

The Case of Leipzig. A City between Migration and Integration

Social cohesion through a mixed-use housing model for a higher city competitiveness performance.



forecasting the Gartenstadt

image: shrinkingcities, Philipp Oswalt, Berlin

P5-Presentation 27.06.2008

Claudia Buhmann

Studio Globalization

Mentorteam:

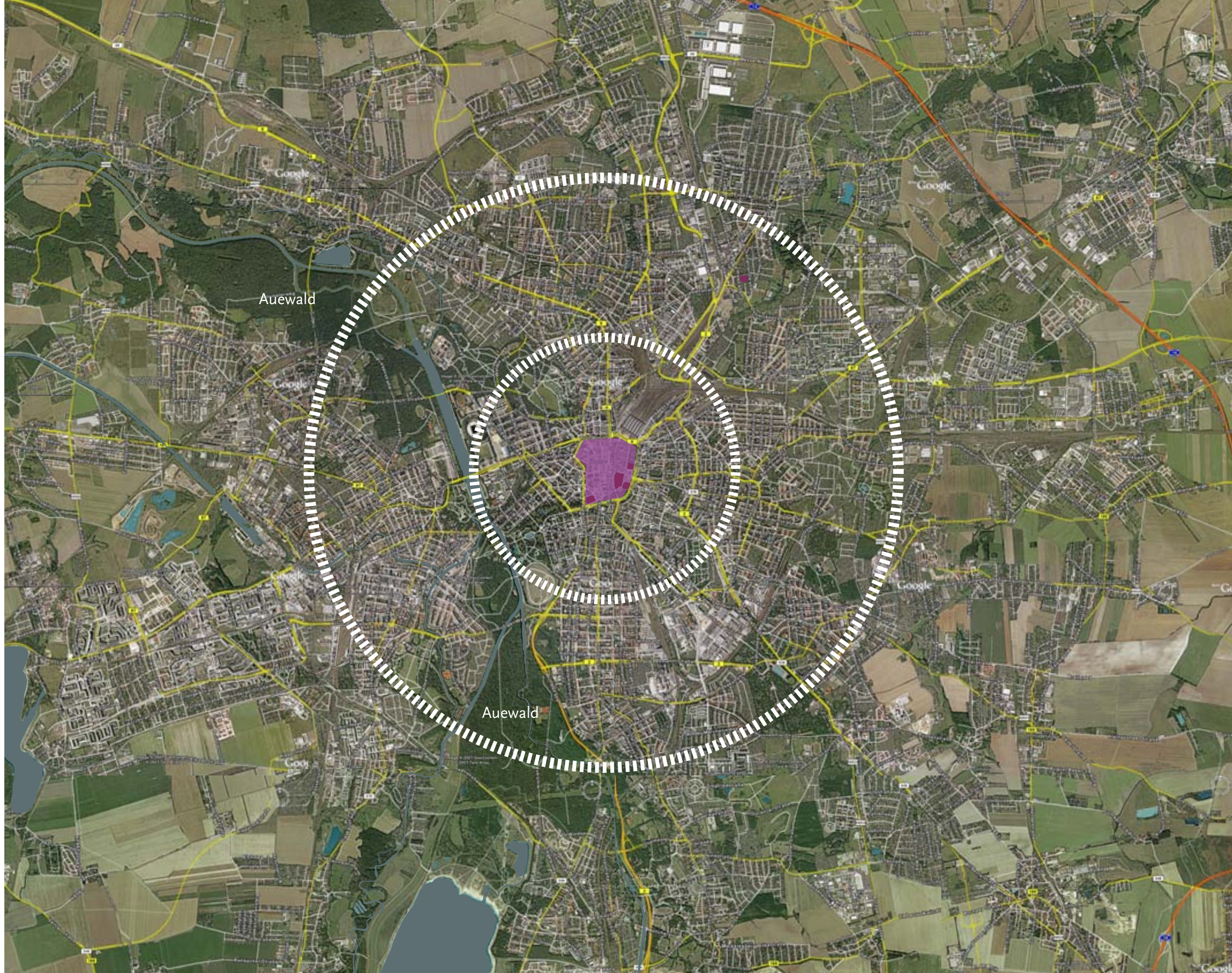
Dr. D. Sepulveda

Prof. Henco Bekkering

Ir. Hein de Haan

LEIPZIG BECOMES AN
IMPORTANT FAIR
TRADE CENTER 1190

500 INHABITANTS



Auewald

Auewald

- Public buildings
- Historical City

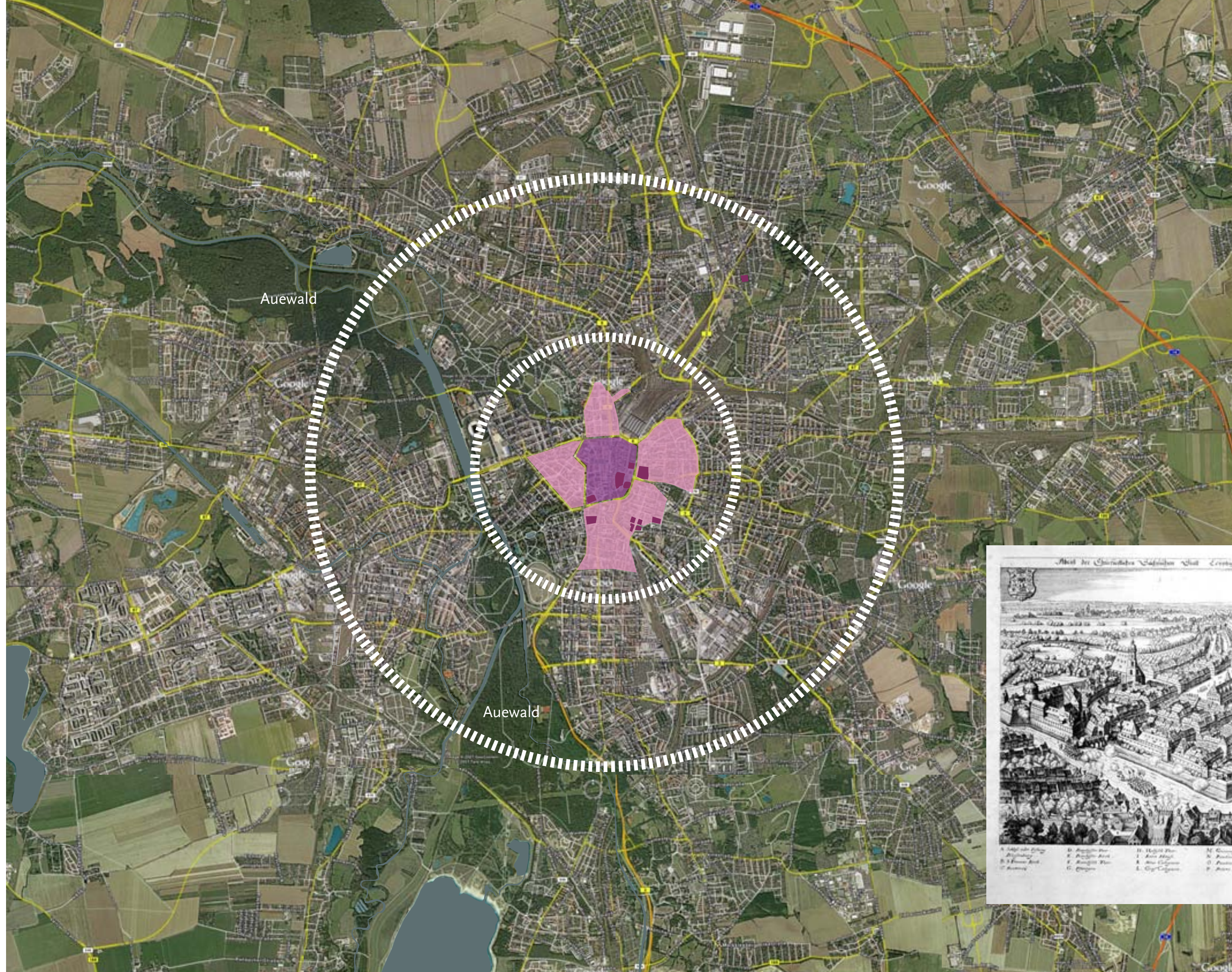
2000m



FIRST SHRINKAGE DURING THE THIRTY YEARS WAR 1618-1648

20,000-14,000 INHABITANTS

- Public buildings
- Historical City centre
- Inner outskirts

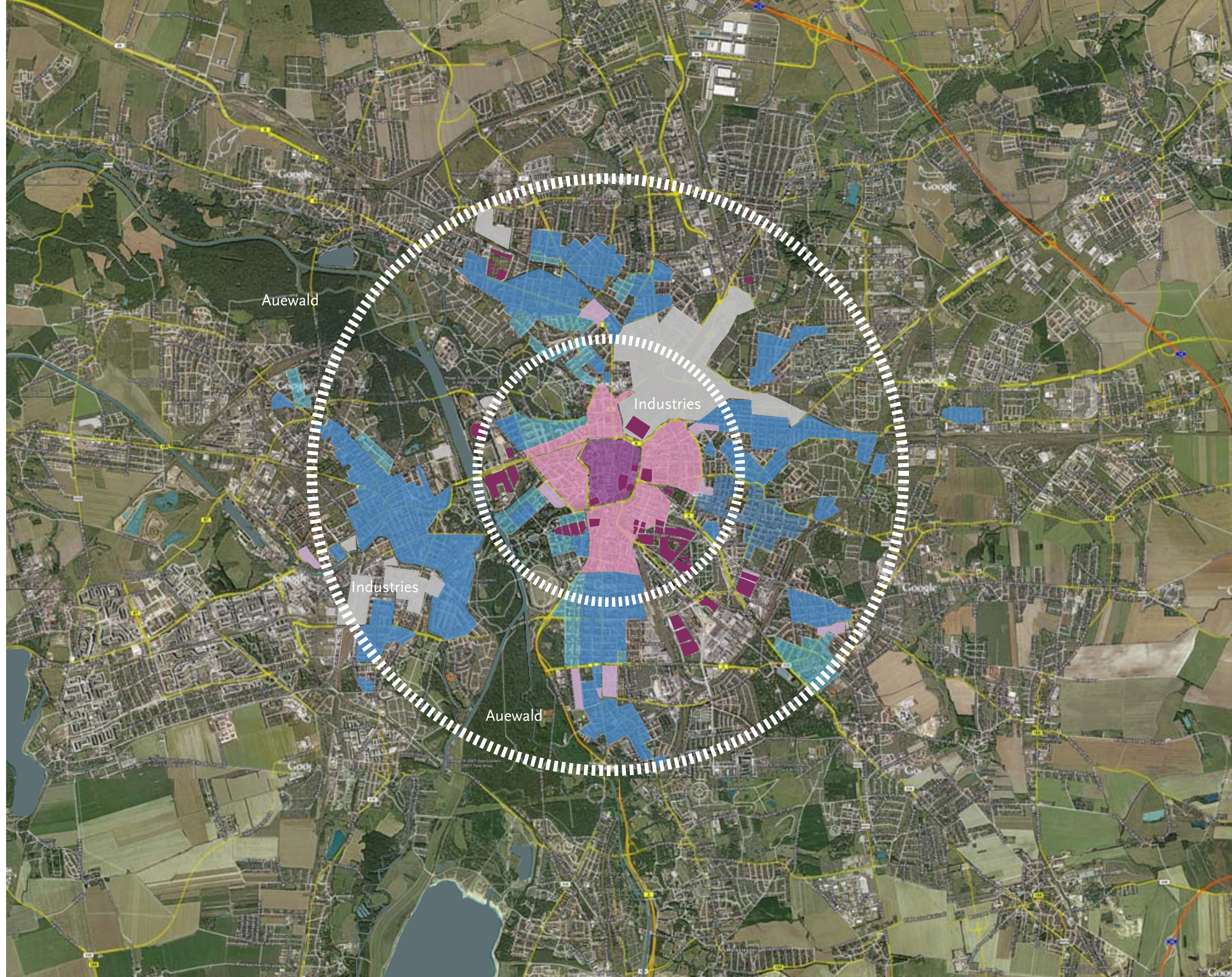


2000m



EXPANSION OF HISTORICAL CITY CENTRE DURING INDUSTRIALIZATION, 1871

106,925 INHABITANTS

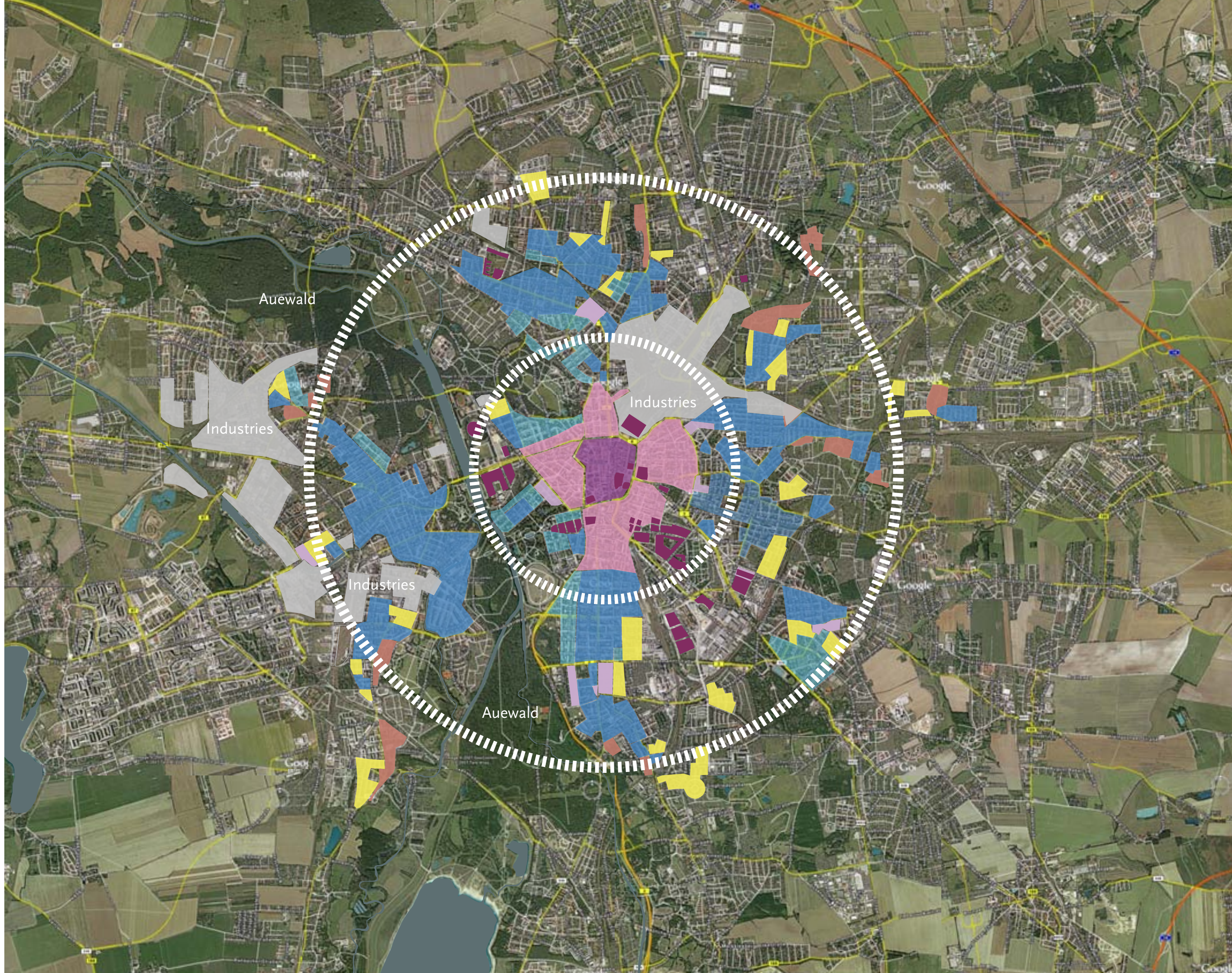


- Industrial sites
- Public buildings
- Historical City centre
- Inner outskirts
- Wilhelmina buildings
- City-villas
- Mixed inner city

2000m

POPULATION CLIMAX BEFORE THE SECOND WORLD WAR 1930

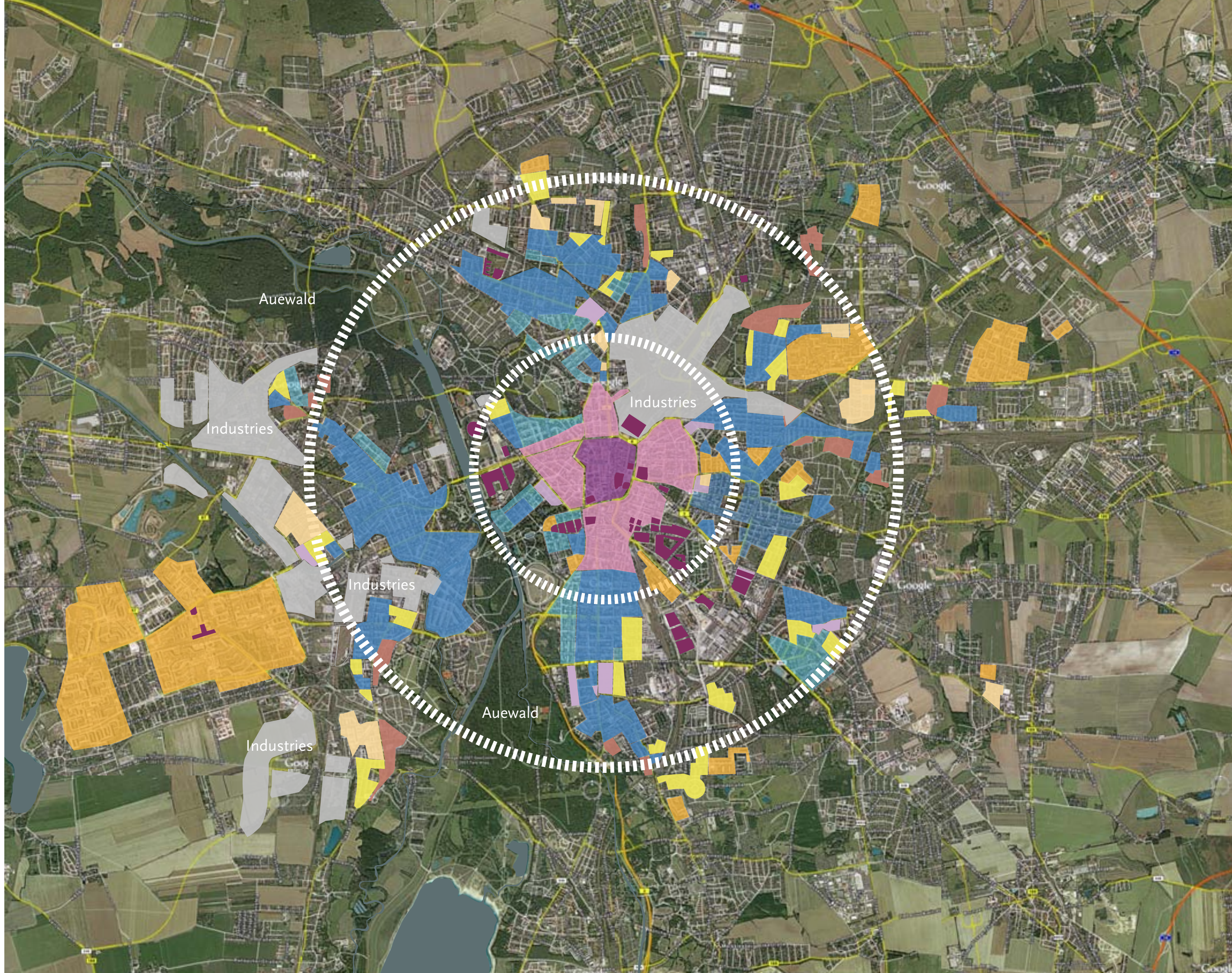
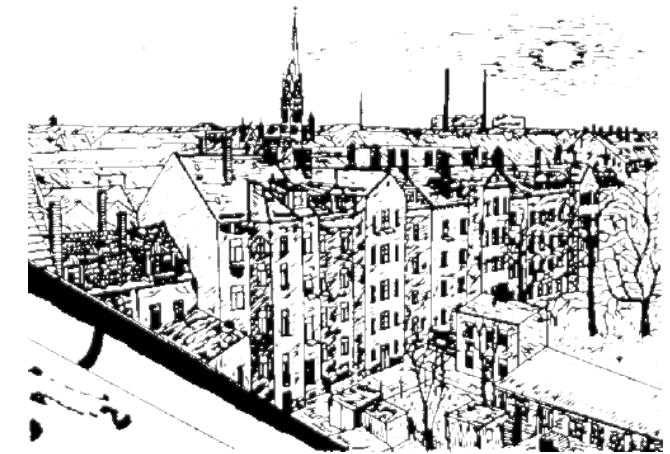
718,200 INHABITANTS



- Industrial sites
- Public buildings
- Historical City centre
- Inner outskirts
- Wilhelmina buildings
- City-villas
- Mixed inner city
- Mixed periphery
- Settlements until 1945

2000m

**SOCIALIST REGIME
FROM 1949-1989,
DECLINE TO 530,010
INHABITANTS**

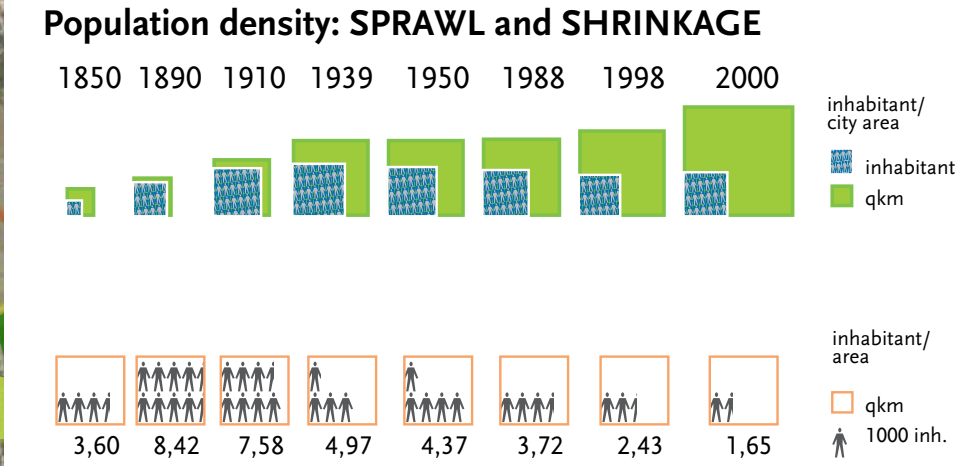


- Industrial sites
- Public buildings
- Historical City centre
- Inner outskirts
- Wilhelmina buildings
- City-villas
- Mixed inner city
- Mixed periphery
- Settlements until 1945
- Settlements until 1970
- Prefabricated buildings

2000m

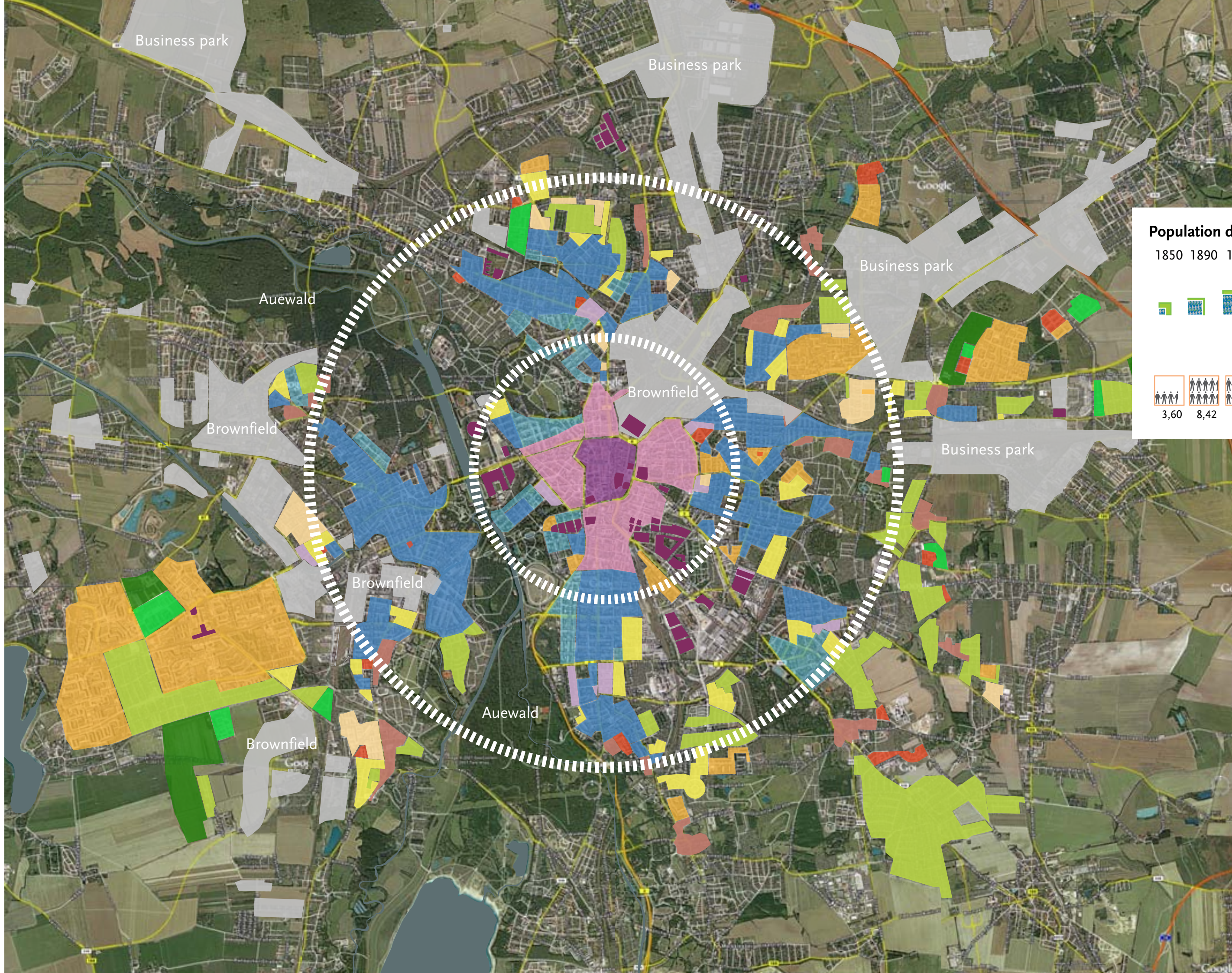


**AFTER THE REUNION
100,000 PEOPLE LEFT
IN 10 YEARS
1998: 437,101 INHABITANTS**



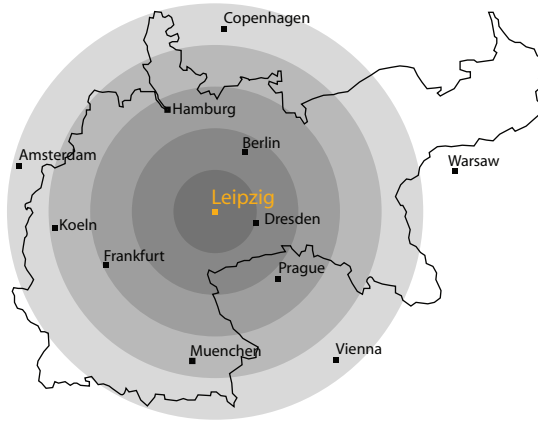
- Brownfield and business zones
- Public buildings
- Historical City centre
- Inner outskirts
- Wilhelmina buildings
- City-villas
- Mixed inner city
- Mixed periphery
- Settlements until 1945
- Settlements until 1970
- Prefabricated buildings
- Multy-family housing after 90
- Family homes 1990-1999
- Family homes after 1999
- Family homes planned

2000m



01

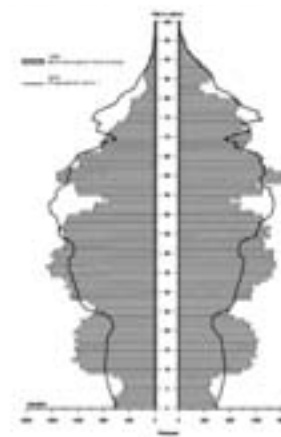
GERMAN EMPIRE



GERMAN DEMOCRATIC REPUBLIC



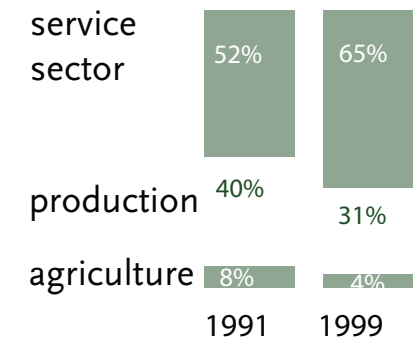
FEDERAL REPUBLIC OF GERMANY



population development

2015

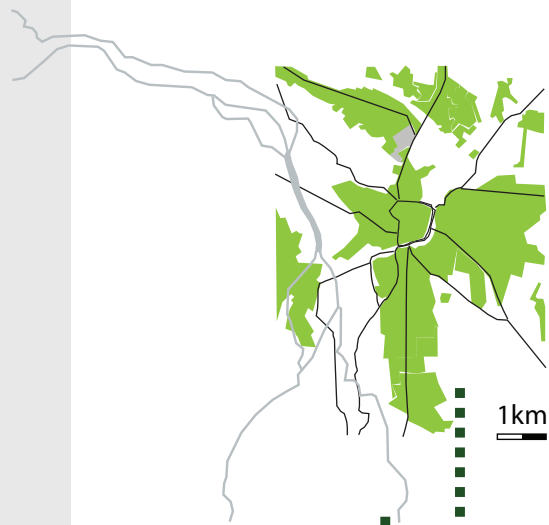
1999



employment in economical sectors

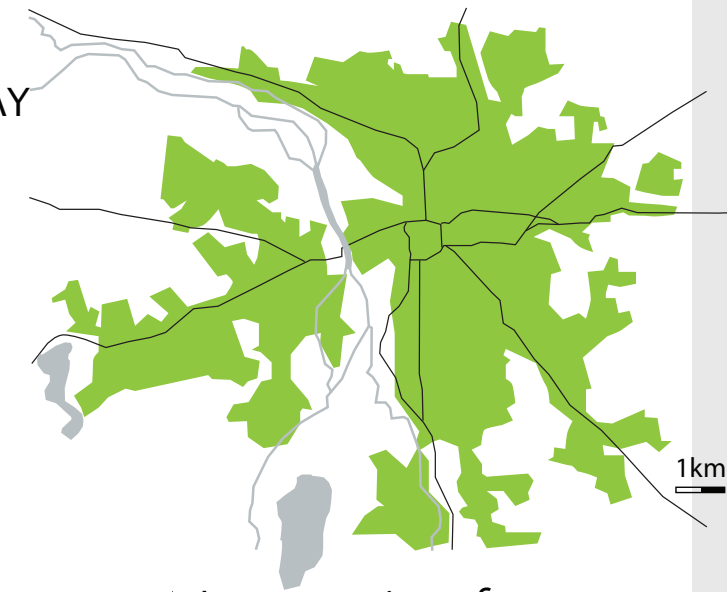


Area: 297.60 km²
 Population: 507,578
 Density: 1,702 /km²
 GDP: 11,670 mio EUR
 debt: 900 mio EUR



CITY DEVELOPMENT: AROUND 1900

LEIPZIG TODAY



FOUNDATION OF THE GERMAN DEMOCRATIC REPUBLIC

PEACEFUL REVOLUTION 1991 free election of the city council

Incorporation of municipalities



CITY profile

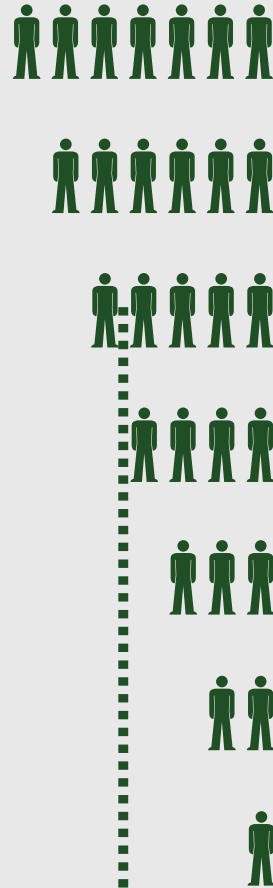
1871 1900 1945 1949 1960 1970 1980 1989/90 1991 1993 1995 1997 1999 2001 2003 2005 2007 2010 2012 2014 2015

COAL MINING
 ENERGY PRODUCTION
 CHEMICAL INDUSTRIES

DE INDUSTRIALISM

TOURISM
 BIOTECHNOLOGY
 DISTRIBUTION HUB

SOCIALISM, PROCLAIMED THROUGH SOWJET UNION INFORMAL COALITION BETWEEN SOCIAL AND CHRIST DEMOCRATS (MODELL OF LEIPZIG)



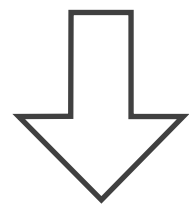
Social / economical aspects

Low fertility rate,
Aging population

->economical
and demographical
shrinking city

Education not bound
to local employment

->“brain drain” and
Jobless growth leads to
high unemployment rates
-> on local level up to 25%!



**Breeding-ground
for racism**

->high migration
rate within and
out of the city

Spatial aspects

Suburbanization,
Loss of quality in inner city



Decaying buildings
Formation of stigmatized neighborhoods



**Vacancy rate 33%/36%
especially in Wilhelmina houses**

Environmental aspects

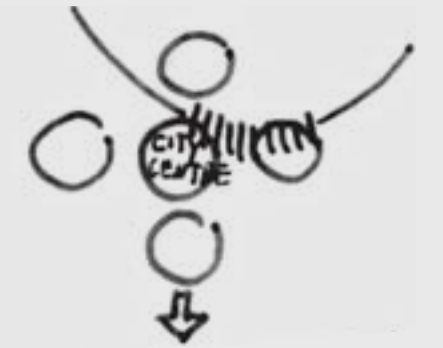
New mobility, high car use rate



Brownfields



Problem on City level spatial fragmentation/ perforation



improvement of
accessibility/ connectivity



Problem on Local level social segregation



enhance social cohesion
through mixed-use housing



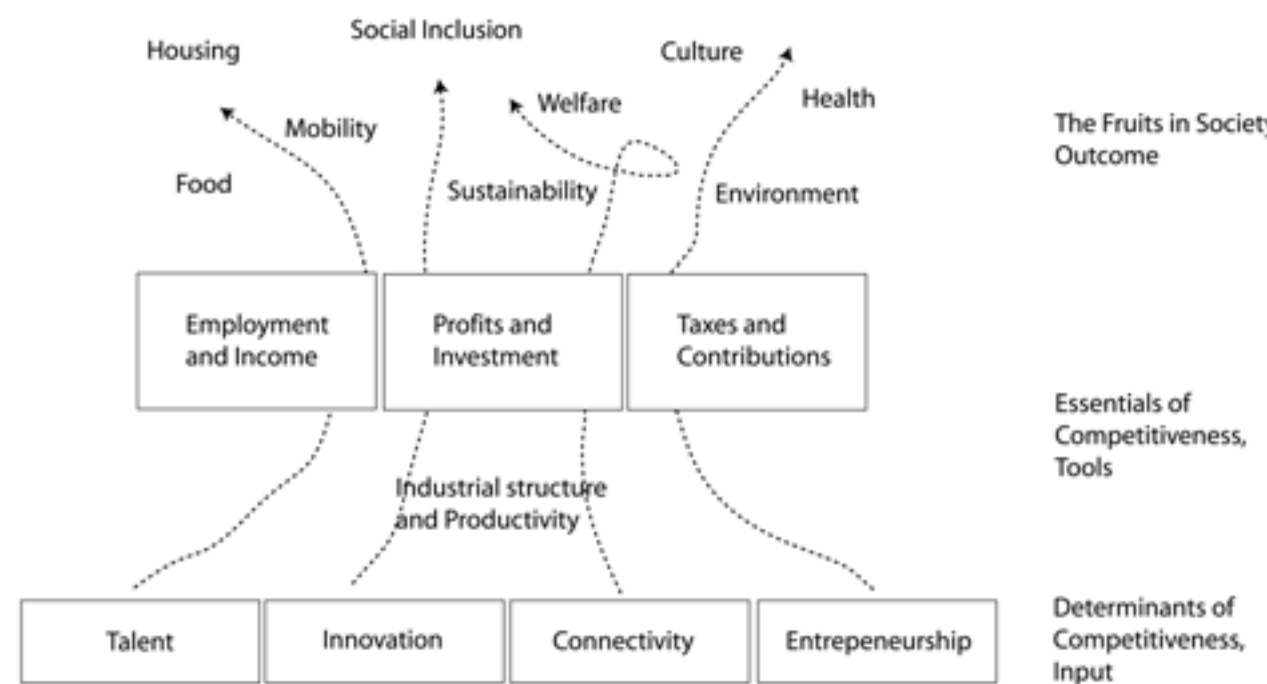
FOR
a higher city competitiveness

Sustainable Development

According to Michael Porter (Porter 2005-2006) these factors are:

- Social cohesion: based on human needs, organized civic society
- Preservation of cultural identity
- Investment in education -> innovation, life-long learning
- Preservation of natural assets of production and recreation
- Quality of physical environment: water, air, soil...
- Quality of urban infrastructure: transportation (affordable mobility), communication, energy supply, sewage system, waste disposal...

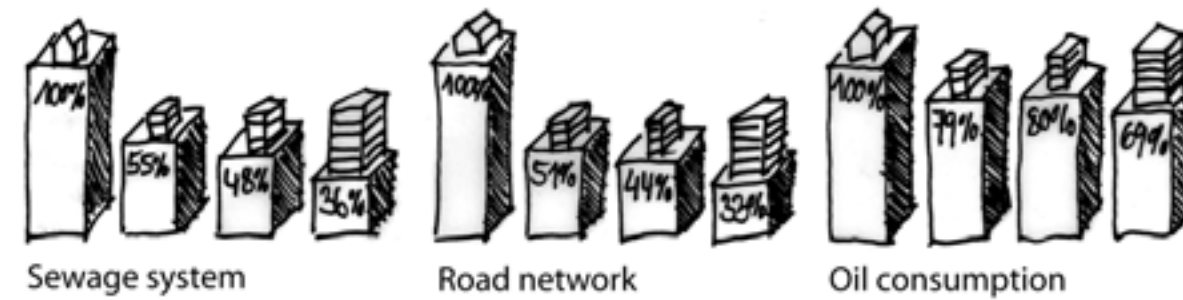
The regional competitiveness tree (ECORYS, Research and consulting)



Cosmopolitan Vision / Mixed-use development

Hartmut Haussermann

aim of integration	supporter of integration	individual	city
	creation of homogeneity	assimilation	melting pot
maintenance of diversity		urban lifestyle	mosaik city

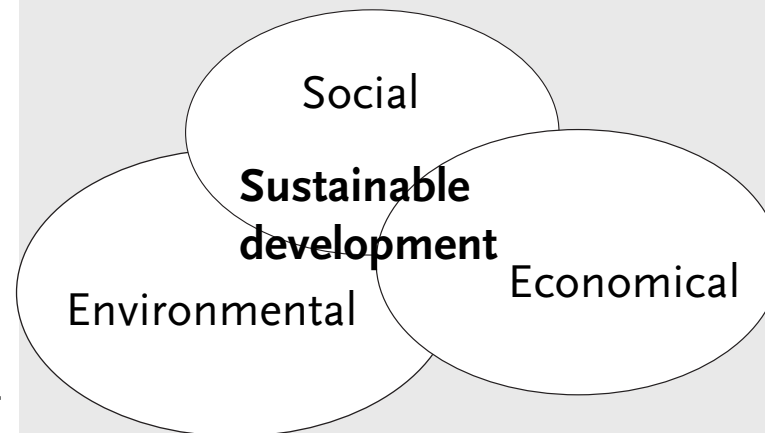


Five reasons for mixed-use housing (Grant 2005):

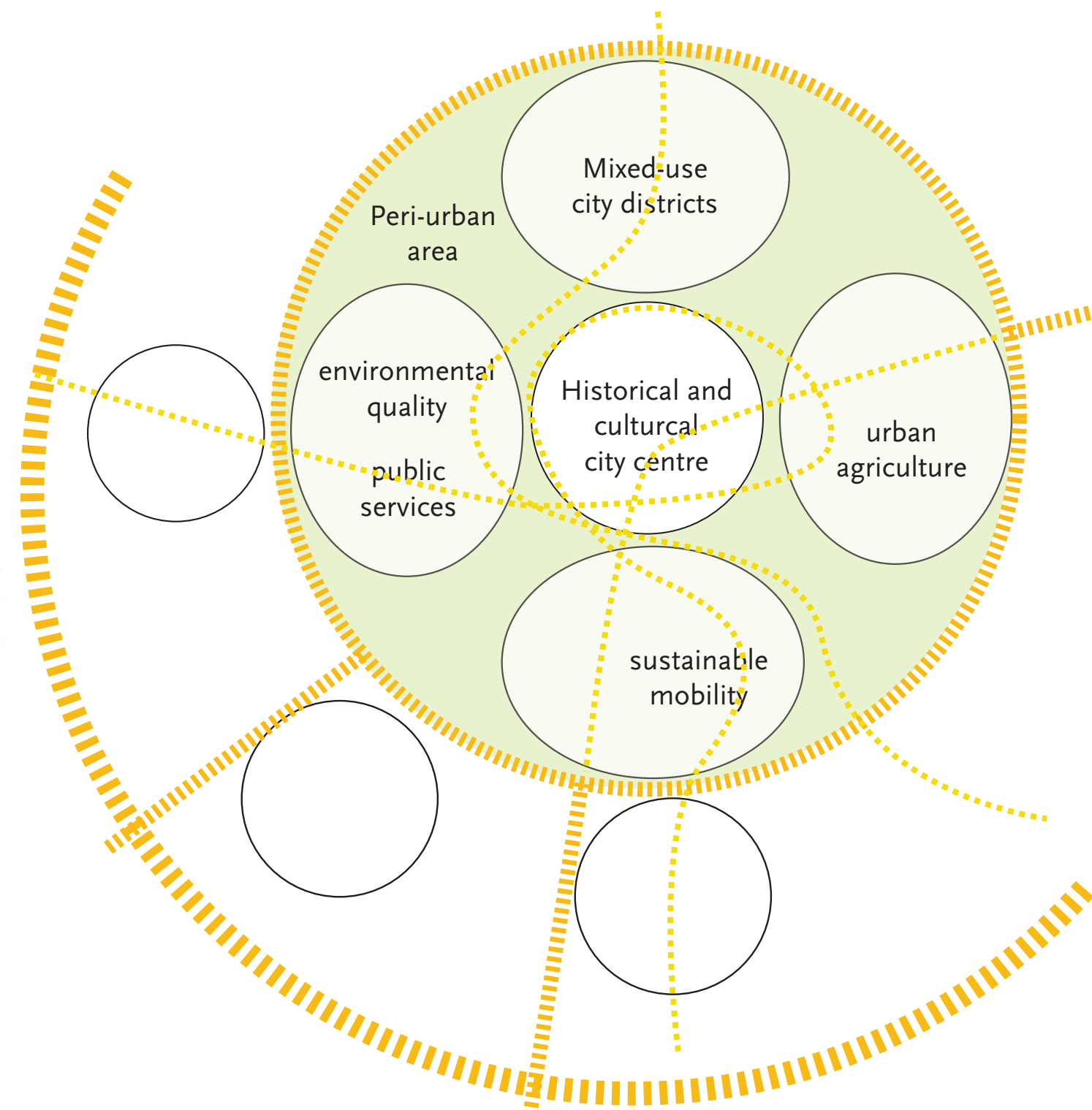
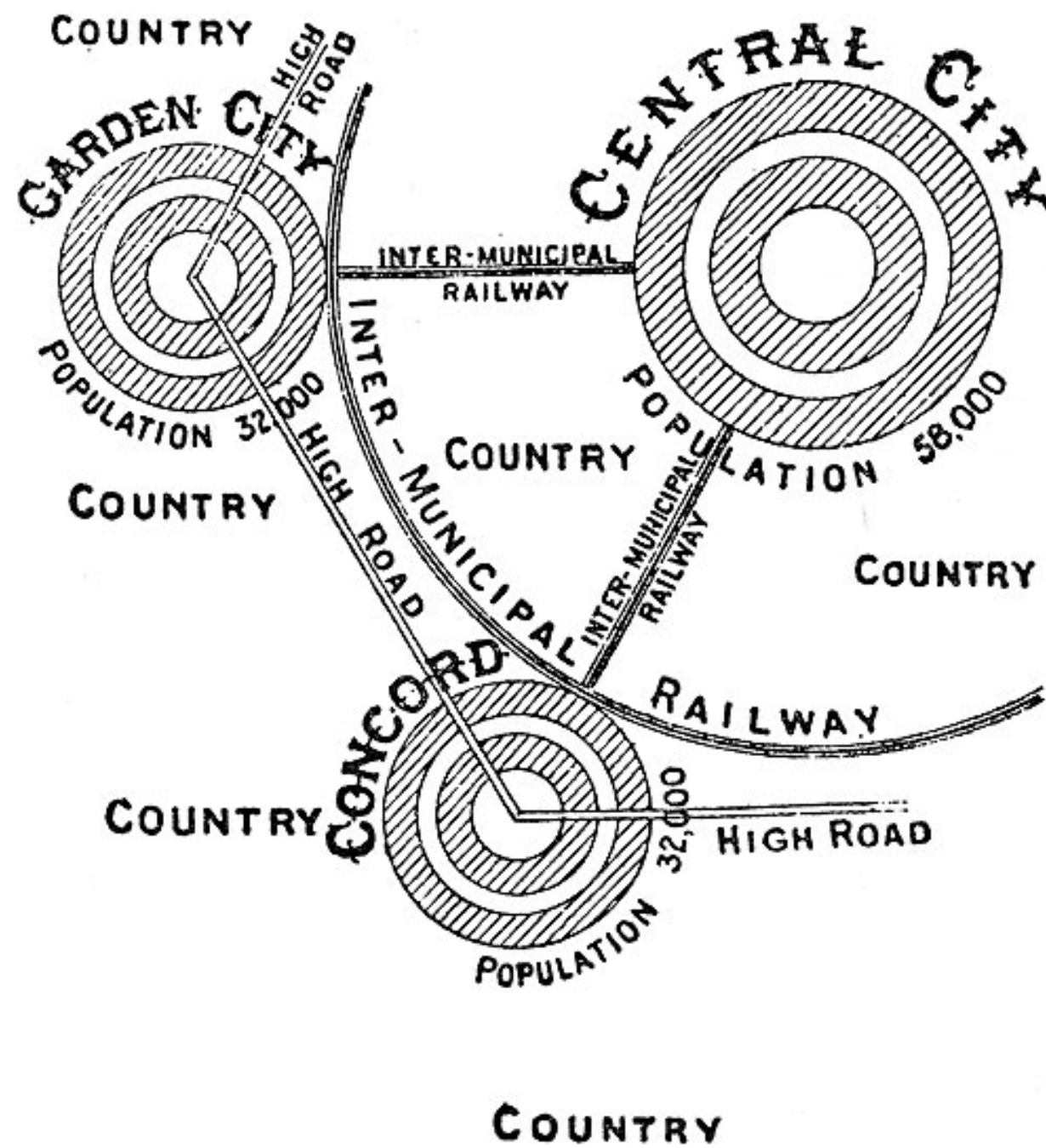
- Mix creates an urban environment active at all hours, making optimum use of infrastructure.
- Smaller, post-baby-boom households can have a greater range of options (rather than just detached homes).
- Mixing housing types could increase affordability and equity by reducing the premium that exclusive, segregated areas enjoy.
- By providing housing near commercial and civic activities, planners could reduce the dependence of elderly and children on cars.
- Enabling people to live near places where they can shop, work, or play could reduce car ownership and vehicle trips, increase pe-destrian and transit use, and thus alleviate the environmental consequences associated with automobile use.

THEORETICAL FRAMEWORK

- Sustainable competitiveness based on the 3 pillars (M. Porter)
- Cosmopolitan vision, Equilibrium for all people (U. Beck)
- Social cohesion, Inclusive city (H. Haussermann)
- Polycentric city, European city model (A. Faludi)
- Mixed-use developments, Cohabitation (J. Jacobs, H. Lefebvre, J. Grant)



Vision



RELAUNCHING THE GARTENSTADT IDEAS

- Living in a healthy environment
- Having an own garden
- Moving with sustainable transport
- Enjoying the city amenities

Case of Leipzig:

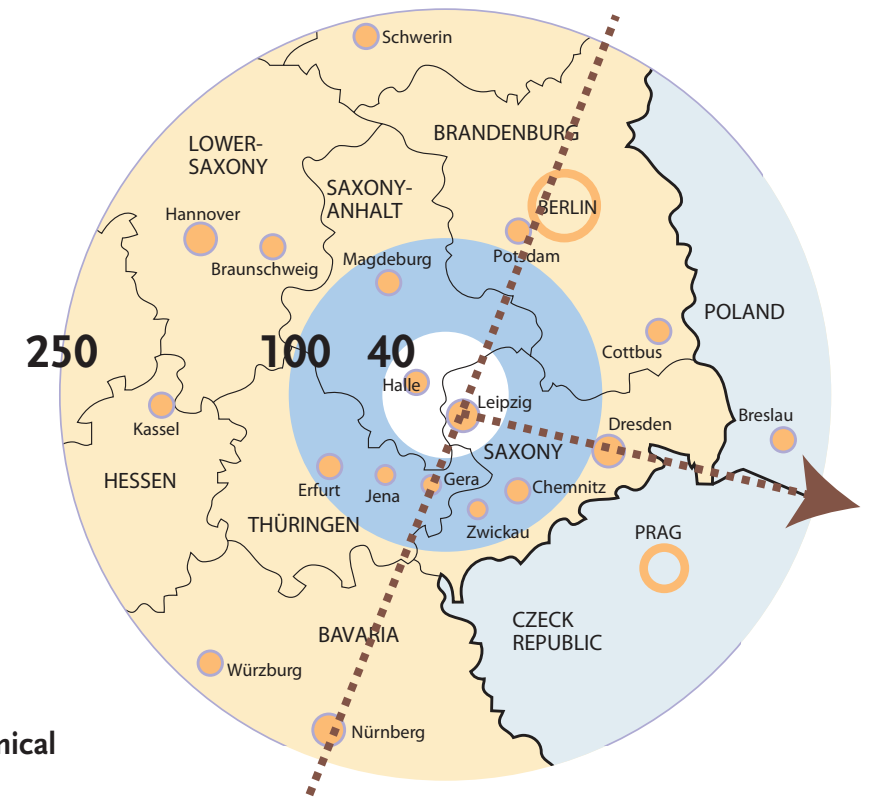
- Low density multi-units in the peri-urban
- Strong social cohesion in housing community
- Urban agriculture within housing typology
- Sustainable micro-mobility in and between sub-centralities

FORECASTING the Gartenstadt





PROXIMITY TO EASTERN EUROPE

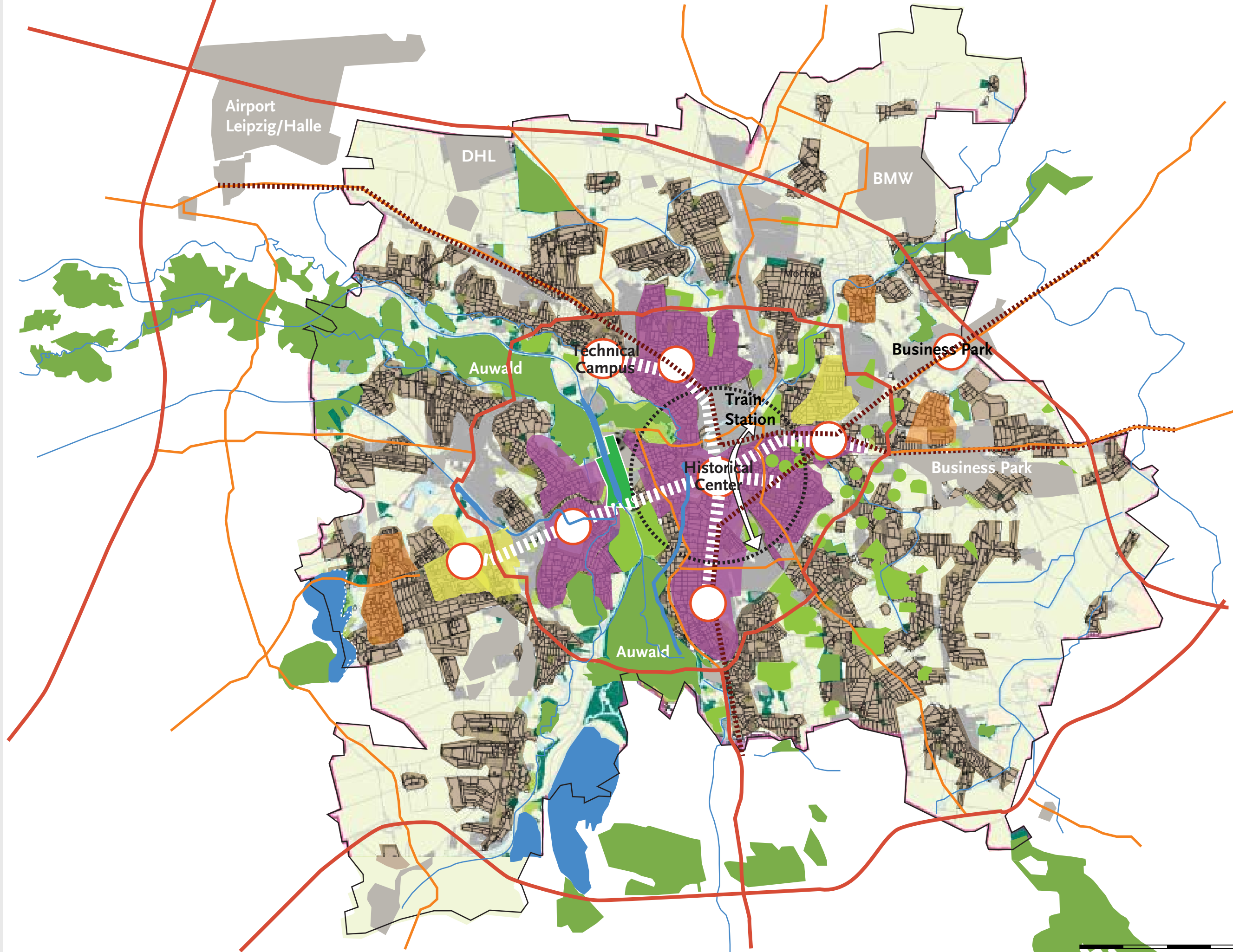


- 1.5 Mio. Inhabitants
- 6.8 Mio. Inhabitants
- 28.6 Mio. Inhabitants
- Cities with 100,000 to 1,000,000 Inhabitants
- Cities with more than 1,000,000 Inhabitants
- Member states after EU enlargement 2007
- Application states for EU membership

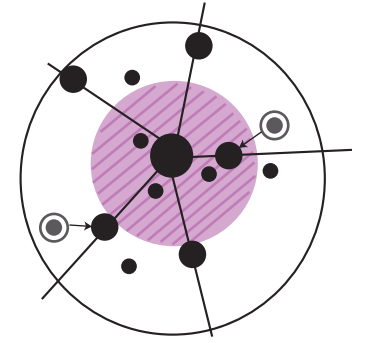
source: www.cadses.net, 2007

200KM

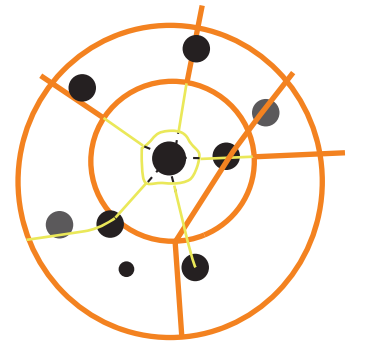
ADAPTION OF 4 URBAN LAYERS



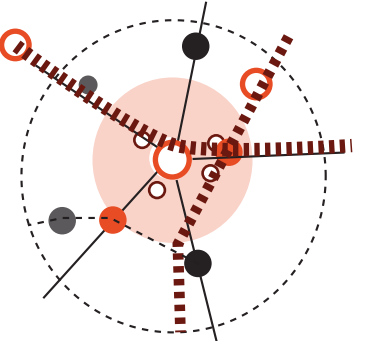
Housing



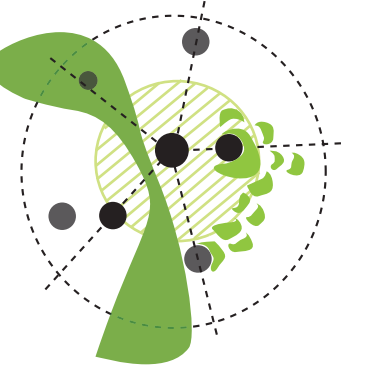
Mobility



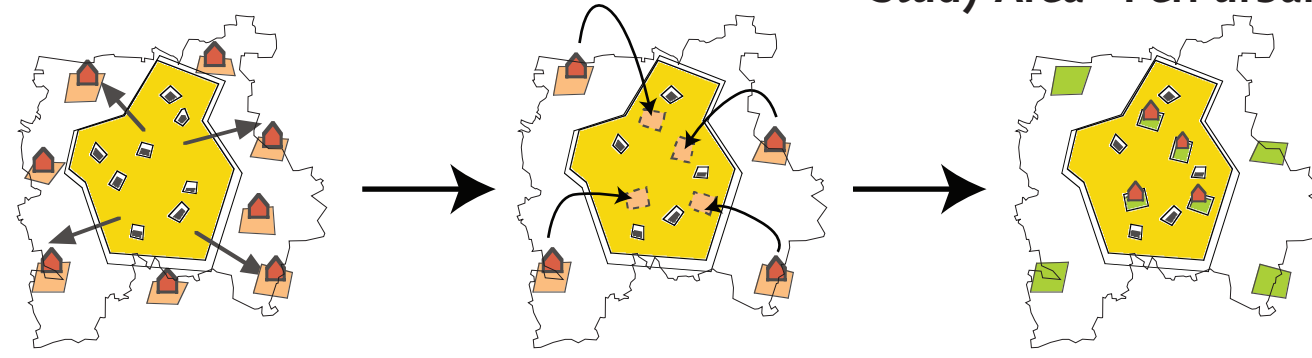
Centrality



Green network



Prevention of further sub-urbanization with counter-urbanization and infiltration of free spaces of the peri-urban for future demand.

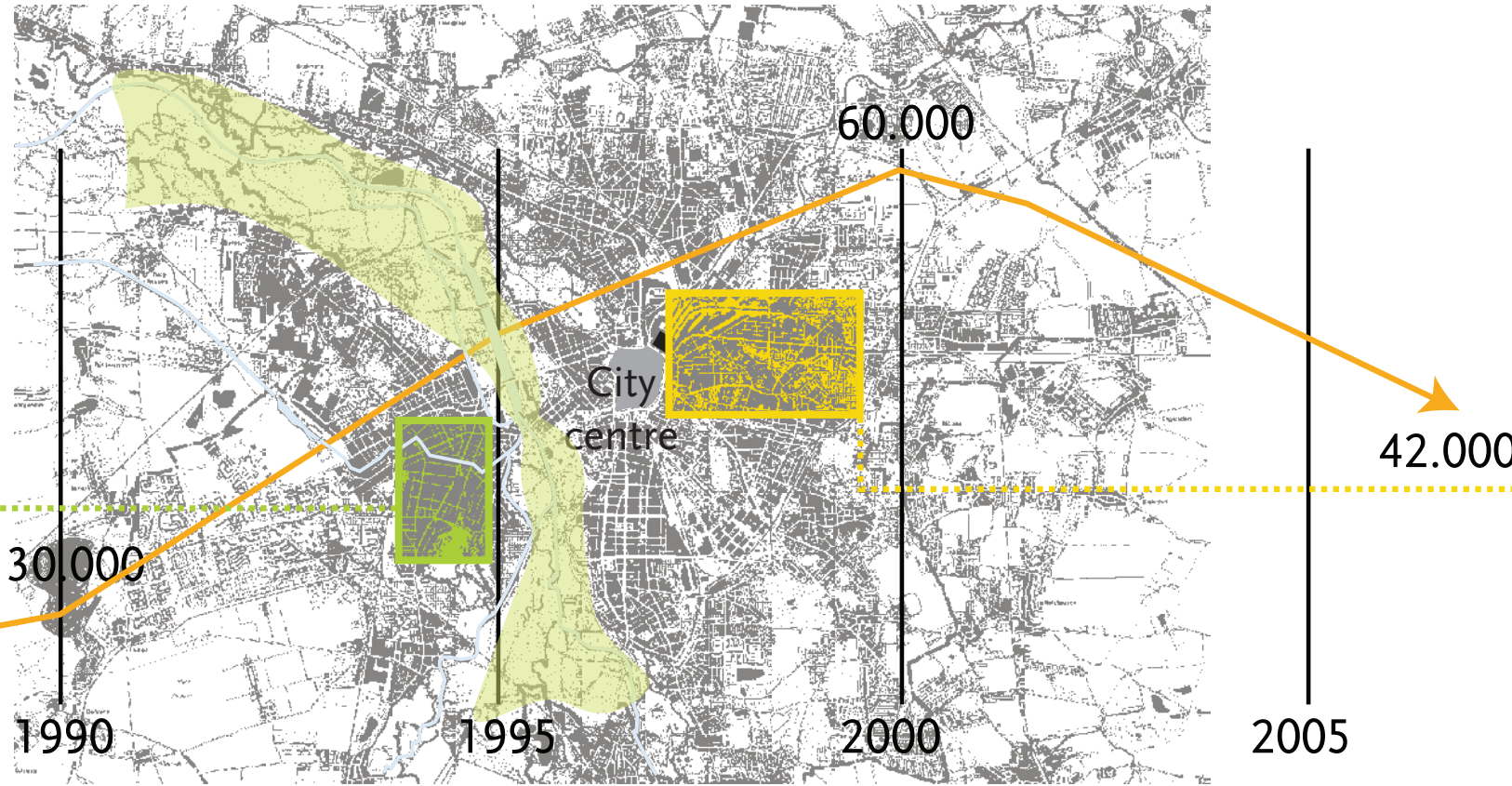


Study Area - Peri-urban

URBAN RENEWAL ZONES IN PERI-URBAN AREA
 -> especially in the West and the East of the historical city centre, the peri-urban areas are in desperate need for urban renewal.



Plagwitz, Lindenau (2.7km²)



Development of vacant housing



Volkmarshdorf/Neustadt-Neuschoenefeld (2.0km²)

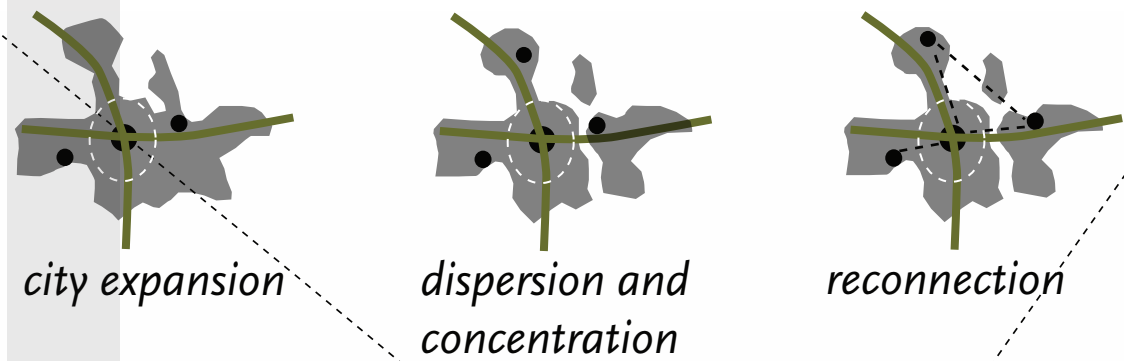


Self-organized building programs/ usage of space/ transformation in formerly dense peri-urban area in Leipzig.



Local Strategy

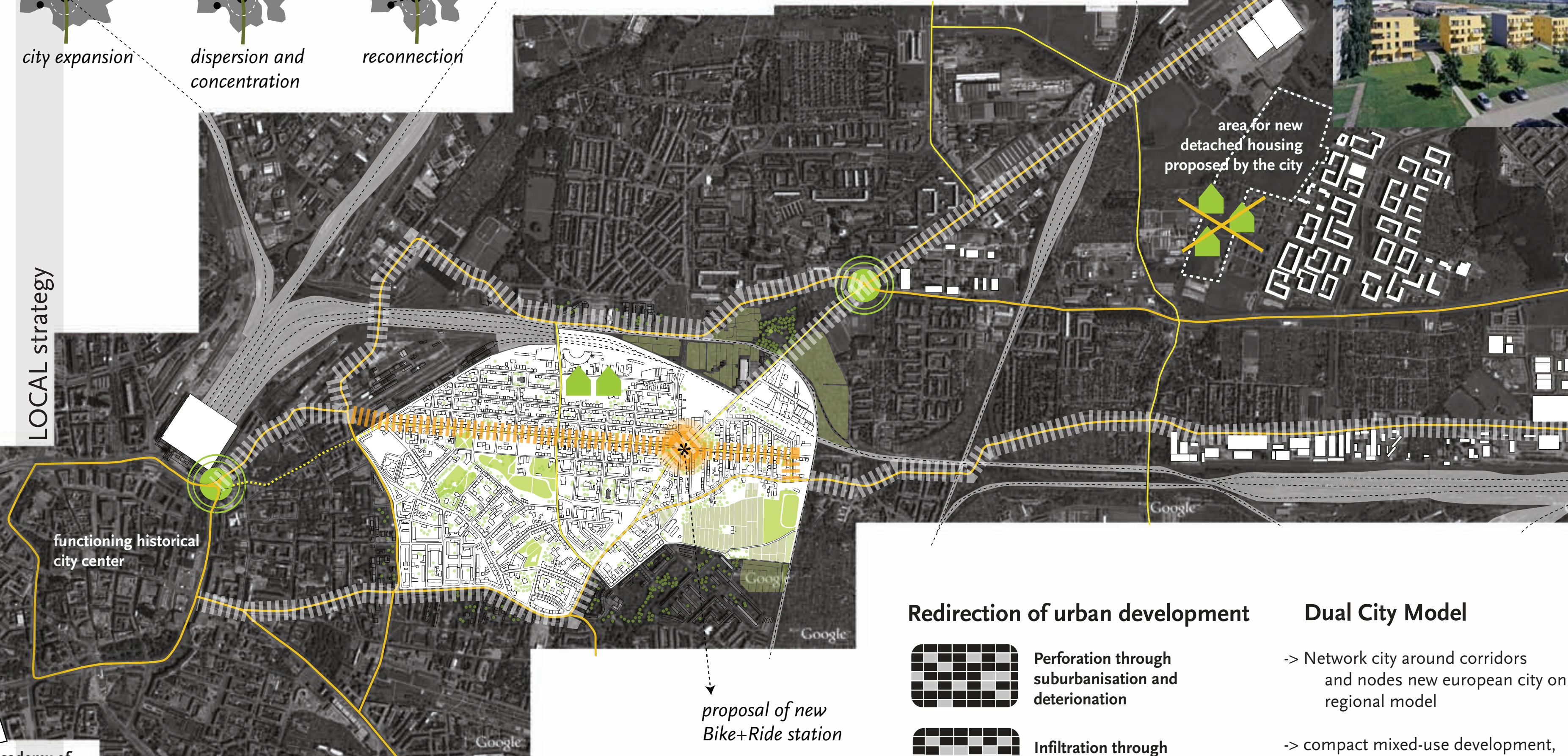
04



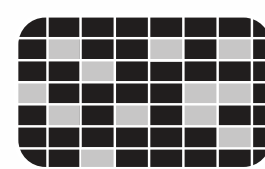
COUNTER URBANIZATION
SLOW SHRINKAGE



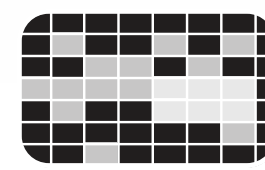
LOCAL strategy



Redirection of urban development



Perforation through suburbanisation and deterioration



Infiltration through transformation and redistribution

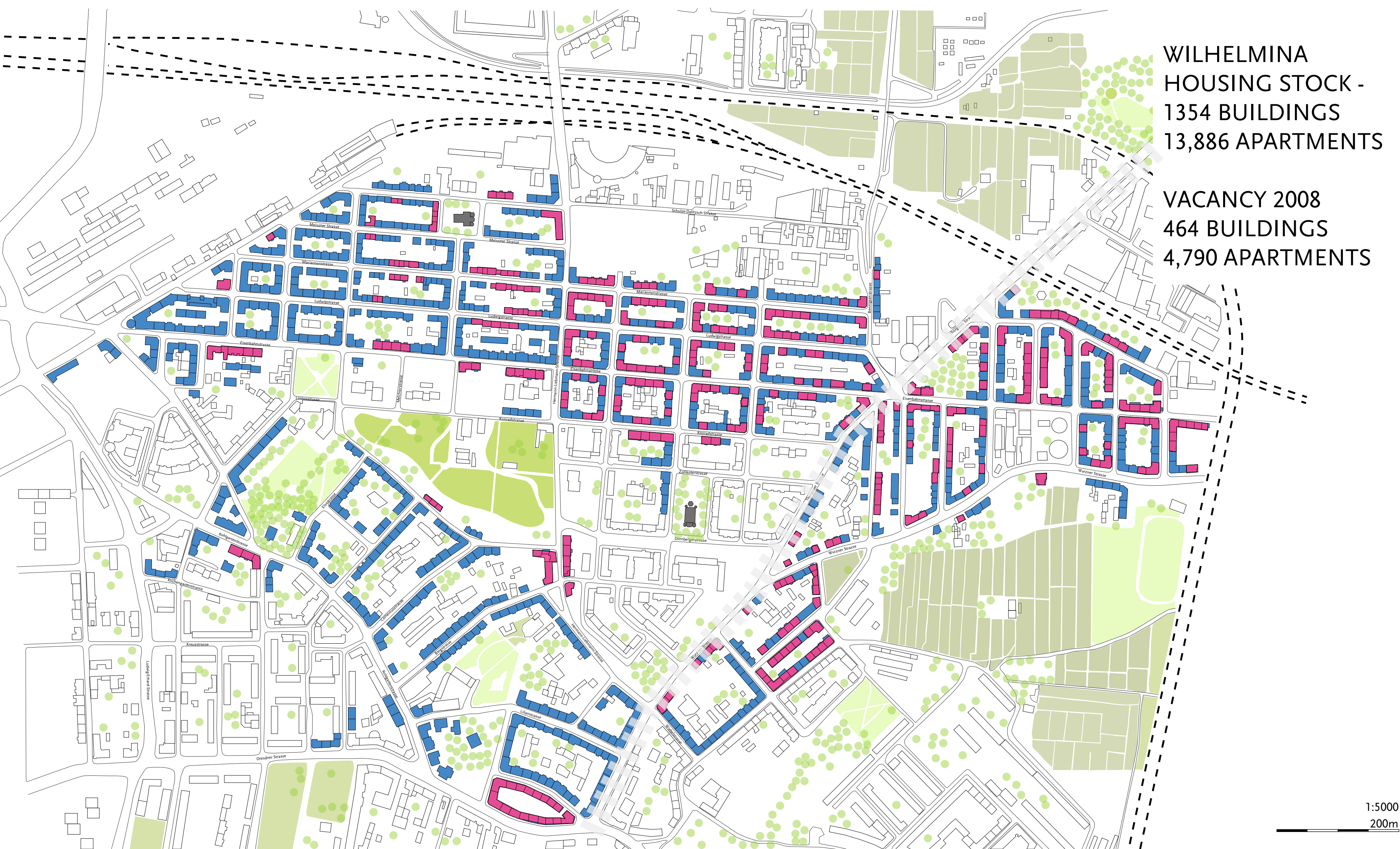
Dual City Model

-> Network city around corridors and nodes new european city on regional model

-> compact mixed-use development, traditional european city on local level

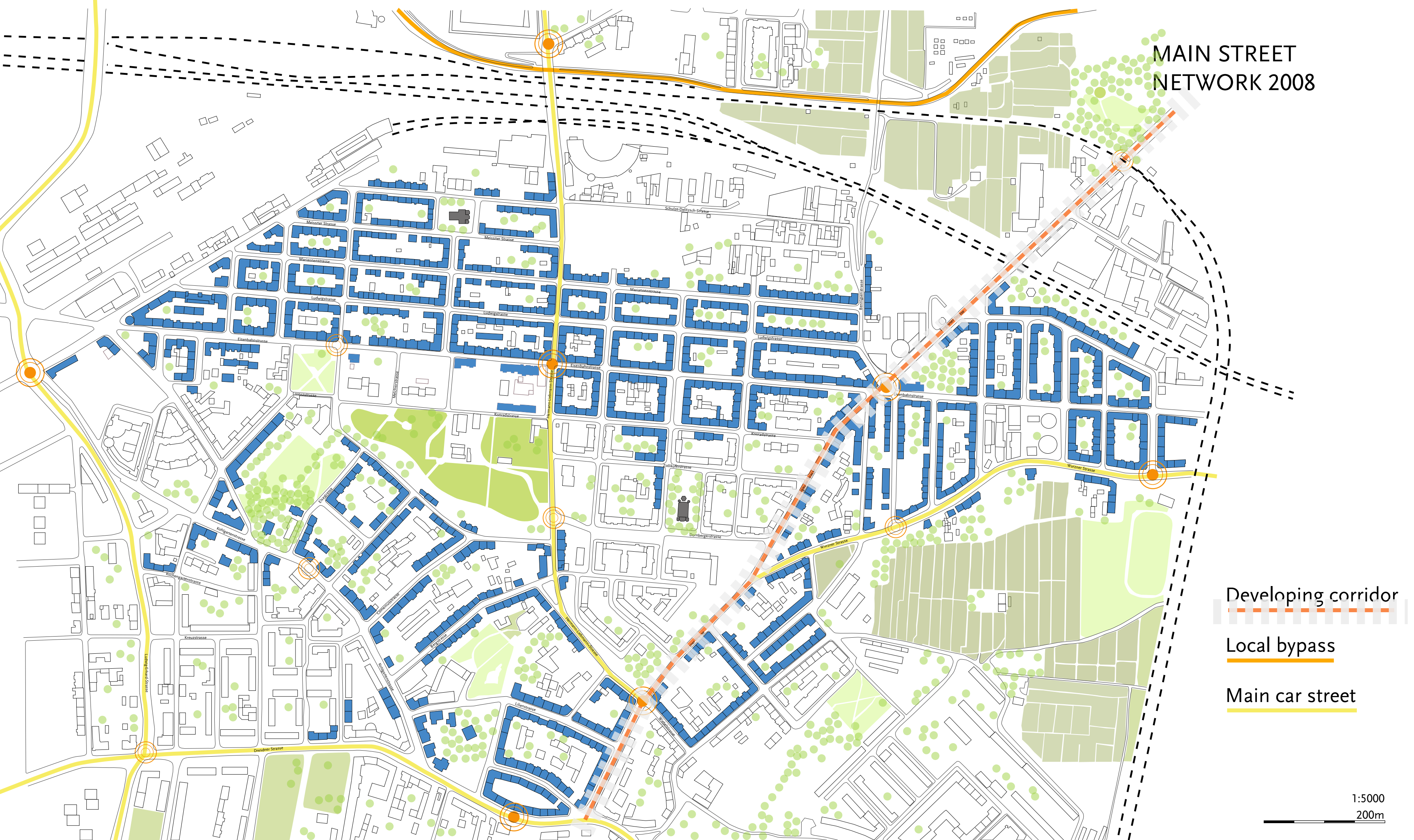
WILHELMINA
HOUSING STOCK -
1354 BUILDINGS
13,886 APARTMENTS

VACANCY 2008
464 BUILDINGS
4,790 APARTMENTS



1:5000
200m

MAIN STREET NETWORK 2008



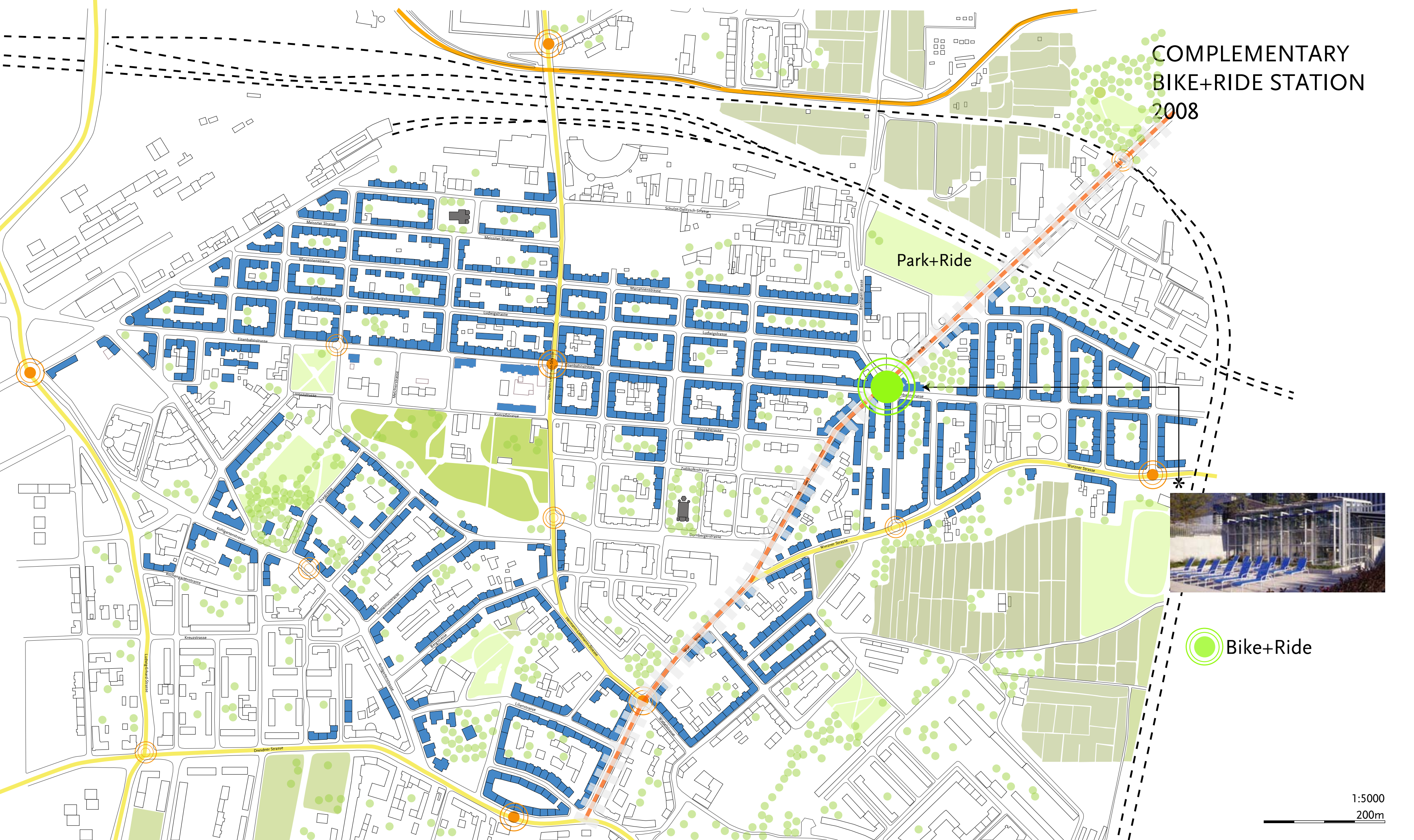
Developing corridor

Local bypass

Main car street

1:5000
200m

COMPLEMENTARY BIKE+RIDE STATION 2008

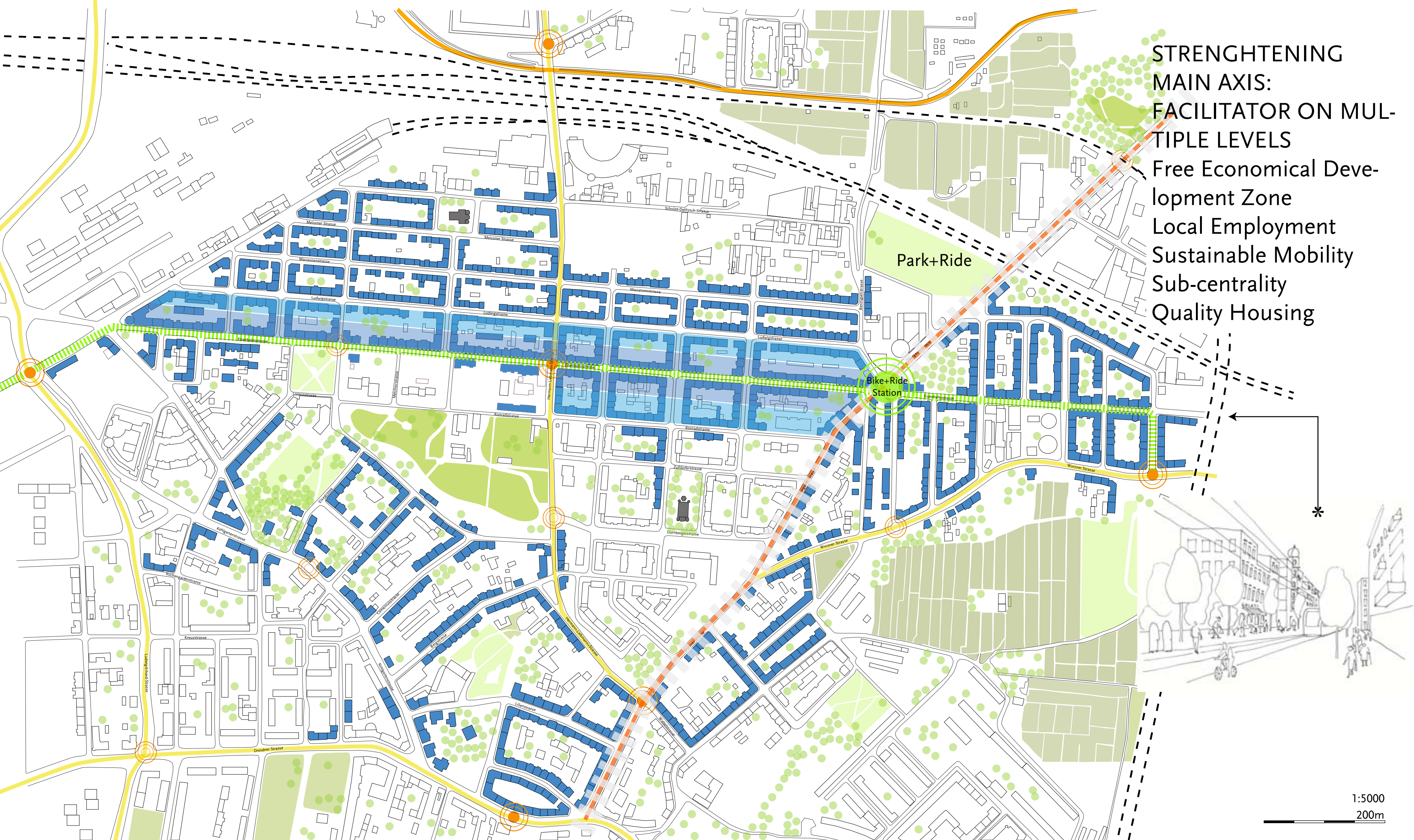


Park+Ride



 Bike+Ride

1:5000
200m



**STRENGTHENING
MAIN AXIS:
FACILITATOR ON MUL-
TIPLE LEVELS**

- Free Economical Deve-
lopment Zone
- Local Employment
- Sustainable Mobility
- Sub-centrality
- Quality Housing

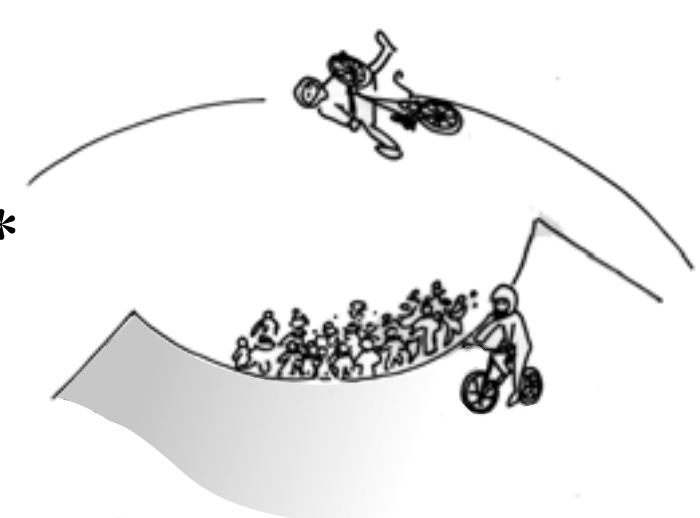
Park+Ride

Bike+Ride
Station



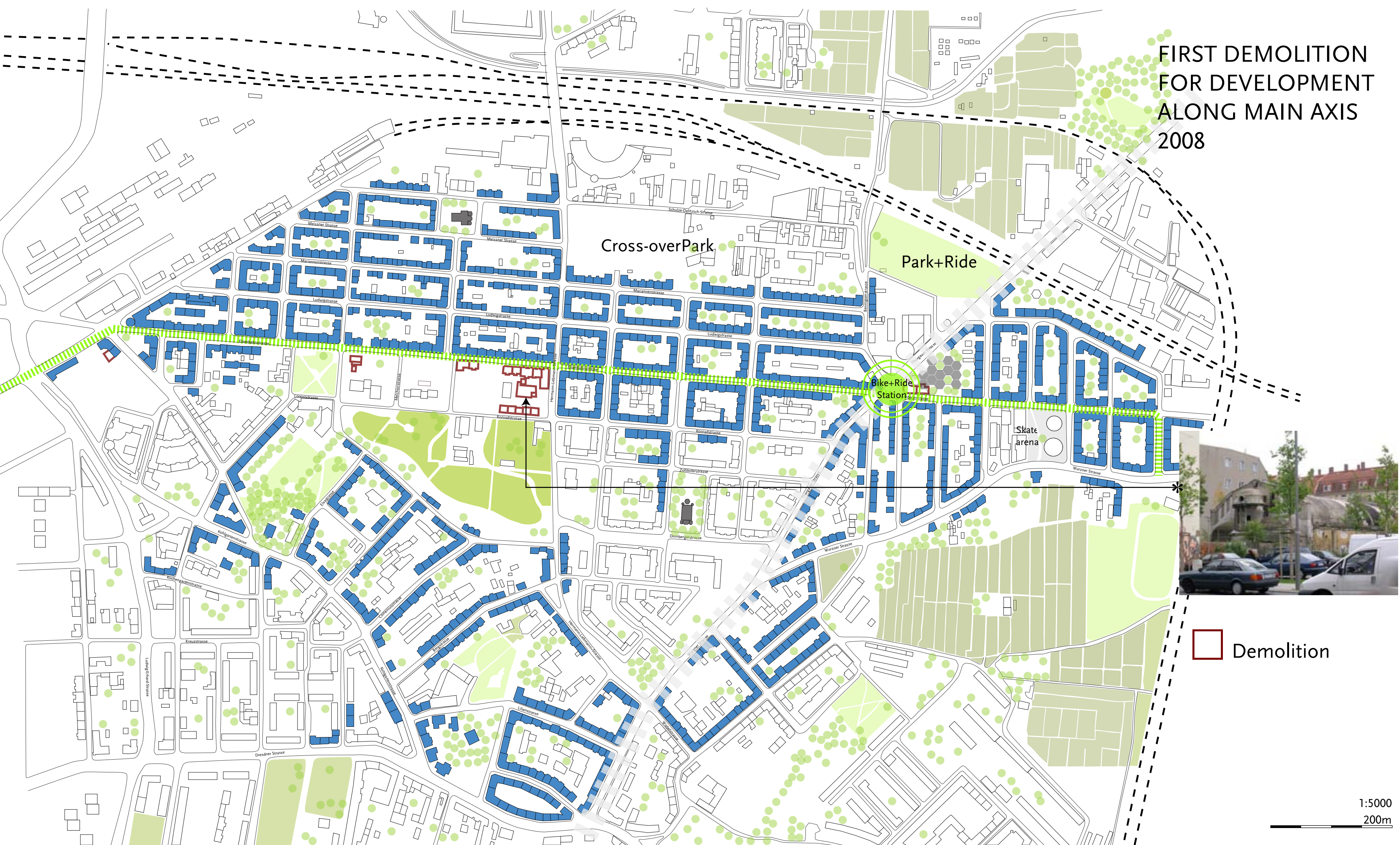
1:5000
200m

REPAIR PLAN -> USING THE SPACE 2008



1:5000
200m

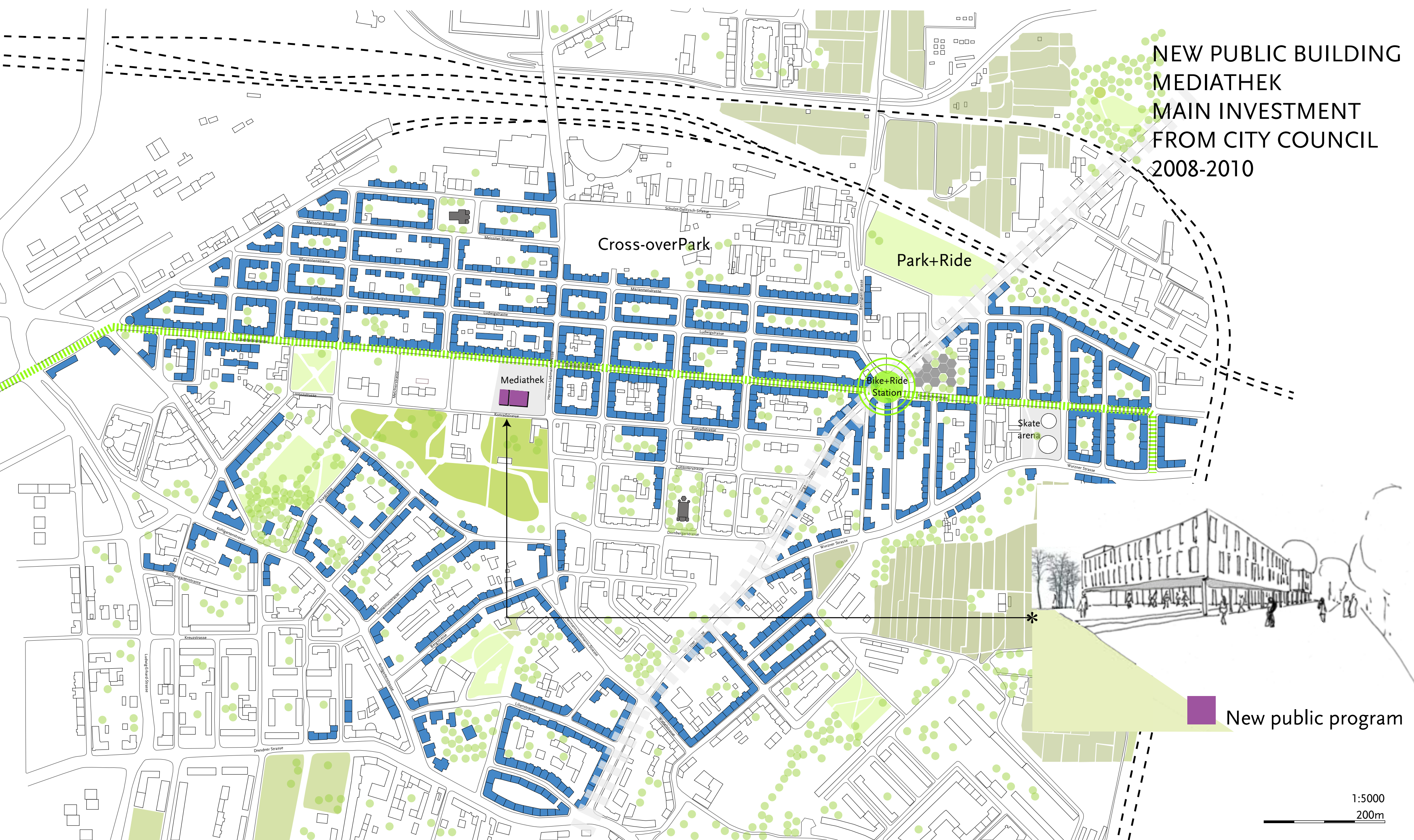
FIRST DEMOLITION
FOR DEVELOPMENT
ALONG MAIN AXIS
2008



Demolition

1:5000
200m

NEW PUBLIC BUILDING
MEDIATHEK
MAIN INVESTMENT
FROM CITY COUNCIL
2008-2010

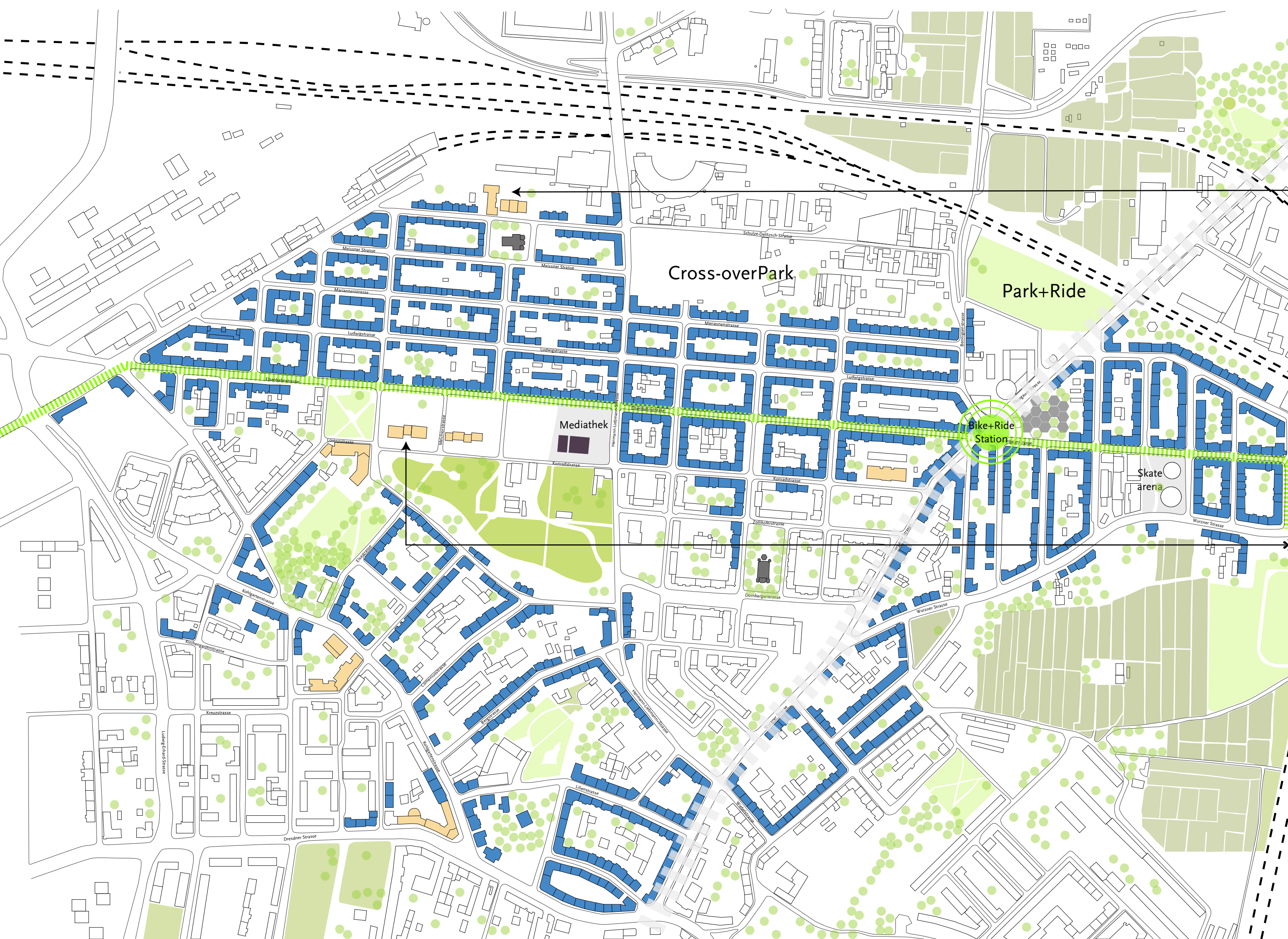


 New public program

1:5000
200m



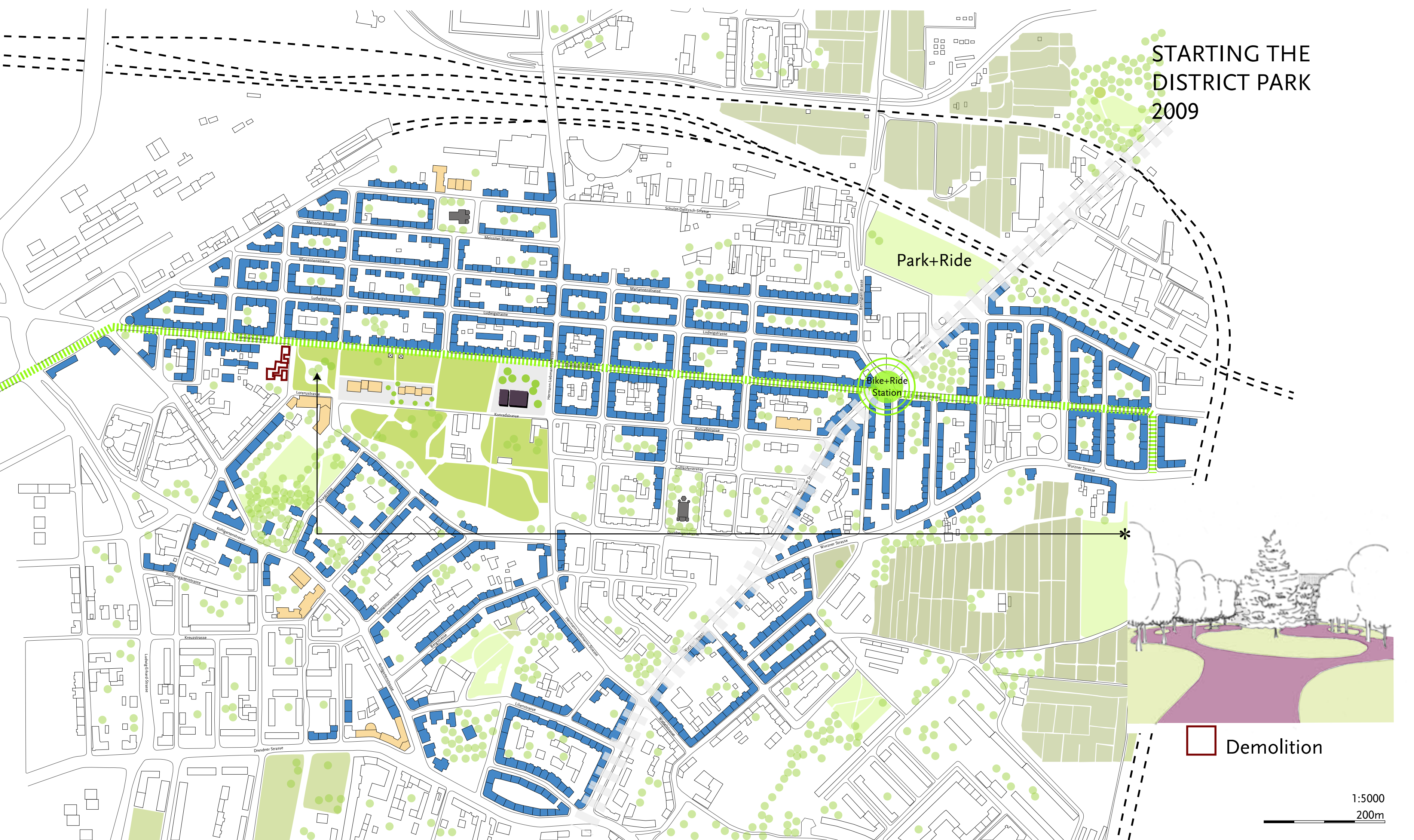
RENOVATION OF EDUCATIONAL BUILDINGS 2008-2012



Renovation area

1:5000
200m

STARTING THE DISTRICT PARK 2009



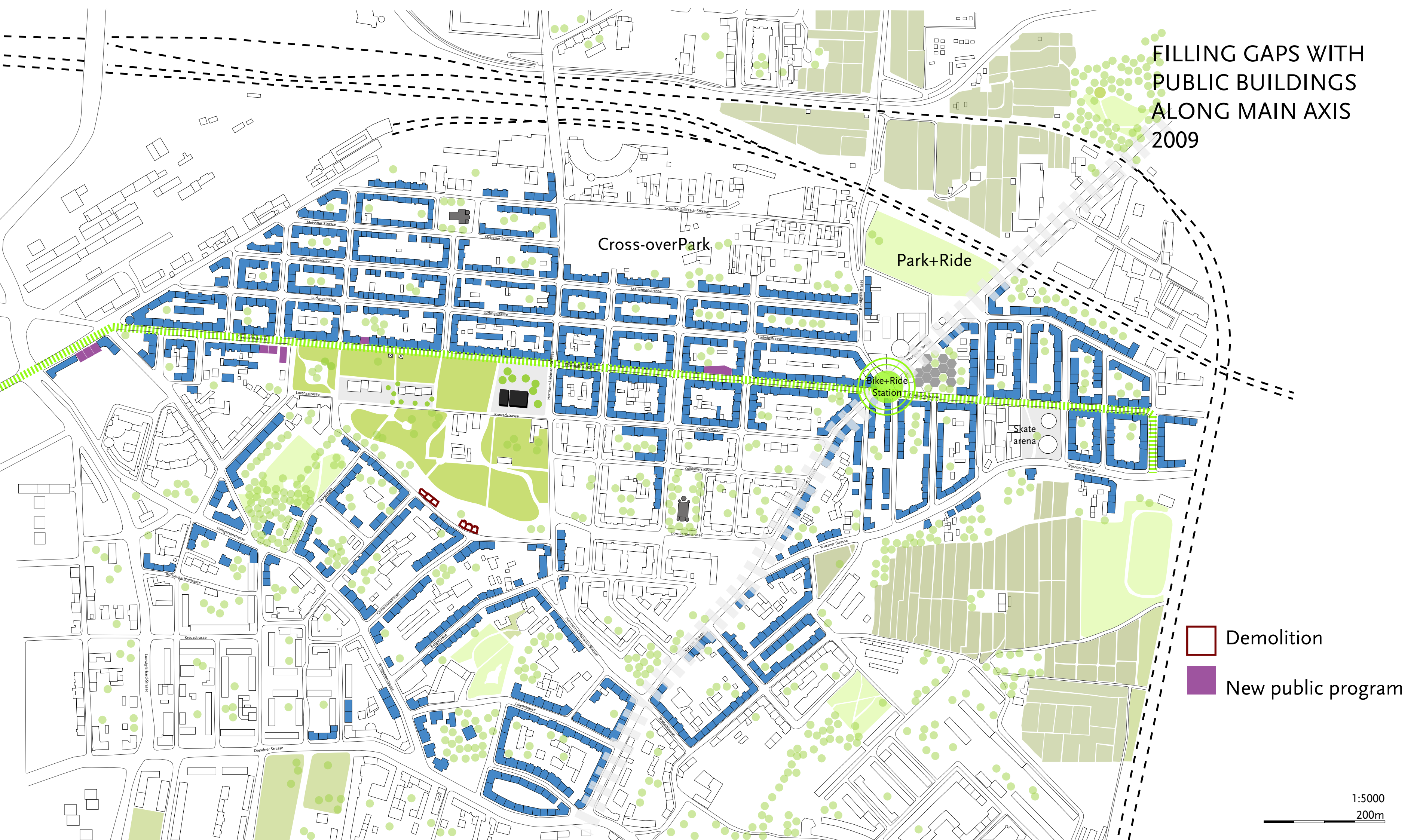
Park+Ride

Bike+Ride Station

Demolition

1:5000
200m

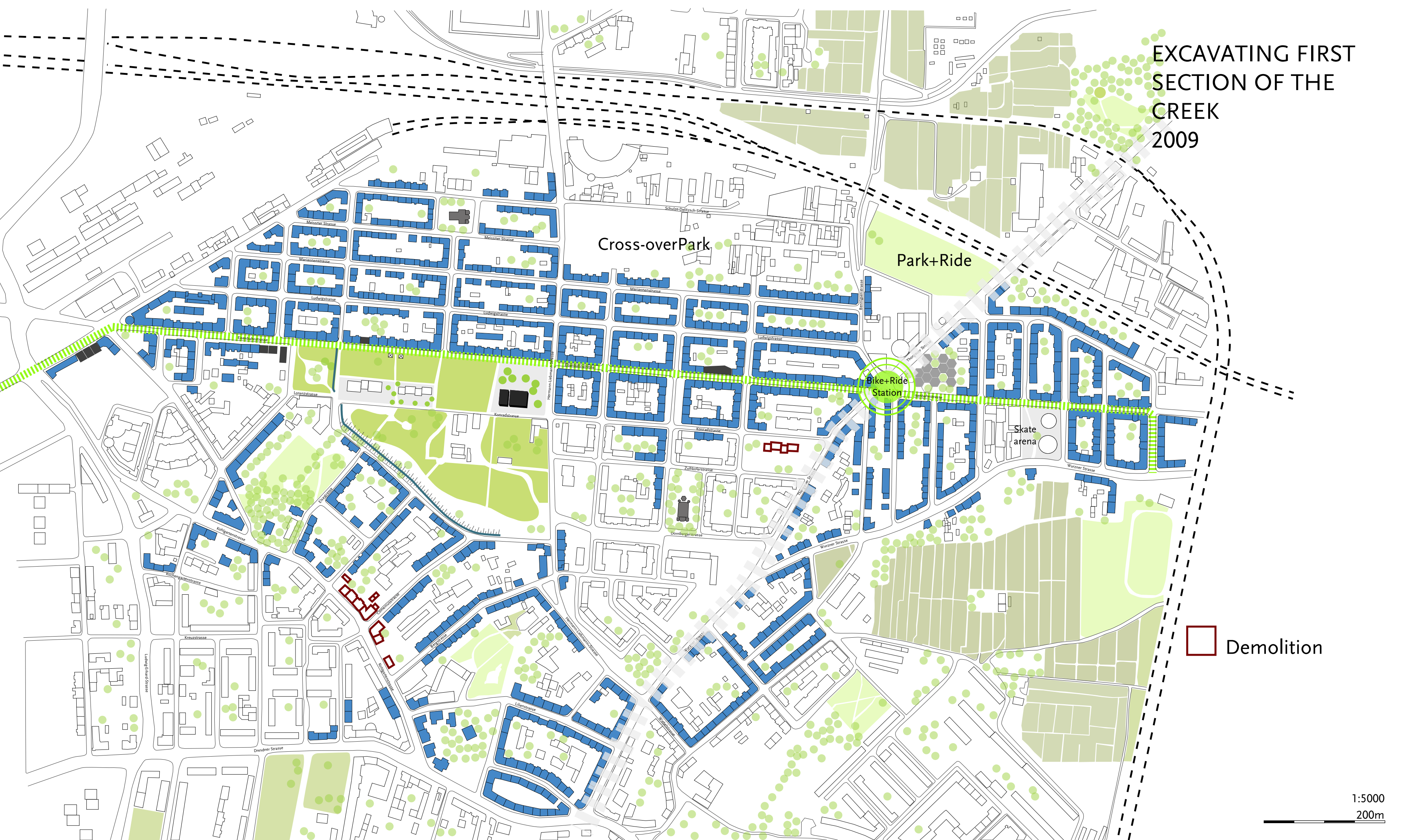
FILLING GAPS WITH
PUBLIC BUILDINGS
ALONG MAIN AXIS
2009



- Demolition
- New public program

1:5000
200m

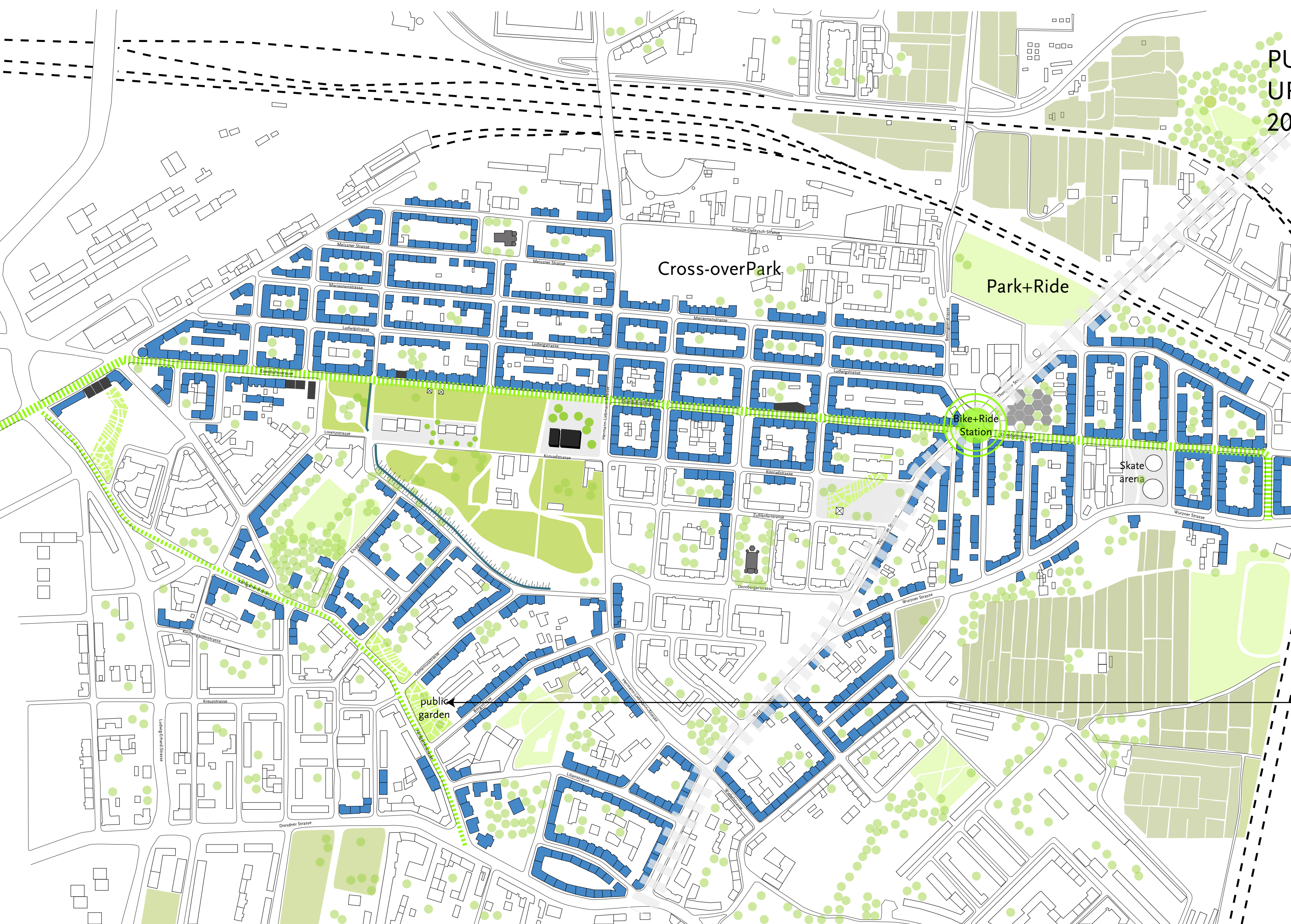
EXCAVATING FIRST SECTION OF THE CREEK
2009



 Demolition

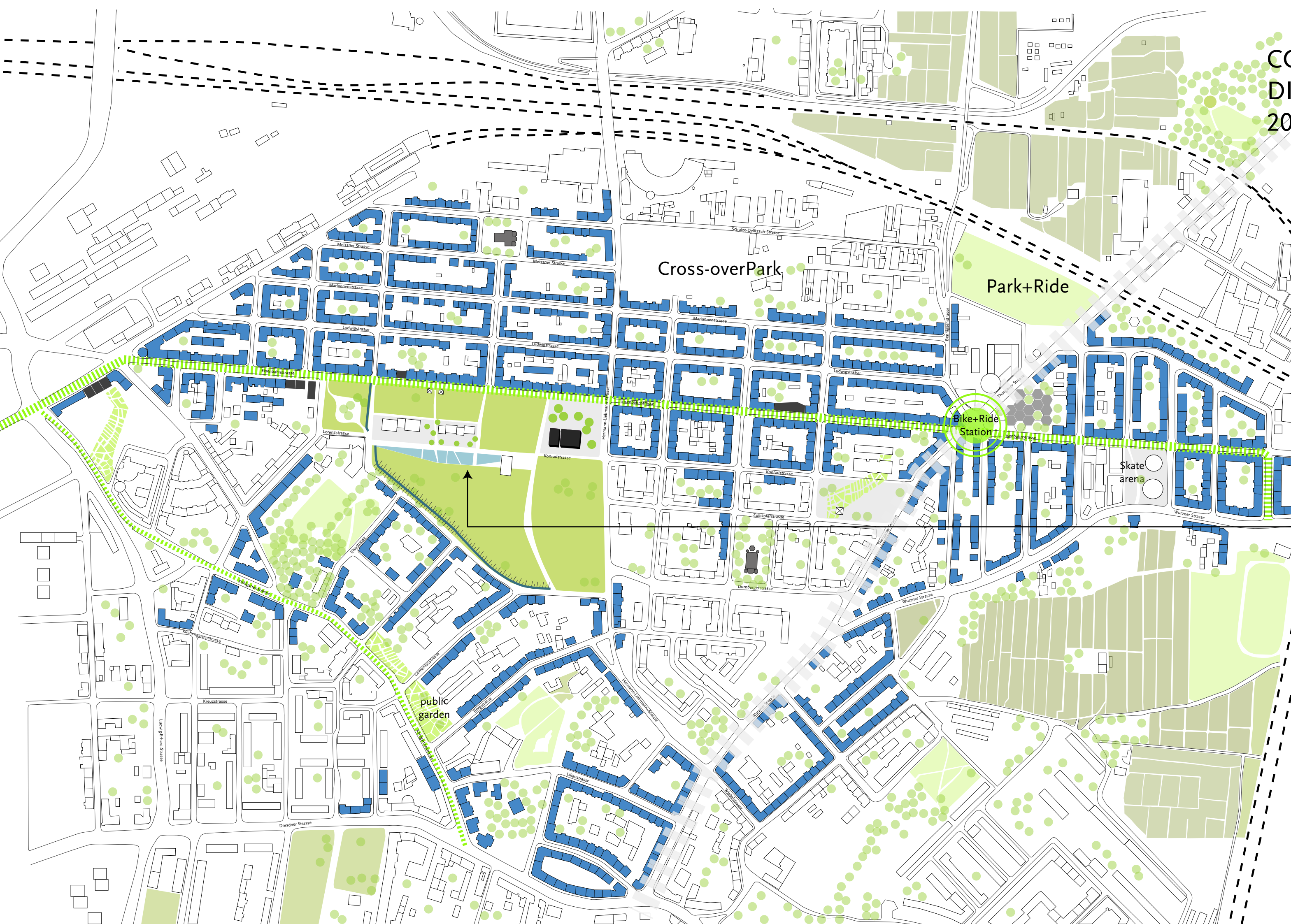
1:5000
200m

PUBLIC GARDENS FOR URBAN AGRICULTURE 2010



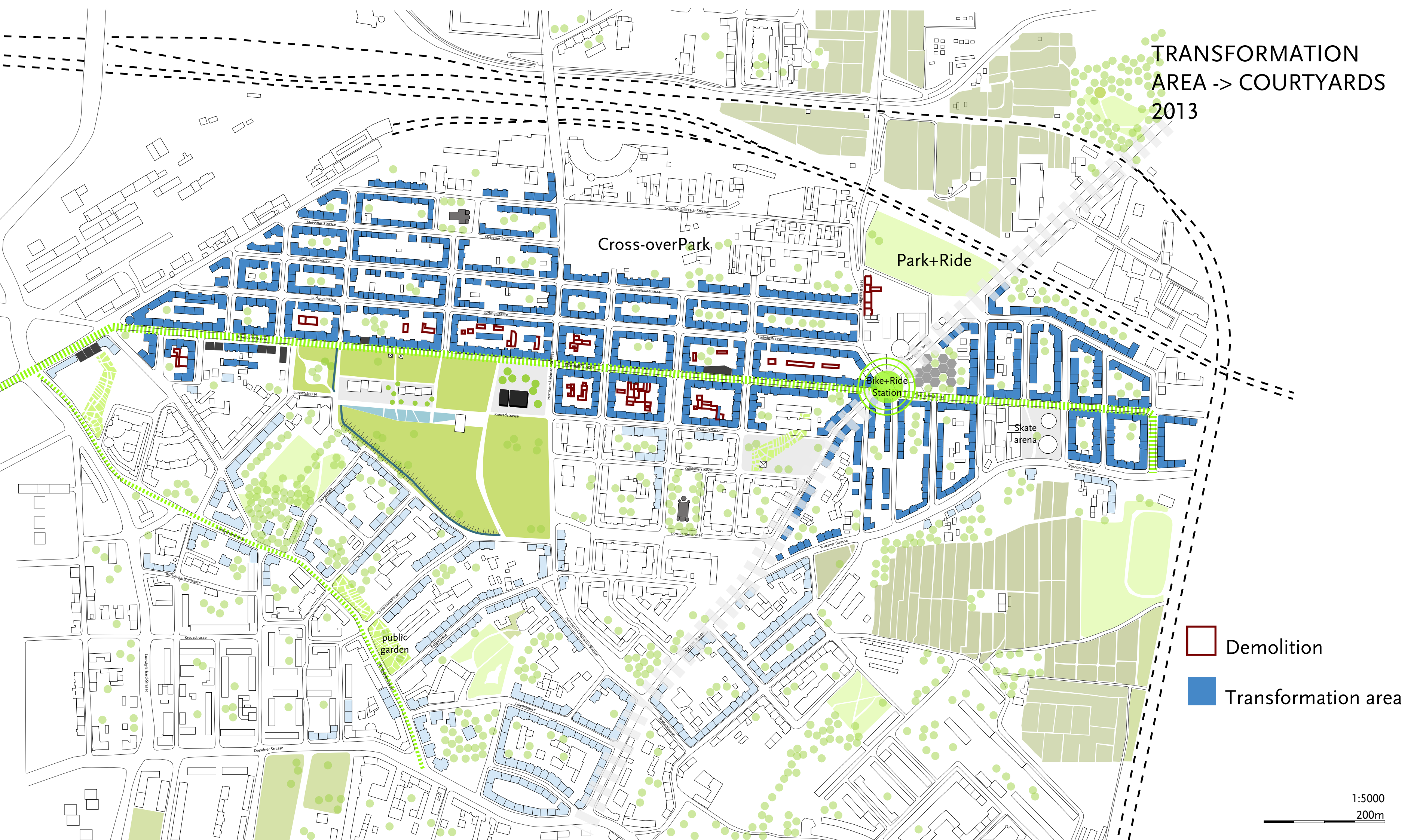
1:5000
200m

CONTINUITY OF THE DISTRICT PARK 2011-2013



1:5000
200m

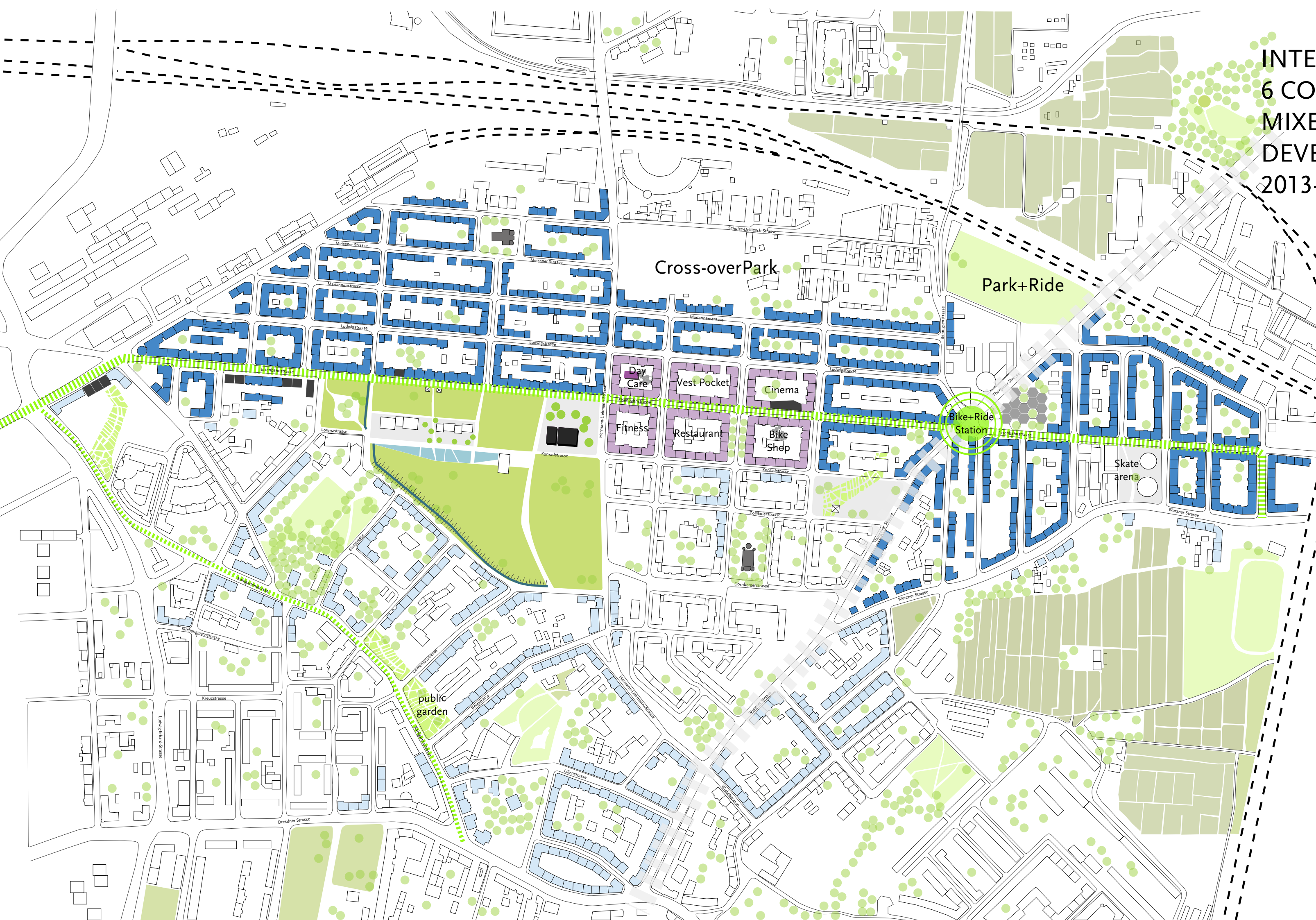
TRANSFORMATION AREA -> COURTYARDS 2013



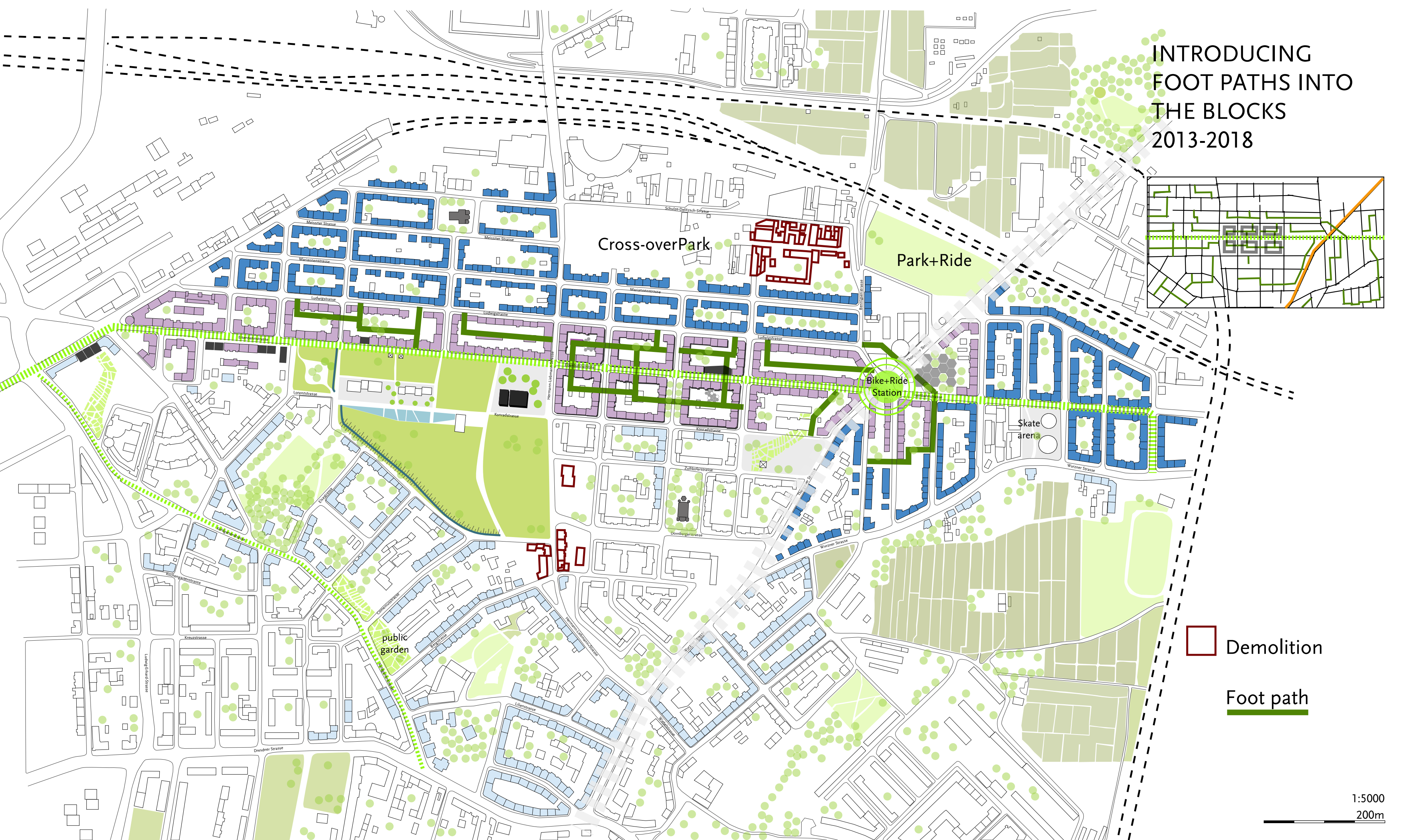
- Demolition
- Transformation area



1:5000
200m

INTERVENTION UNIT
6 COURTYARDS
MIXED-USE
DEVELOPMENT
2013-2018



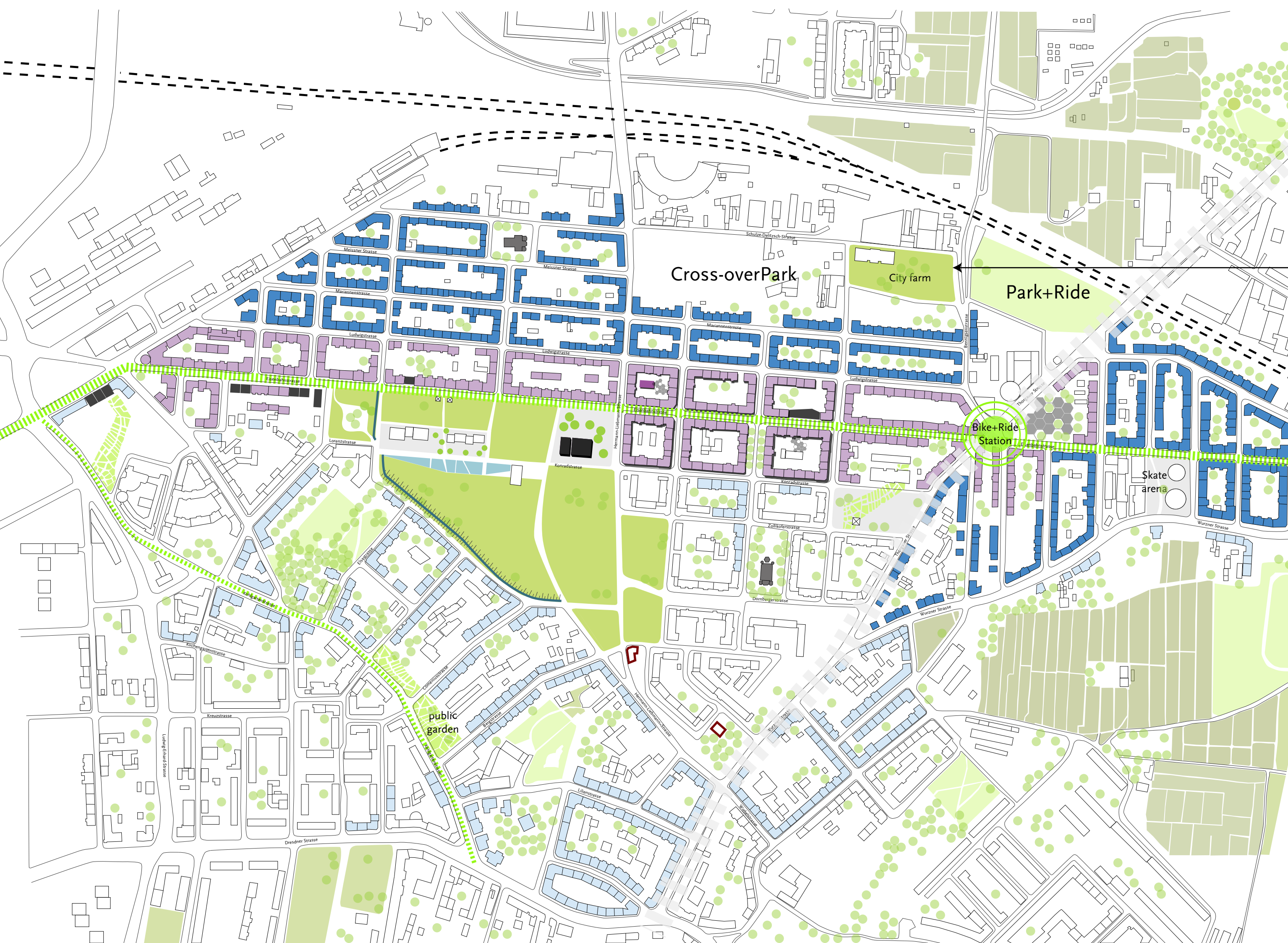
INTRODUCING FOOT PATHS INTO THE BLOCKS 2013-2018



-  Demolition
-  Foot path

1:5000
200m

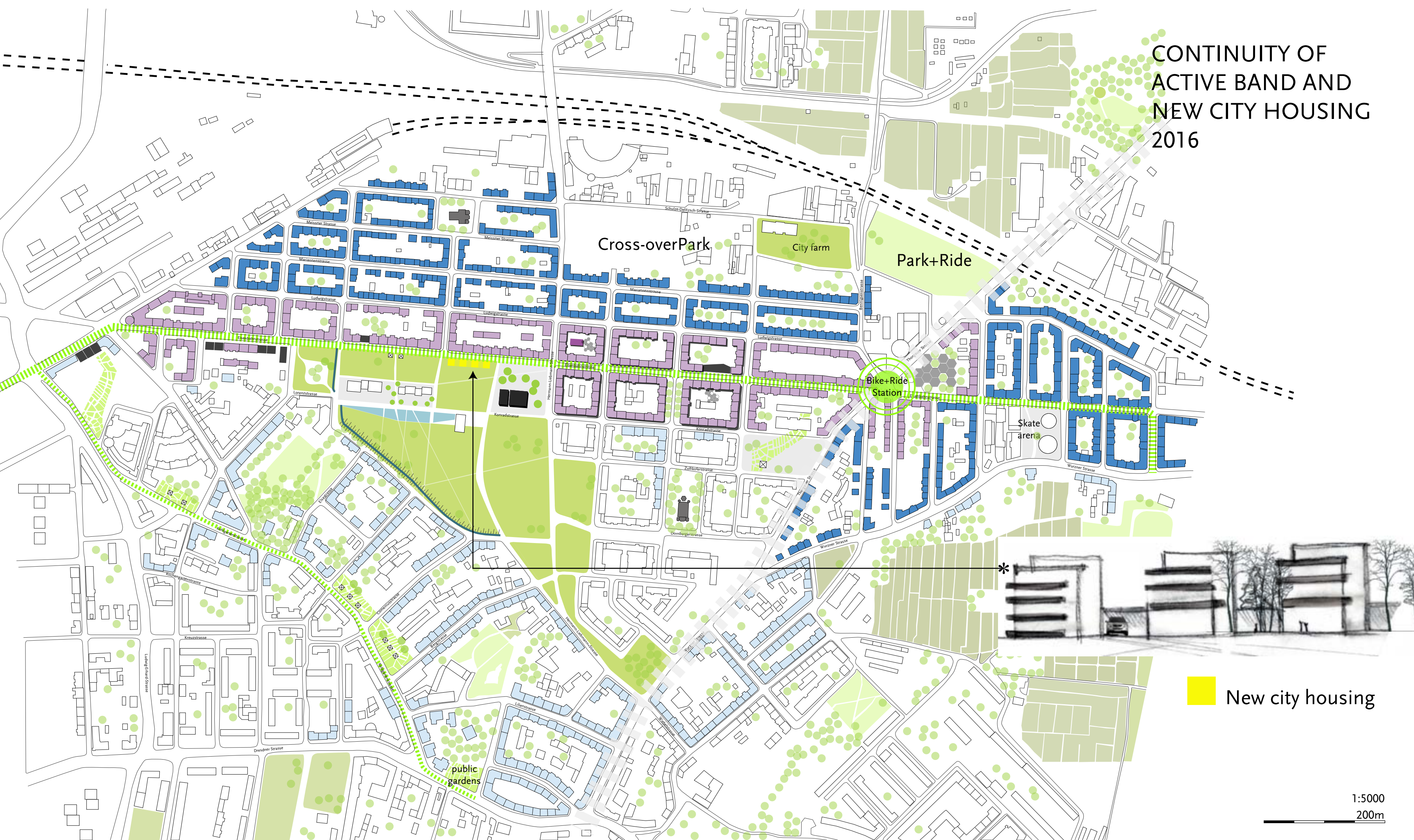
STARTING THE ACTIVE BAND AND CITY FARM 2015



 Demolition

1:5000
200m

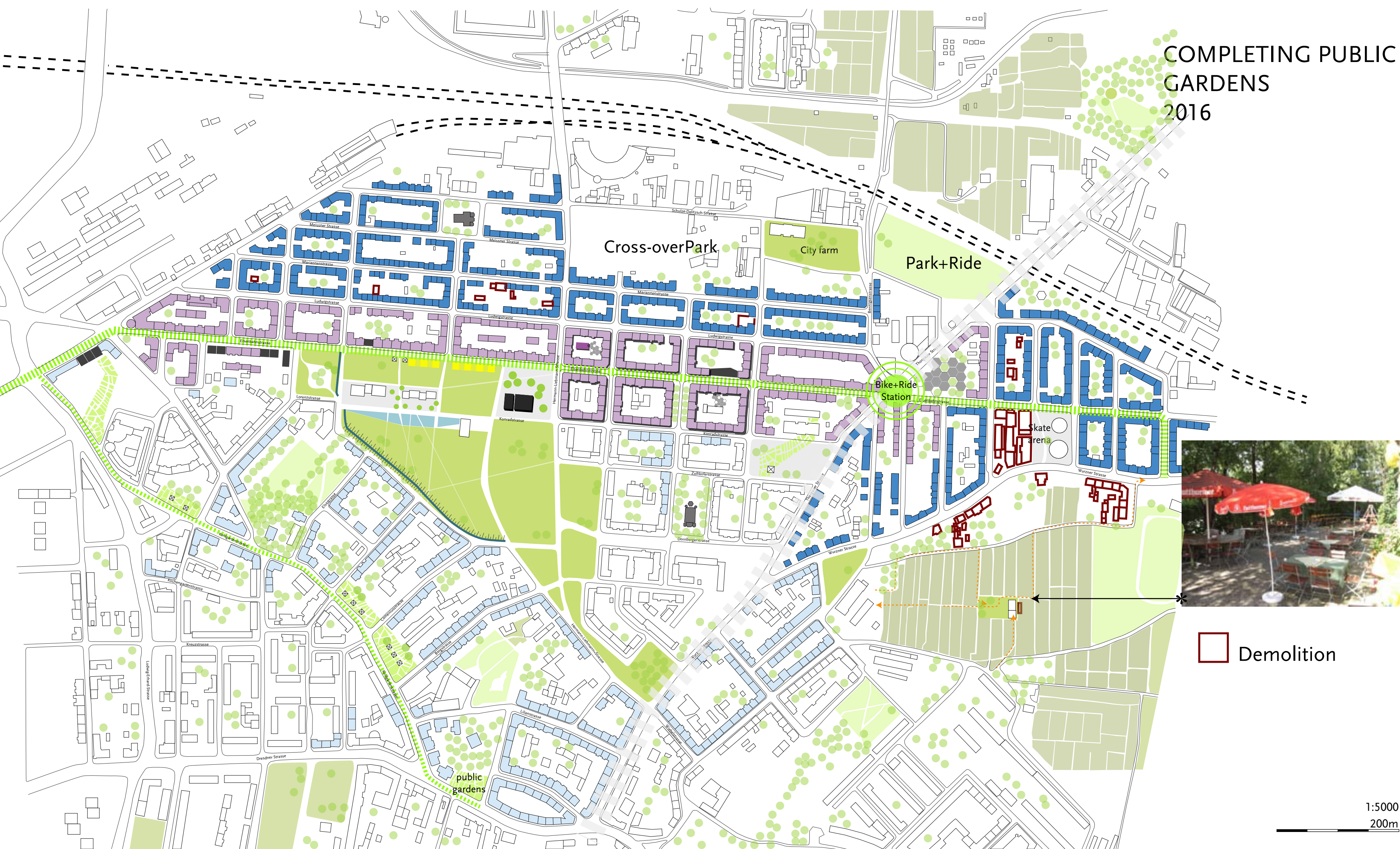
CONTINUITY OF ACTIVE BAND AND NEW CITY HOUSING 2016



 New city housing

1:5000
200m

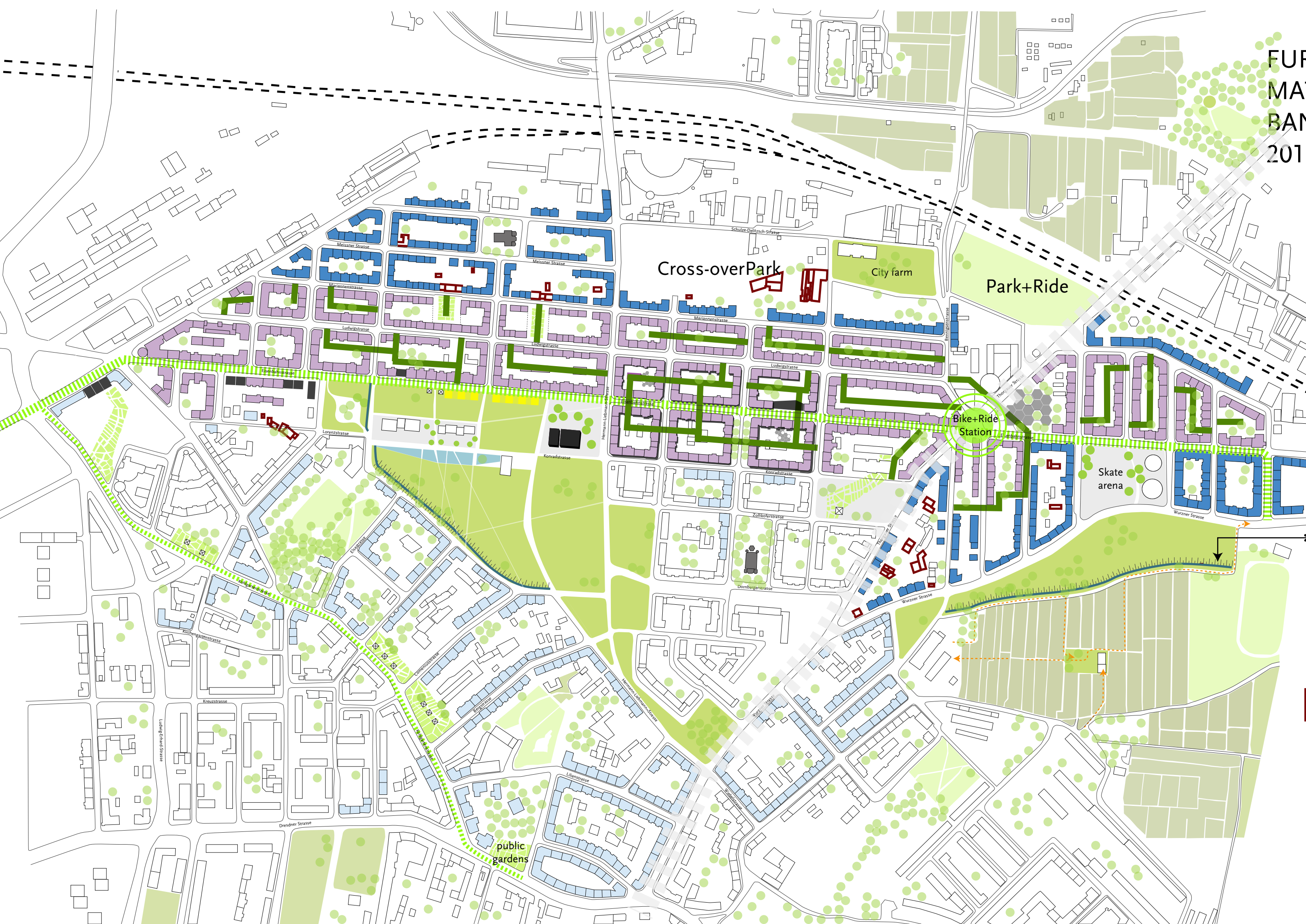
COMPLETING PUBLIC GARDENS 2016



 Demolition

1:5000
200m

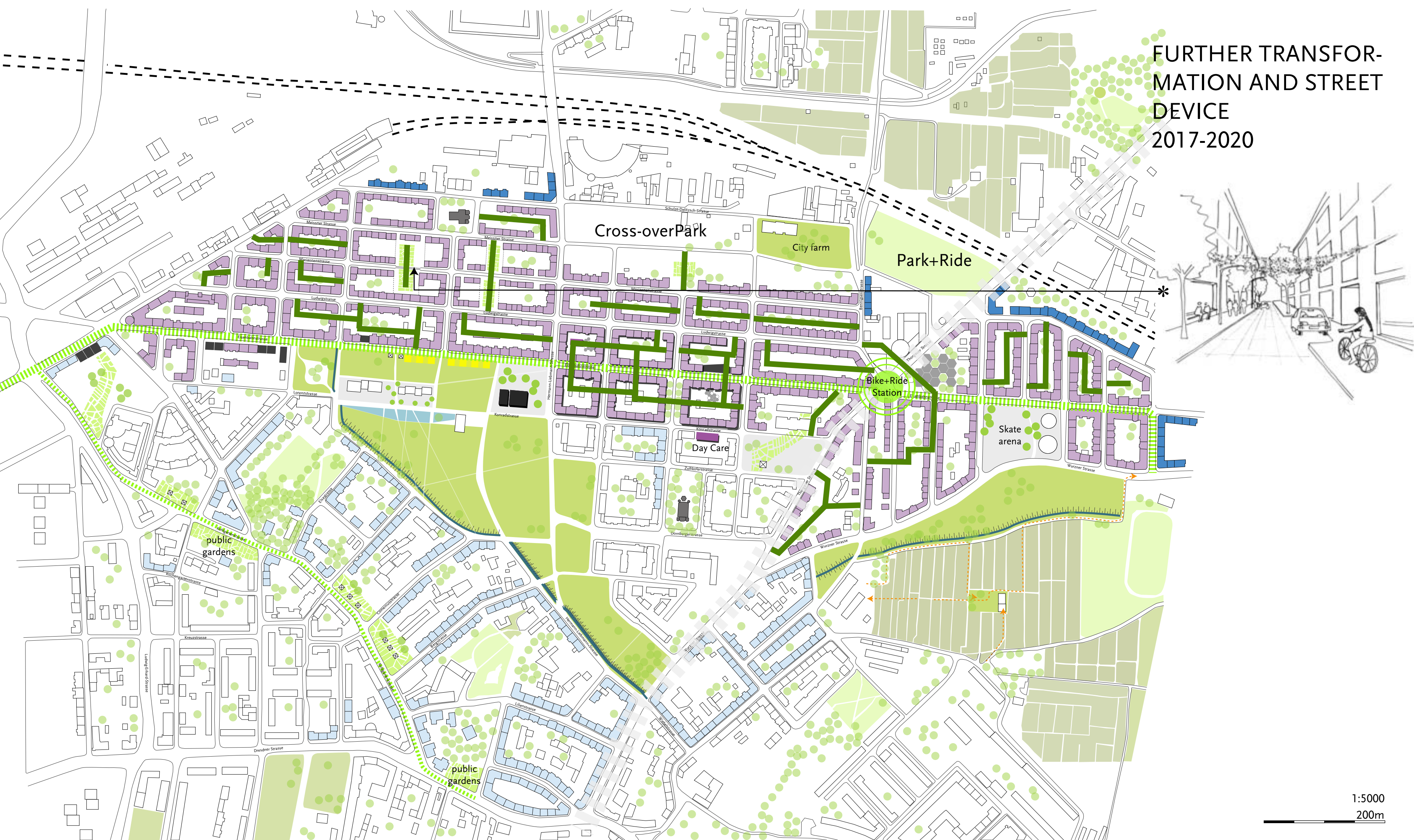
FURTHER TRANSFORMATION AND ACTIVE BAND 2017-2020



 Demolition

1:5000
200m

FURTHER TRANSFORMATION AND STREET DEVICE 2017-2020



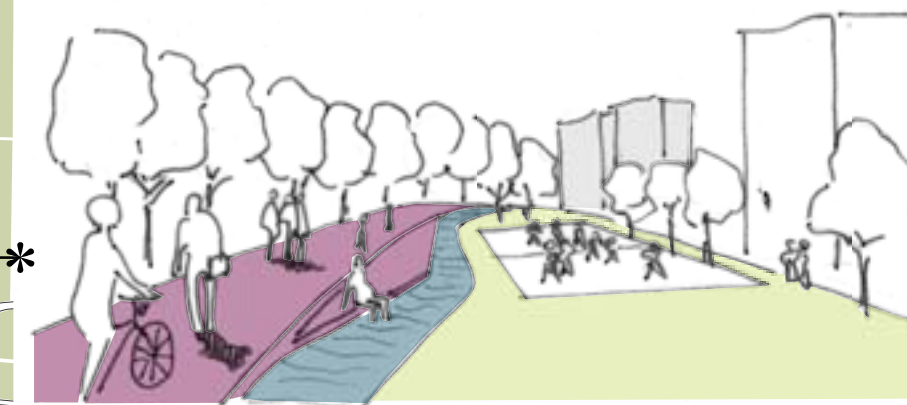
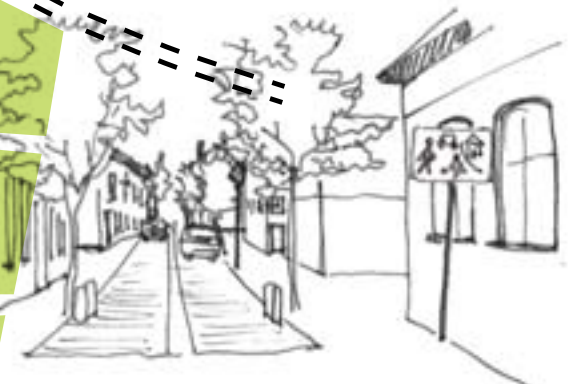
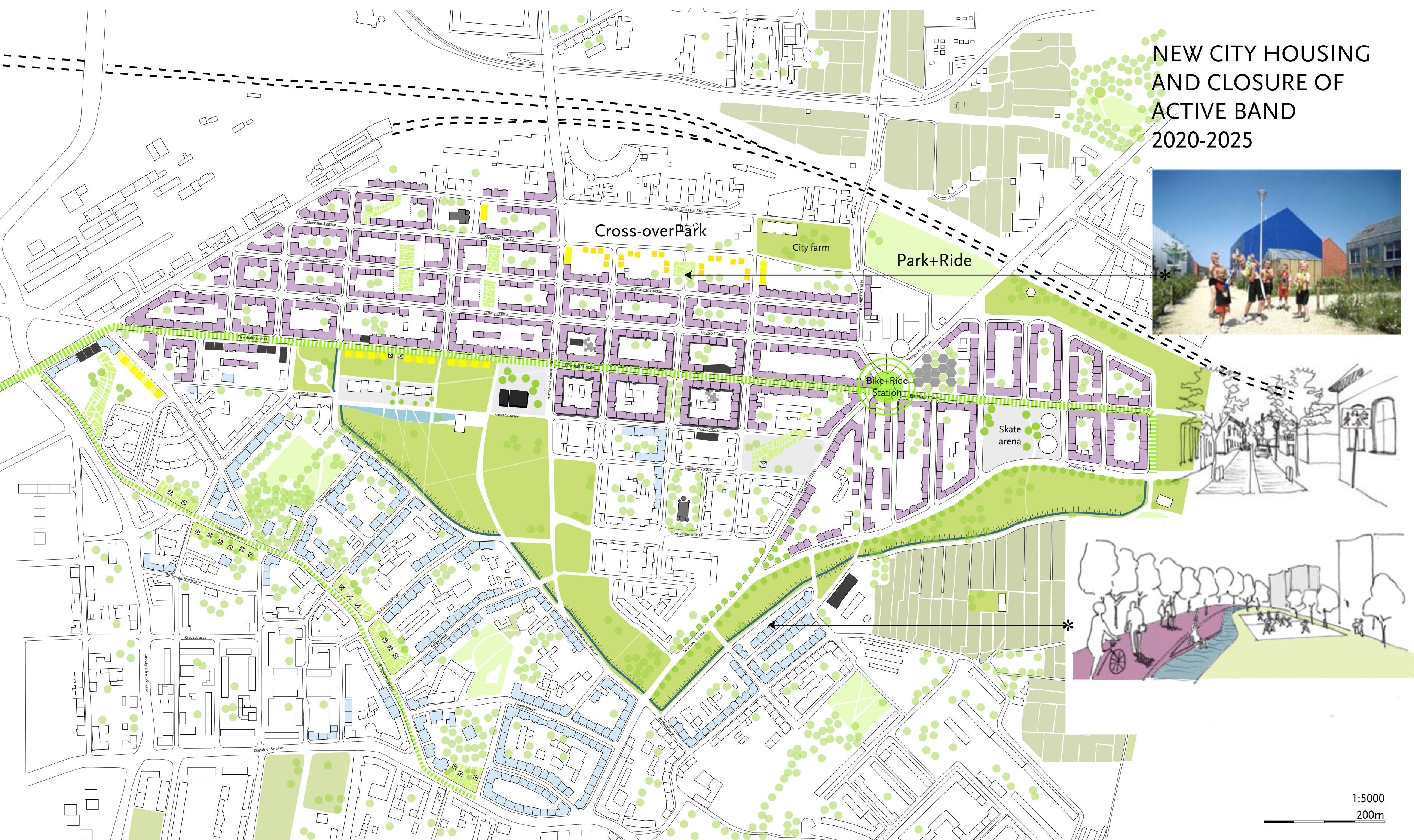
NEW DEVELOPMENT PUBLIC PROGRAM AND ACTIVE BAND 2018-2020



- Demolition
- New city housing
- New public program

1:5000
200m

NEW CITY HOUSING AND CLOSURE OF ACTIVE BAND 2020-2025



FUTURE DEVELOPMENT -> SUSTAINABLE TYPOLOGIES 2025-2030



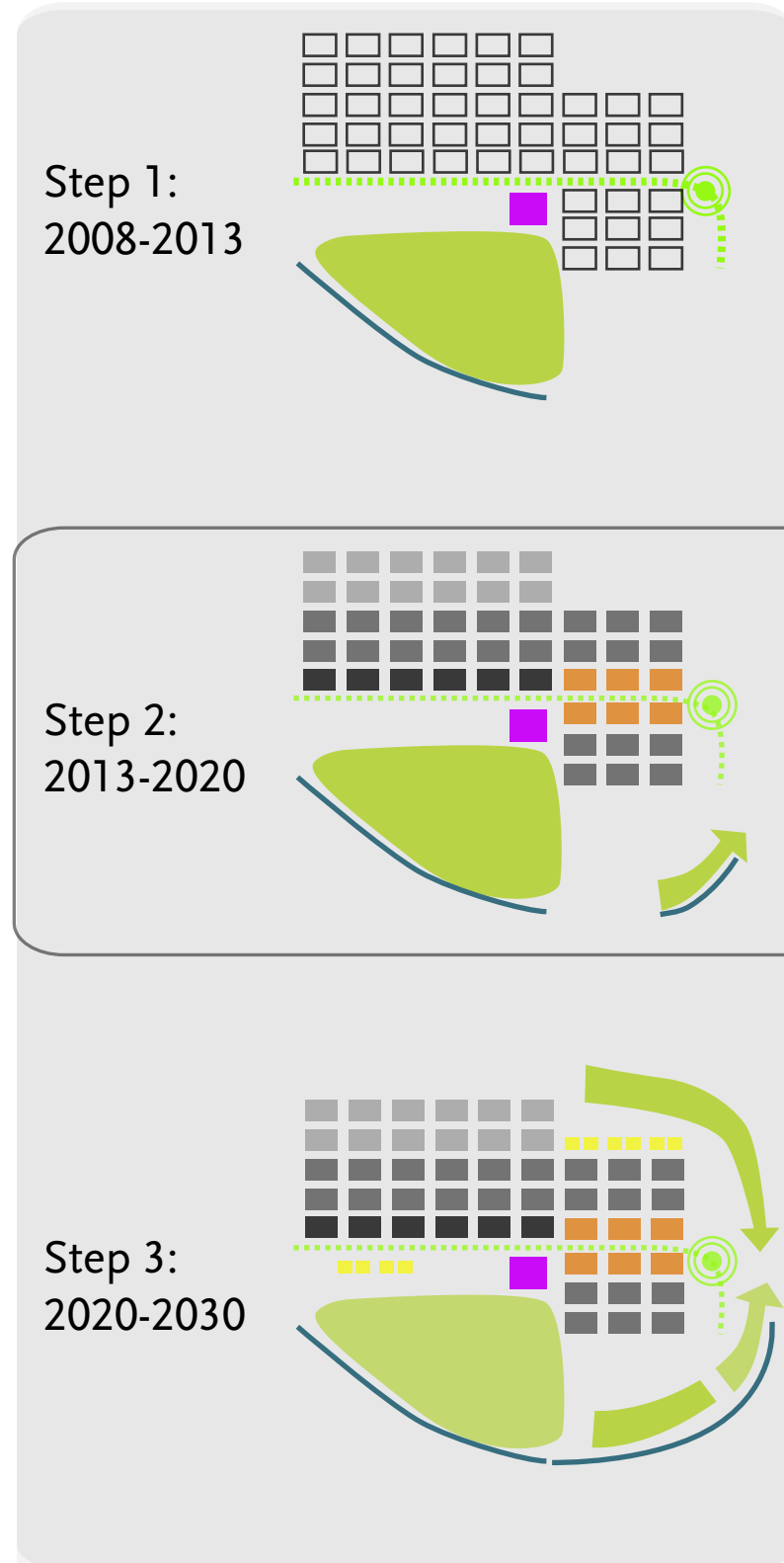
1:5000
200m

Flexible Planning

MODERATE SCENARIO

EXTREME GROWTH

SHRINKAGE



START-UP PROJECTS
 Municipal Initiative:
 Mediathek, District Park,
 Strengthening of axis
 -> not waiting for the market!

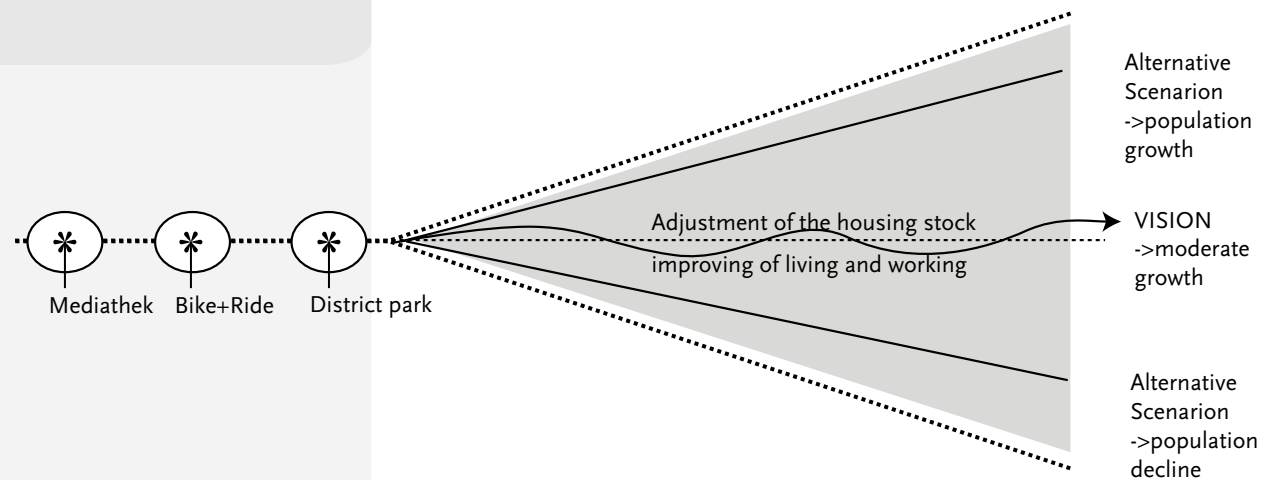
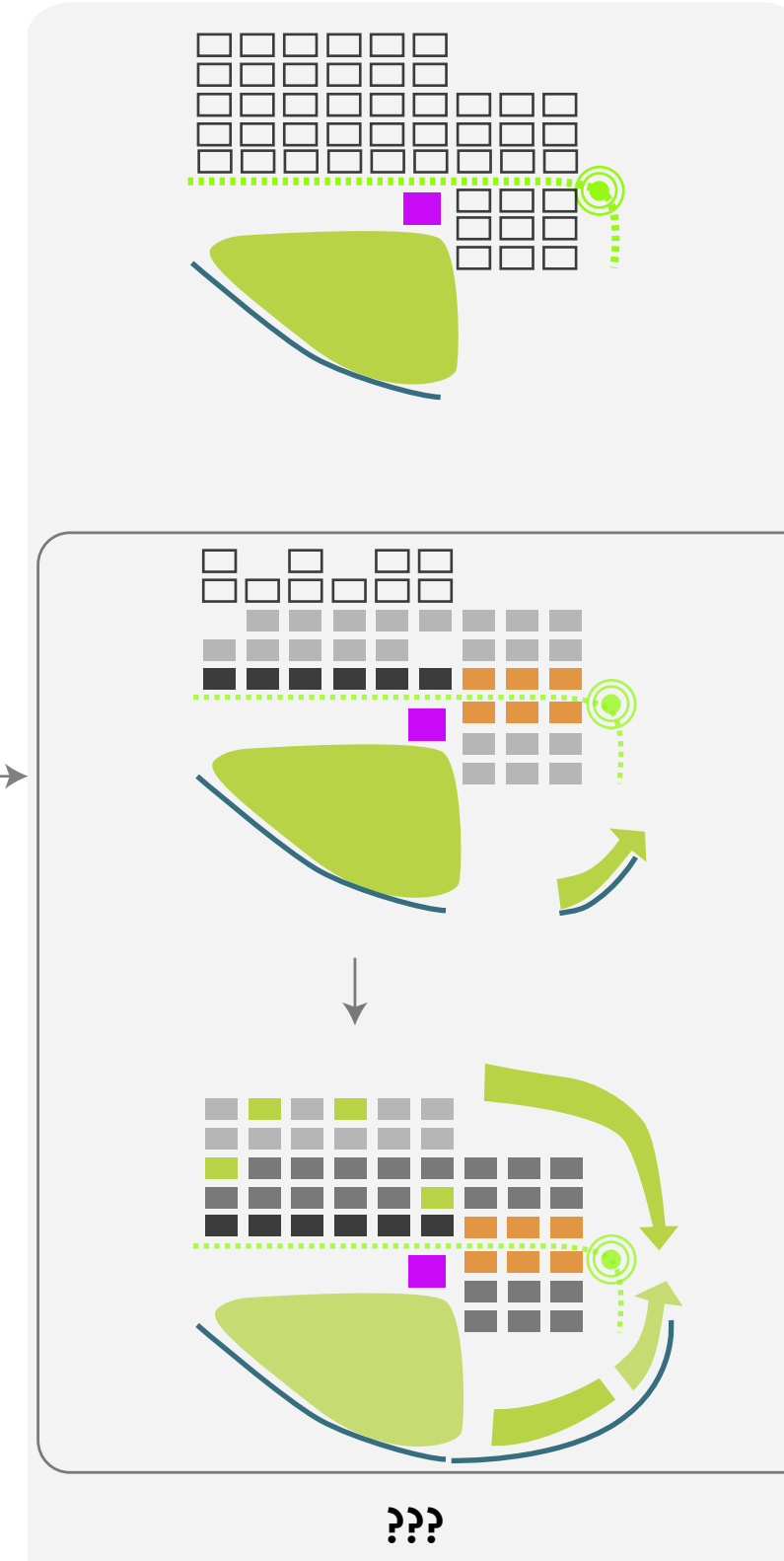
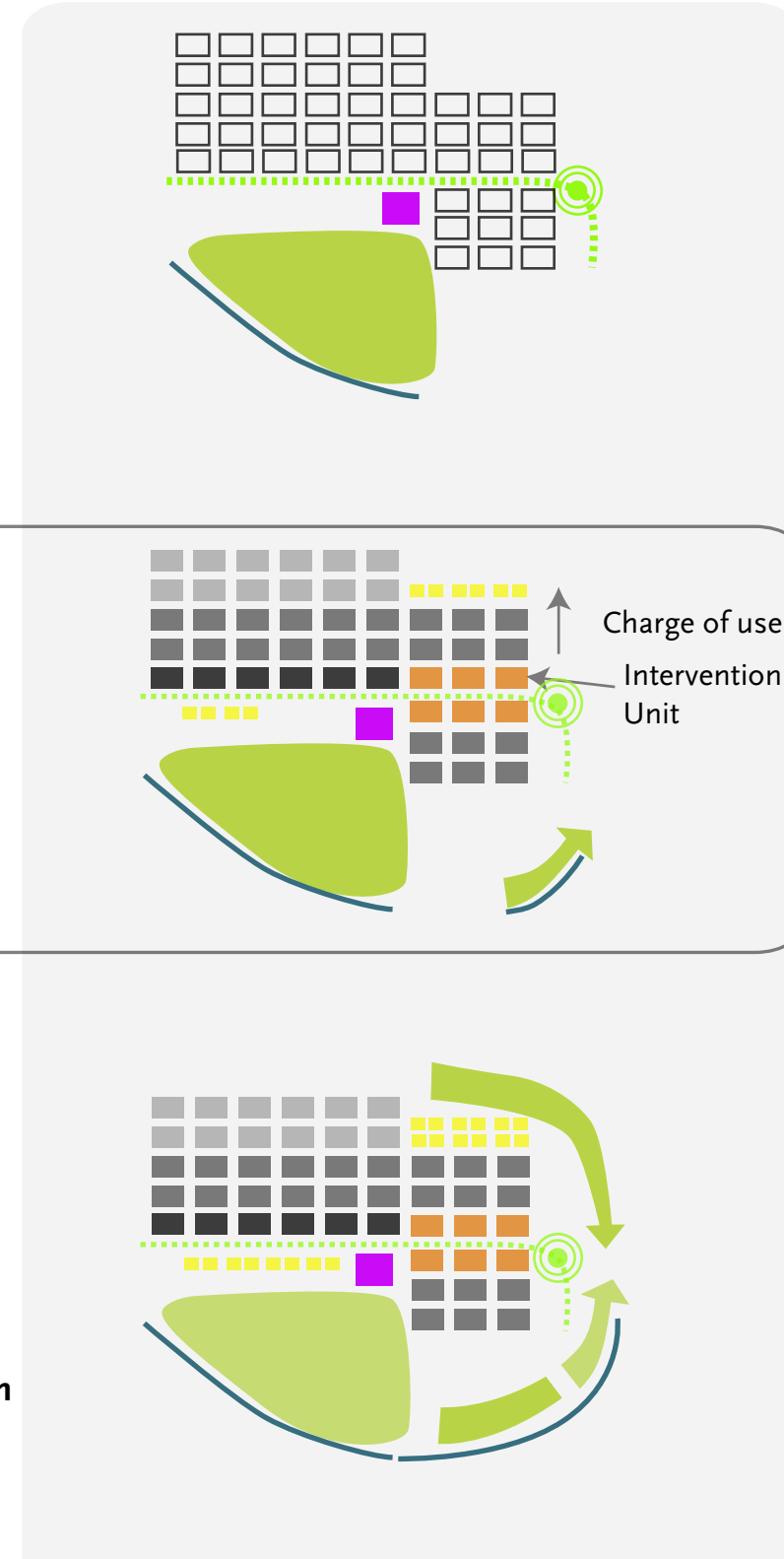
Investment
 in any case

TRANSFORMATION
 Private Initiative:
 Improving living and working
 space in existing urban fabric
 -> not depending on the
 market!

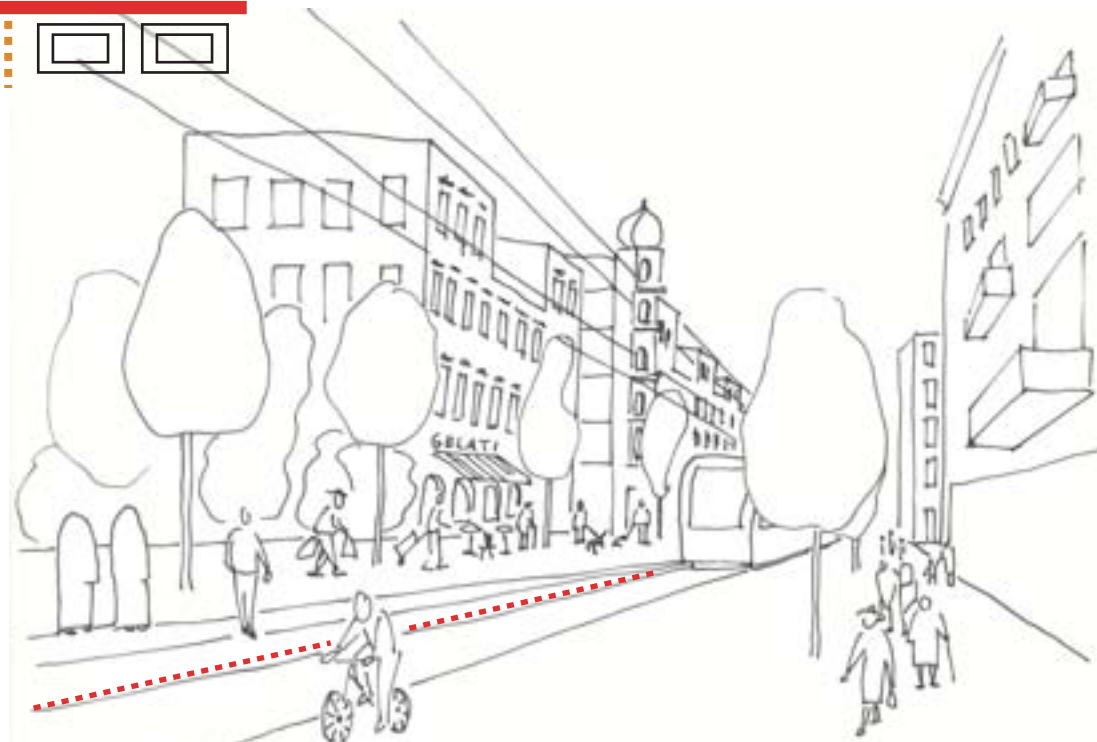
Build up can
 start earlier,
 according on
 demand

BUILD-UP
 Public-Private Initiative:
 New facilities for possible
 growth of the population
 -> depending on success!

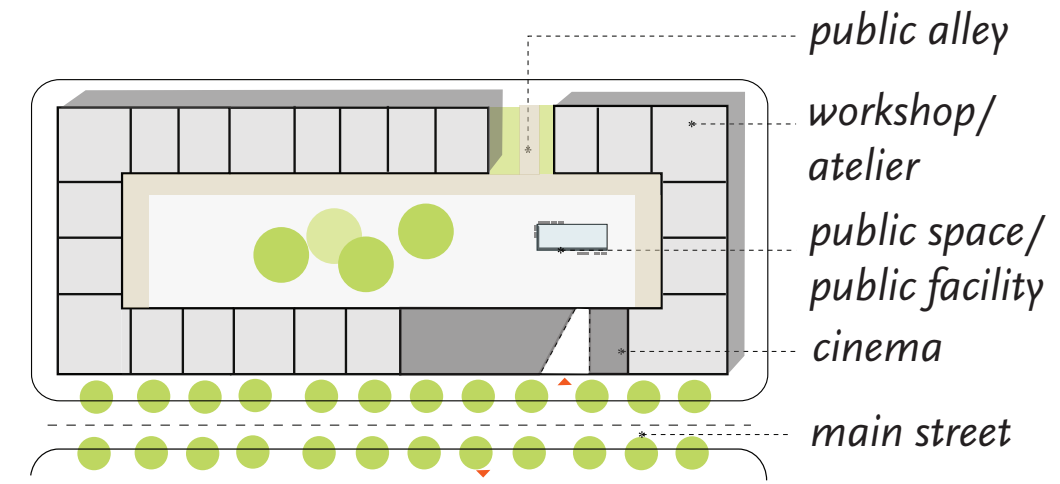
No new build
 up projects, but
 securing the
 quality of the
 existing condition



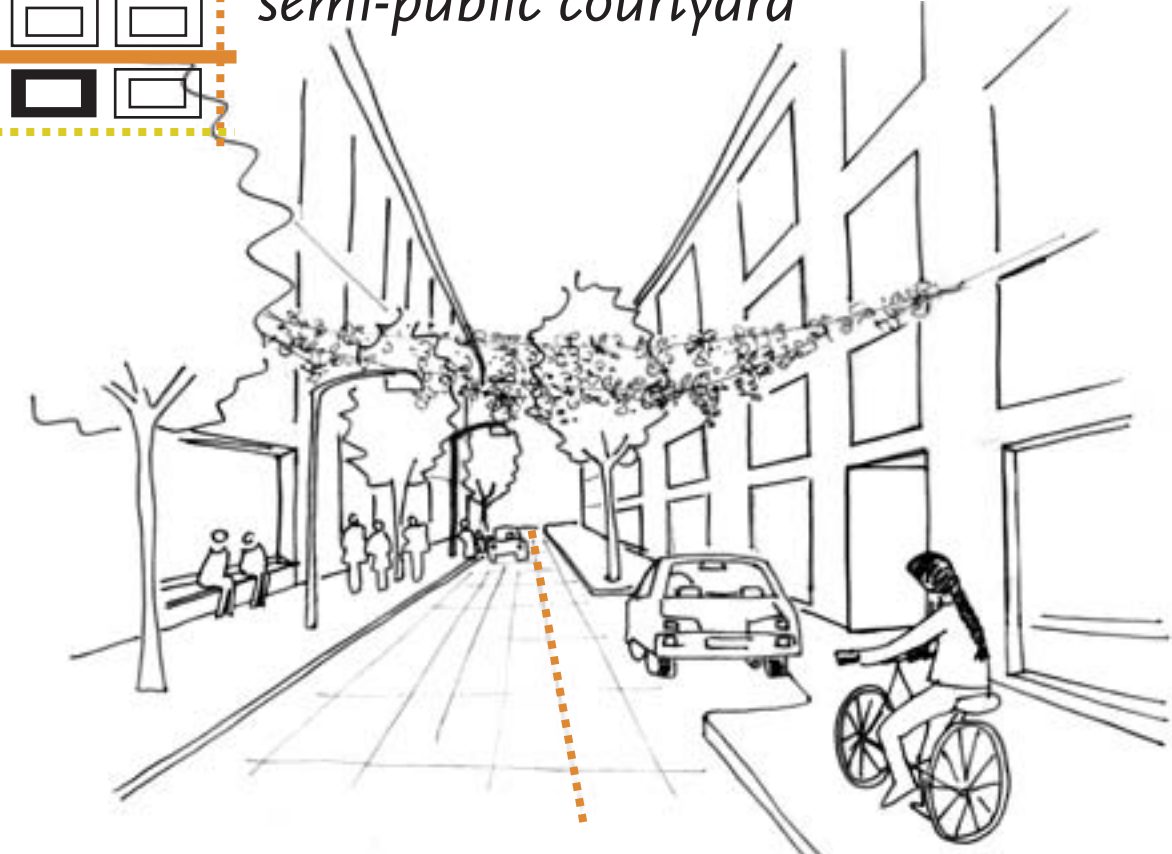
05



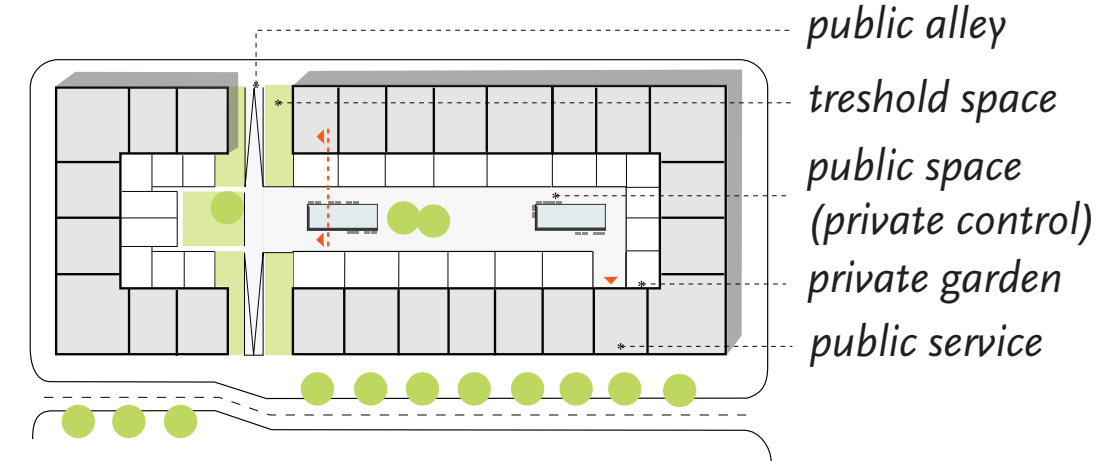
atelier/workshop community gardens public service



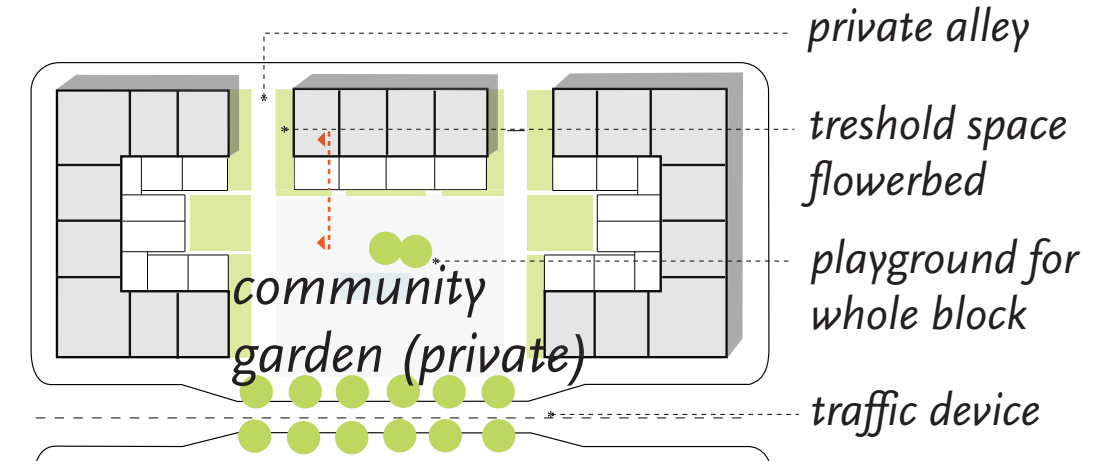
Block Typologies



streetlevel public service ramp seats basin gardens (height difference)



private house private garden community gardens

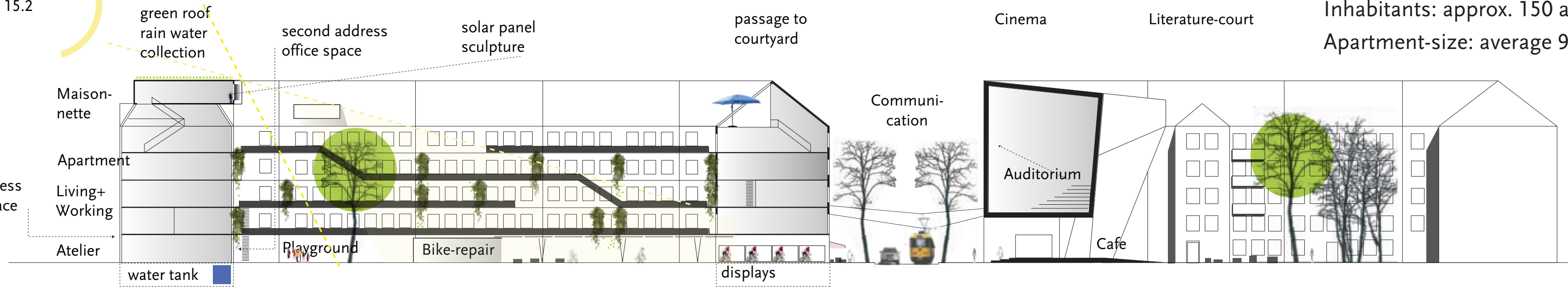


DESIGN examples

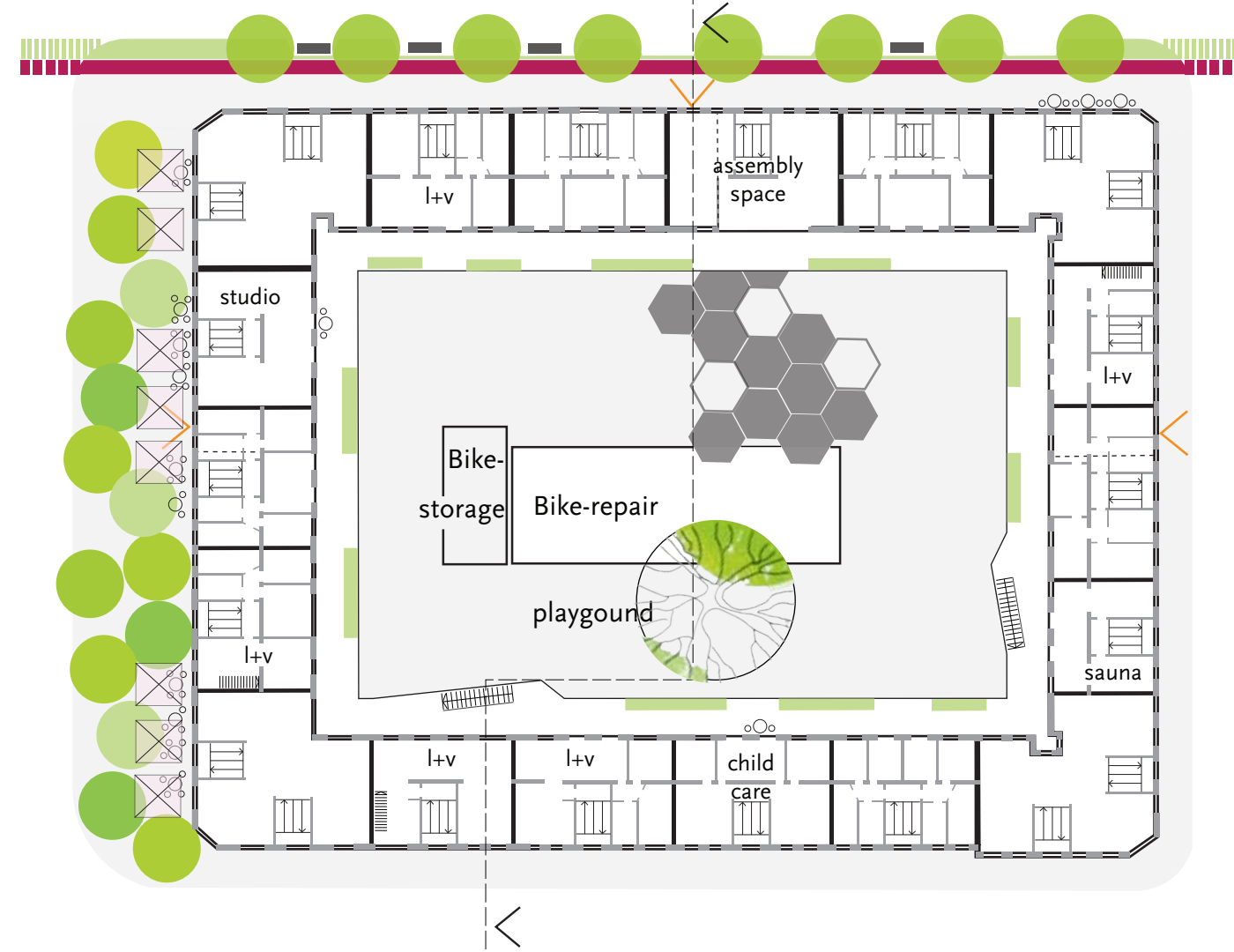
summer sun 62.2

winter sun 15.2

first address living space



DESIGN PROJECT
 17houses for individual use /
 1 for community use
 Footprint: 4,085 sqm
 Living and working: 15,845sqm
 Working space: 4,580sqm
 Inhabitants: approx. 150 apart., 255
 Apartment-size: average 95sqm



Rent: 2x300EUR warm

Rent: 1x350EUR warm + 1x250EUR warm

Rent: 1x600EUR warm



Plagwitz before ... and after urban renewal



Auewald



old industrial area

connection to recreation area in the south



EVALUATION WITH PLAGWITZ

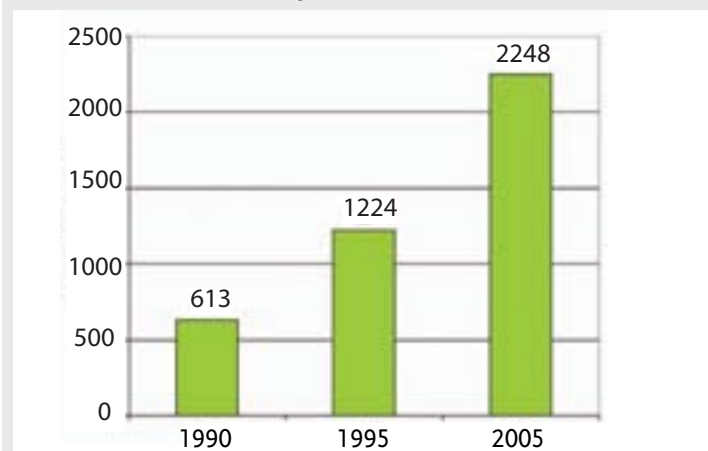
Qualities In The West:

- Proximity to Auewald
- Waterways, Living by the water, connection to lake district
- Proximity to city centre

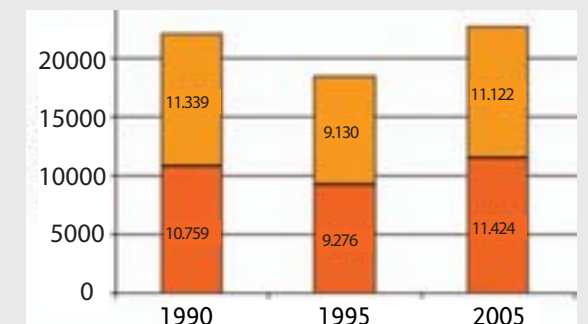
Plagwitz was able to change it's image from an industrial location to a creative district with mostly young people.

Plagwitz plays a crucial role in the whole city layout and has it's impact on the East. Waterways are reachable easily by bike.

Local Enterprizes



Inhabitants of district



Plagwitz Schleußig

Three Urban Scales

BUILDING ON SUBSCRIPTION
 NUCLEAR MODEL FOR SOCIAL COHESION IN MIXED-USE HOUSING COMMUNITY

building block (nuclear model)

Building on Subscription in one housing block: from 180 apartments into ca. 130 bigger apart. + working space and ateliers

TRANSFORMATION AND OPENING OF BLOCKS
 FLEXIBLE URBAN RENEWAL STRATEGY
 TRANSFORMATION OF URBAN SPACE

Intervention Unit (local level)

Bigger layouts combining living and working: 678 buildings with ca. 60m²/apart. -> 448 buildings with ca. 90m²/apart.

COUNTER-URBANIZATION INTO PERI-URBAN AREA (CITYWIDE)
 COUNTER-URBANIZATION-> OFFER/DEMAND

Gruenau: demolition of 16,616 apartments

Plagwitz/Lindenau: ca. 2,390 empty apartments

city centre
 Plagwitz
 Volkmarsdorf

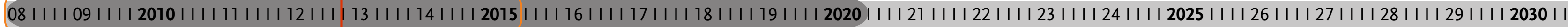
Neu-Paunsdorf: intra-regional redistribution (720 apartments)

new family homes in the city (ca. 55,000 new family homes are demanded until 2015)

Volkmarsdorf Neustadt/ Neuschoenefeld: 13,886 empty apartments

CITY INVESTMENT

PRIVATE INVESTMENT



EVALUATION

INTERVENTION UNIT

Opening of the introvert blocks into extrovert blocks and introducing public functions into the courtyards along the bike boulevard

transition point

bike boulevard, main axis and shopping street

MAIN AXIS, BIKE BOULEVARD, LOCAL FACILITATOR AND CONNECTOR TO REGIONAL SCALE

bypass (city scale)

developing corridor (regional scale)

bike boulevard (local scale)

transition point, Bike+Ride (intervention)

interwoven footpaths in courtyards (intervention)

city centre

HIGHWAY-RING, DEVELOPING CORRIDOR AND RINGROAD

airport

ring road

highway ring

city tunnel

city centre

developing corridor (regional level)

bypass (city level)

developing corridor

transition point, Bike+Ride

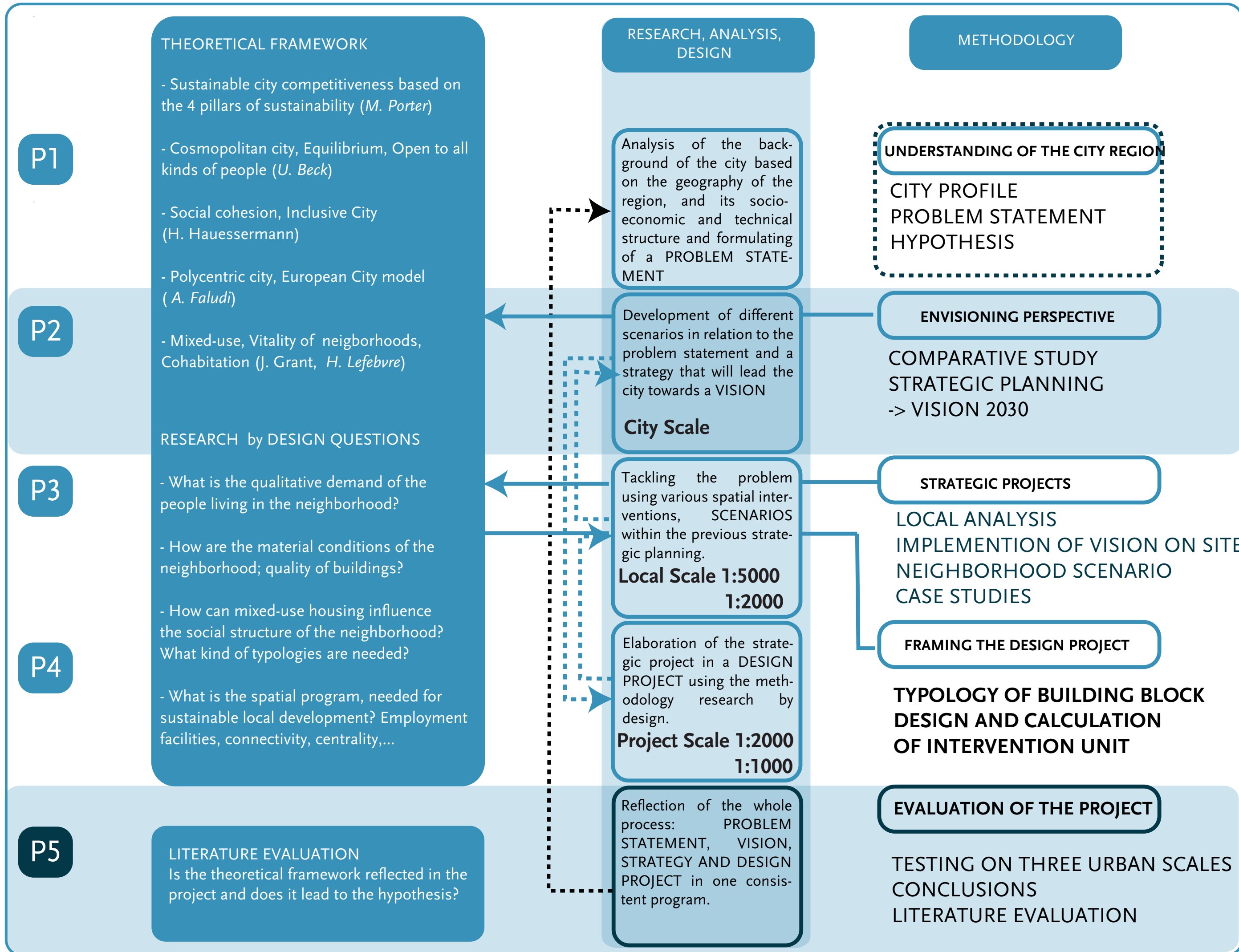
bike boulevard (local level)

Highway

National road

Important main road

Main road



DID I FIND ANSWER TO THE RESEARCH QUESTIONS?

city strategy, recognizing regional economical model

social integration via mixed-use development

urban renewal on local level via regional insertion

local level

city level

regional level

