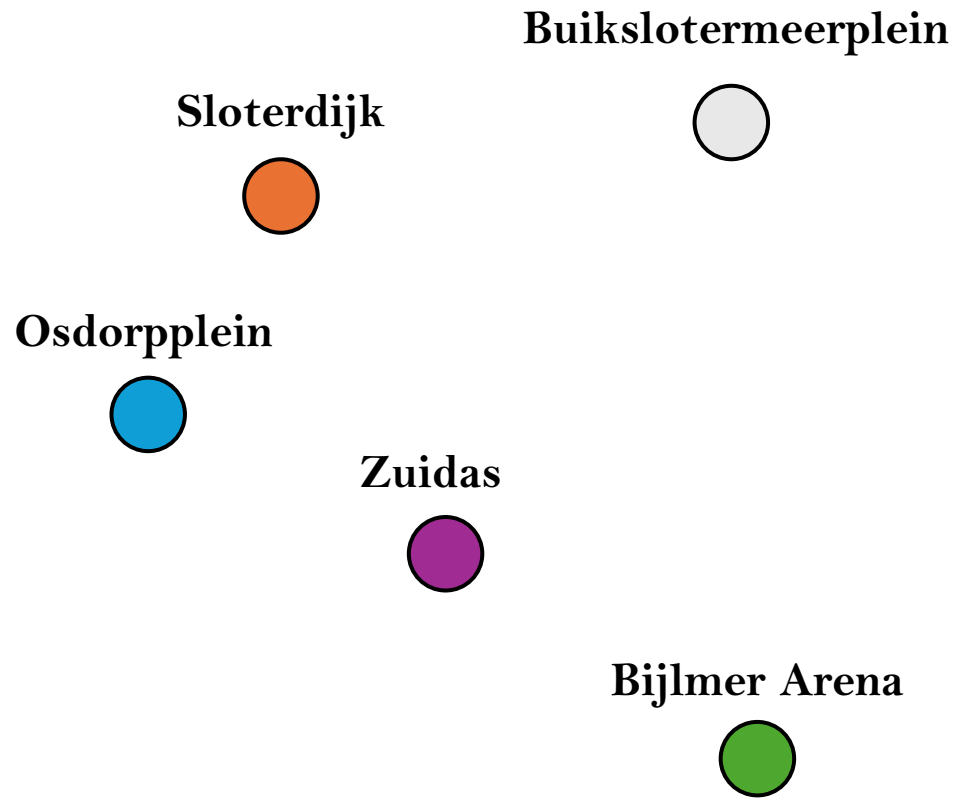
The Detour

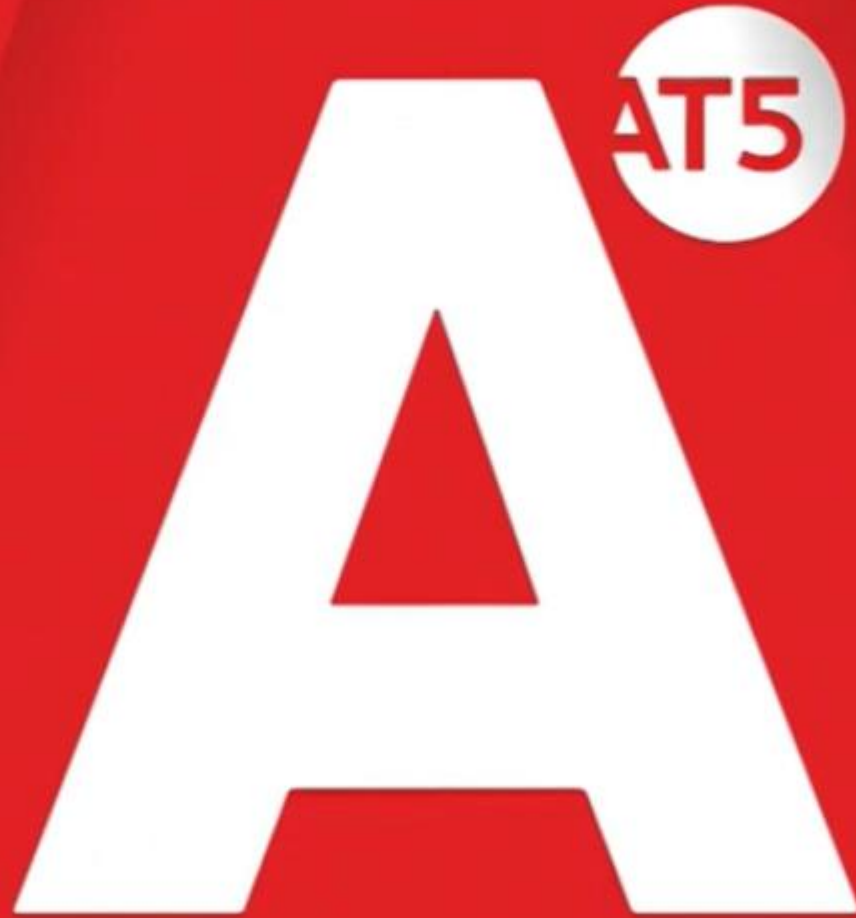
Going from multi-core to corridor



The Detour

How can a data-informed strategy contribute to addressing overtourism in Amsterdam?



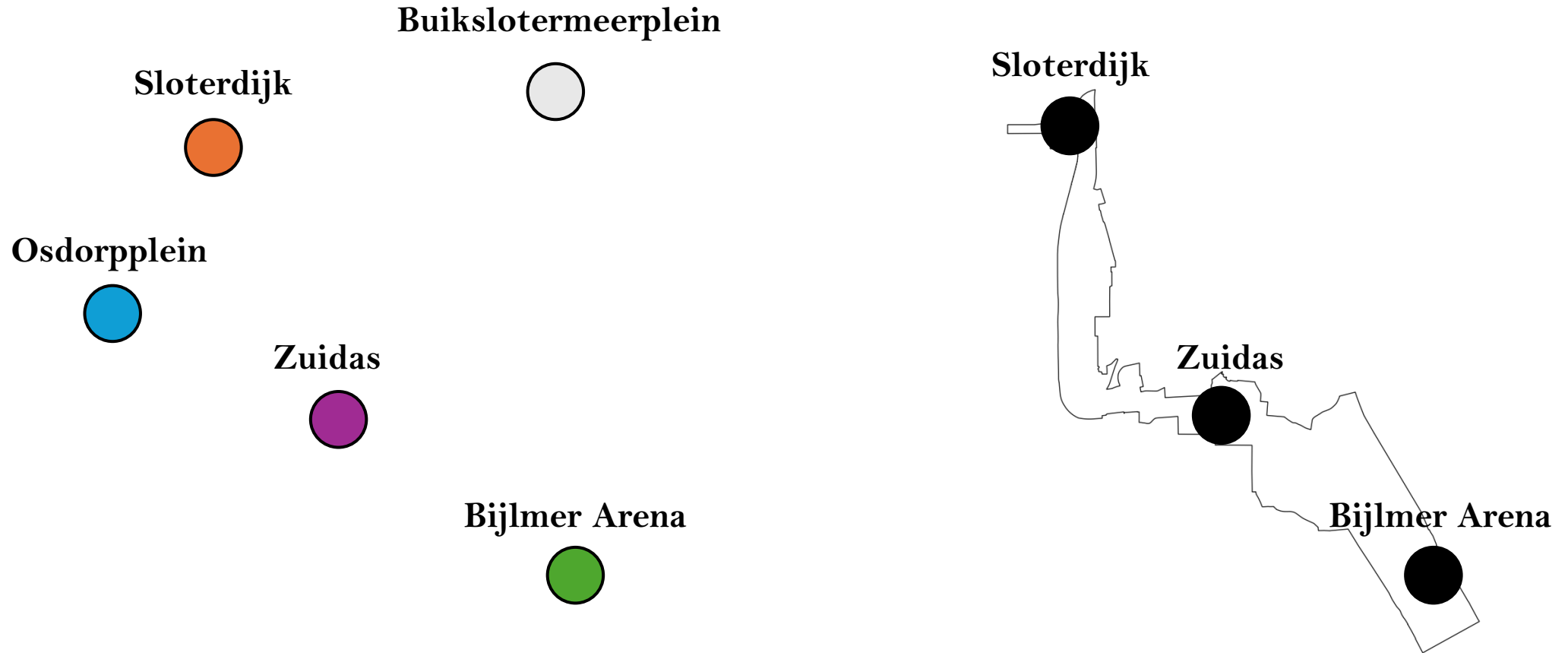


The Detour

Going from multi-core to corridor

Multicore

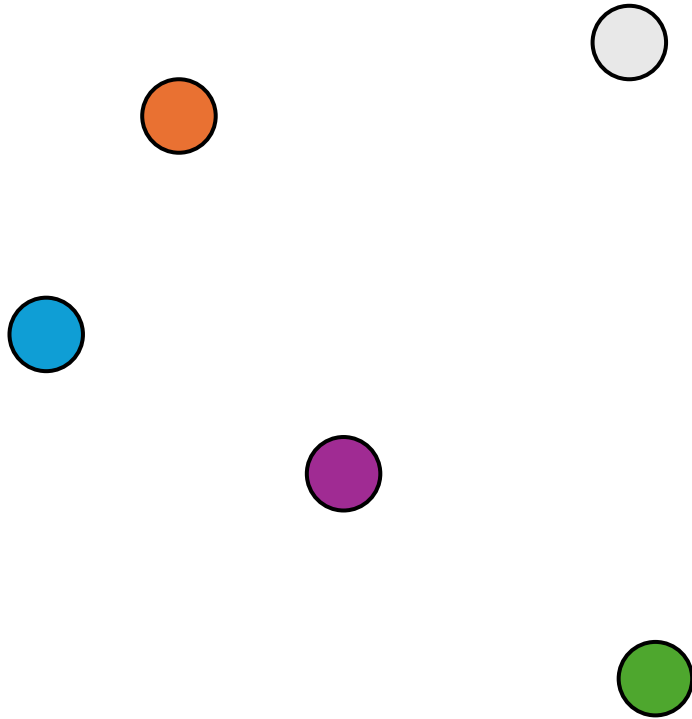
Corridor



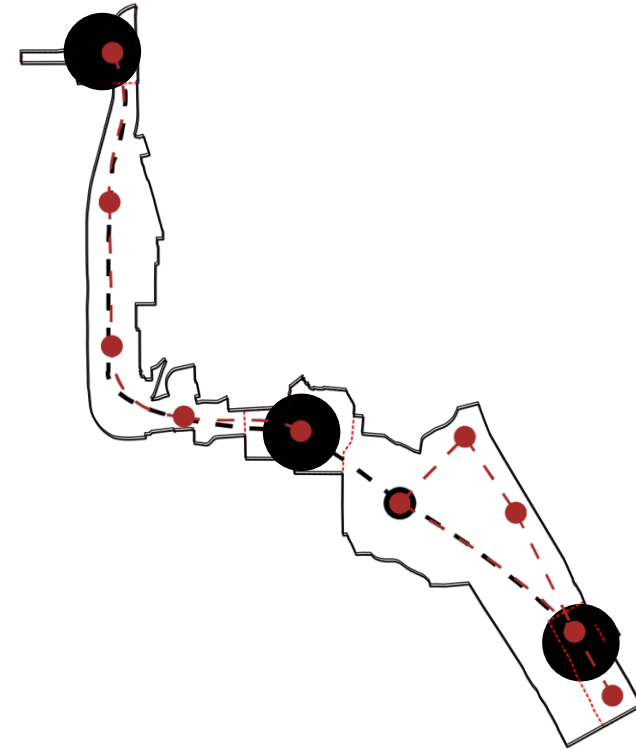
The Detour

Going from multi-core to corridor

Multicore

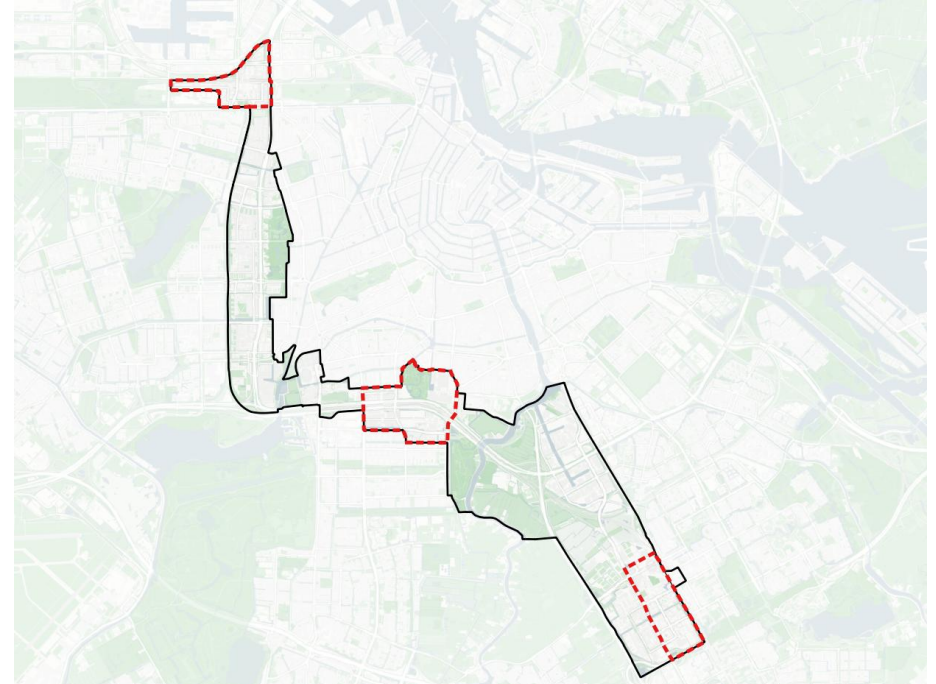


Corridor



The Detour

How can a data-informed strategy contribute to addressing overtourism in Amsterdam?



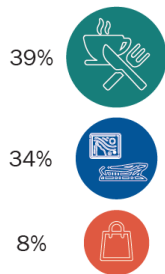
The Detour

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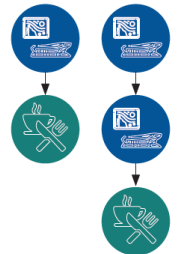
Tourist



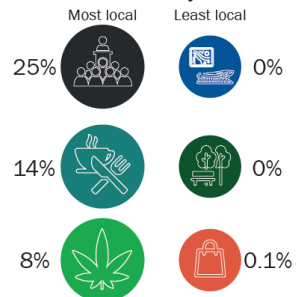
Most interest



Frequent Sequences



Locality

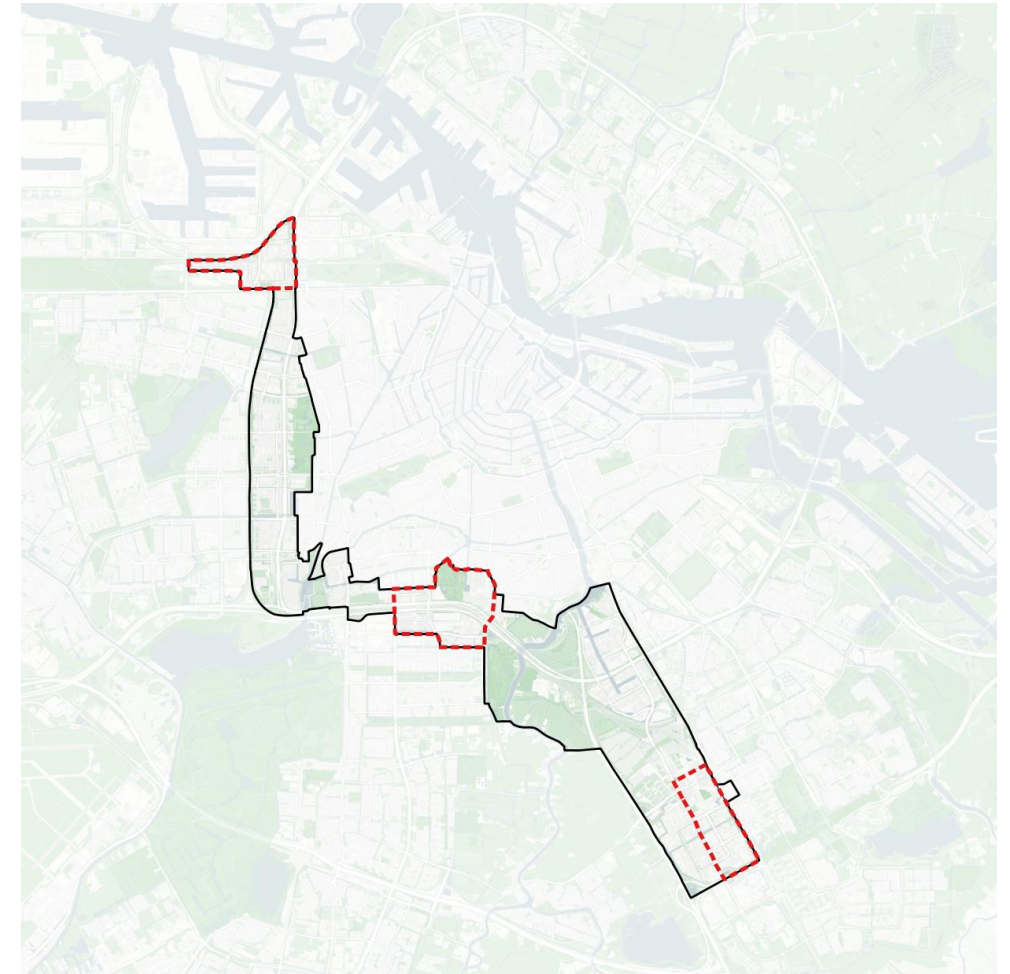
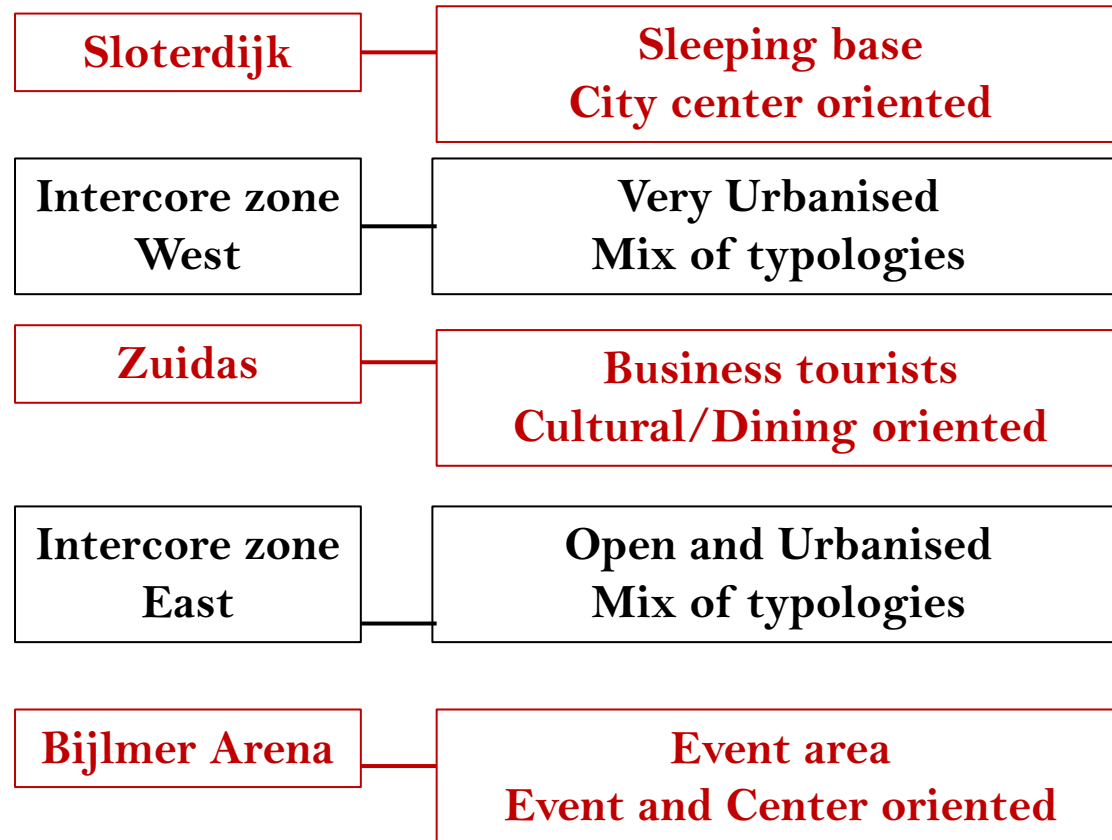


Morphology



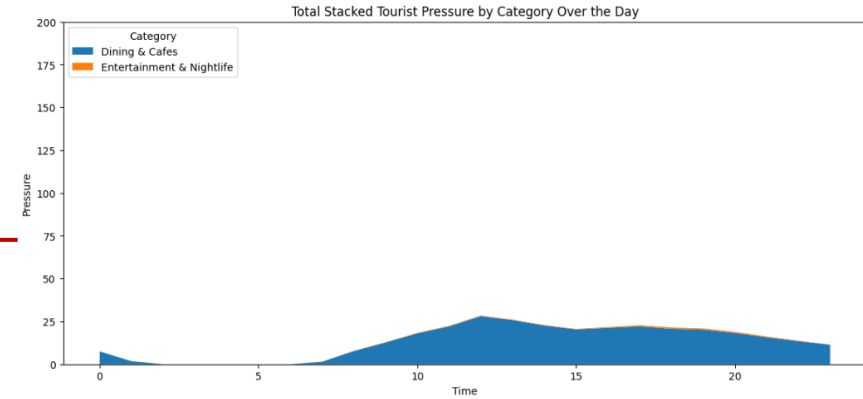
The Detour

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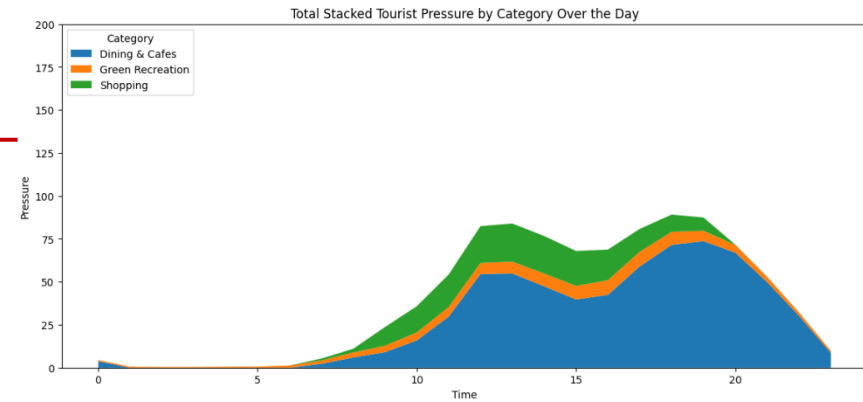


The Detour

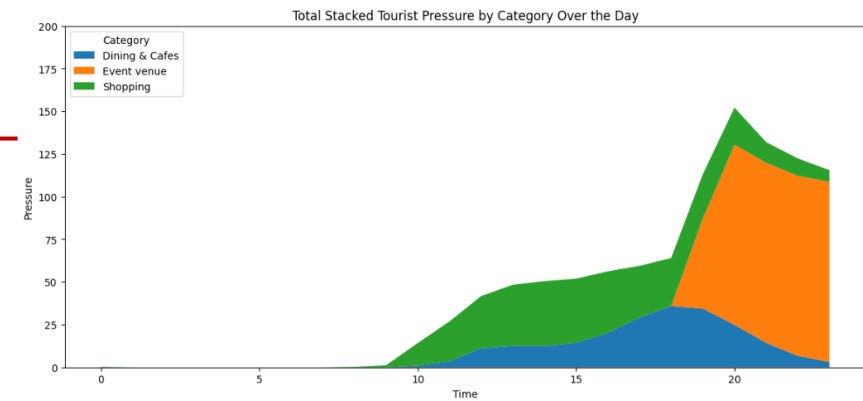
Sloterdijk



Zuidas



Bijlmer Arena

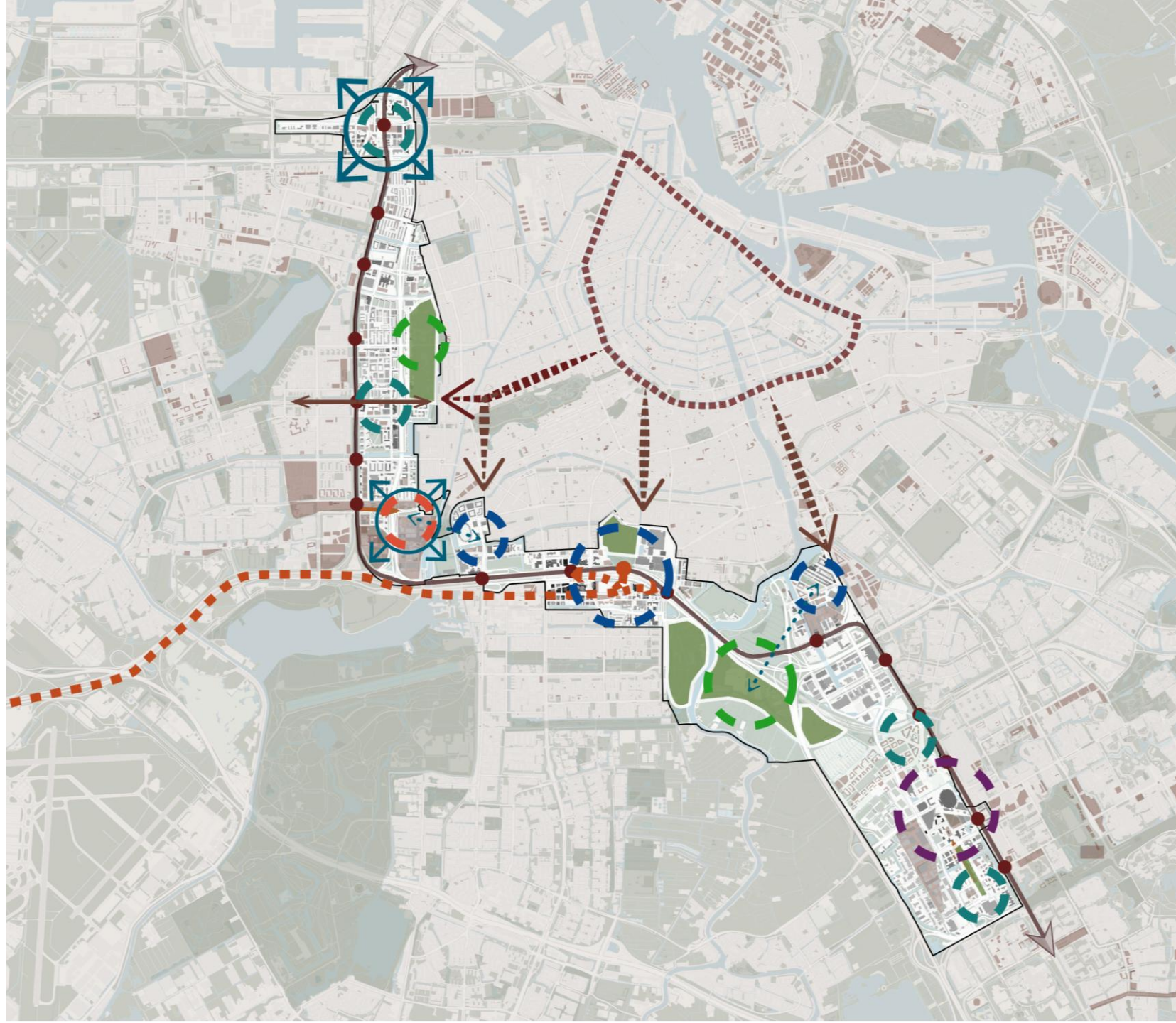


The Detour

Strategy

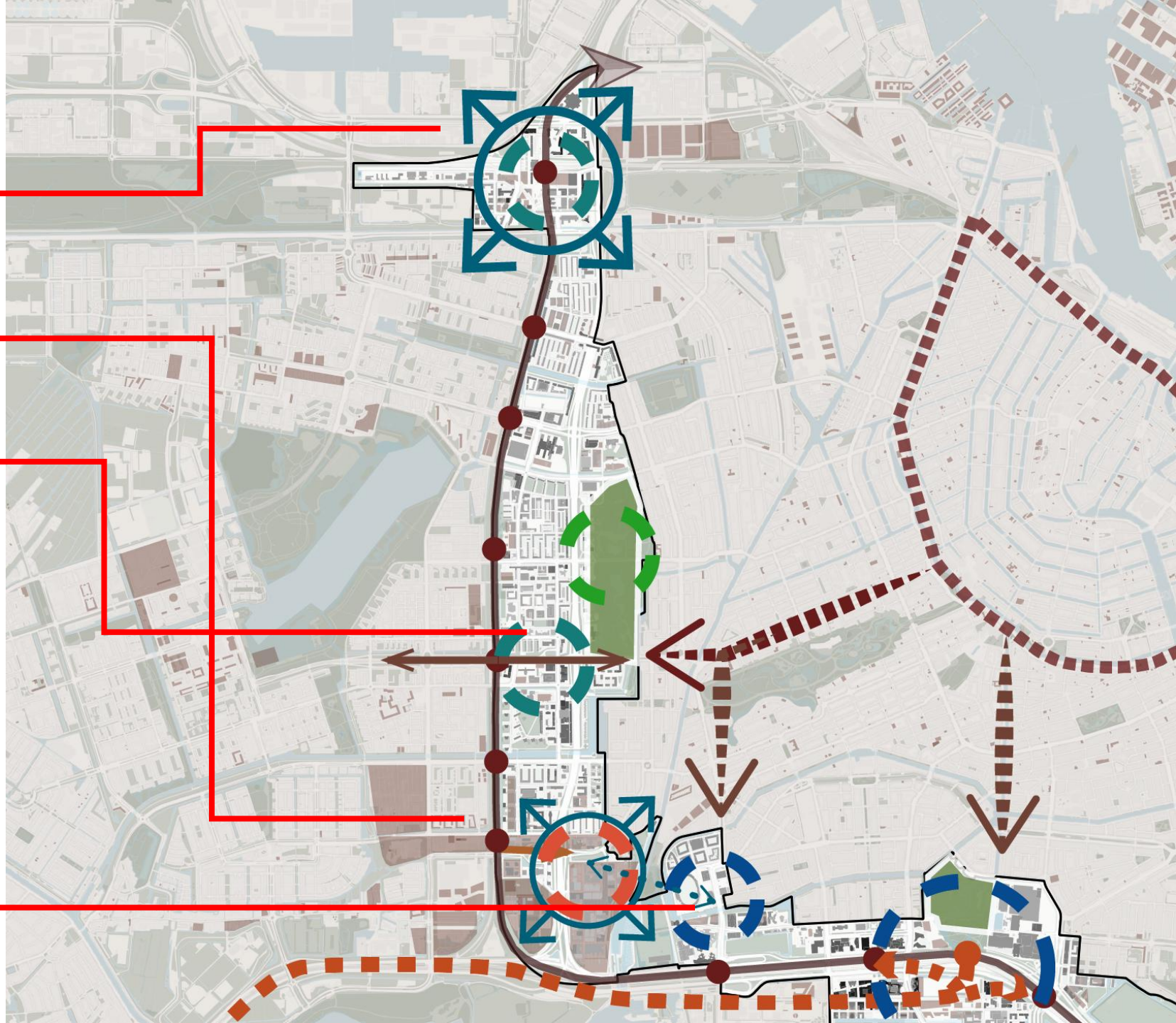
The DeTour

- Sloterdijk limited
- Zuidas Cultural
- Bijlmer Arena
Beyond Events
- Connect to
current system



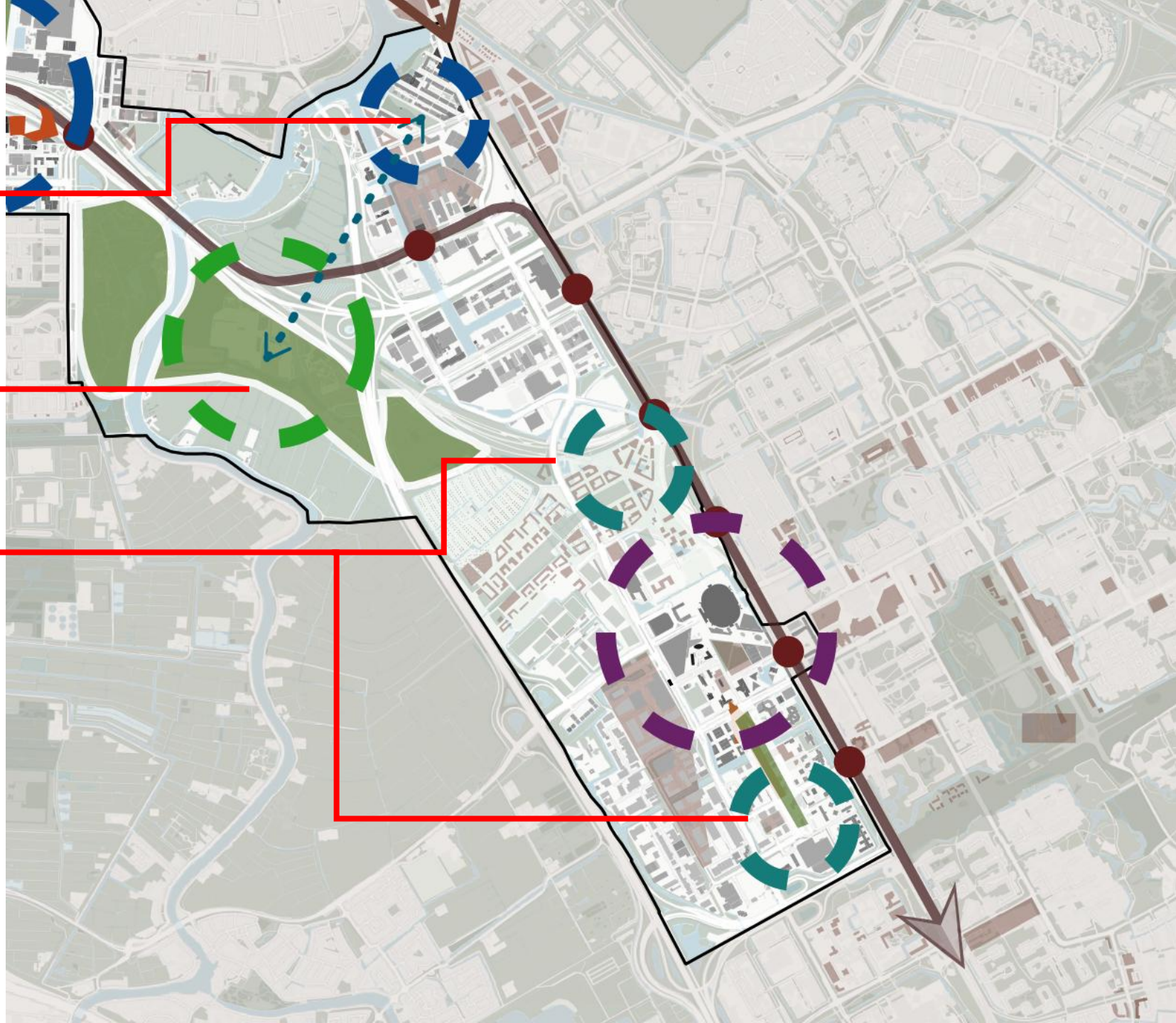
The DeTour

- Sloterdijk small core
- Small cores cluster
- Lelylaan Potential
- Stadionbuurt Museum



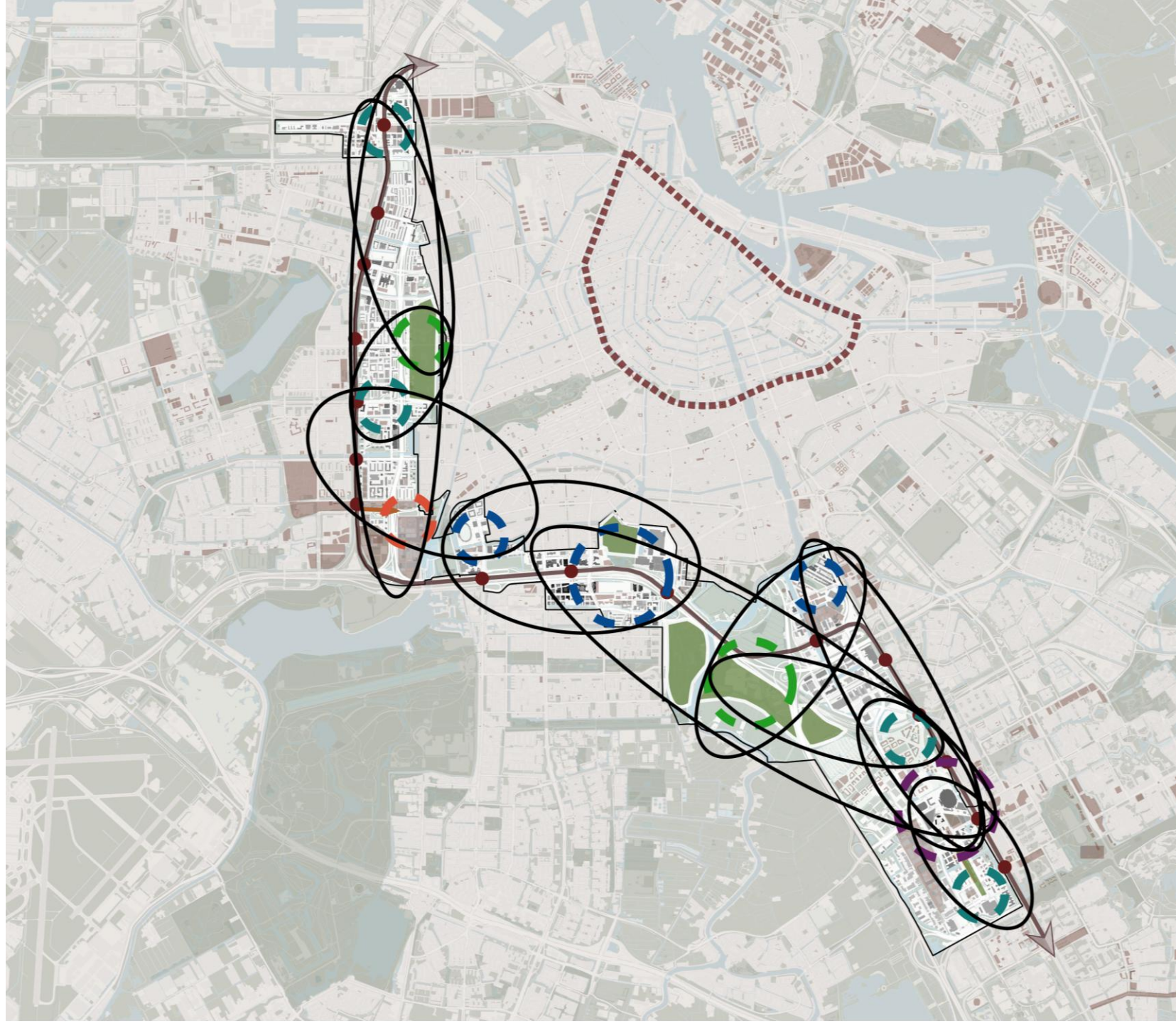
The DeTour

- Amstelkwartier museum
- Amstelscheg park
- Amstel III and Nieuwe Kern



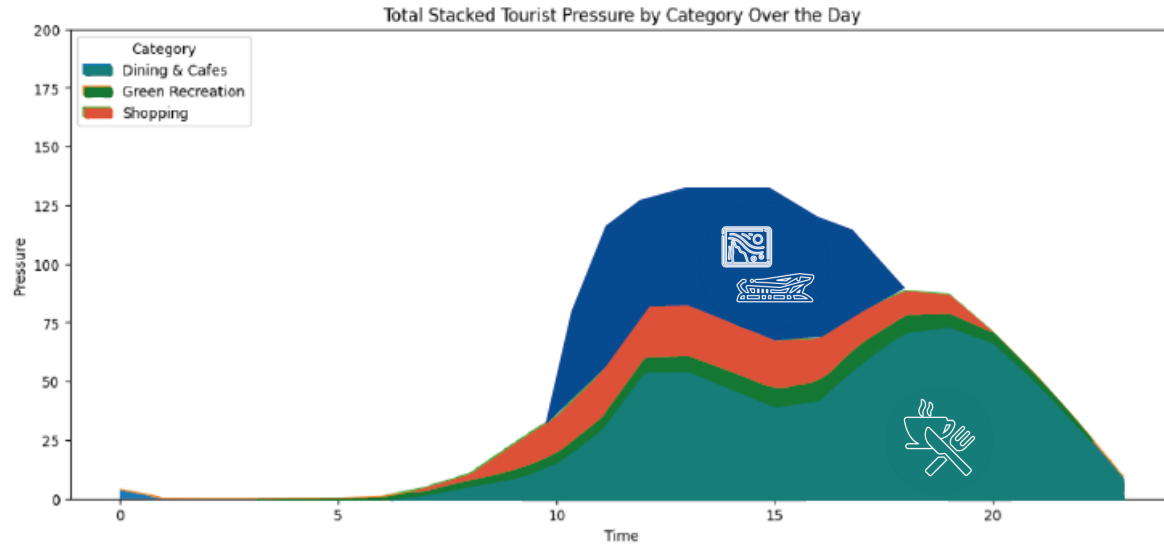
The DeTour

- Interconnected on multiple dimensions

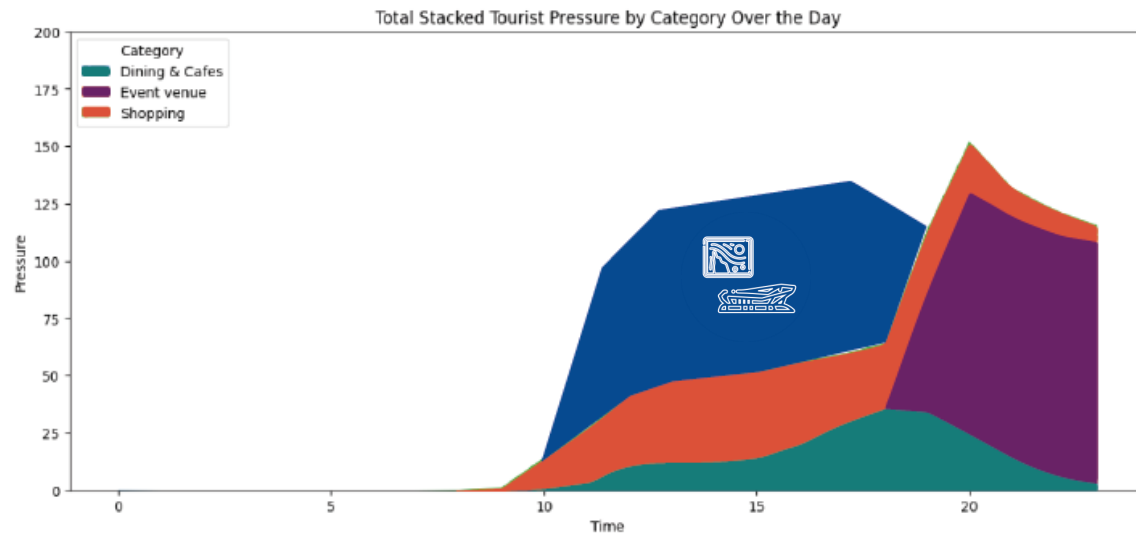


Time

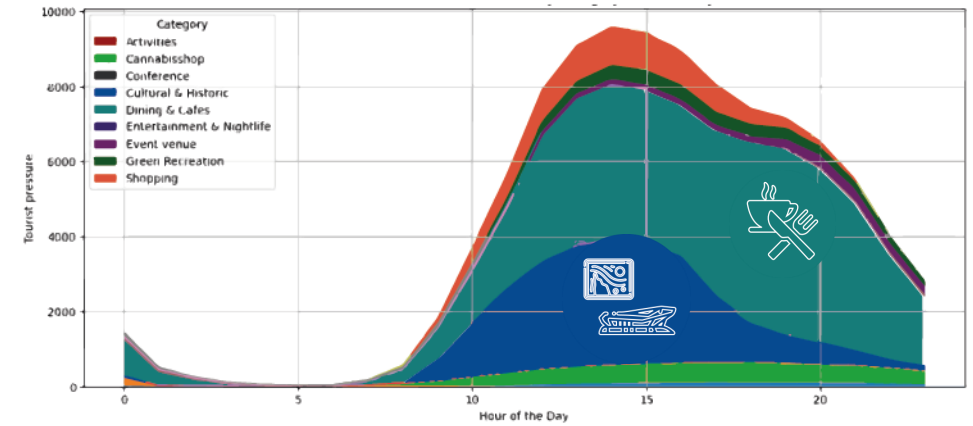
Zuidas



Bijlmer Arena



Amsterdam



Phasing

2025–2030

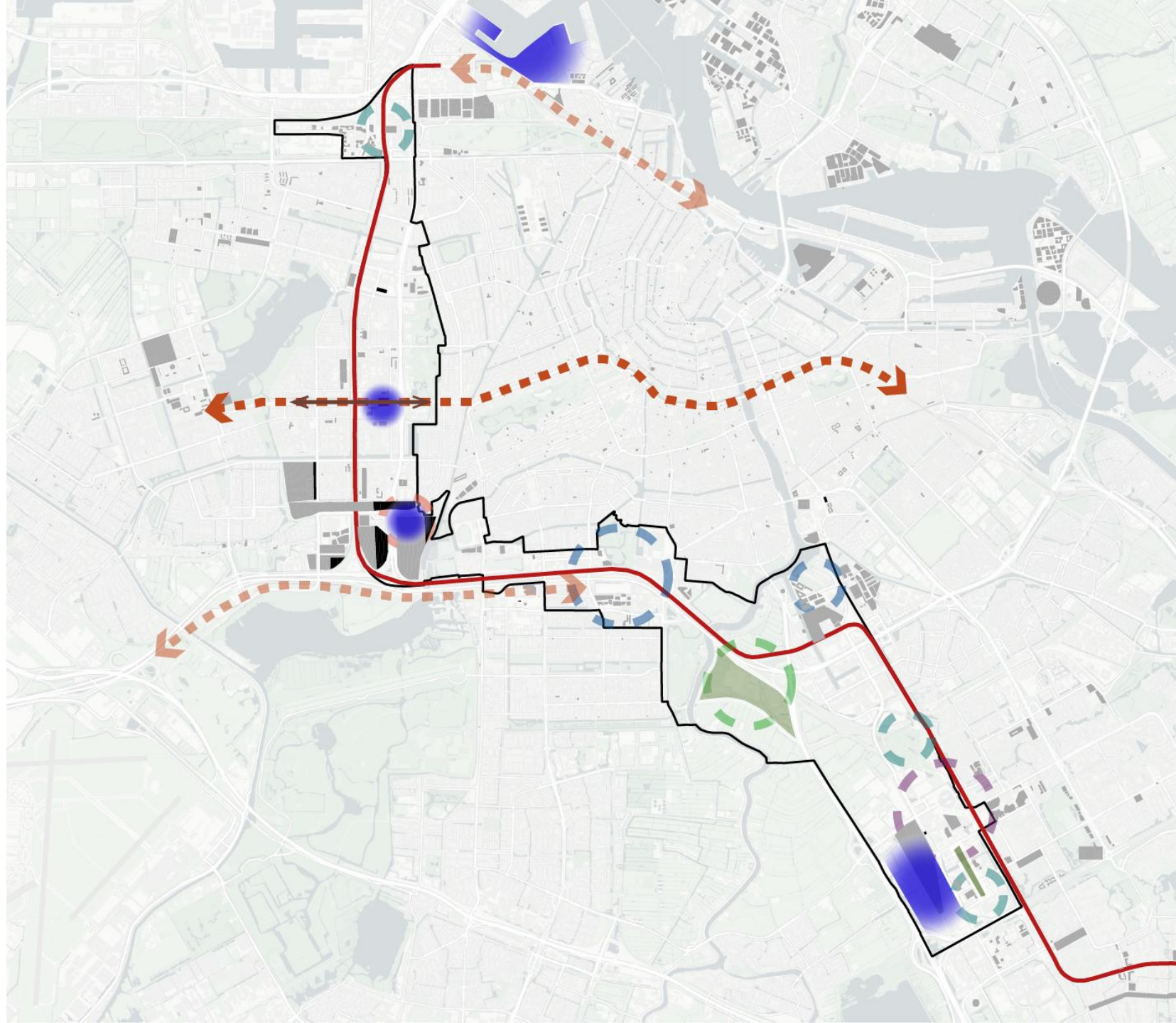
1. Anchor points
2. Stations/Cores
3. Inncity flow

2030–2040

1. Zuidas Entrance
2. Landscape Park
3. Inncity flow

2040–2050

1. East-West
2. Lelylaan



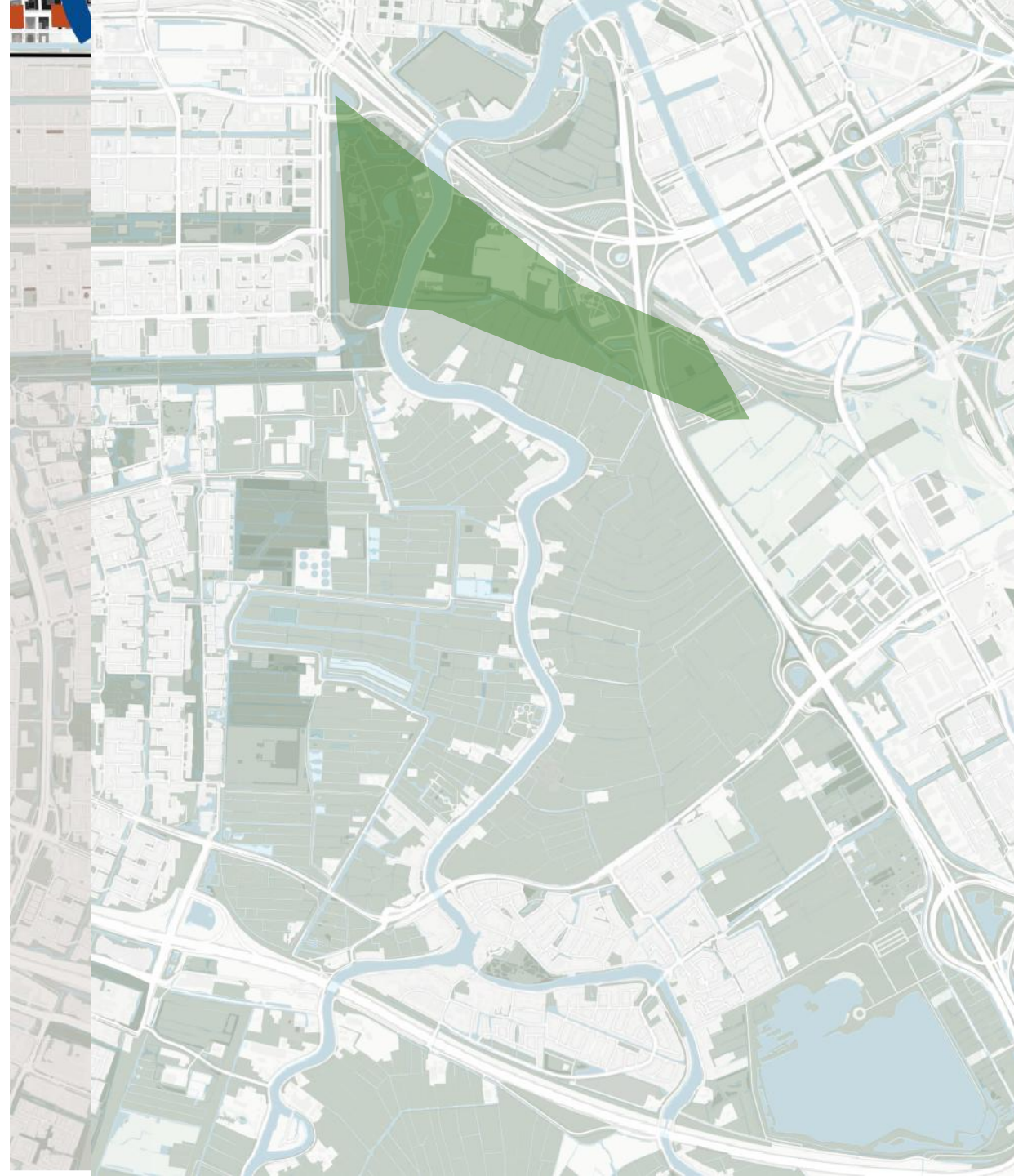
Bijlmer ArenA

- Potential
- Making use of capacity
- Enhancing local and tourist experiences
- Human scale
- Event flows



Ruysdaelpark

- Identifying the need
- Functional
- Diverse typologies
- Cultural and Natural







Conclusion

- **Complex Urban Challenge**
- **Tourist Pressure**
- **Carrying Capacity**
- **DeTour**



DeTourism

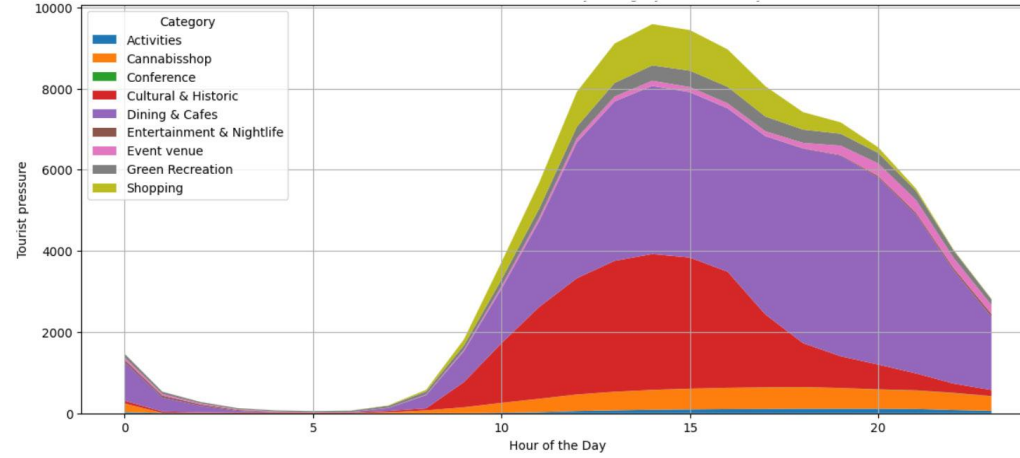
Exploring spatiotemporal dimensions to mitigate overtourism and enhance urban livability

Isamu Goiati
1st Mentor: Claudiu Forgaci
2nd Mentor: Achilleas Psyllidis
Studio: Metropolitan Ecologies of Places
16-6-2025 P5 Presentation

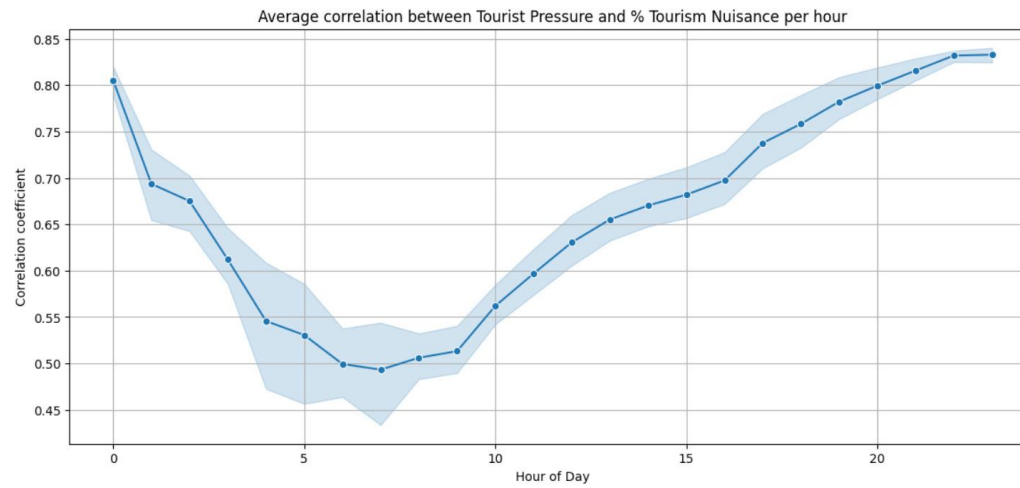


Extra slides

Tourist pressure

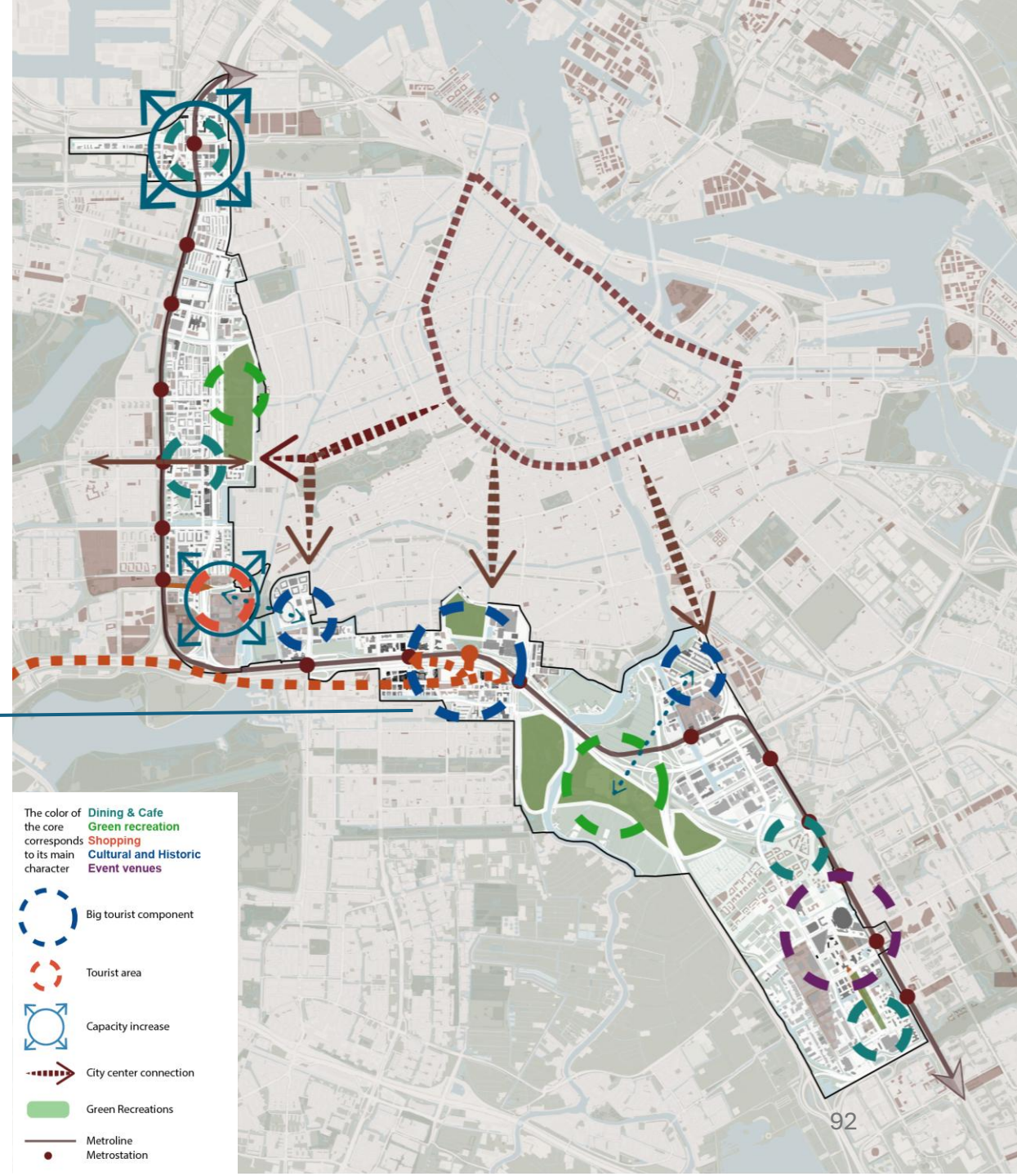


Correlation Pressure And Nuisance

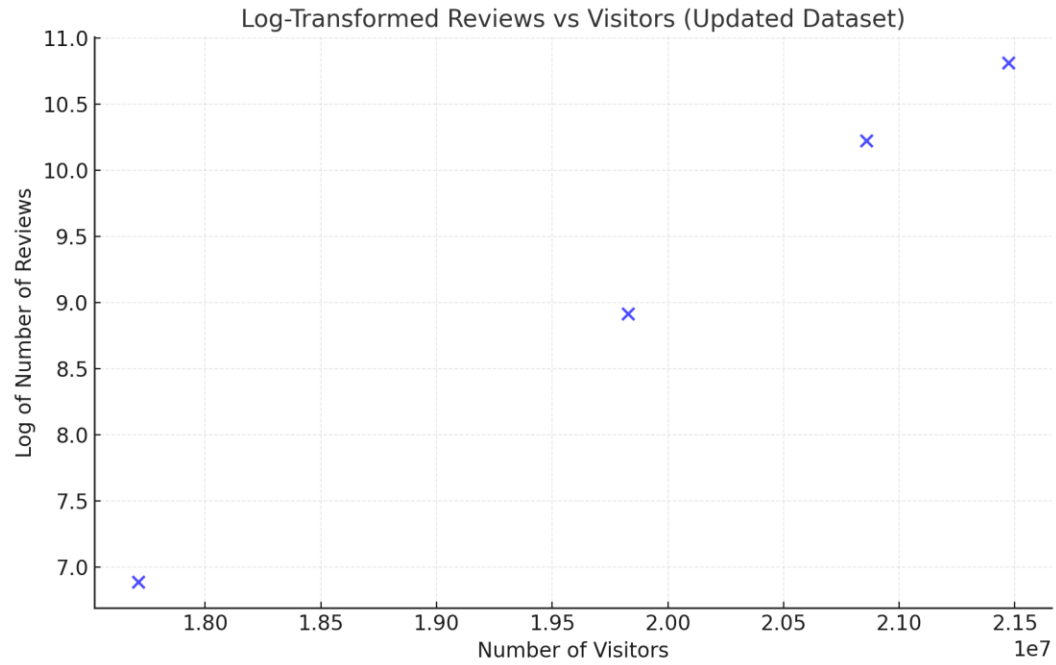


The Detour

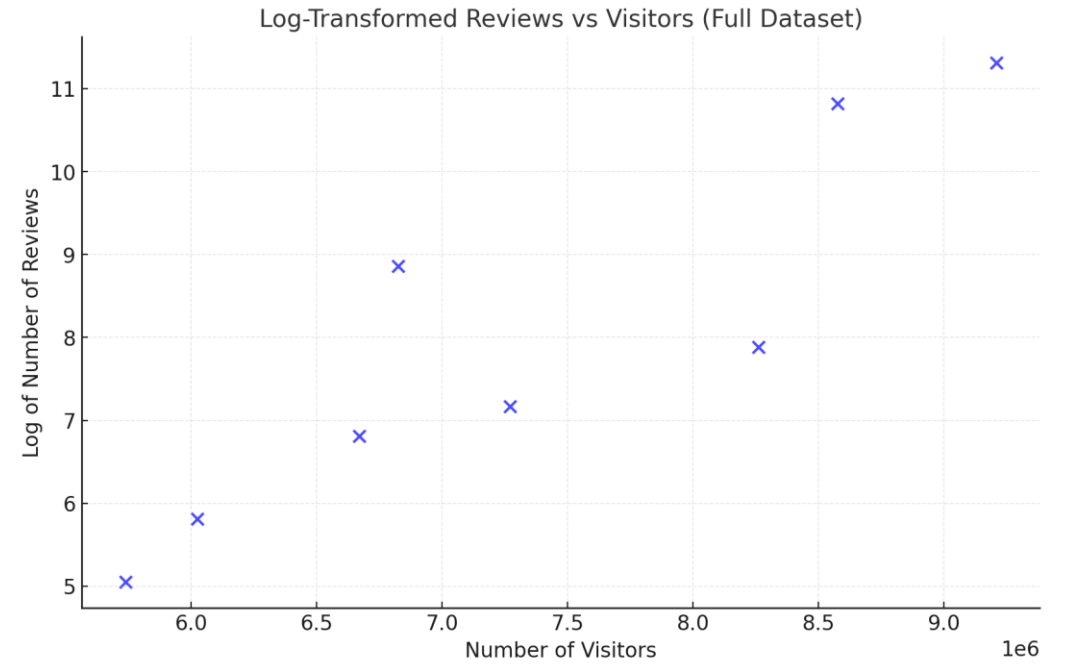
- Identity based on context and characteristics
- Big clusters
- Small clusters
- Connecting to inner city
- Present pressure
- Capacity



Tourist Share



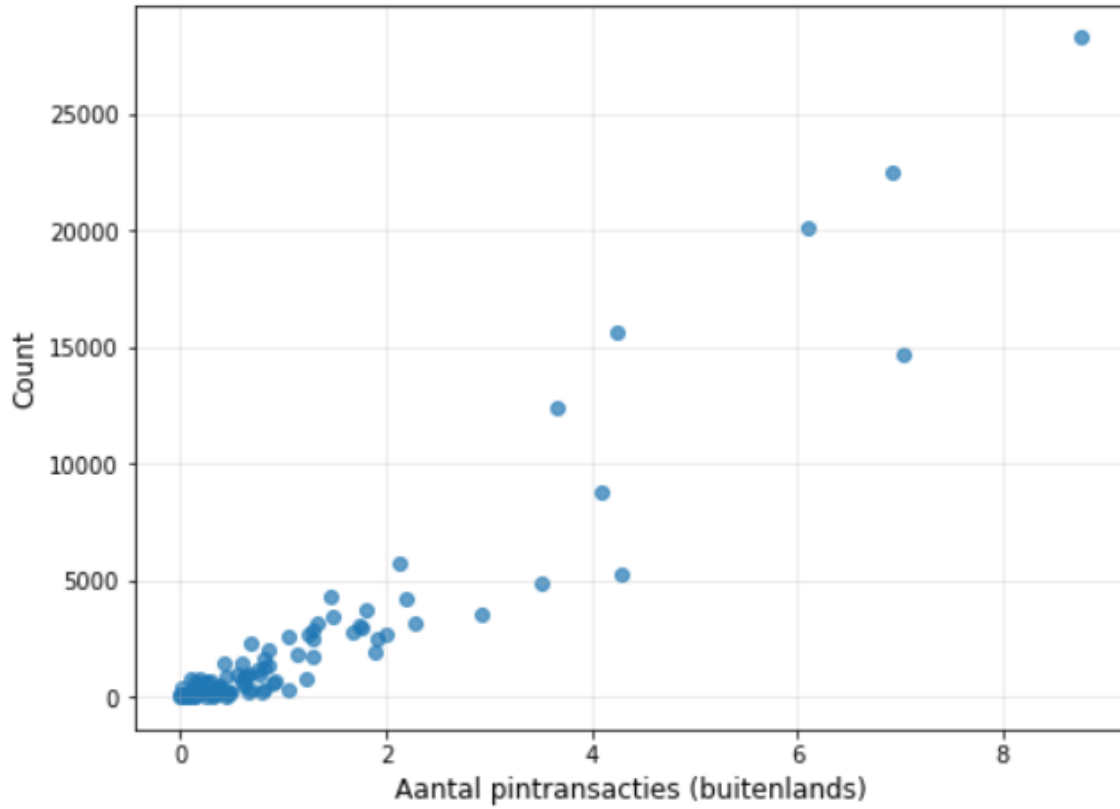
Reviews and visitors. = 0.99



r reviews and hotel stays: 0.89

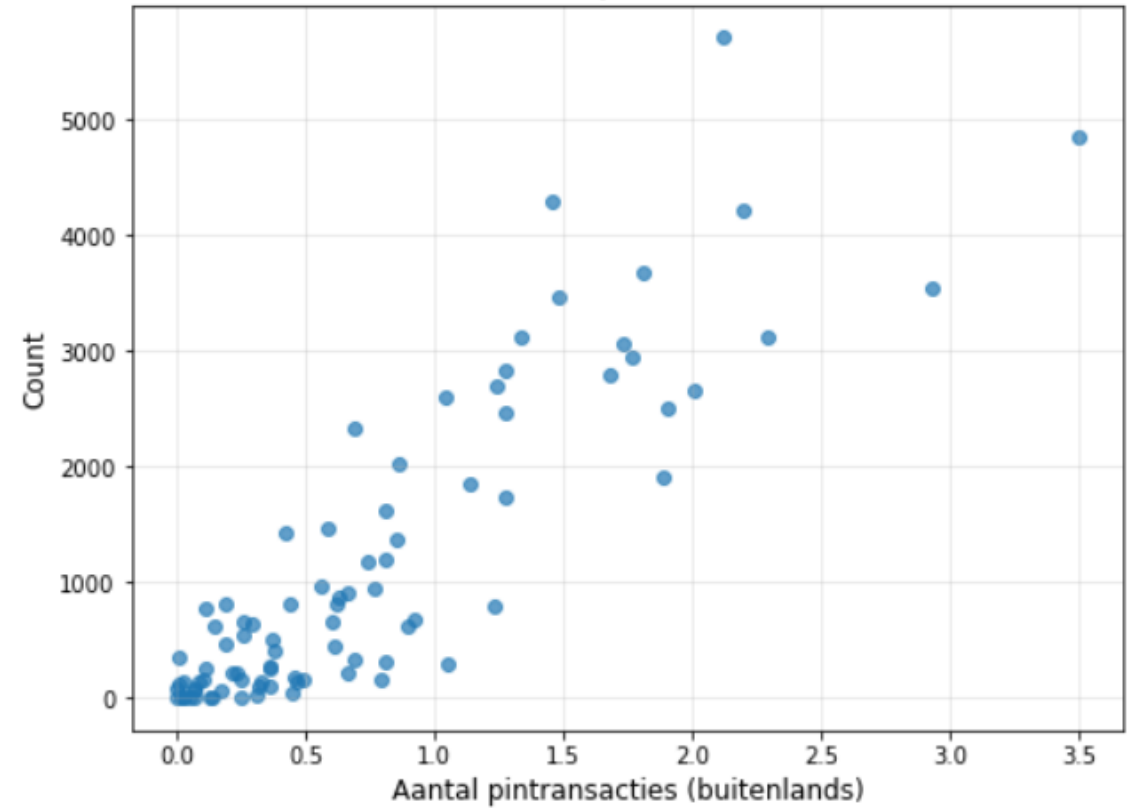
Tourist Share

Data Without 95th



Corr. = 0.94

Data Without IQR-Defined Outliers



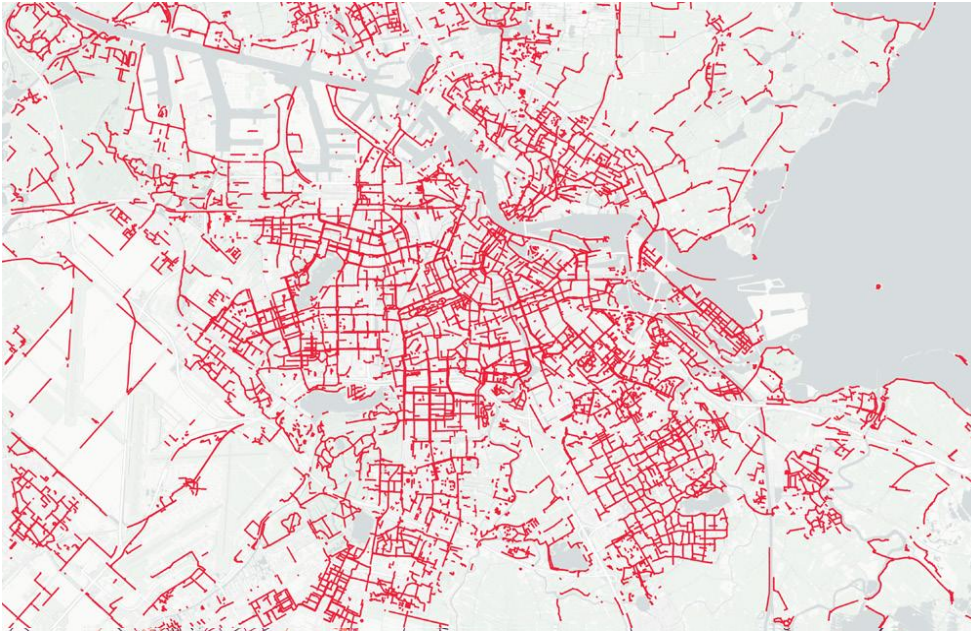
Corr. = 0.88

Carrying capacity

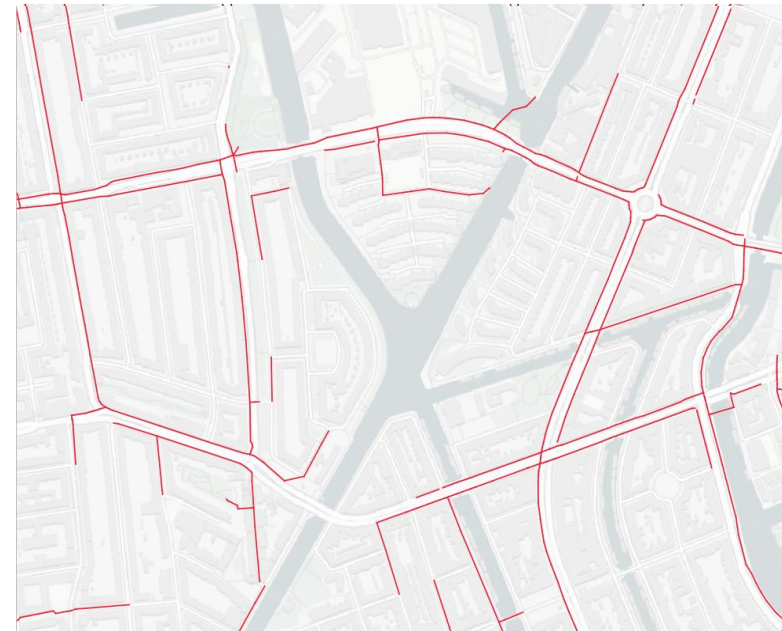
Network Capacity

- Angular Choice - How probable a street is chosen to move through?

City Scale



Neighbourhood scale

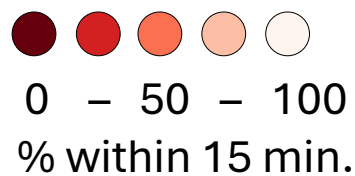
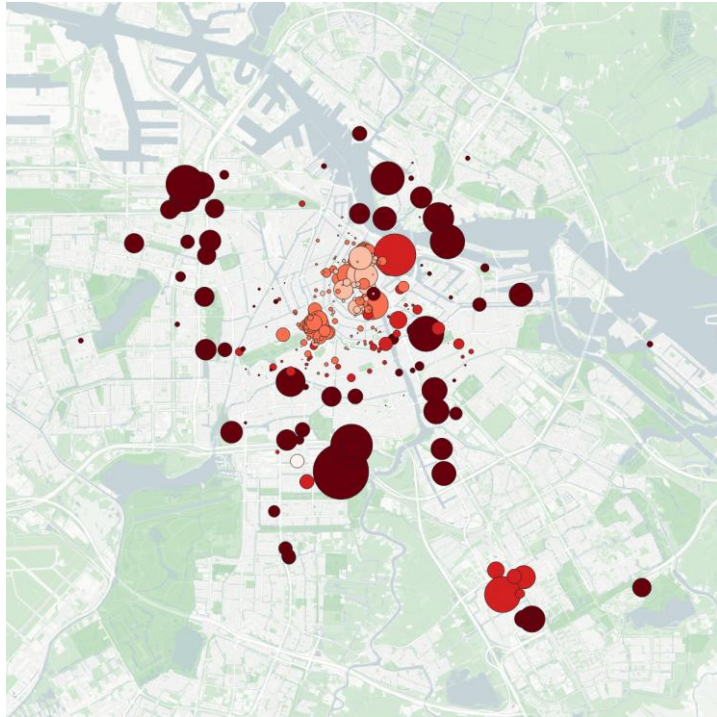


**Top 25%
Scores**

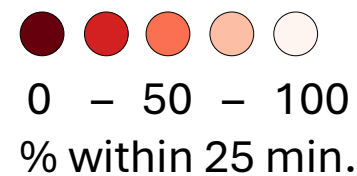
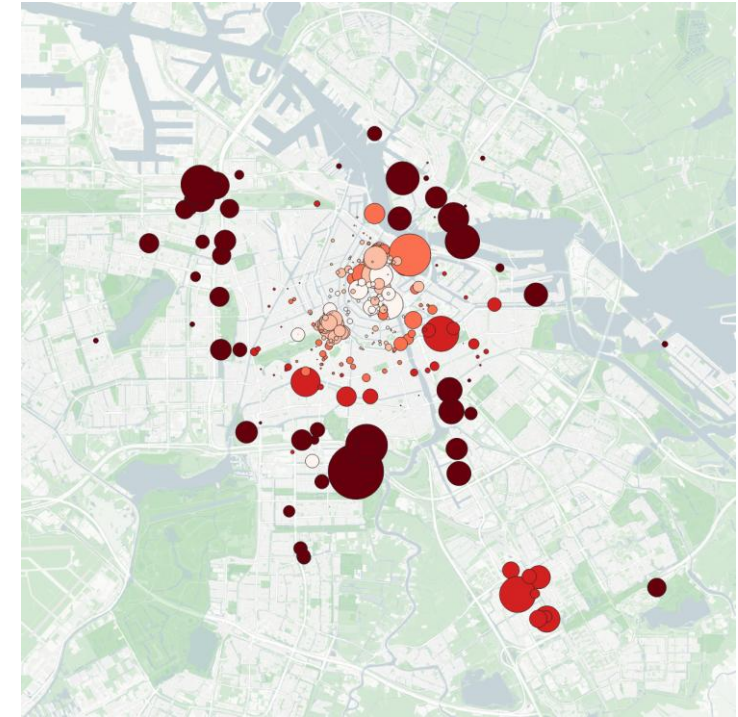
Spatiotemporal Pressure

What are the spatiotemporal dynamics of tourism flows in Amsterdam?

Destination within 15 min.



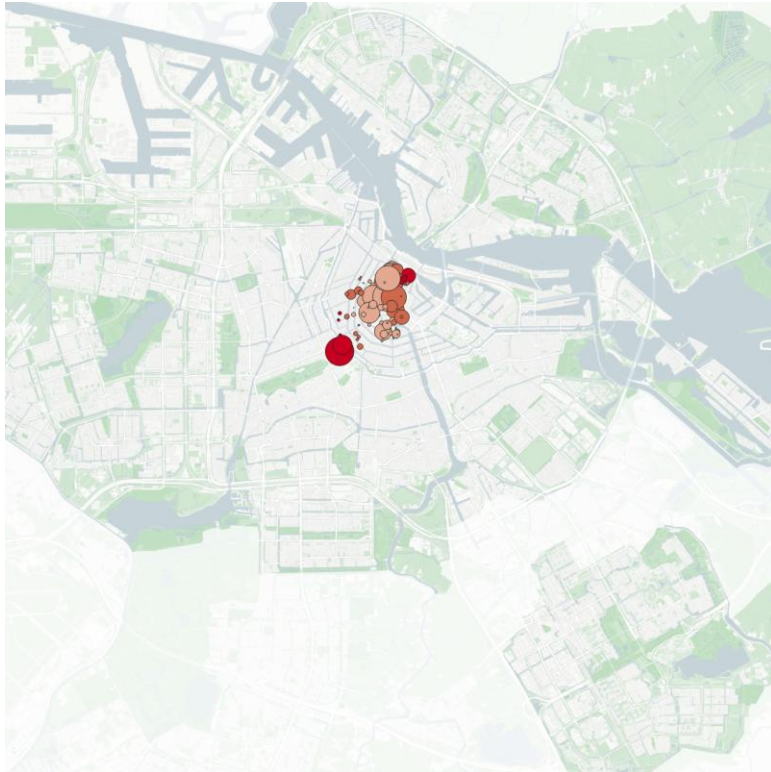
Destination within 25 min.



Carrying capacity

Network capacity

High pressure



S - M - L
Capacity

○ ○ ○
Amount
Hotelbeds

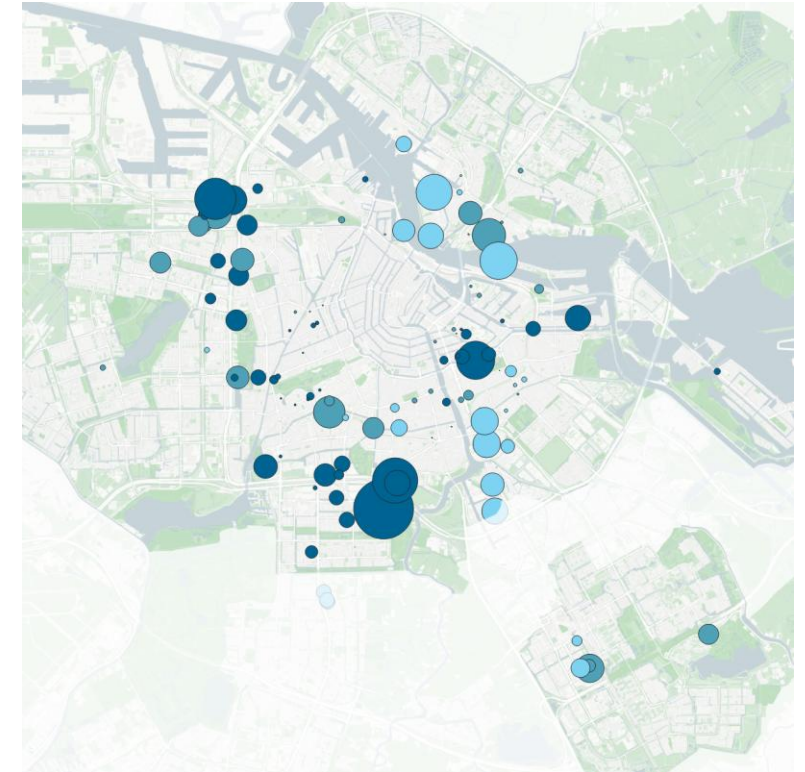
Medium Pressure



S - M - L
Capacity

○ ○ ○
Amount
Hotelbeds

Low Pressure



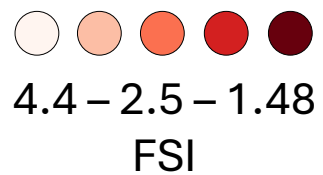
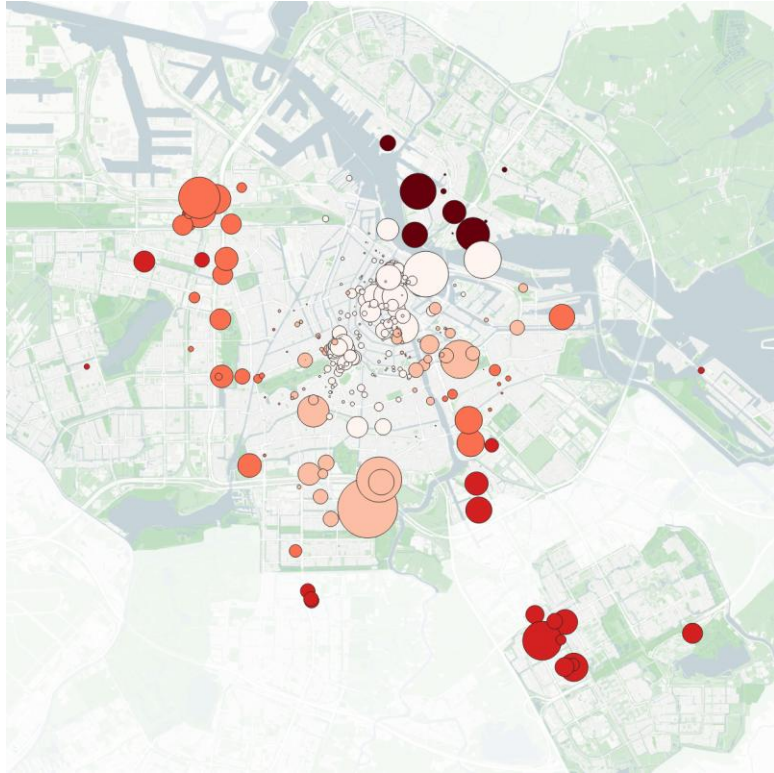
S - M - L
Capacity

○ ○ ○
Amount
Hotelbeds

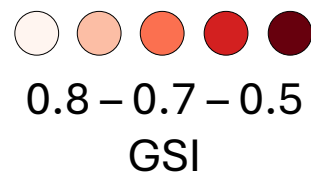
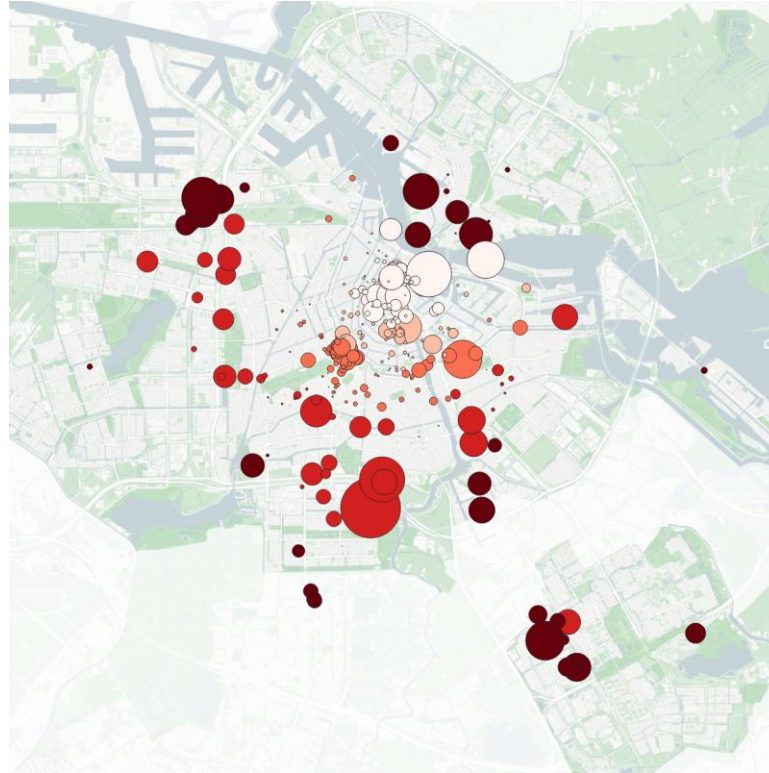
Carrying capacity

Space capacity

FSI



GSI



MXI

