

# Regenerating Rotterdam South

Improving socio-economic diversity and spatial quality  
in problem areas dealing with selective migration

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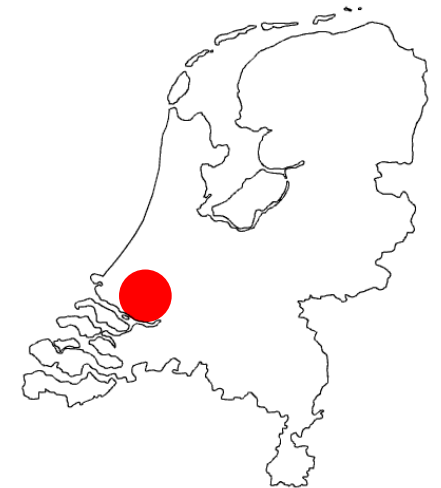


# Introduction

## *Problem areas in Rotterdam South: negative livability*



*(Leefbarometer 2010)*



# Introduction

## *Situation in these problem areas:*

- *Negative livability*
- *Lacking spatial quality*
- *Development of a criminal activities*
- *Unfeasible for economical diversity*
- *Social risers move away*
- *Growing polarization*



How can **urban regeneration** improve  
the **spatial quality** and **socio-economic** diversity  
in problem areas dealing with a **negative selective**  
**migration** ?



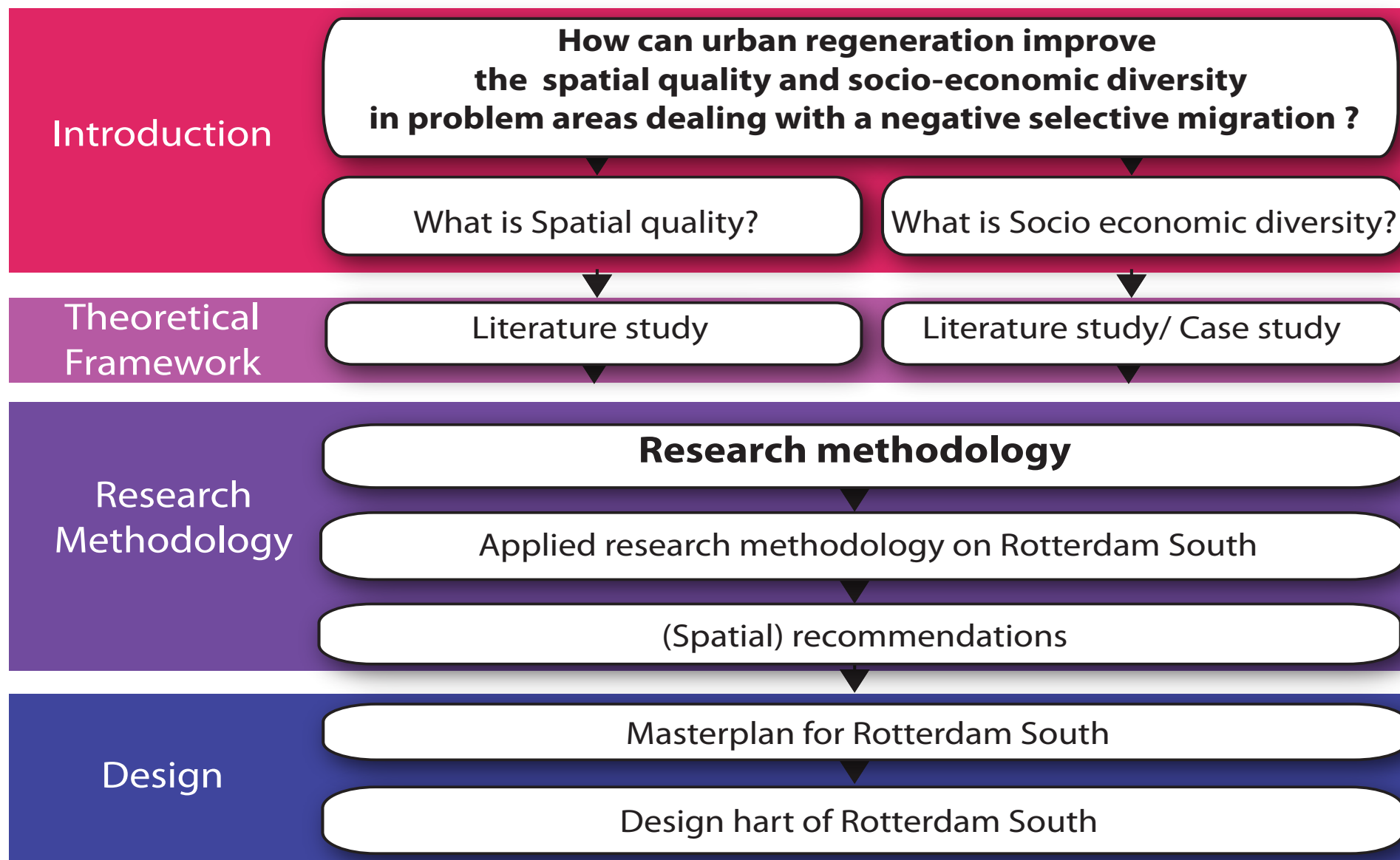
## Introduction

*Aim: regeneration without stimulating 'Waterbed effect'*



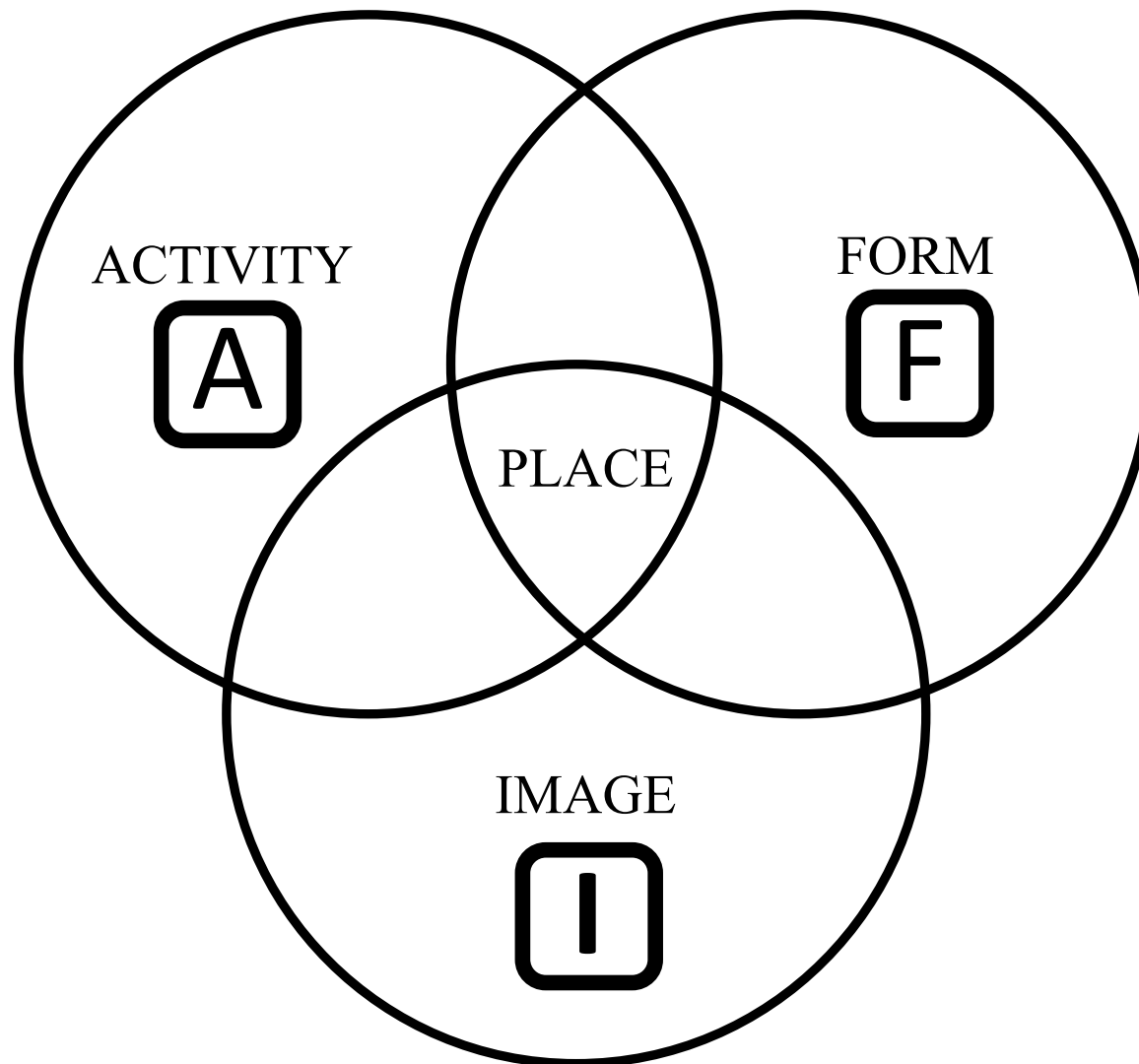
# Introduction

## Methodology



# Theoretical framework

## *What is Spatial Quality?*



( Montgomery 1998)





# Theoretical framework

## *From theory to research methodology*

### **A** *Activity*

- *Necessary activities*
- *Optional activities*
- *Population density*
- *Population variety*
- *Fine grain economy*

### **F** *Form*

- *Housing density*
- *Housing variety*
- *Transparency*
- *Connectivity, flows and permeability*
- *Parking solutions*
- *Green*
- *Public transport*

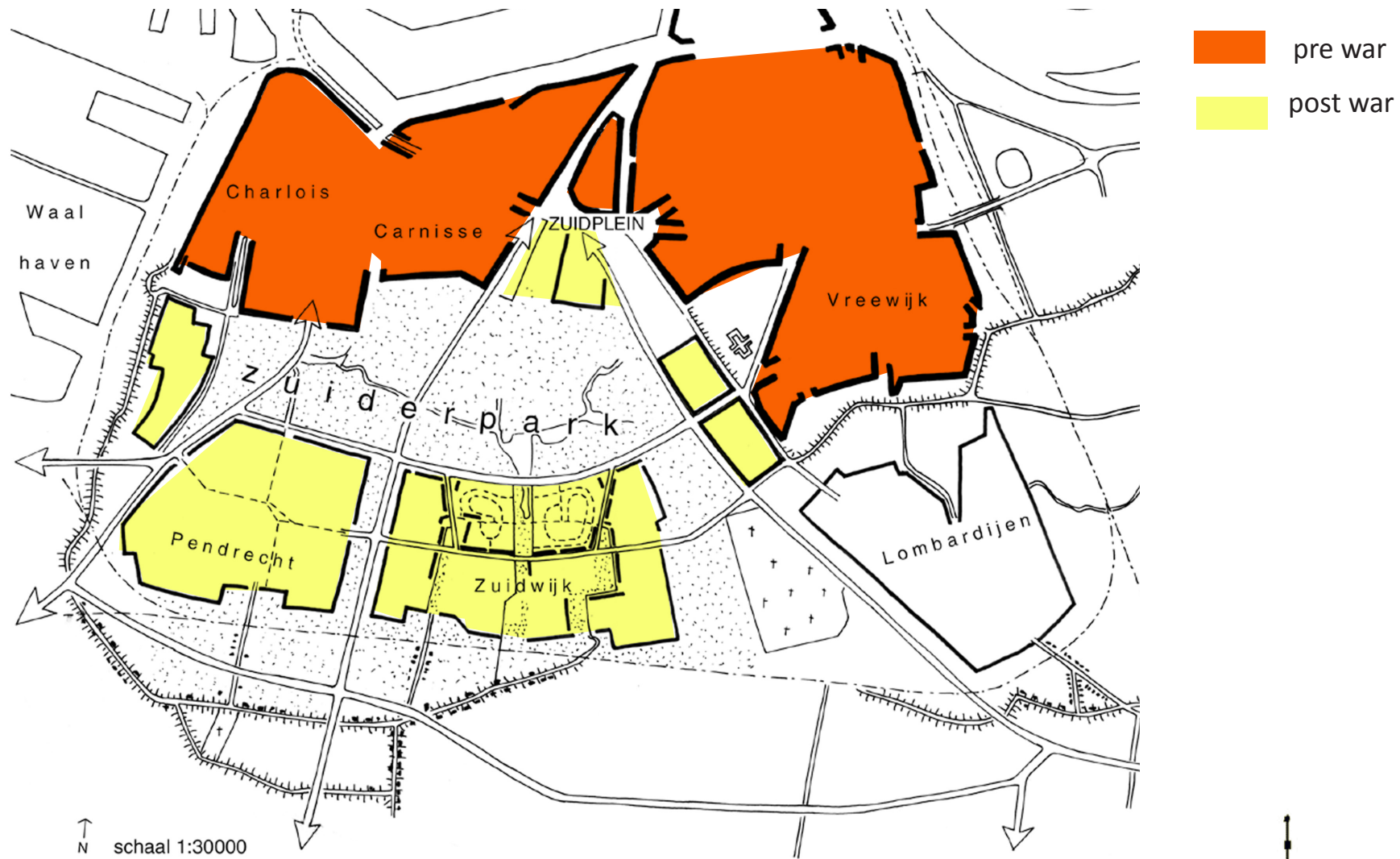
### **i** *Image*

- *Livability*
- *Safety*
- *Attractiveness*



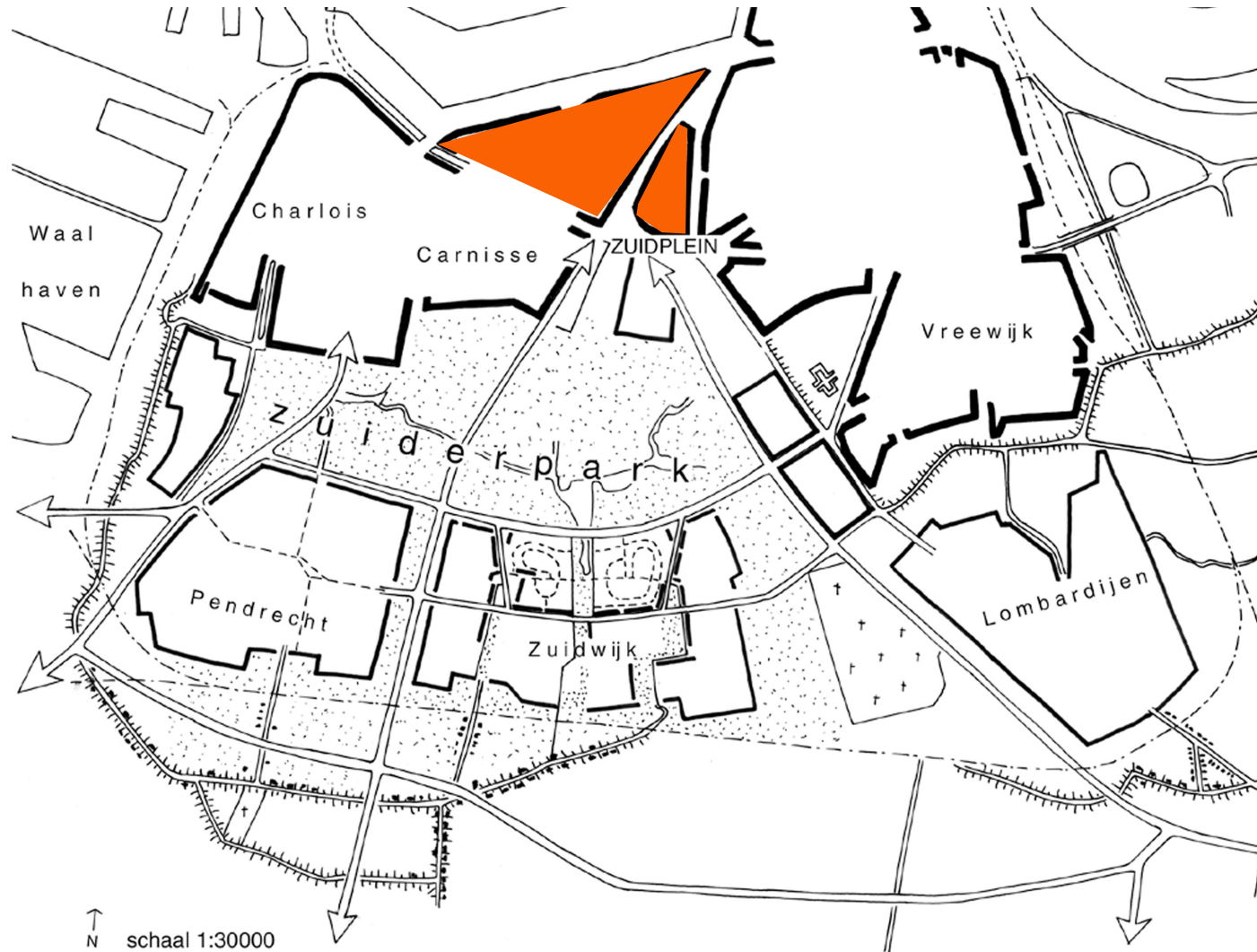
# Theoretical framework applied on Rotterdam South

*Location area for applying research methodology*



# Theoretical framework applied on Rotterdam South

*Explain research by pre war neighborhood Tarwewijk*



# Theoretical framework applied on Rotterdam South

## *Explain research by pre war neighborhood Tarwewijk*

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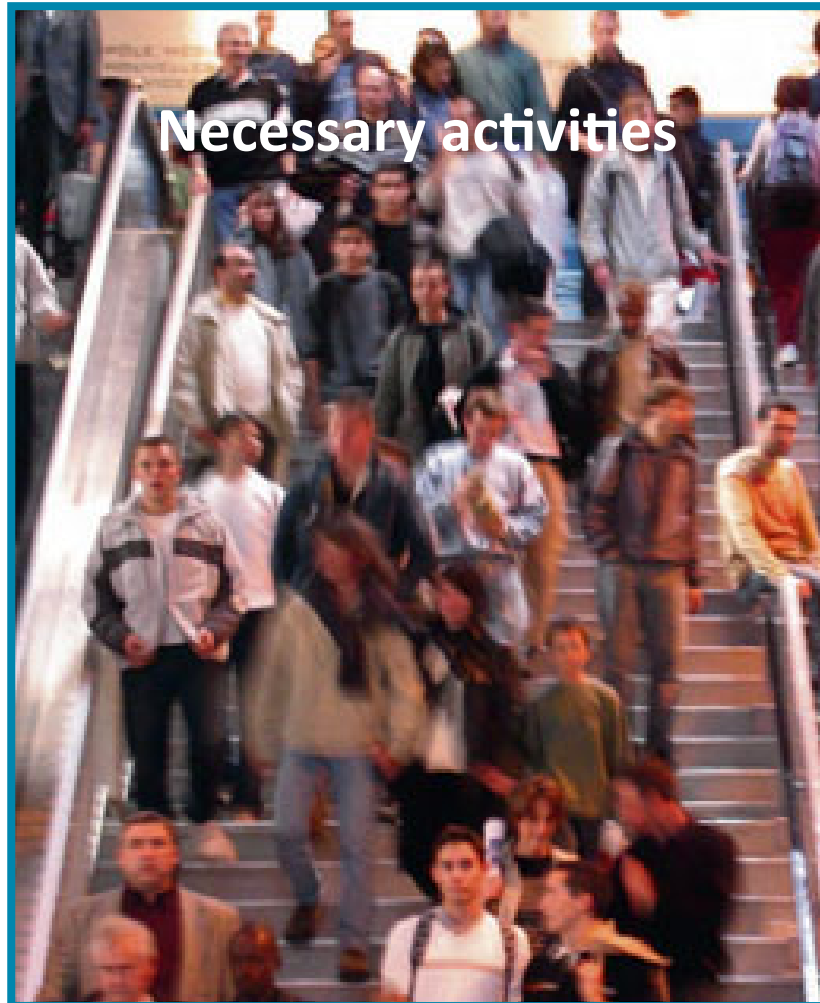
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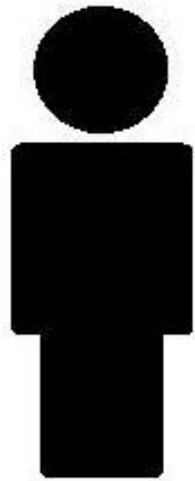
# Theoretical framework applied on Rotterdam South

*Little necessary activities in Tarwewijk*



# Theoretical framework applied on Rotterdam South

*Little population variety*



48% low incomes



6% high incomes incomes

Percentage low incomes Rotterdam total is 17% ( max income E.9.249)

(CBS 2010)



# Theoretical framework applied on Rotterdam South

## *Unsafe parking solutions*



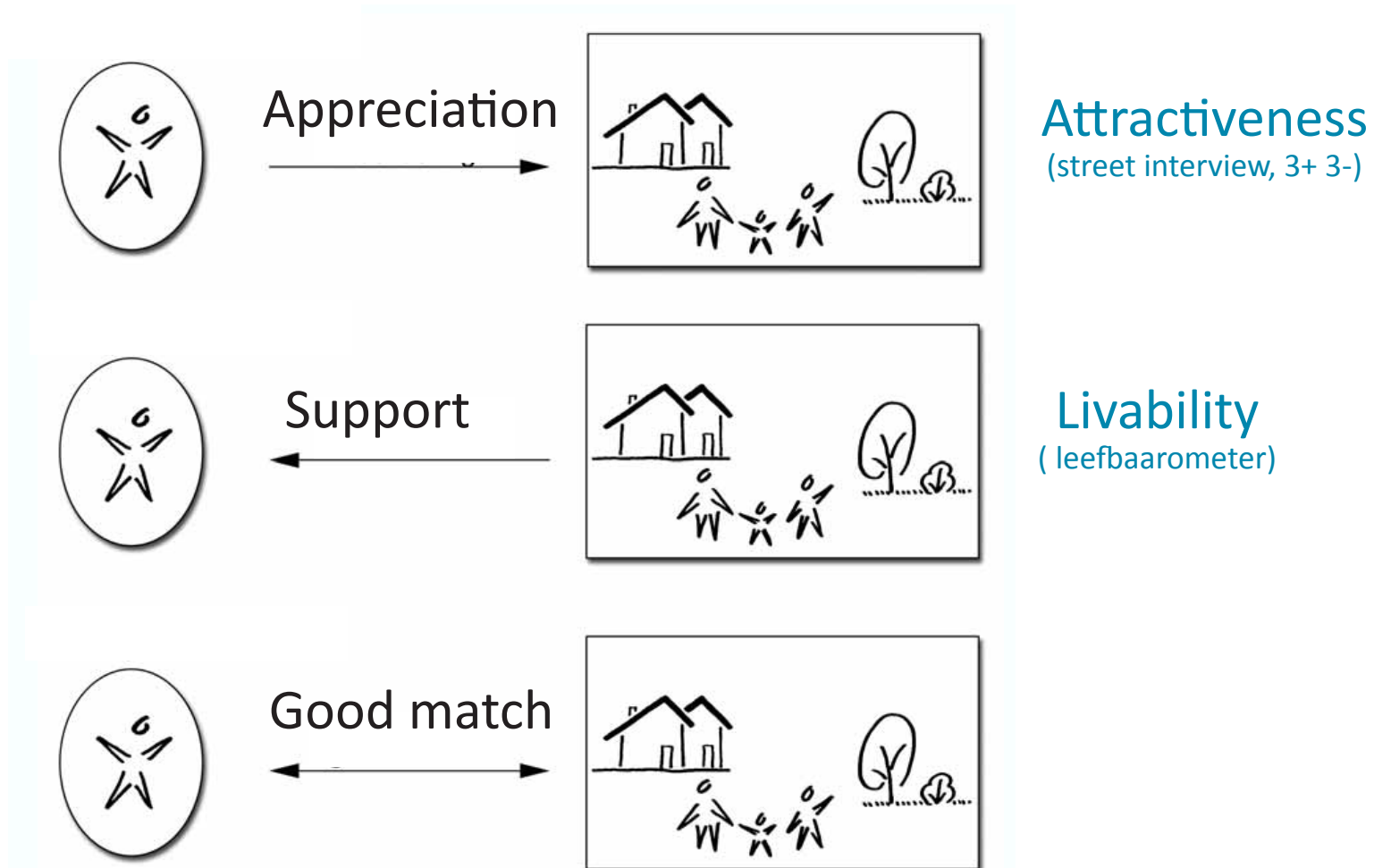
# Theoretical framework applied on Rotterdam South *Little green*





# Theoretical framework applied on Rotterdam South

## *Negative image*



Theoretical framework applied on Rotterdam South  
*Results research methodology applied on Tarwewijk*

Activity



Form



Image



# Theoretical framework applied on Rotterdam South

## *Intervention scheme Tarwewijk: it is a social problem*

Tarwewijk

A

F

i

Activity

Form

Image

### Problem analysis

Little necessary activities

Large private owned stock in deterioration

Little diversity population  
48% low income

Little green

Unsafe parking solutions

Negative image

### Indirect interventions

Subsidies Private owner  
Retrofitting housing

Invest in Re enters

Municipality buys up housing

Invest in Education

Ownership stimulation  
subsidies > till 67% rent

PPP

Simplify splitting regulations

City Branding

Phase developmentplan

Neighborhood branding

Flexible landuse plan

Participation residents

### Direct interventions

Extend gardens,  
public gardens

thinning neighborhood  
densify around

Green veins

renovation housing  
merge/ cut dwellings

Water storage

New plots Maas shore  
50.000m2 inc. Infra

work& living dwellings

Angle parking  
parking on plot

Commercial & businesses  
along veins

Link urban structure  
to bloemhof, zuidplein

300 owner occupied  
dwelling to reach  
average

Building for  
students,  
households with kids  
households without kids  
elderly

## Theoretical framework applied on Rotterdam South

### *Creating socio-economic diversity: attracting more affluent people*

- *Direct interventions: add new residence*
- *Indirect interventions: ownership stimulation, simplify regulation*
- *Market led: gentrification*

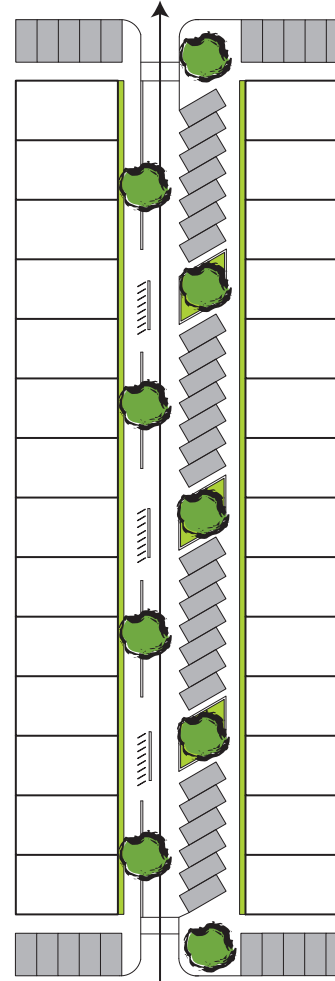
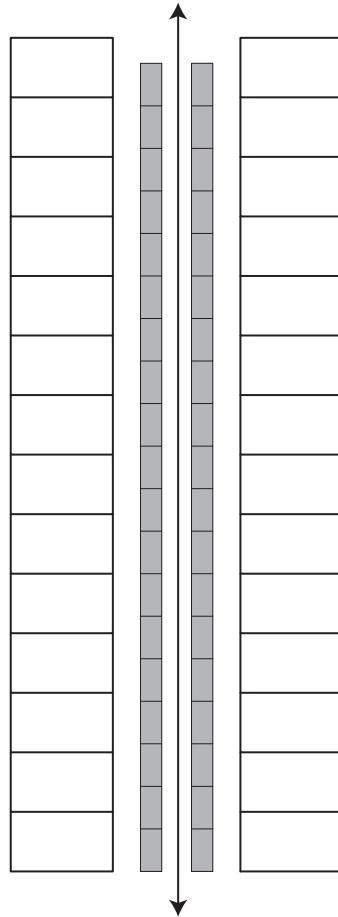


# Theoretical framework applied on Rotterdam South *Gentrification in the Pijp ( Amsterdam)*



# Theoretical framework applied on Rotterdam South

## *Possible interventions Tarwewijk*



# Theoretical framework applied on Rotterdam South

## *Possible interventions Tarwewijk*



# Theoretical framework applied on Rotterdam South

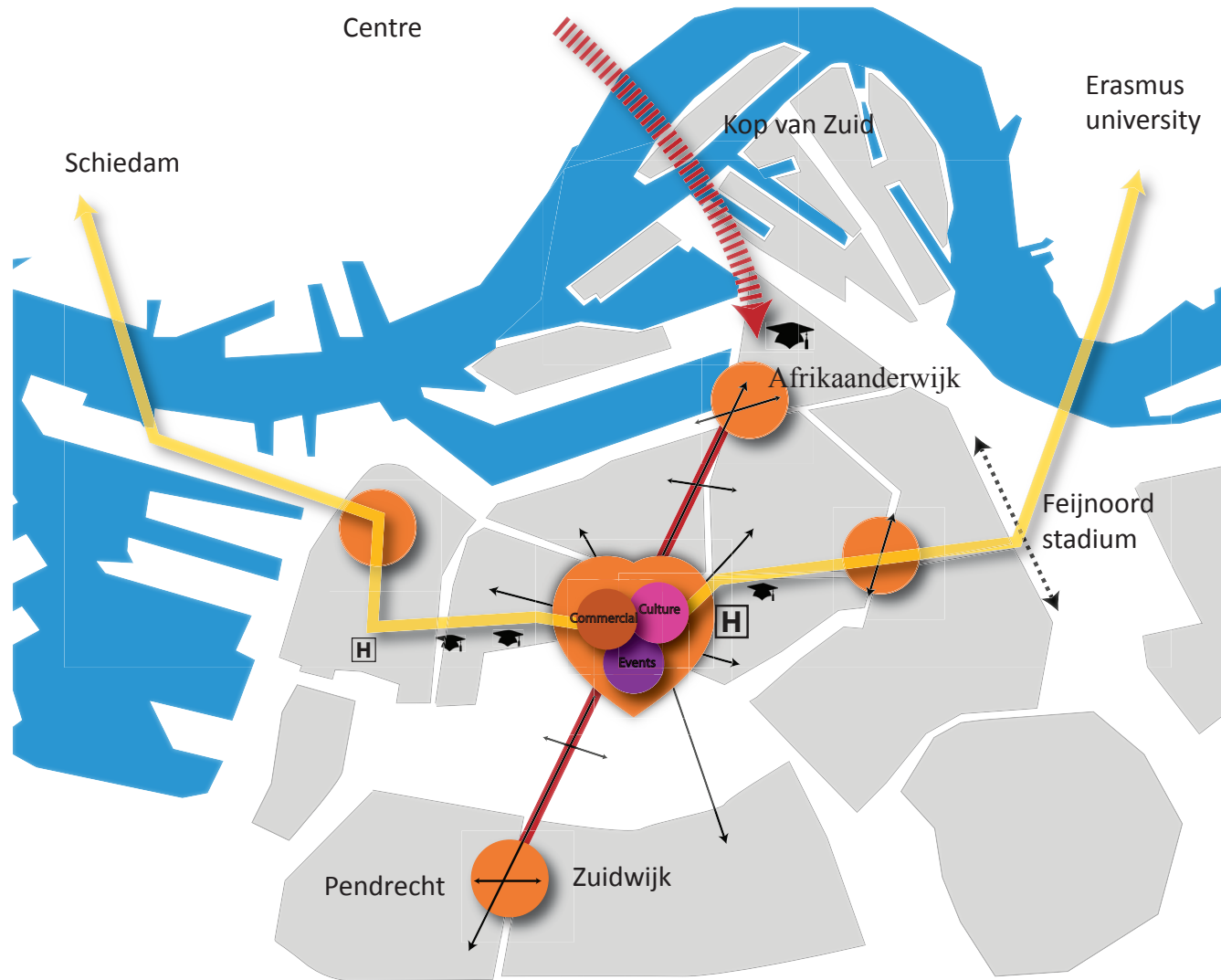
## *Possible interventions Tarwewijk*





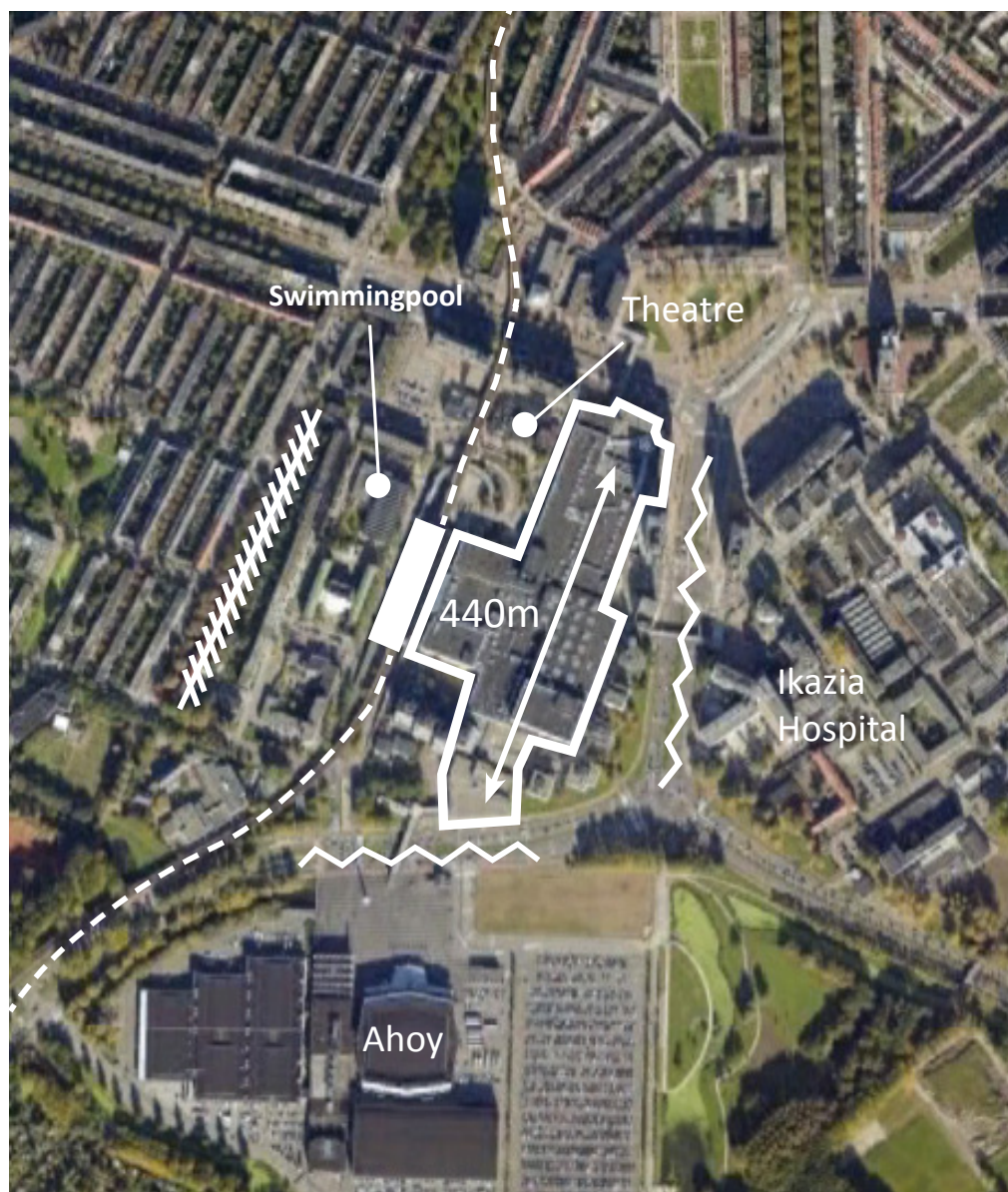
# Strategy

## *Where to start regeneration?*



# Masterplan

## *Where to start regeneration?*



- *2 modalities : metro, busstation*
- *Shoppingmall ( 440 m long)*
- *Ikazia hospital*
- *Event centre Ahoy*
- *Theatre Zuidplein*
- *Swimmingpool*
- *Businesses*



## Zuidplein: Parking solutions



*Zuidplein: transparency*



*Zuidplein: infrastructure barriers*



Zuidplein: Large scale



# Masterplan

## *Improve form of Zuidplein; a new hart on Rotterdam South*

### **A** *Activity*

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### **i** *Image*

- *Livability*
- *Safety*
- *Attractiveness*



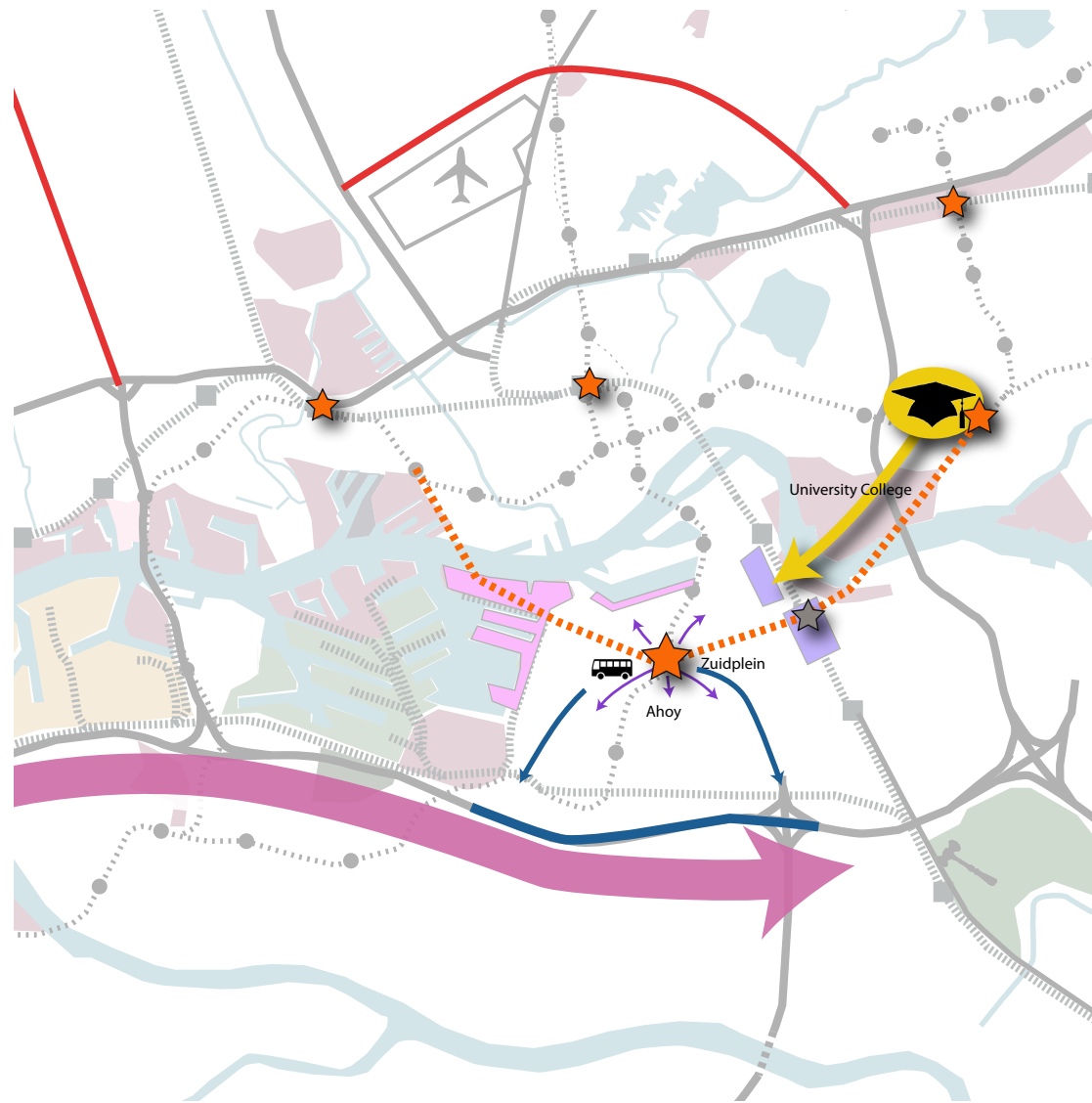
# Masterplan





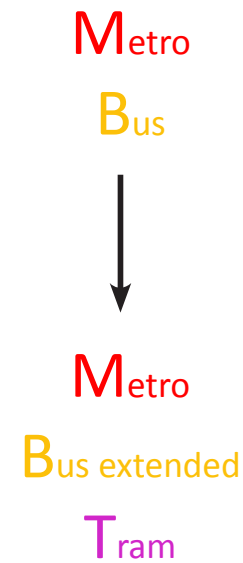
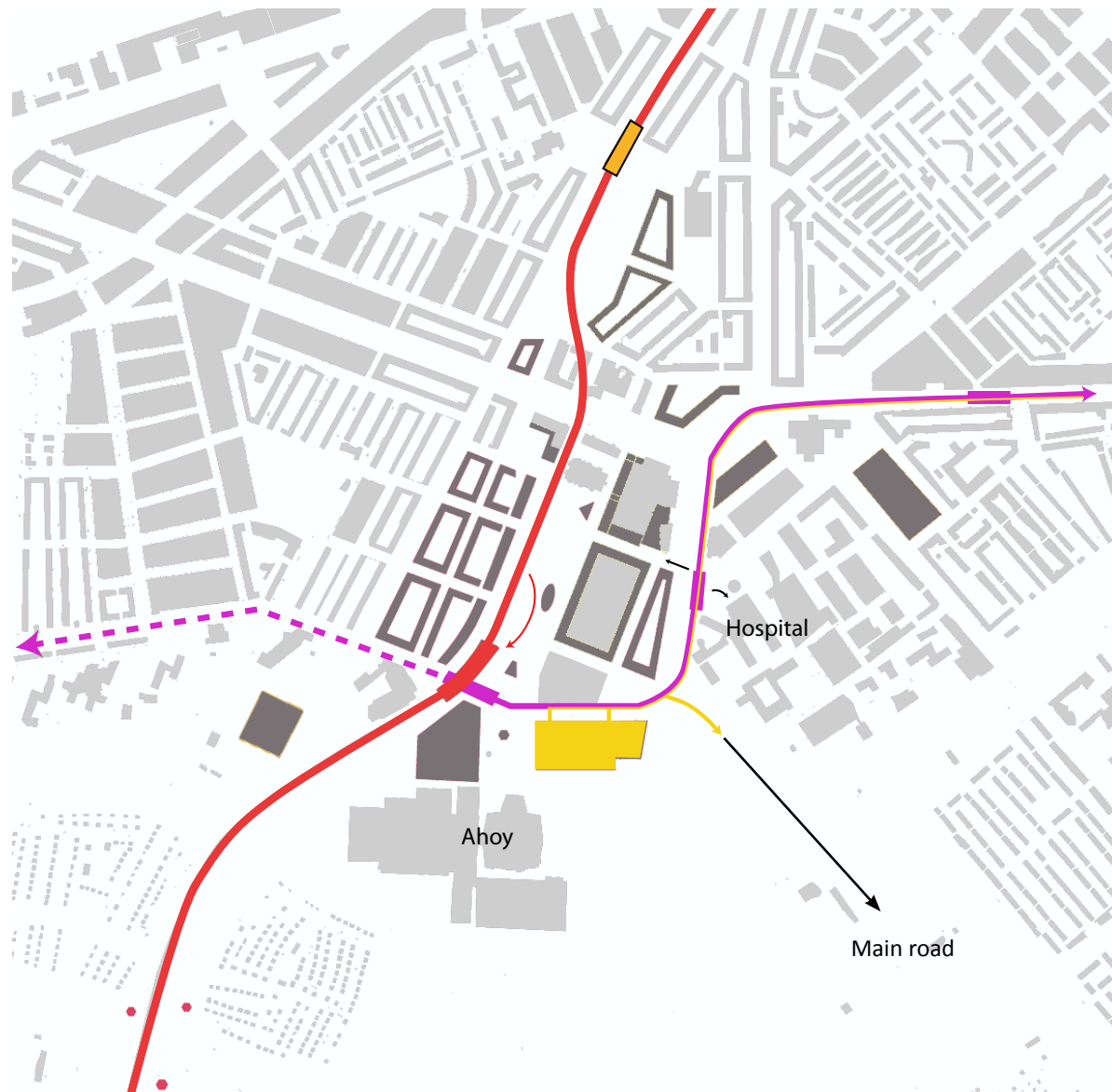
# Masterplan

## *Public transportation: regional connectivity*



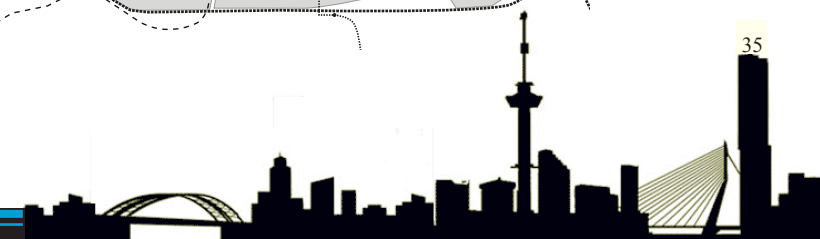
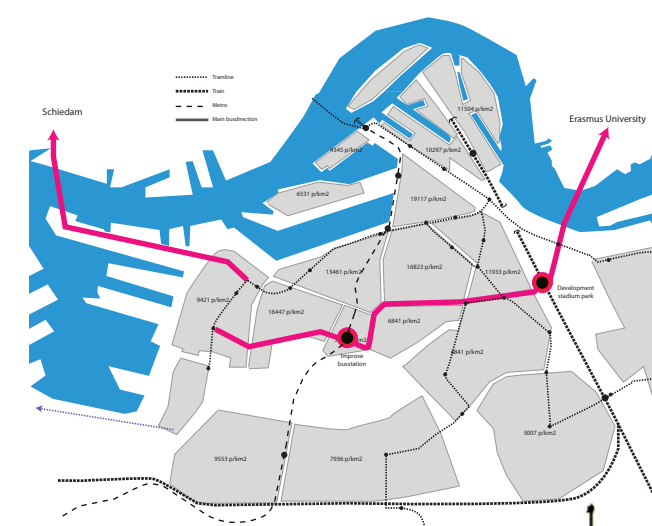
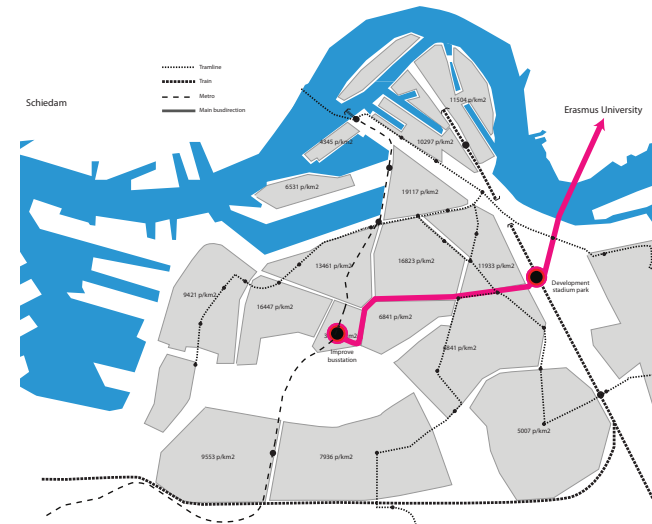
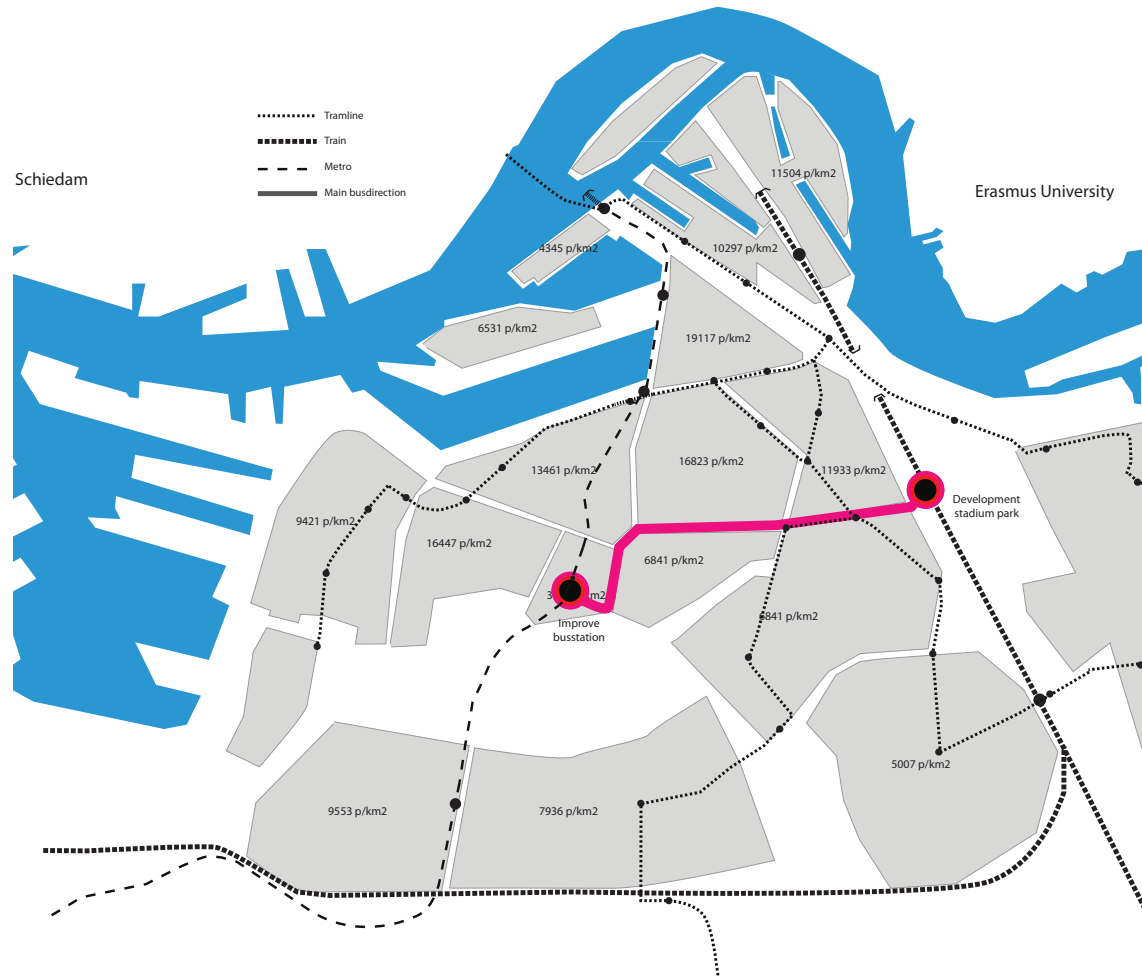
# Masterplan

## *Public transportation: from 2 to 3 modalities*



# Masterplan

## Public transportation: from 2 to 3 modalities



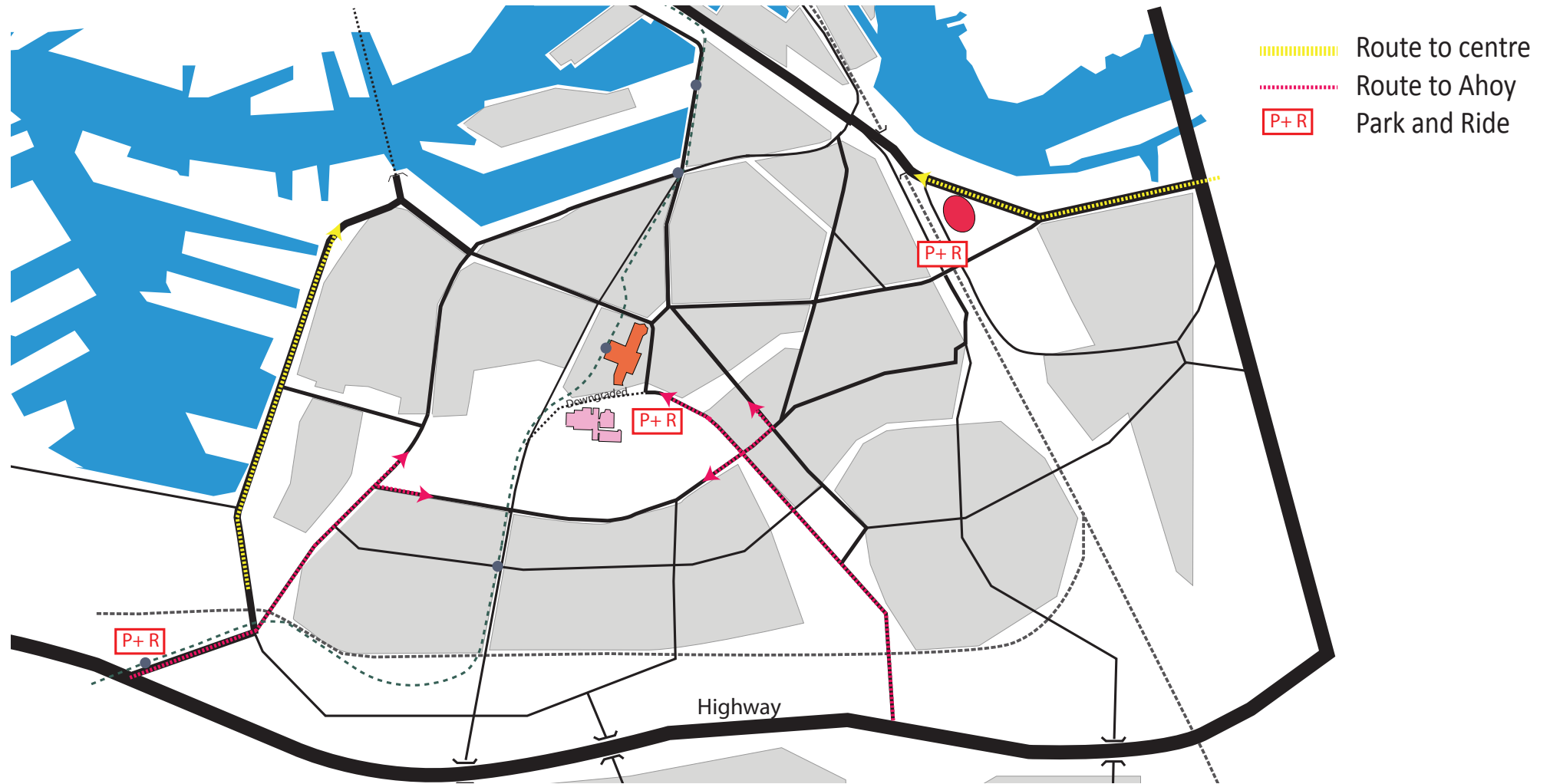
# Masterplan

*Public transportation: from 2 to 3 modalities*



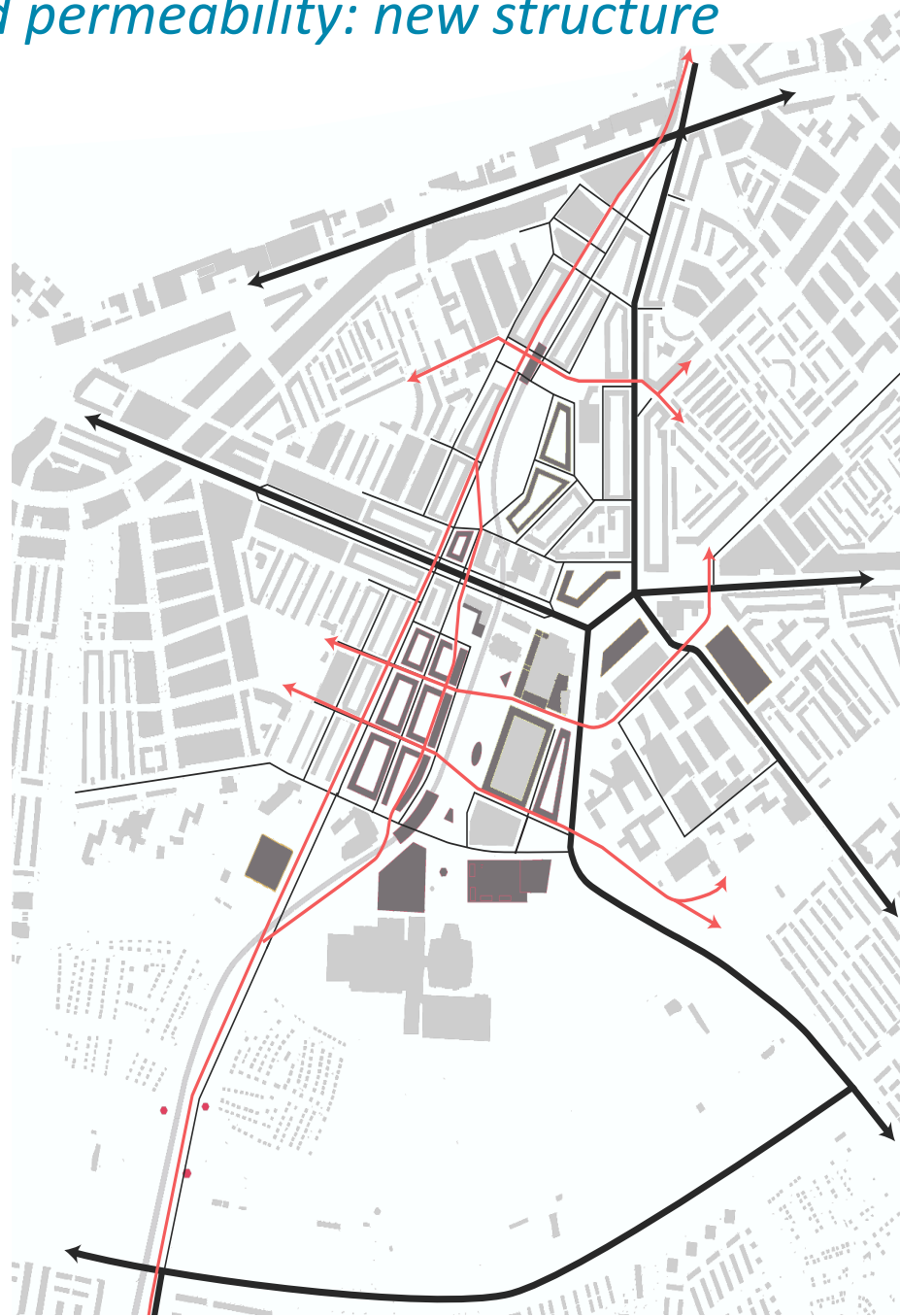
# Masterplan

## Connectivity flows and permeability: regional connectivity



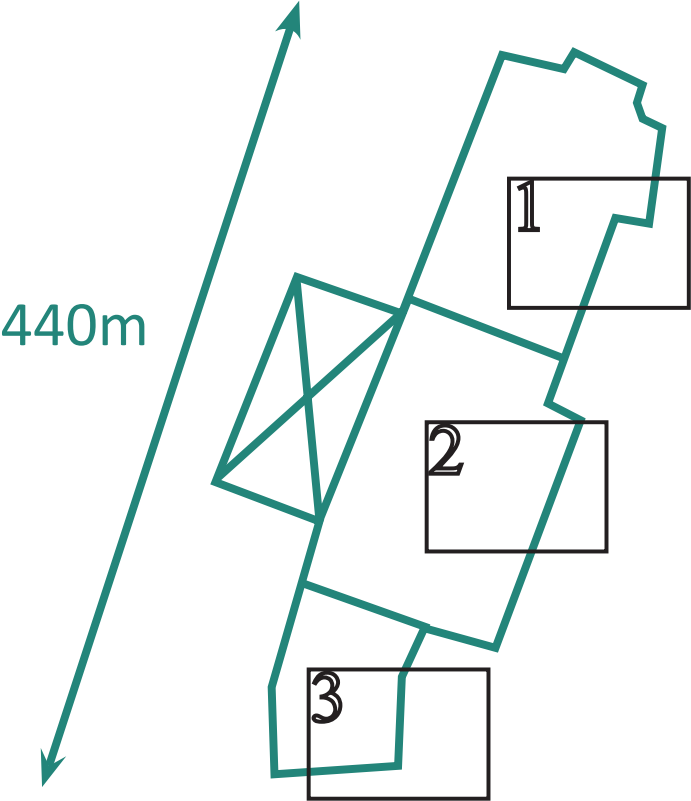
# Masterplan

## *Connectivity flows and permeability: new structure*

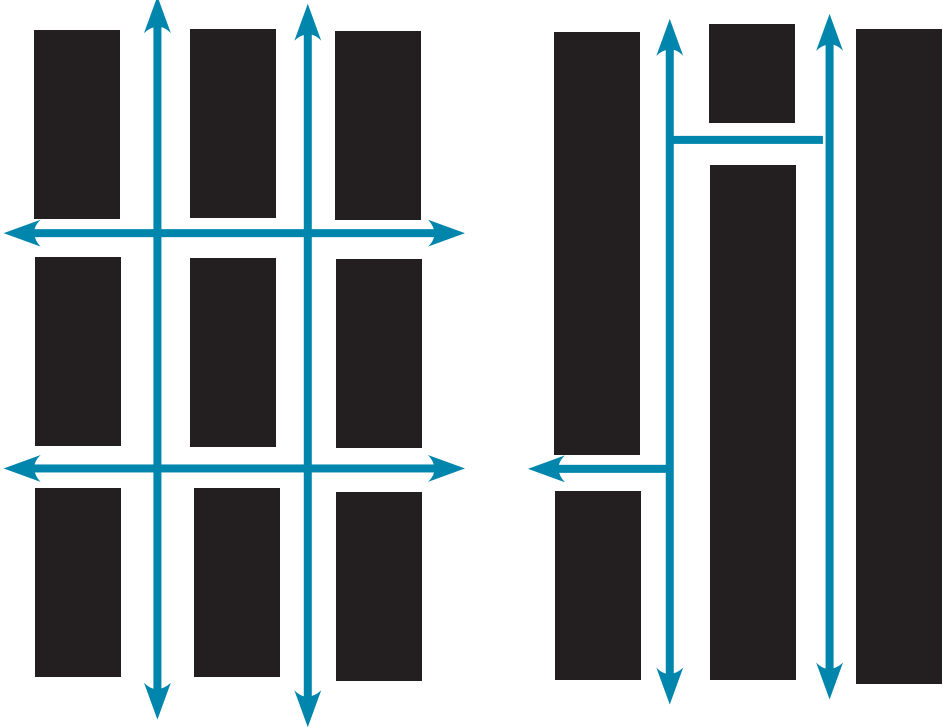


# Masterplan

*Connectivity flows and permeability: increase permeability*



Shoppingmall



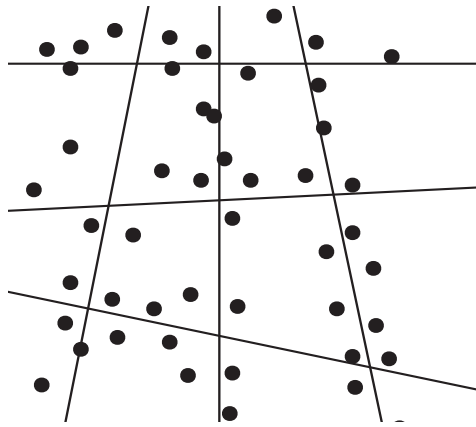
High permeability

Low permeability

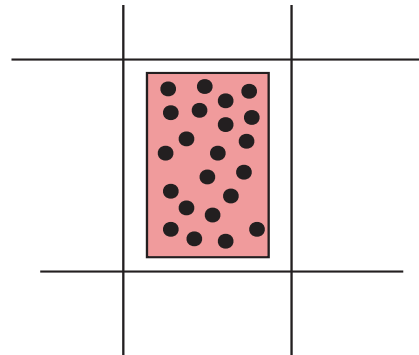


# Masterplan

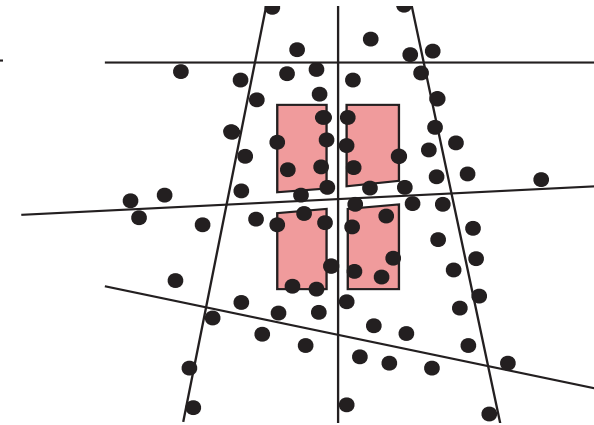
*Connectivity flows and permeability: increase permeability*



Activity along line ( pre war)



Activity in a box (post war)



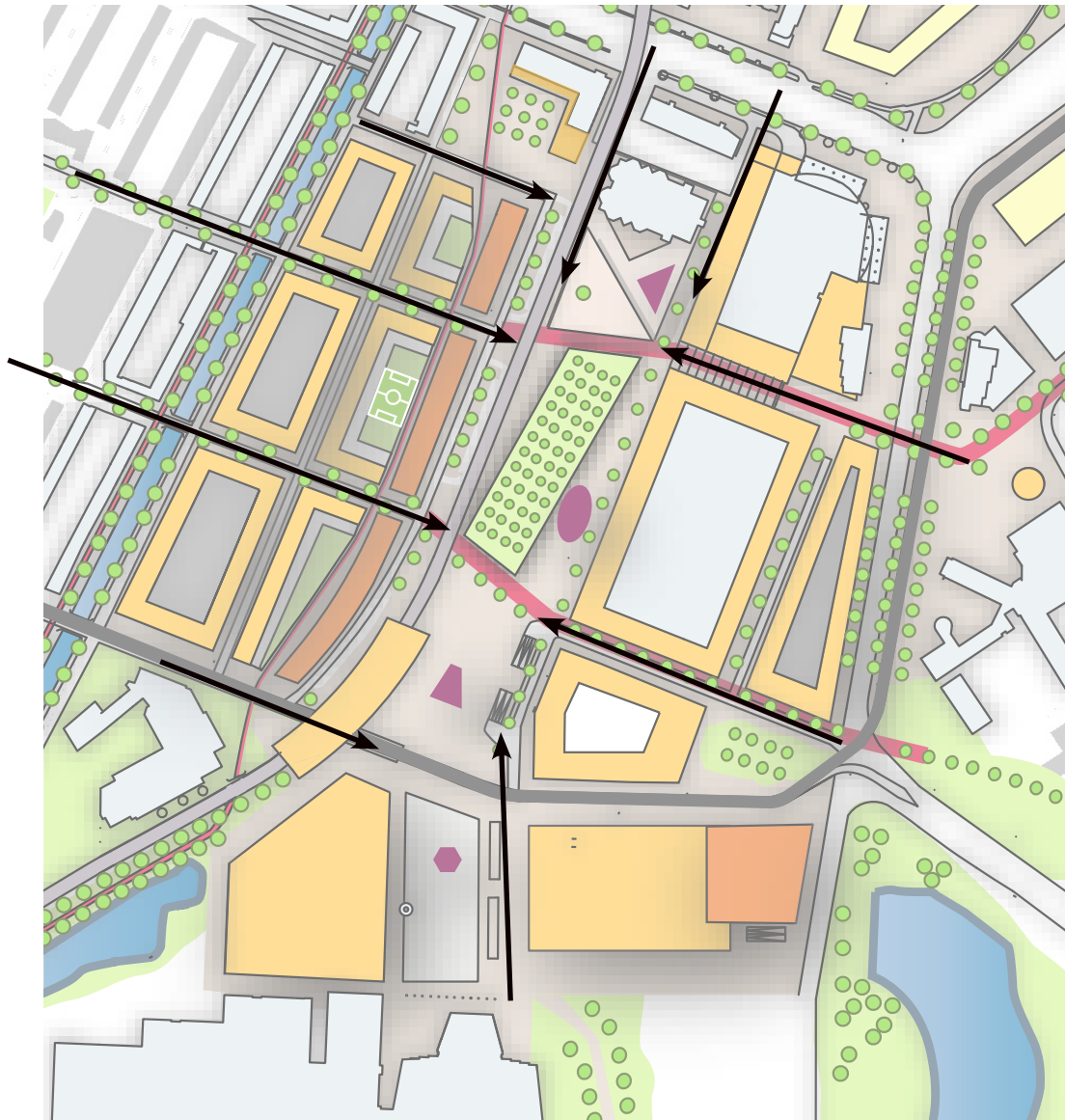
Open up the box





# Masterplan

## *Connectivity flows and permeability: new situation*



# Masterplan

*Connectivity flows and permeability: higher integrated streets*



Old situation in Space Syntax



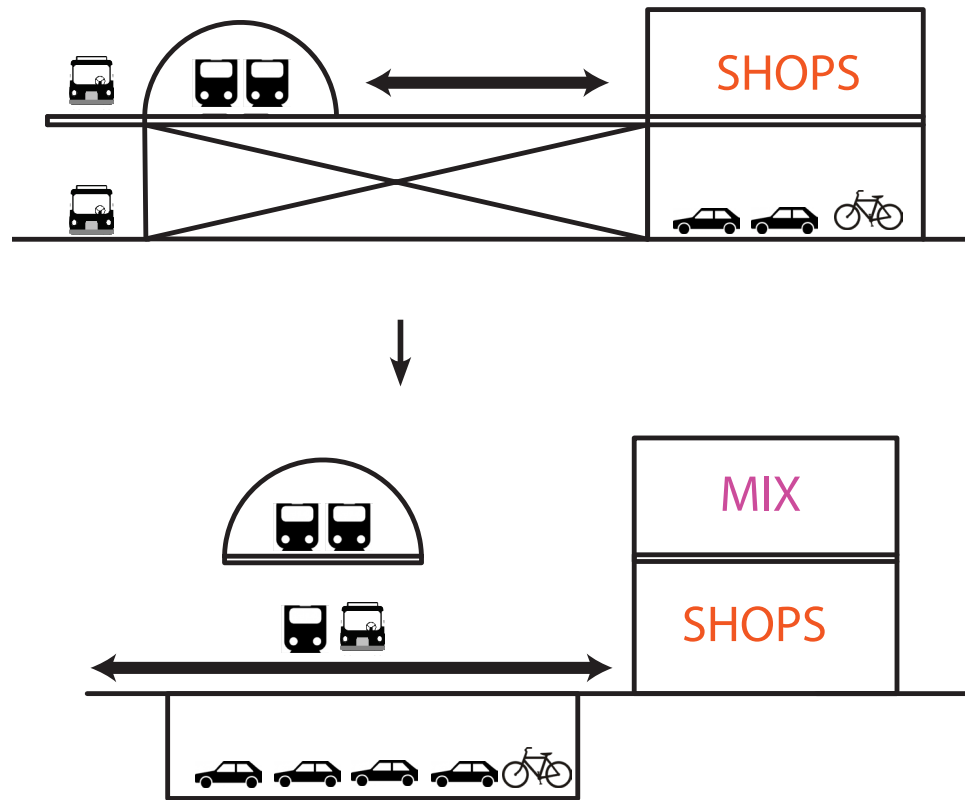
New situation in Space Syntax (cars)



New situation in Space Syntax (bikes)



# Masterplan *Transparency*



Zuidplein inside out

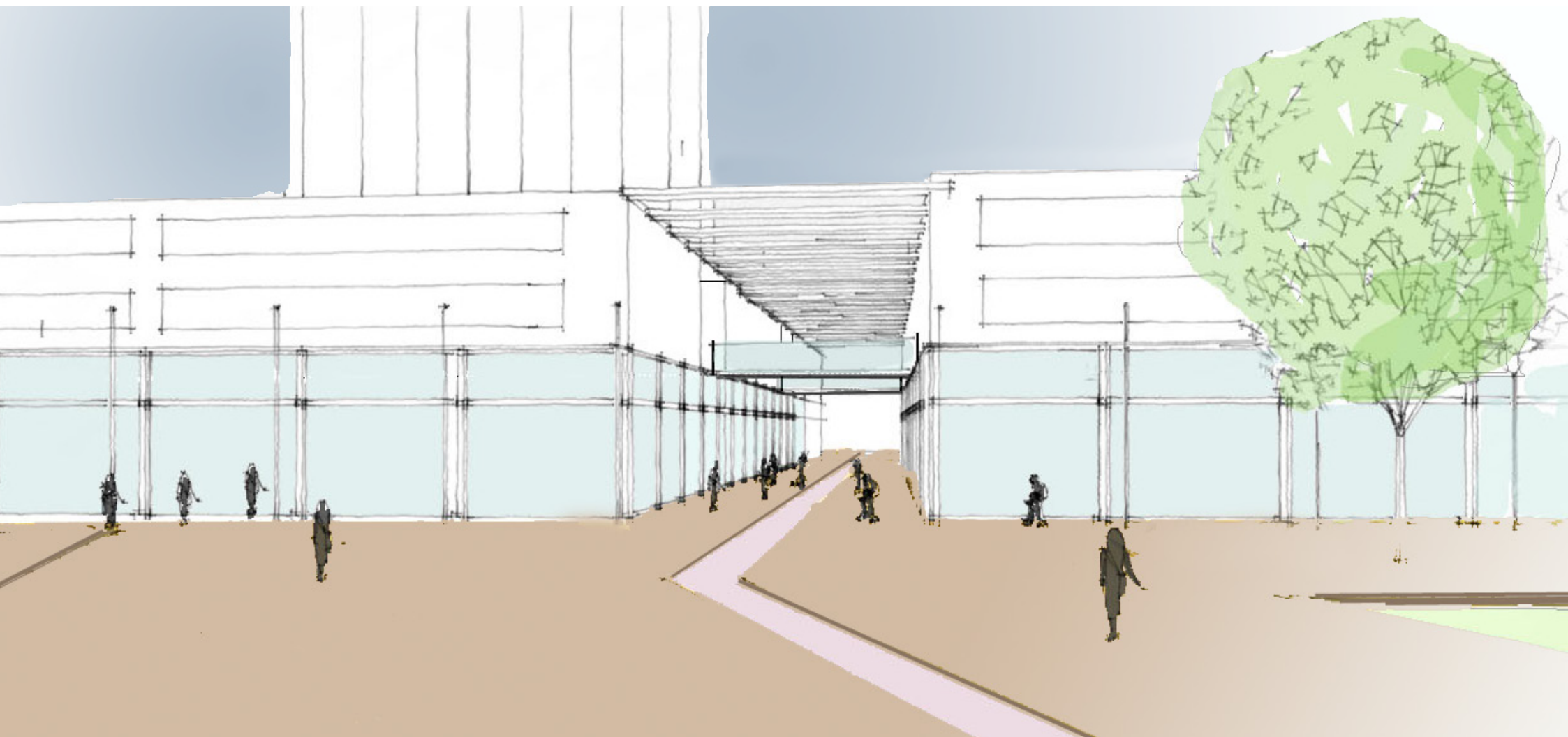


(Shopping Mall Leyweg, The Hague)



# Masterplan

*'Open the box'*



# Masterplan

*Stimulating population diversity: adding new residence*



(Java eiland Amsterdam)

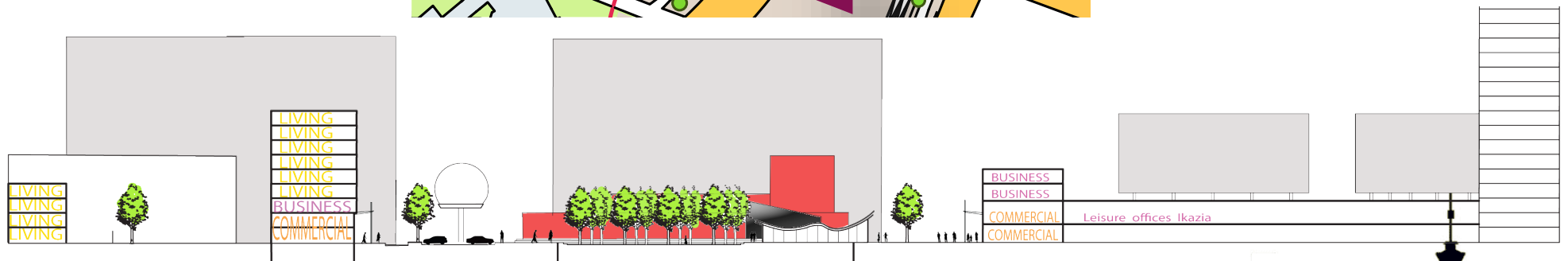
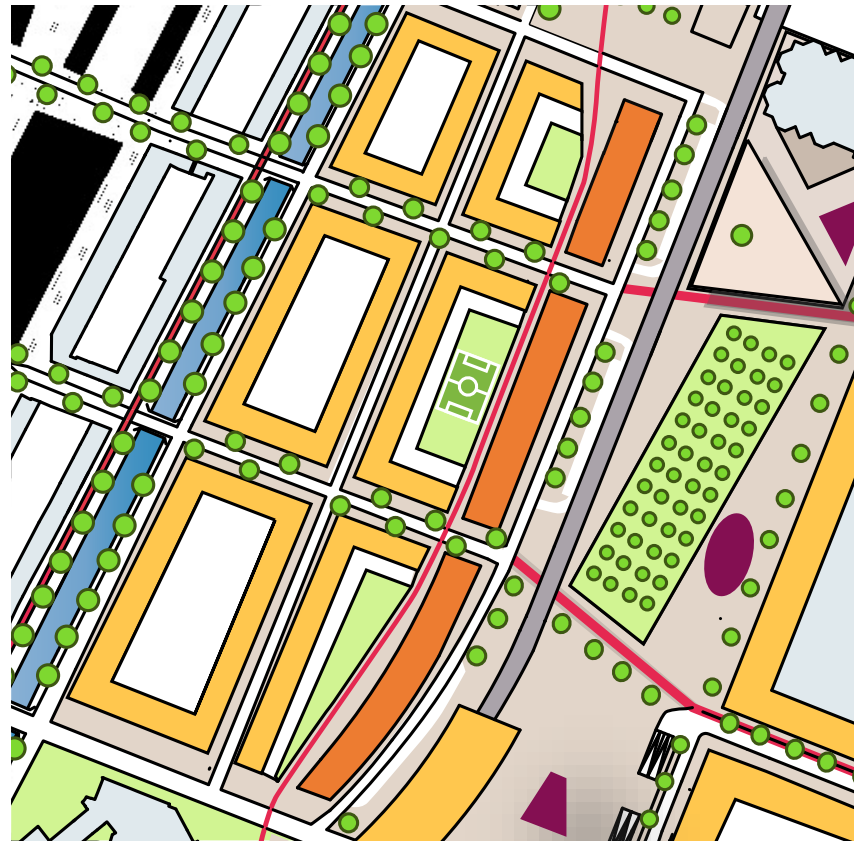


- New built
- Renovated
- New planned



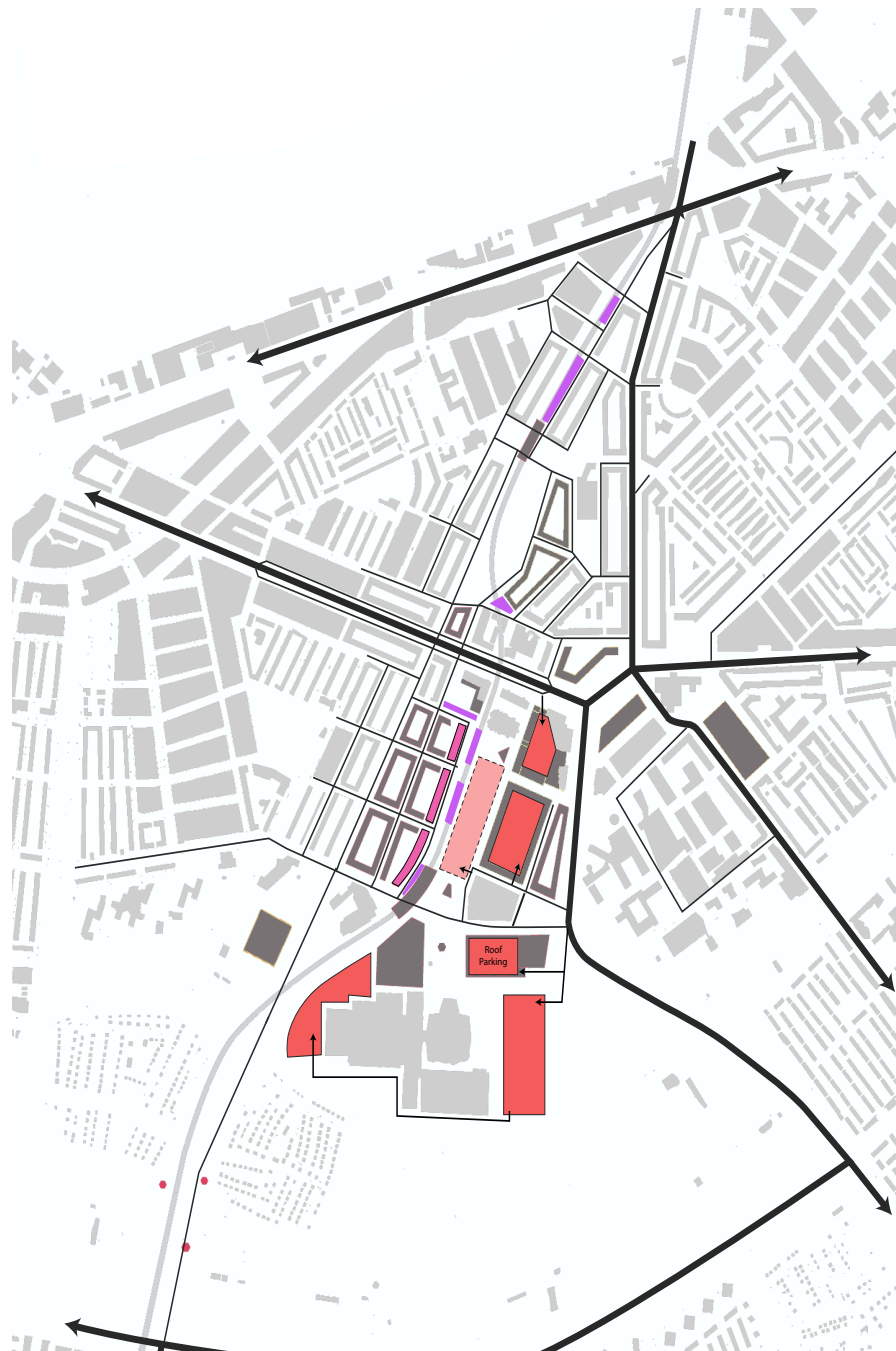
# Masterplan

*Stimulating population diversity: adding new residence*



# Masterplan

## *Parking solutions*



# Masterplan

## *Parking solutions: old situation*





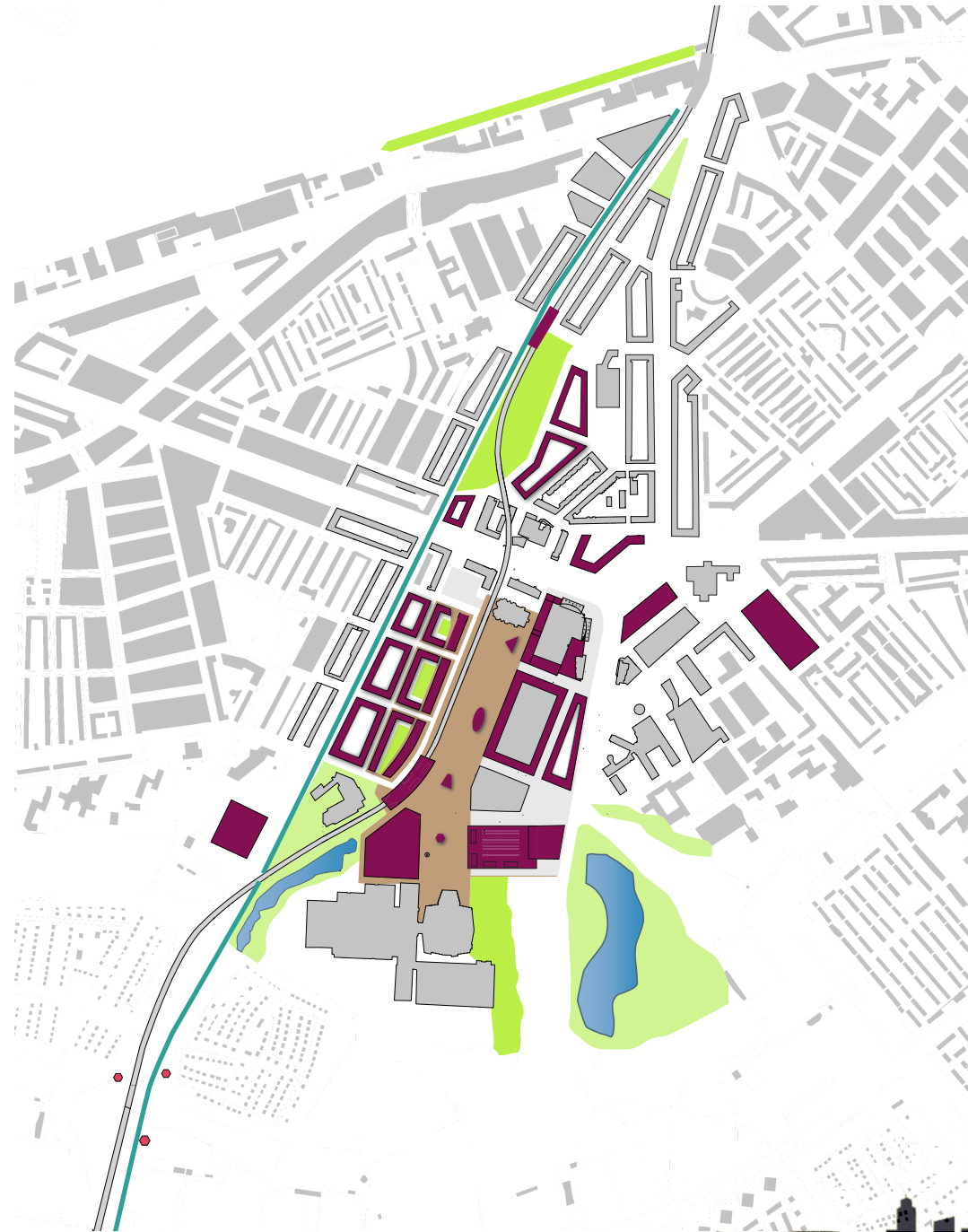
# Masterplan

## *Parking solutions: new situation*



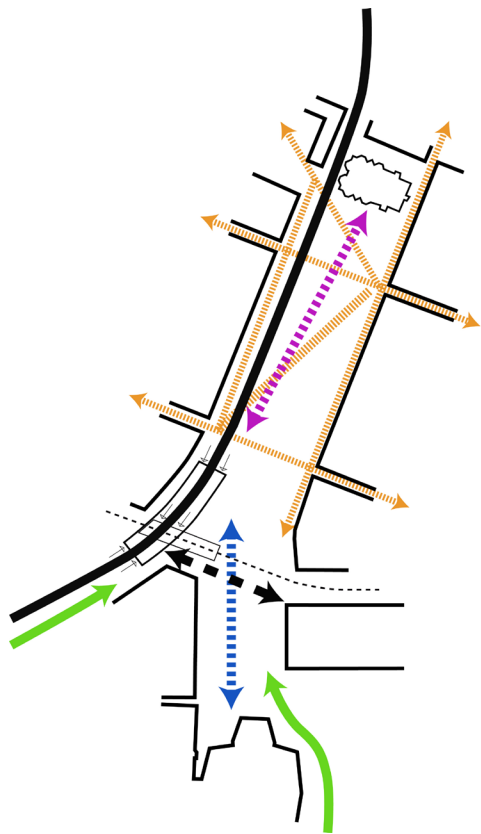
# Masterplan

*New public space*

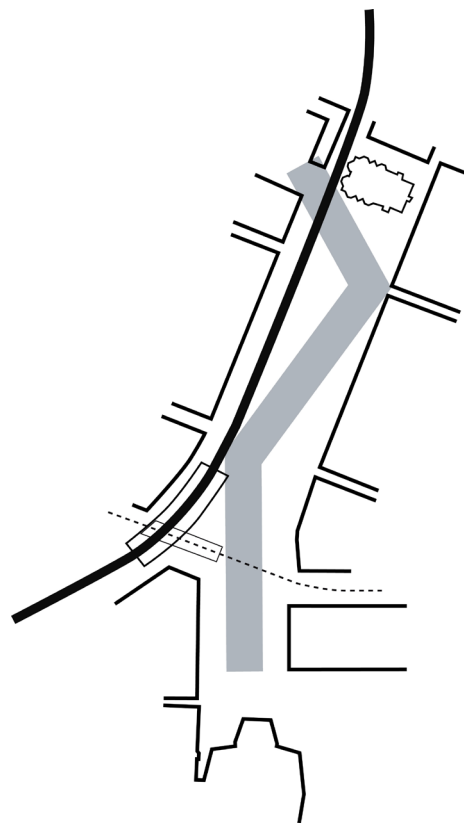


# Heart of Rotterdam South

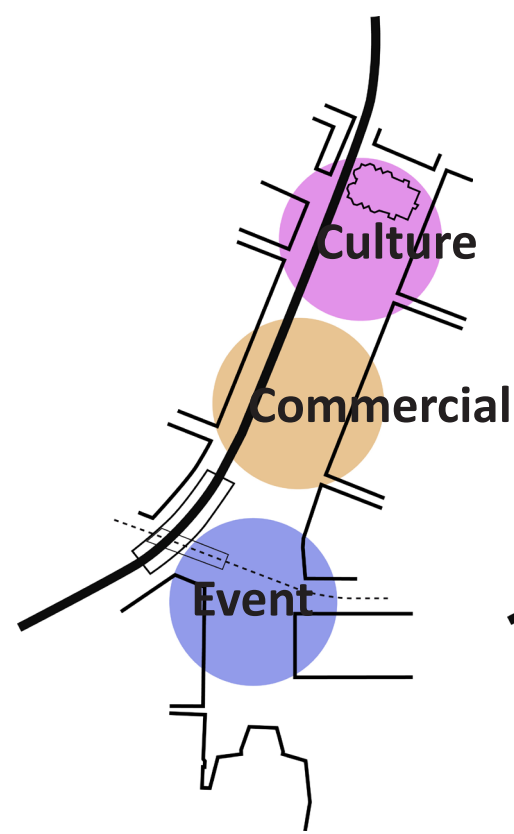
*A new entrance for the heart of South*



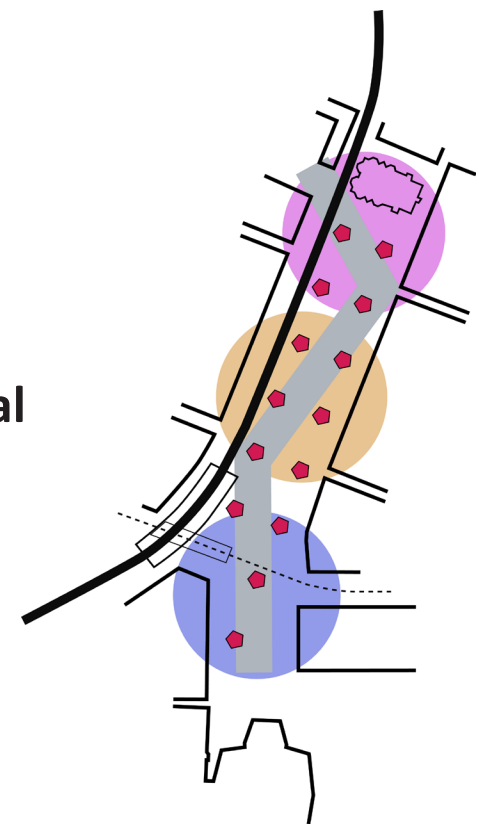
**Pedestrian flows**



**Breakline**



**Atmospheres**

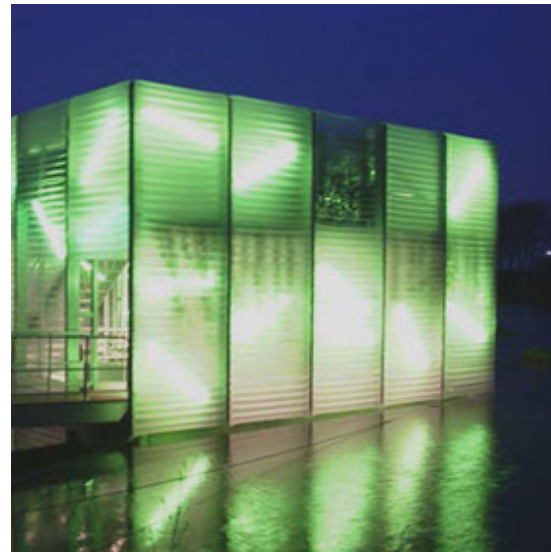
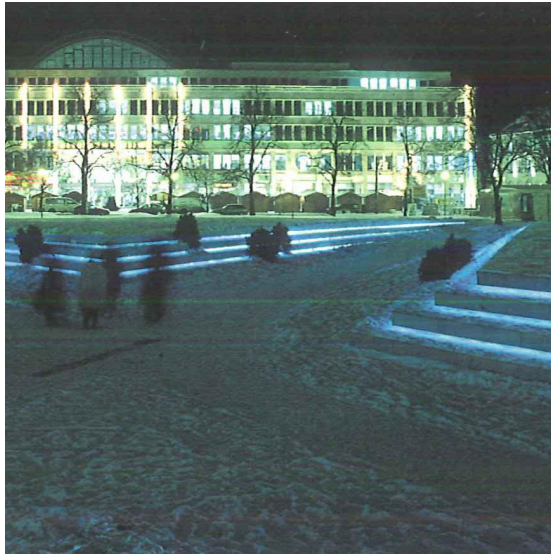


**Pavilions**



# Heart of Rotterdam South

*Atmosphere culture square*



# Heart of Rotterdam South

## *Atmosphere culture square*



# Heart of Rotterdam South

## *Culture square*



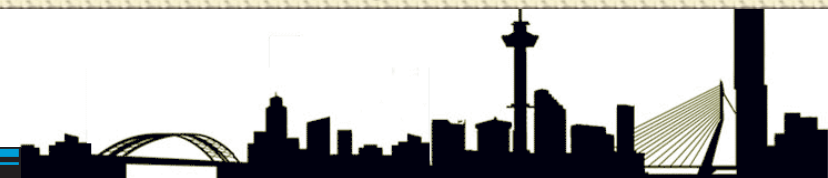
# Heart of Rotterdam South

*Atmosphere commercial square*



# Heart of Rotterdam South

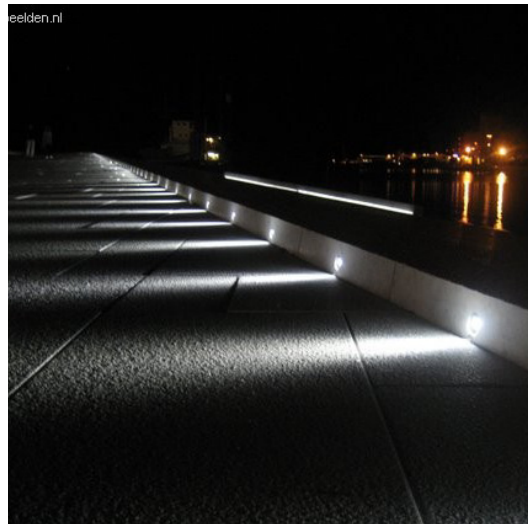
## *Commercial square*





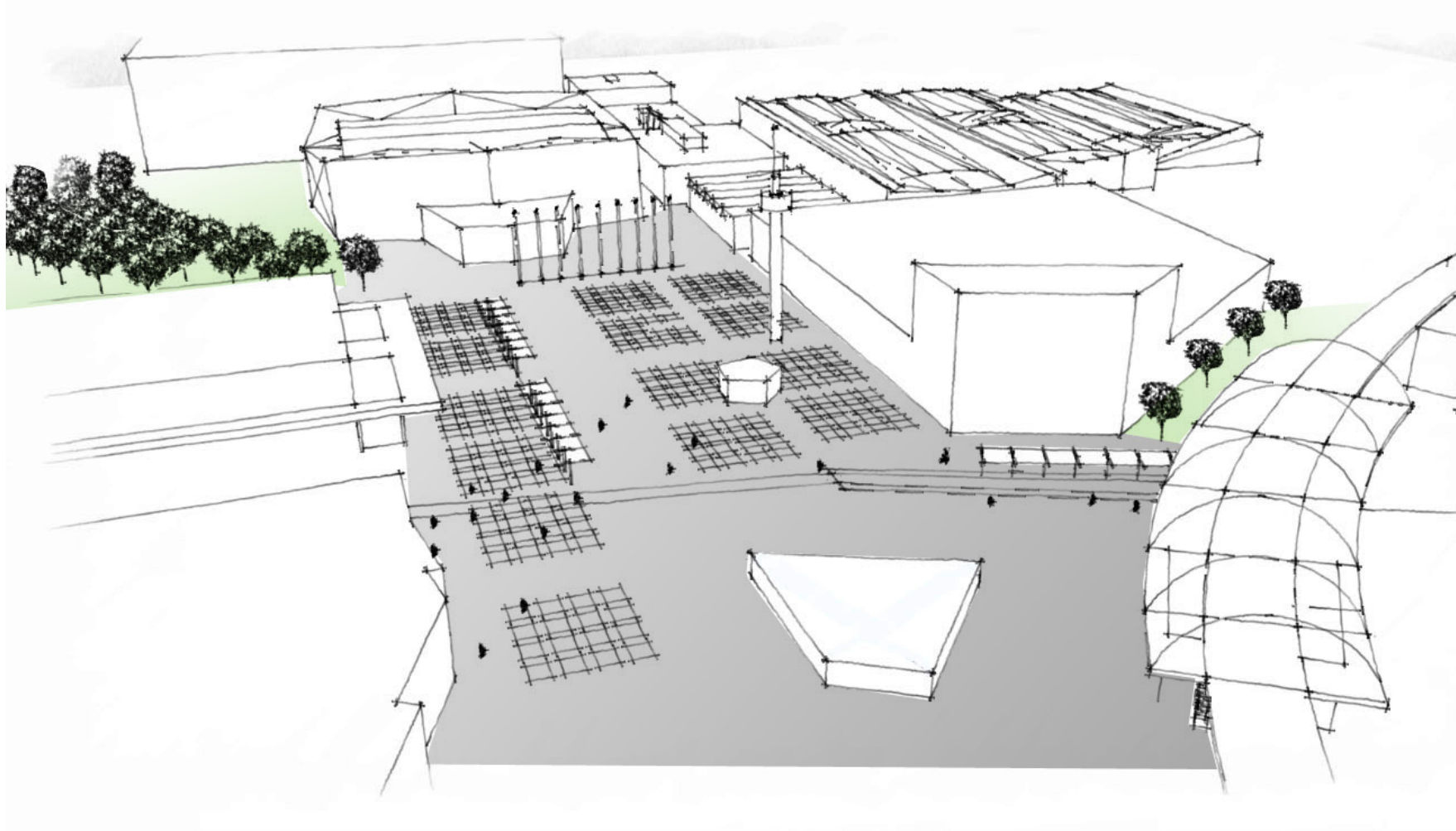
# Heart of Rotterdam South

## *Atmosphere event square*



# Heart of Rotterdam South

*Atmosphere event square*



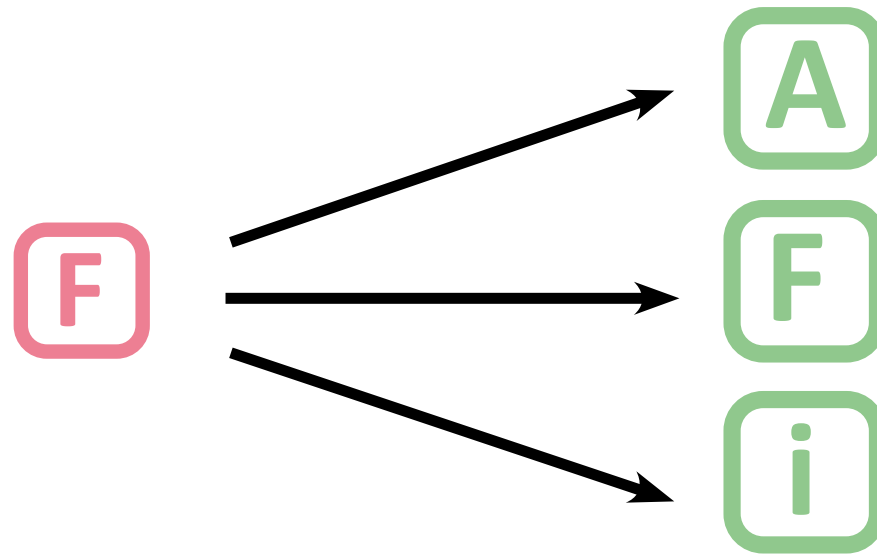
# Heart of Rotterdam South

*Event square*



## Heart of Rotterdam South

*Conclusions: improving spatial quality*

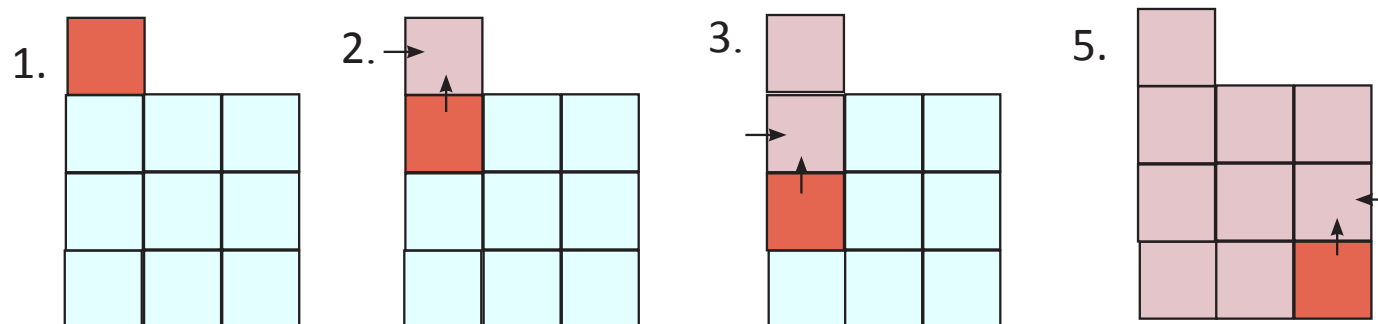


- Interventions in form lead to better the activity on street and image of Zuidplein
- Interventions on Zuidplein improve the entrance of Rotterdam south
- Catalyst development surrounding neighborhoods



# Heart of Rotterdam South

## *Conclusions: socio economic diversity*



- ‘Waterbed effect’ decreased by intensification Zuidplein and phased development.
- New living attractions can attract more affluent people



# Heart of Rotterdam South

## *Recommendations*

- Methodology as direction for problem solving
- Methodology research is generic for innercity problem areas it is applied on Rotterdam South



PLEIN

ZUIDPLEIN

*The End*

