

Towards the Green Capital |

designing a waterfront in Riga |



P5 Presentation |
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Delft | July 2012 |



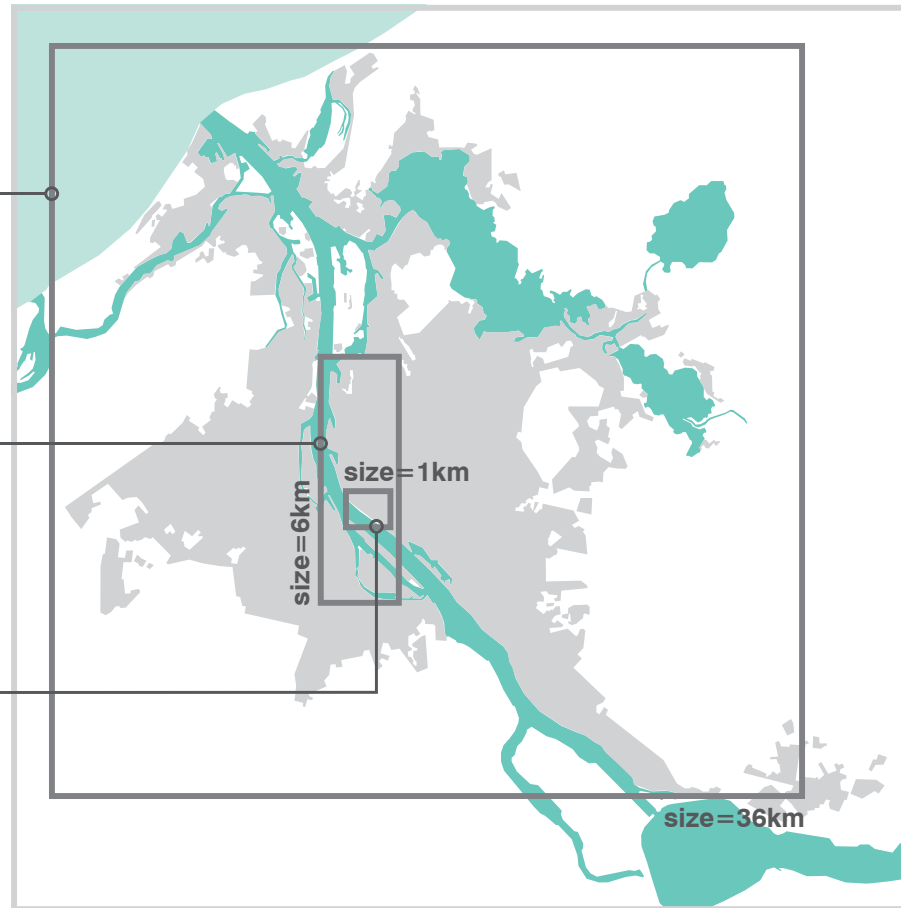
project approach

working through scales

City Scale
Recreational Spaces
Vision

Waterfront Scale
Highway
Scenarios

Local Scale
Public Space
Masterplan



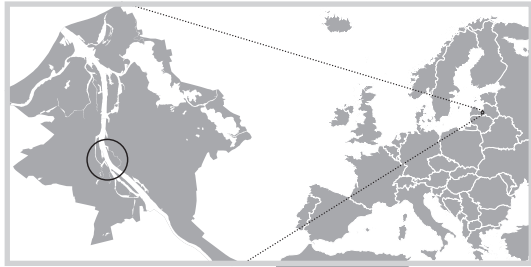
research & design scales |

- city
- waterfront
- local

additional research scales |

- delta
- metropolitan region

design on finer scale
generates research questions
for greater scale and *vice versa*



riga location

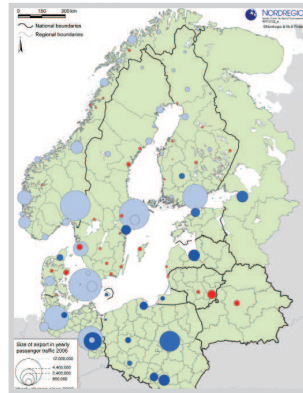
context

city of riga

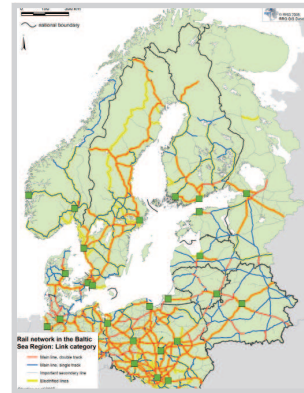
overview



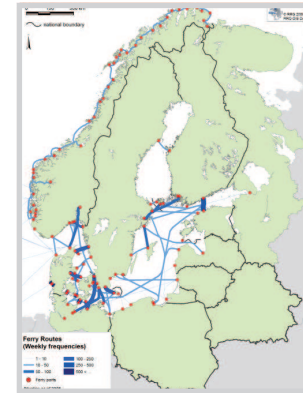
highway network
(1) by nordregio, 2008



airports
(1) by nordregio, 2008



railway network
(1) by nordregio, 2008



ferry lines
(1) by nordregio, 2008



port export | import
(2) jana seta, 2009

riga |

coastal city in north eastern europe

located in daugava delta

country capital

concentrates

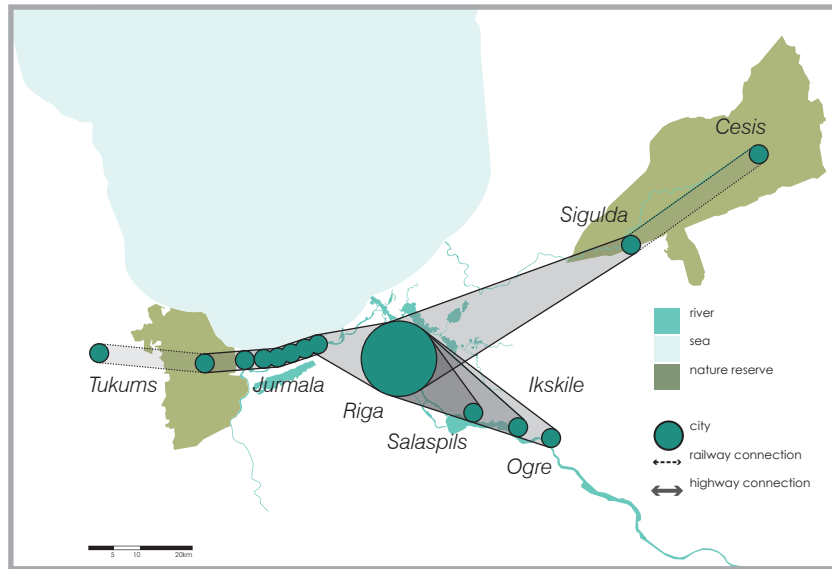
- 1/2 of country GDP
- 1/3 of country population
/700 thsd/

port city

- passenger port
- cargo port
/largest in the country/

well connected

- highways - all region
- air connections - europe & CIS
- railway - CIS
- ferry - northern europe, germany



riga metropolitan region |



(1) beach (above) and
(2) nature reserve kemberi (below)

context

city of riga

metropolitan region

riga |

center of metropolitan region for

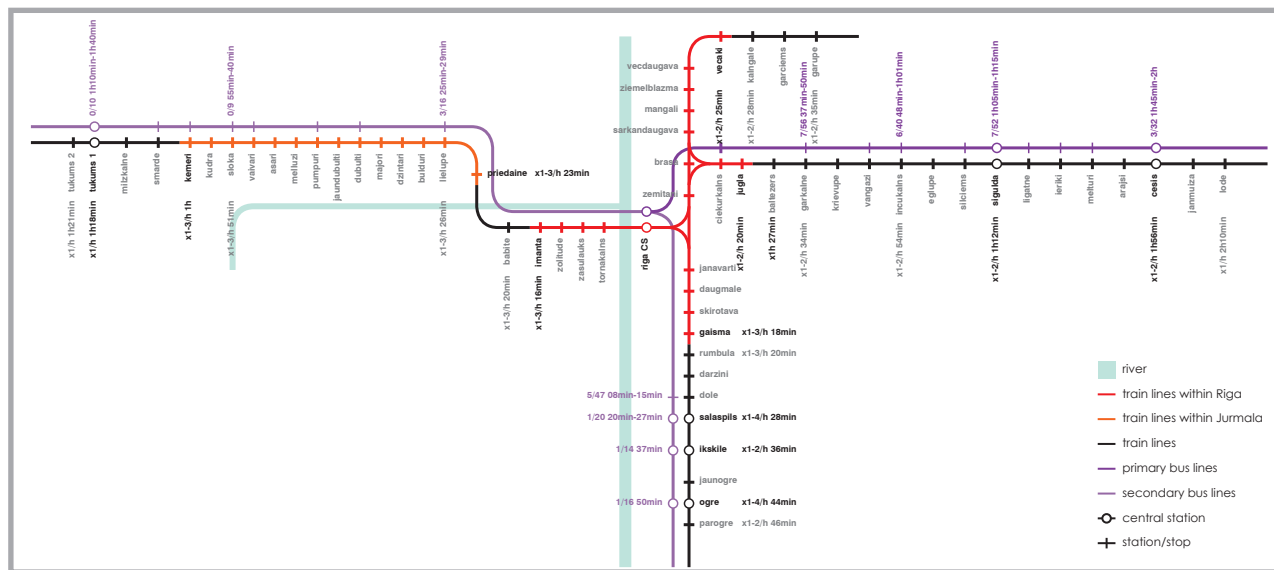
- work
- study
- entertainment

travel time riga-satellite

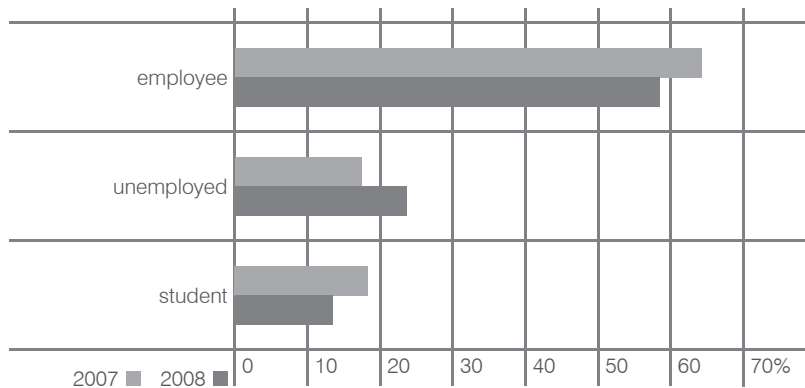
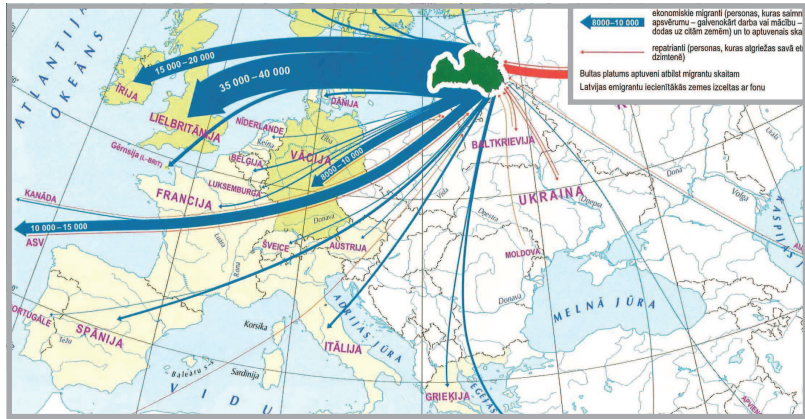
- 20min - 2h
/bus//train/

for recreation people go to

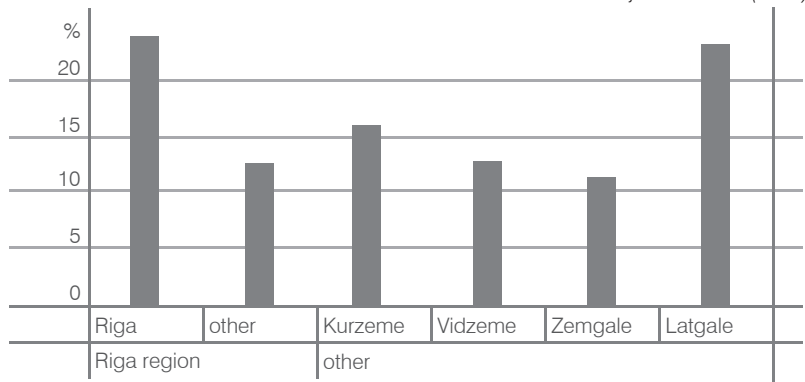
- jurmala
20min - 1h
- sigulda
1h05min - 1h15min
- coastal villages in the west
25min - 35min



region intercity connections |



resident status before going abroad |
based on Krisjane & Bauls (2011)



proportion of migrants by region |
based on Hazans (2011)

economic migration |

(1) jana seta, 2009



(2) riots in riga, january 13, 2009



(3) latvian migrants abroad

context

city of riga

problem - shrinkage

preconditions |

dissolution of Soviet Union >
service sector economy

15 years of relative economic decline
/1990s, early 2000s/

admission to EU in 2004
/european funds, loans
> fake economic growth/

financial crisis on 2009

numbers |

2 waves of emigration
/after 2004, 2009/

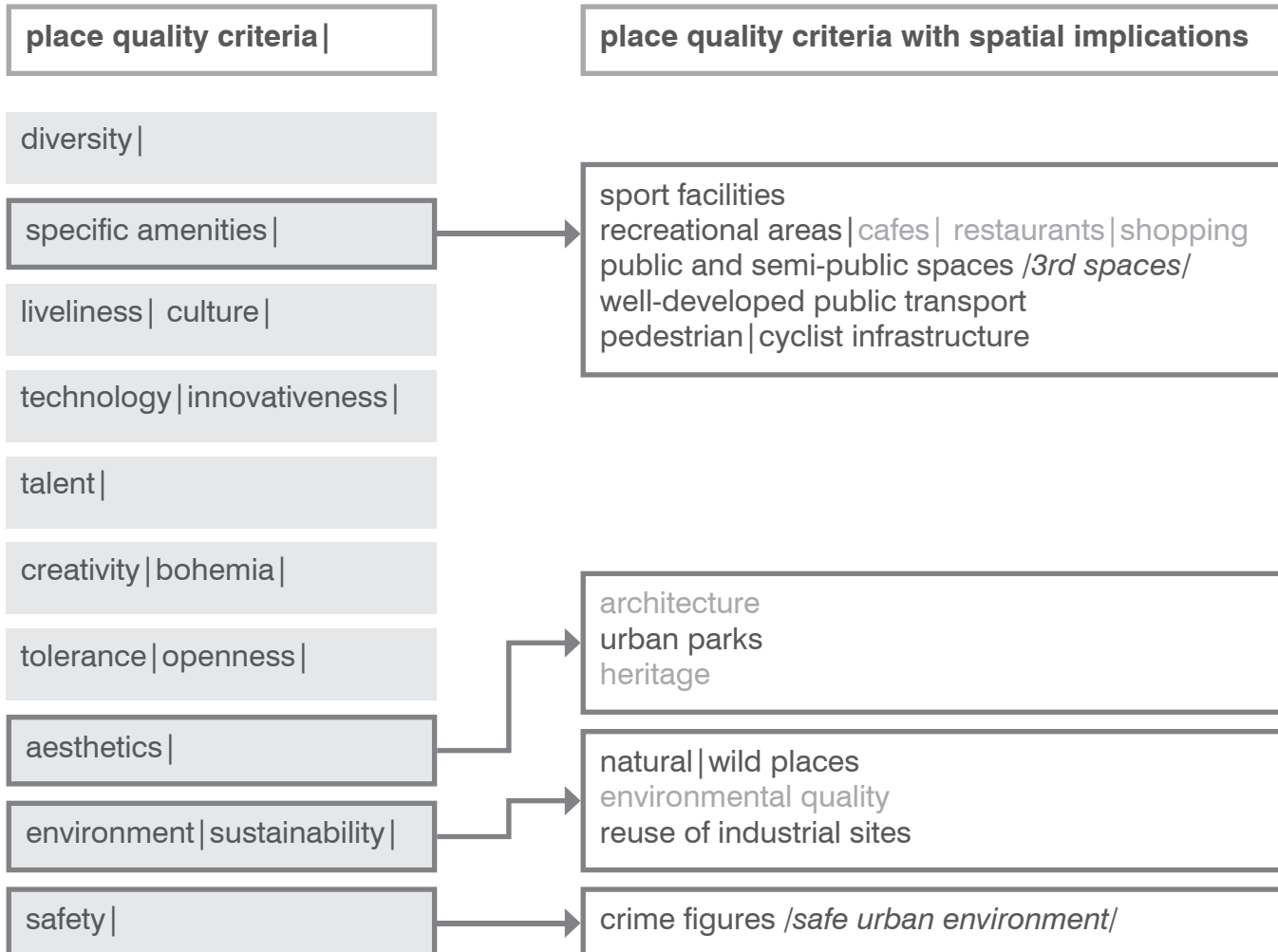
200 thsd. economic migrants
/in 8 years, expert evaluation/

1/4 from the city of riga

more than 60% before going abroad
were employed
/country loses tax-payers/

spatial relevance

location choice
spatial quality



based on trip, 2007; brown, meczynski, 2009; lorenz, 2010;

what can we do as urban planners?

people are attracted to places
with high place quality |
/city branding/

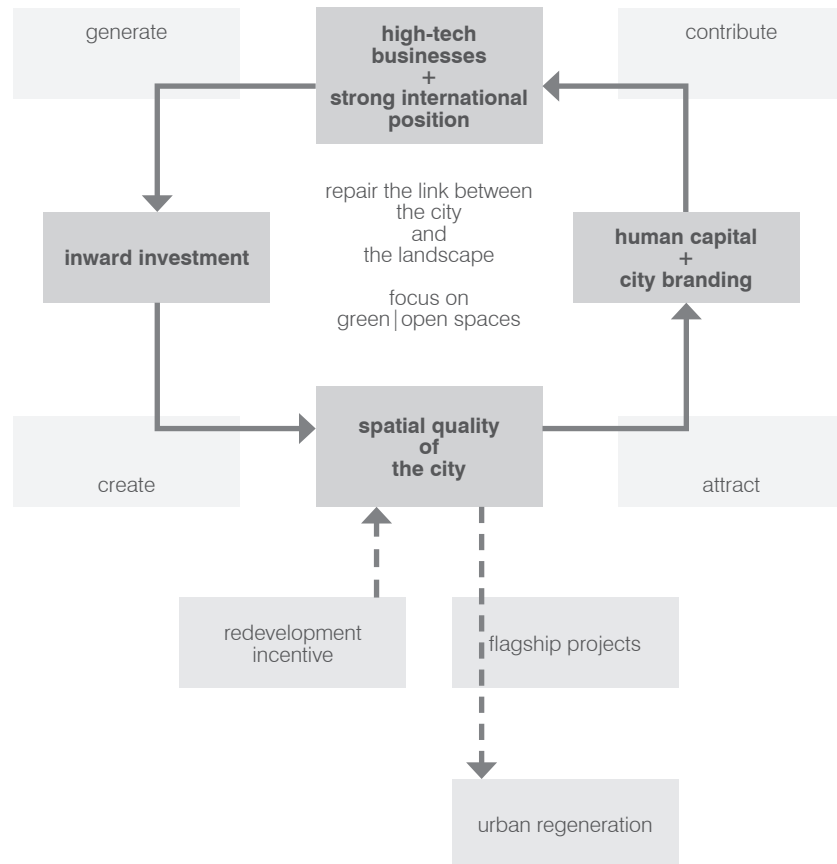
place quality notion has
a spatial component |

spatial component has
urbanism related assets |

spatial relevance

strategy

attract residents



recreational spaces |
(1,2) examples from san diego, california

what?

reduce resident emigration and attract new residents

how?

by creating favourable living conditions

examples |

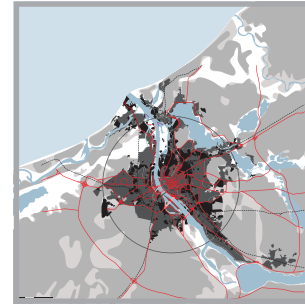
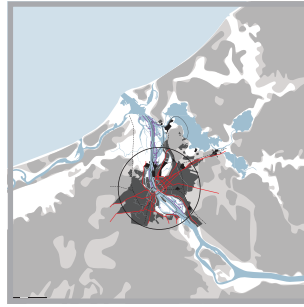
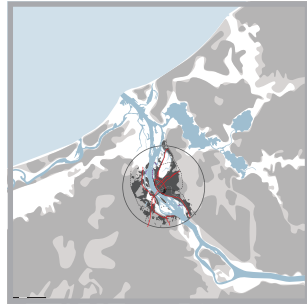
top 10 creative cities in US
have extensive recreation facilities
/see creative class theory - Florida/

cities with no high-tech component
attract people via high place quality
*/see experience economy and cities -
- Lorentzen, Lorentzen/*

city branding works
/see branding in Turin - Vanolo/



city development |



spatial quality

current situation
strength & weakness



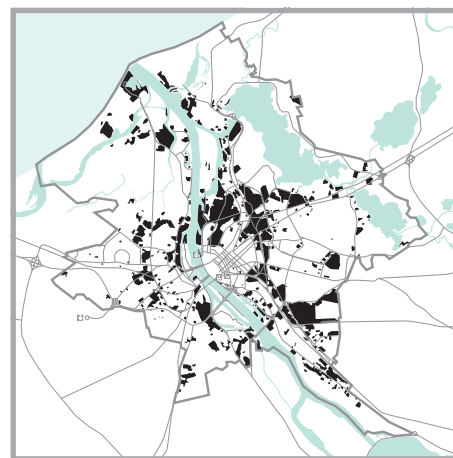
city centre river islands
(1) zakusala (above) and (2) lucavsala (below)



(3) RER factory industrial site (above)
(4) brownfield site at hanzas street (below)



nature areas |



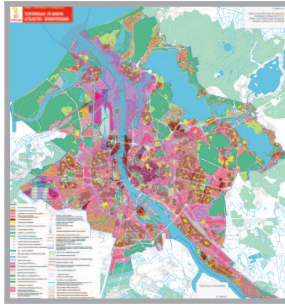
industrial sites |

strengths |

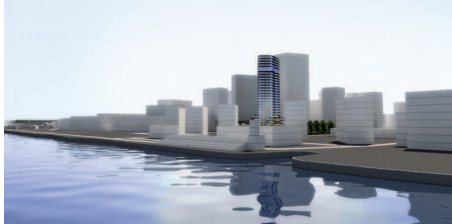
- [1] large recreational areas
 - lakes
 - forests
 - beach at city periphery*/15.7% blue// 28.0% green/*
- [2] green river islands in city centre

weaknesses |

- [1] areas with poor spatial quality
 - industrial sites
 - brownfield sites around city centre*/developed along railway lines// late 19th early 20th c/*
- [2] infrastructure barriers
/modernist planning approach/



(1) riga development plan |
2006-2012



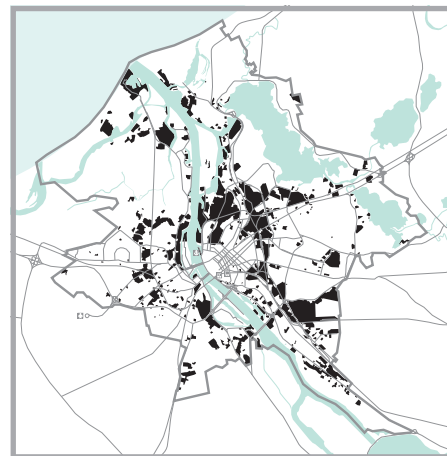
development proposals by
(2) spacegroup (2006, above) and (3) arhis (2006, below)



(5) development proposal by
schaller architekten (2007, below)



nature areas |



industrial sites |

spatial quality

future situation

threat

city development plan | */aimed to improve spatial quality/*

[1] built up
vacant brownfield sites

[2] densify
loosely built industrial sites &
turn them into mixed use areas

[3] built up
city centre river islands

[4] create
new infrastructure connections

threat | */no contribution into spatial quality/*

[1] development and gentrification of
profitable centre locations

[2] degradation of
other industrial locations

/shrinkage/
who is going to use
new office, retail, residential spaces?

spatial quality

future situation
opportunity



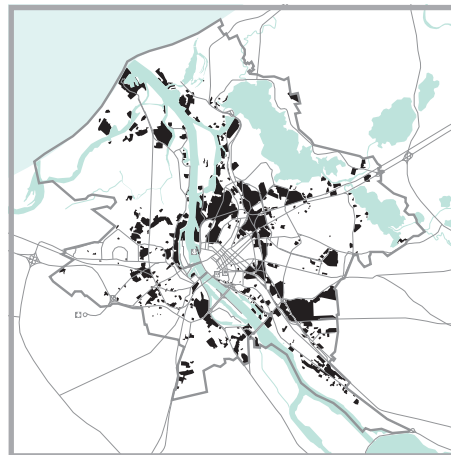
(1,2) example of
brooklyn bridge park by MVA (2003 - ongoing)



(3,4) example of
emscher park, ruhr valley



nature areas |



industrial sites |

opportunity |

instead of
new built space development
new recreational space development

place quality spatial components |

create recreational areas
with sport facilities

create public | semi-public spaces

improve public transport network

improve | create
pedestrian | cyclist network

connect natural | wild places

reuse industrial sites

reduce crime figures
/create safe environment/



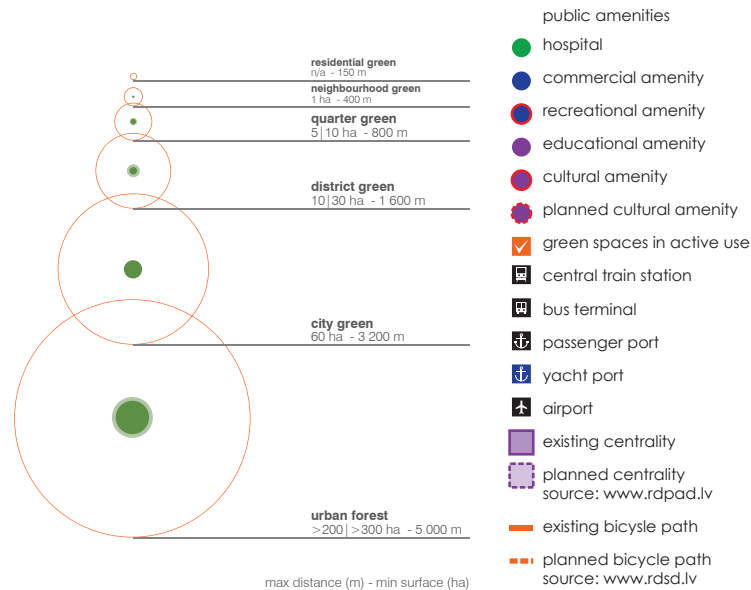
recreational space provision |
without barriers



recreational space provision |
with barriers



centralities and public amenities |
existing



city scale

problem statement
analysis conclusions |
fragmentation & barriers

recreational spaces |

[1] functional levels

- large weekly use
peripheral spaces
- no small daily use
local spaces

[2] coherence

- fragmentation
- interruption by infrastructure

[3] accessibility

- linear barriers - infrastructure
- spatial barriers - industrial sites

[4] facilities & safety

centralities & amenities |

[1] cyclist paths, planned

[2] island park, planned

riga needs
a recreational space network
which simultaneously

direct benefits |

[1] **provides** residents with
daily use local
recreational spaces

[2] **connects** residents to
weekly use peripheral
recreational spaces via
cyclist | pedestrian paths

[3] connects all recreational spaces
into one system

[4] improves spatial quality of the city

indirect benefits |

[1] improves image of the city

[2] attracts human capital

*/according to
human capital theory/*

[3] attracts new businesses
that follow human capital

city scale

problem statement

proposal |

recreational space network

**relation to
place quality spatial components |**

create recreational areas
with sport facilities

create public | semi-public spaces

improve public transport network

improve | create
pedestrian | cyclist network

connect natural | wild places

reuse industrial sites

reduce crime figures
/create safe environment/



city scale

vision

green corridors

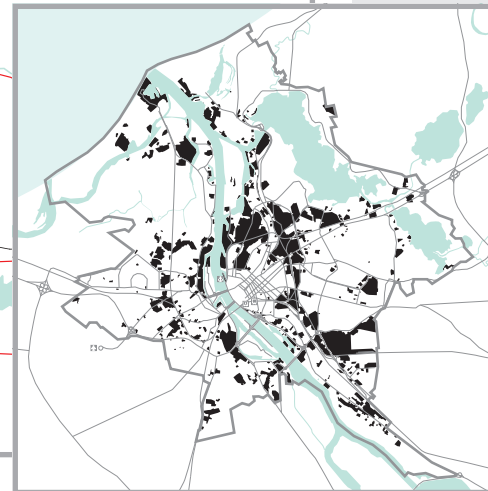
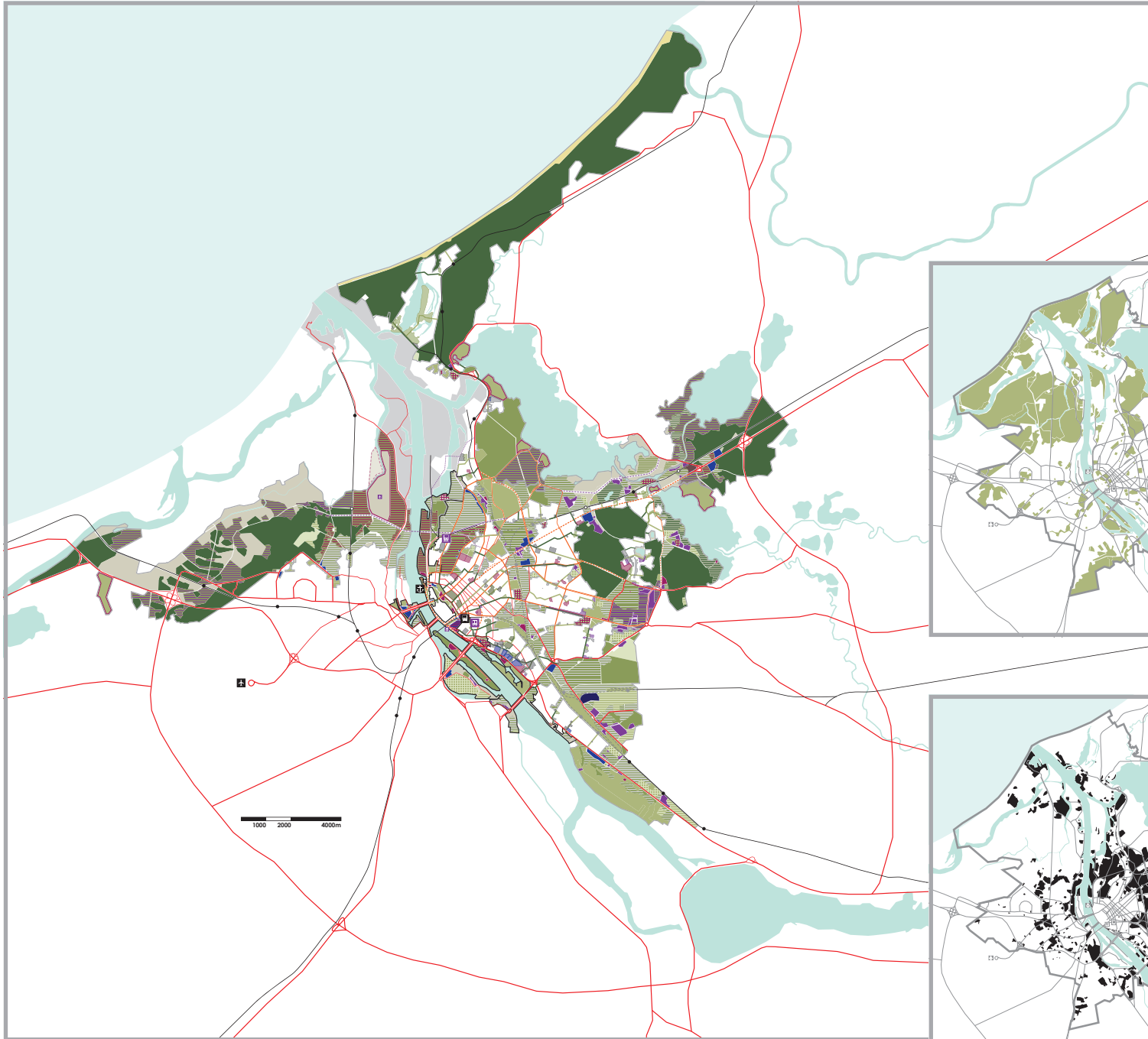
vision detailed |

for further elaboration
3 most important corridors selected

- [1] metropolitan regional corridor
 - connects riga to satellite towns & nature reserves
- [2] city corridor
 - connects riga & satellite towns to the sea and the beach
- [3] waterfront corridor
 - connects city centre to neighbourhoods
 - connects neighbourhoods to the riverside

city scale

vision
concept



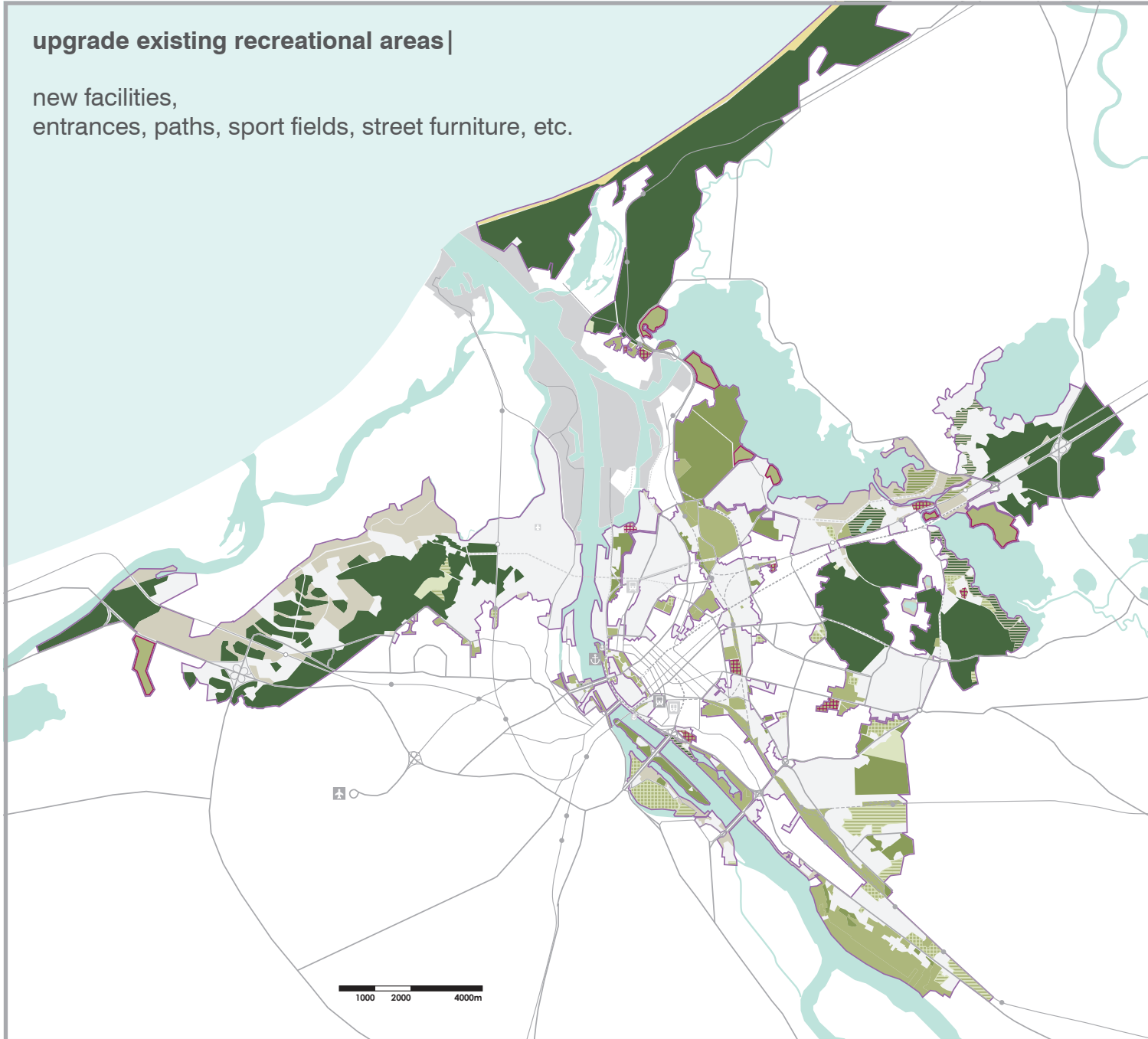
city center recreational area |
(2,3) example of ada ciganlija island, belgrade



redeveloped industrial site |
(5) example of emscher park, ruhr valley

upgrade existing recreational areas |

new facilities,
entrances, paths, sport fields, street furniture, etc.



city scale

vision

recreational spaces



forest |

(1) forest park, riga



open green |

(2) lake kisezers, riga



community garden |

(3) santopol's edible campus, montreal



space with sport facilities |

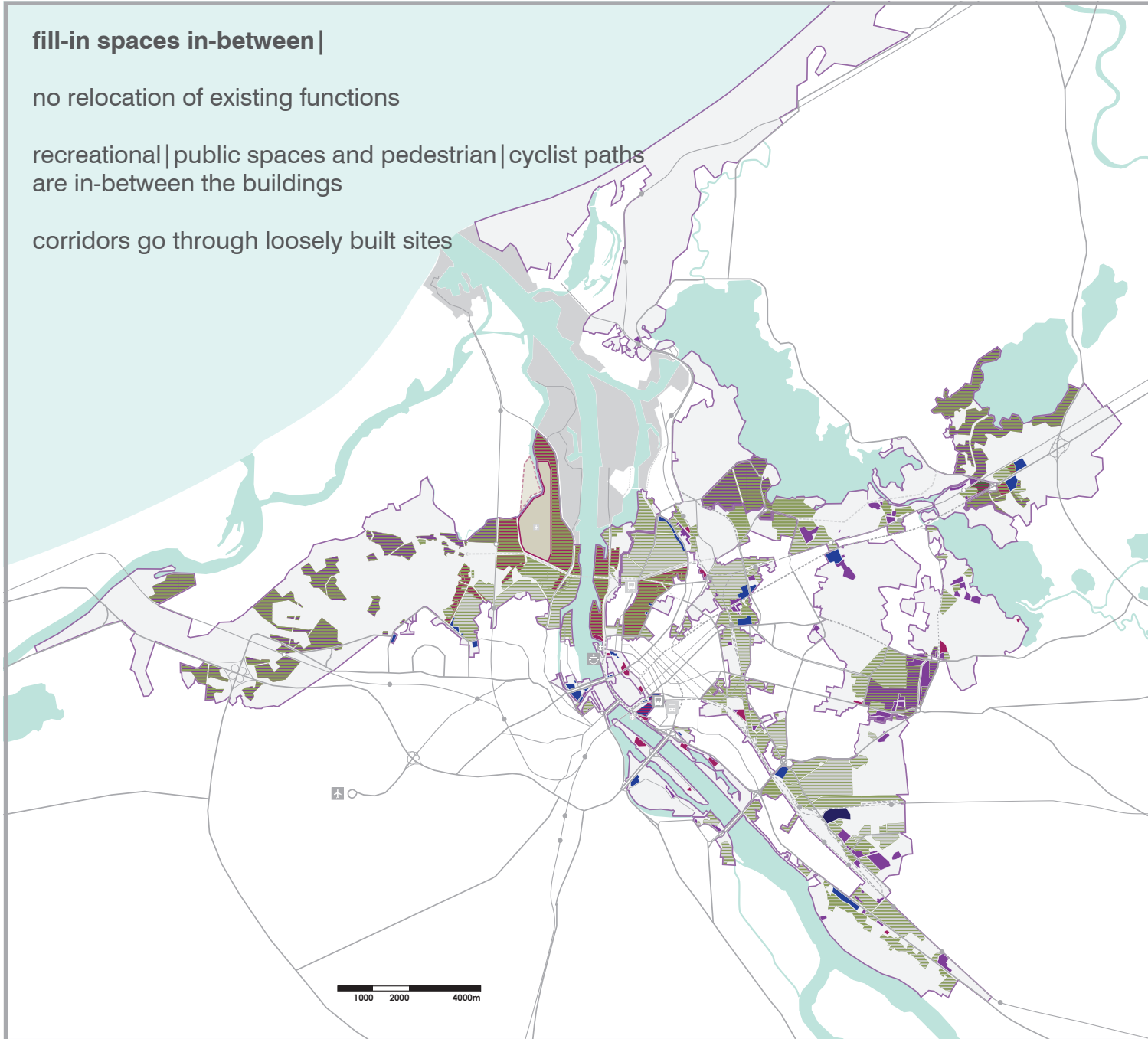
(4) urban basketball, new york

fill-in spaces in-between |

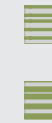
no relocation of existing functions

recreational | public spaces and pedestrian | cyclist paths
are in-between the buildings

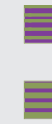
corridors go through loosely built sites



city scale vision fill-in spaces



green industrial sites |
(1) emscher park, ruhr valley



green residential areas |
(2) dockside green, victoria



green mixed use areas |
(3) downtown, portland

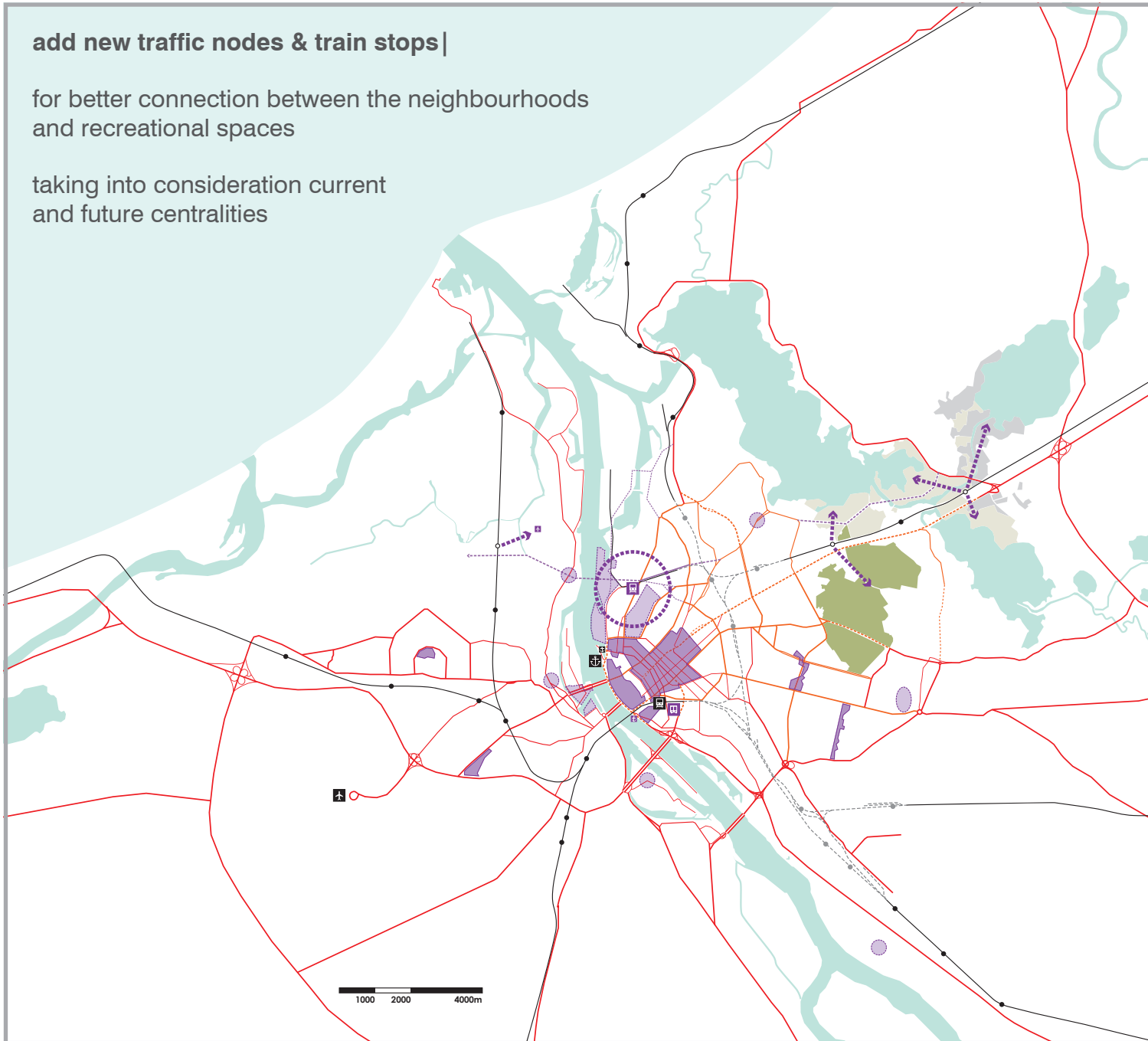


some areas left as they are |
(4) central market, riga

add new traffic nodes & train stops |

for better connection between the neighbourhoods
and recreational spaces

taking into consideration current
and future centralities



city scale vision traffic

existing

new

traffic nodes



train stops



centralities



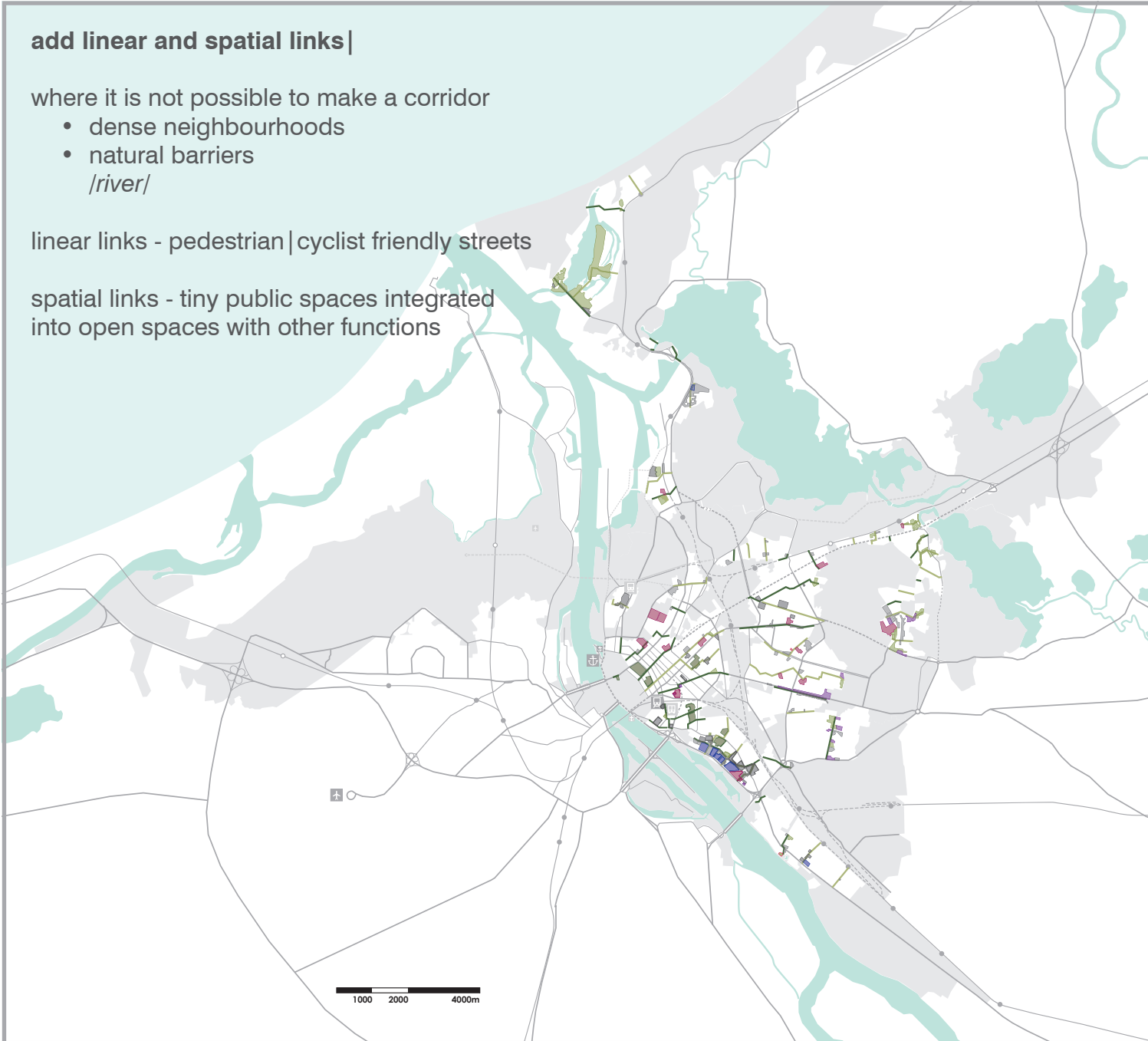
add linear and spatial links |

where it is not possible to make a corridor

- dense neighbourhoods
- natural barriers
/river/

linear links - pedestrian | cyclist friendly streets

spatial links - tiny public spaces integrated into open spaces with other functions

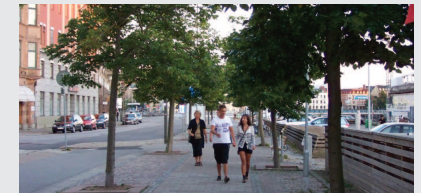


city scale

vision

links

linear links



(1) malmö, sweden

spatial links

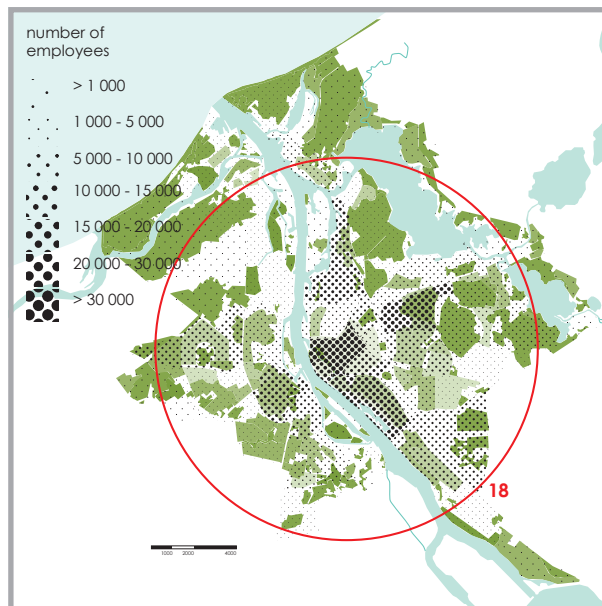
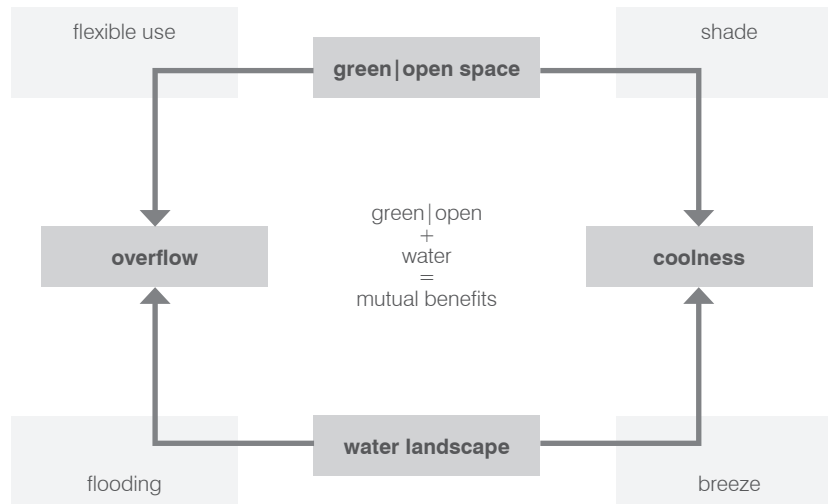


(2) 'parklets', san francisco

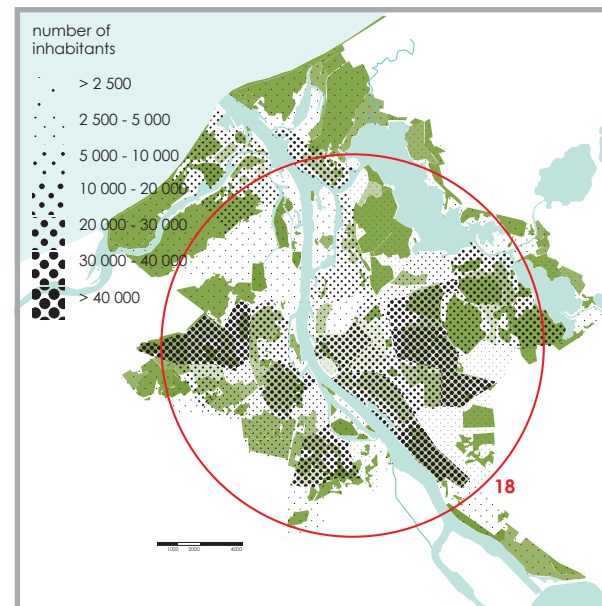
waterfront scale

motivation

why?



number of employees |



number of residents |

waterfront corridor |

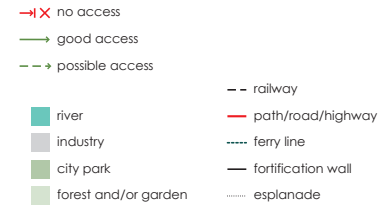
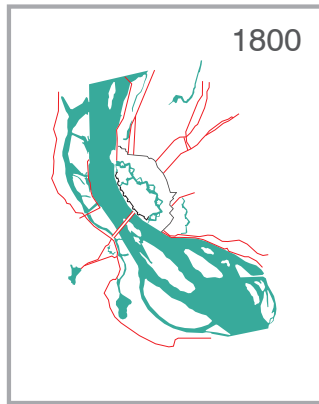
[1] space on the edge of green | blue landscapes /mutual benefits/

[2] connects city centre to neighbourhoods

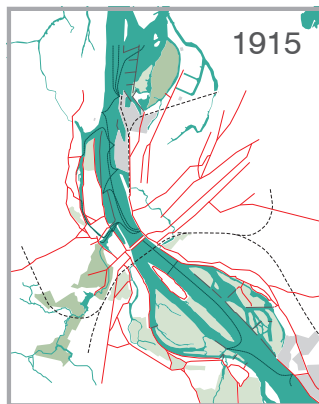
[3] connects neighbourhoods to the riverside

[4] space where most people live and work

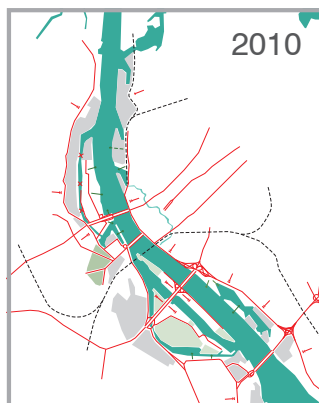
[5] politically easier to develop as a flagship project



(1, 2)



(3, 4, 5)



waterfront scale

historical development

city - river detachment

/used to be integrated with the city > city market + port

car traffic development + bridges > detachment/

until 1860s - defence |

river - source of danger > fortification walls facing the waterfront

from 1860s to 1930s - integration |

important functions at the waterfront

- port
- city market

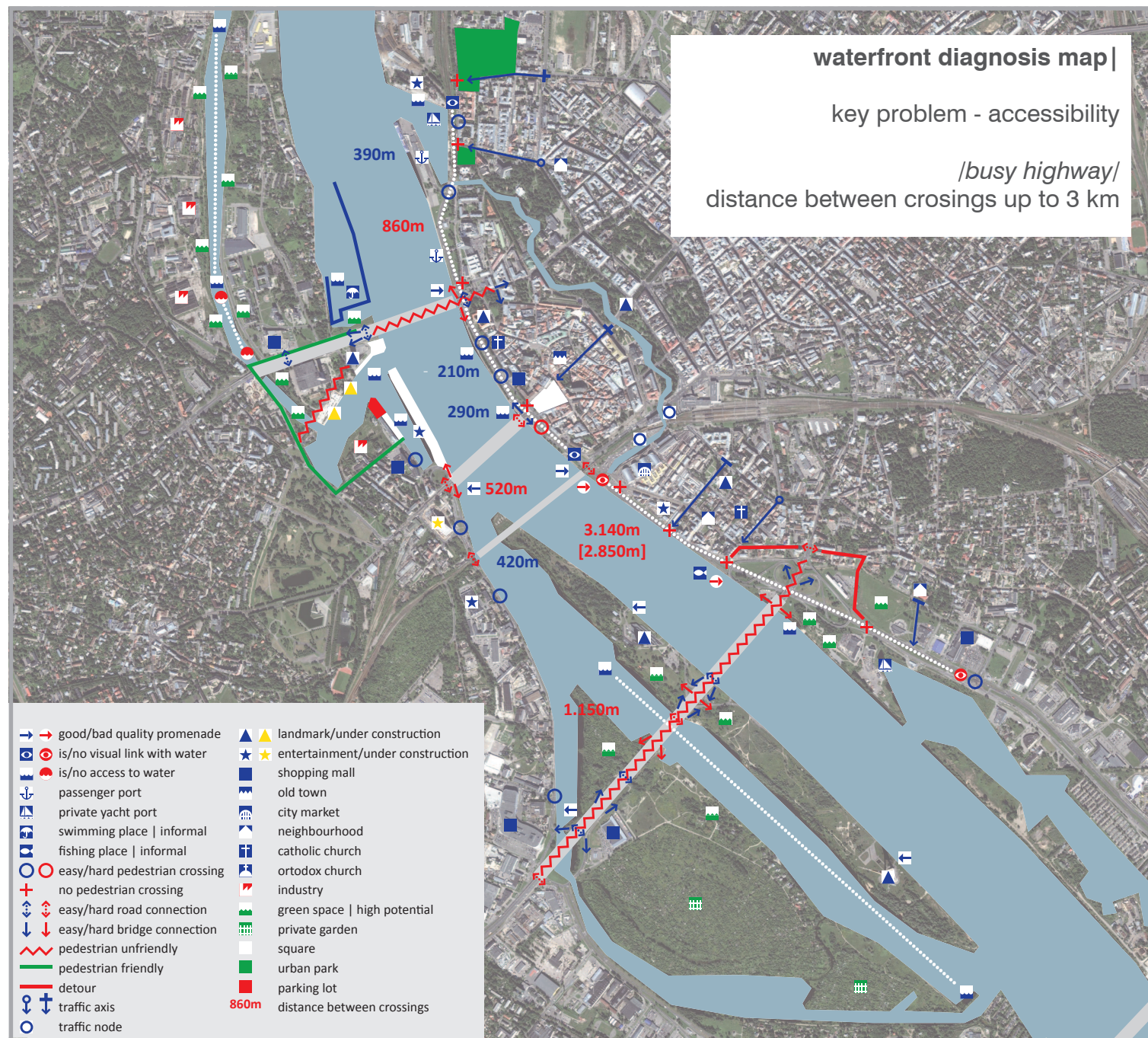
no bridges > lively boat traffic

from 1930s to 1980s - ignorance |

port & city market relocated
new bridges > cars instead of boats

from 1980s - neglect |

bridge + land reclamation > busy highway along the waterfront



waterfront scale

current situation

barriers & quality |

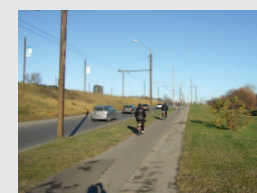
fieldwork results



is | no access to the water



is | no pedestrian crossing



easy | hard get on | off the bridge



easy | hard go under the bridge

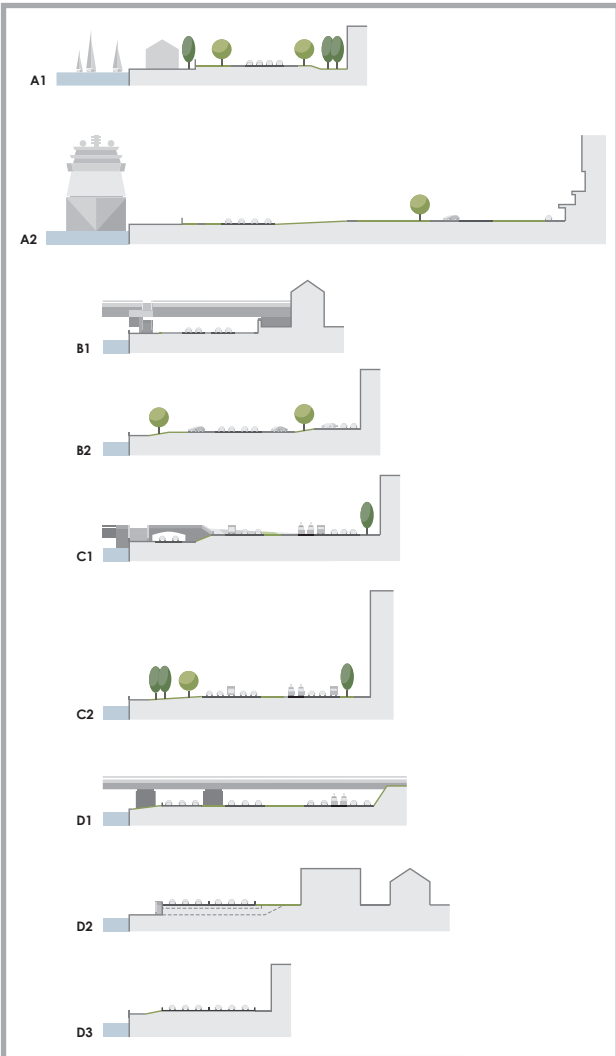


waterfront scale

current situation

barriers & quality |

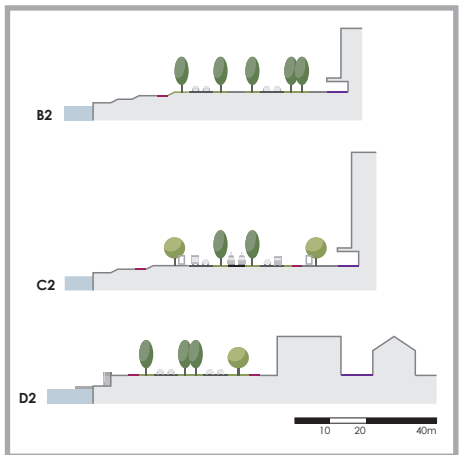
traffic & sequential sections



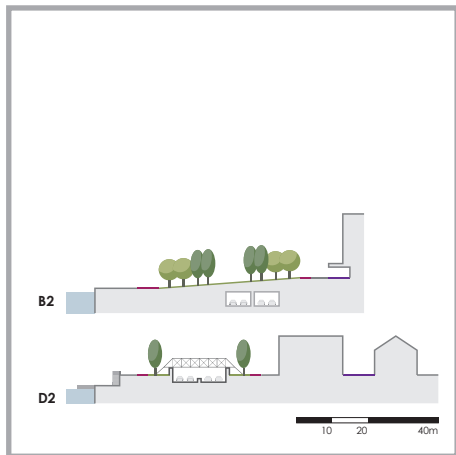
waterfront scale

scenarios

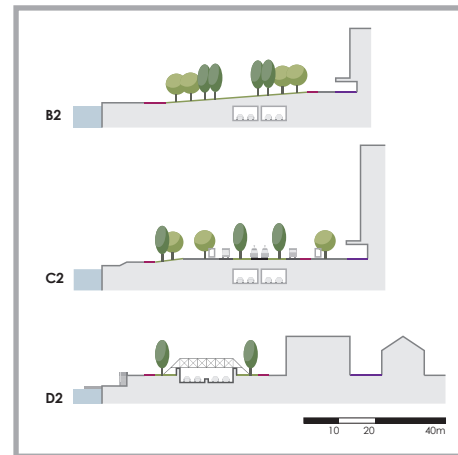
what to do with the highway?



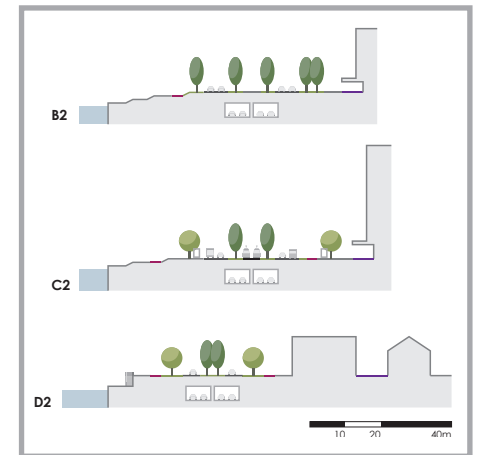
[1] slow traffic road



[2.1] high-speed tunnel



[2.2] high-speed tunnel
public transport on surface



[3] high-speed tunnel
slow traffic road on surface

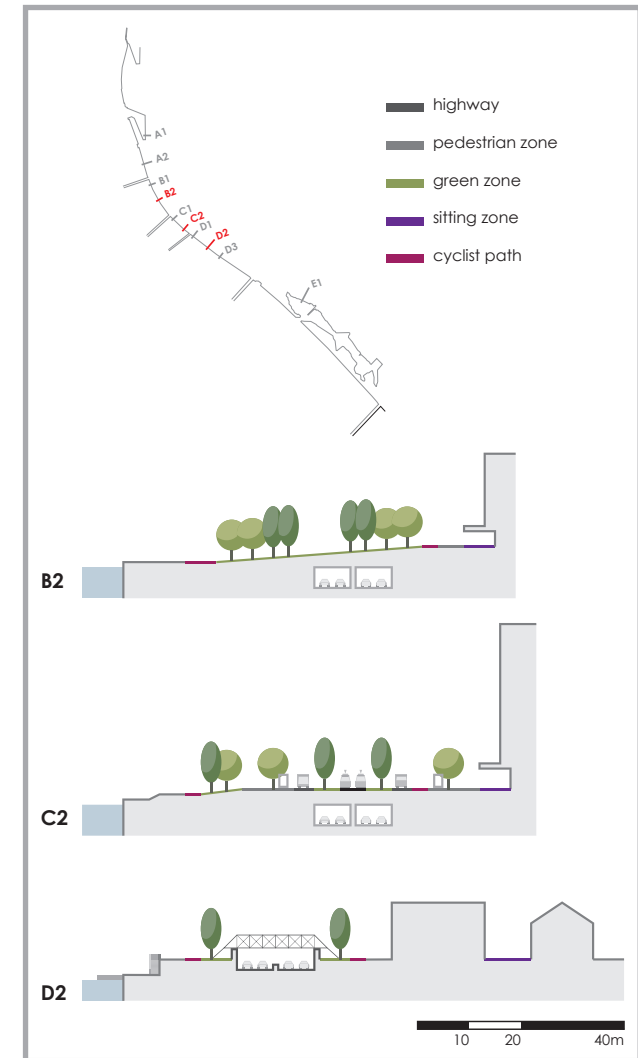


waterfront scale

most efficient

scenario 2.2 |

tunnel, park & public transport





local scale

location choice
why?

transitional space |

- old town
- central train station
- city market

low quality space |

- intersected by traffic > air & noise pollution
- no facilities
- no places to stay

space, with landscaping potential |

- city channel
/interrupted by a shopping mall/
- city channel park
/possible continuation/
- riverside

most difficult location |

- traffic & pedestrian flows
- centralities



(2) city market



A large, historic stone building with multiple gables and windows, featuring a red carpet leading to its entrance. The building has a rustic, aged appearance with light-colored stone or brickwork. A bright red carpet is laid out on the grass, leading from the foreground towards the main entrance of the building. The entrance is a large, arched doorway. To the left of the entrance, there is a small, dark, arched structure, possibly a gate or a small shrine. The building has several windows of different sizes, some with shutters. A staircase is visible on the right side of the building, leading to an upper level. The sky is overcast and grey. The overall scene suggests a formal event or a significant location.

(4) creative quarter



current situation
centralities & flows

- old town
- city market
- central train station
- creative quarter (future)
- city

- public transport stops
- public transport end stops > return loops
- commuter, visitor, worker, tourist flows

pedestrian flows and centralities
are interrupted and separated
by highways



- tram line
- important car traffic routes
- railway
- bridge
- riverside
- built
- important buildings
- park
- open green space
- square
- open space
- elevation
- city canal

waterfront scale

historical reconstruction
growth of barriers



(1) city harbour
1900



(2) railway bridges
1930



(2) 13 january street
1930



(3) 13 january street
1960



local scale

strategy

eliminate the barriers |

park & new connections

phasing |

[1.1] high speed tunnel

[1.2] waterfront promenade

[2.1] relocation of the bus terminal,
the shopping mall & the cinema

[2.2] opening the channel
& closing the park ring

[3.1] attractions -
- water access places, etc.

[3.2] public transport
& pedestrian links

relation to city strategy |

[1] elimination of barriers -
- infrastructure

[2] recreational spaces
with double function

- attraction
- link between other attractions



local scale

design masterplan

relation to place quality spatial components |

create recreational areas
with sport facilities

create public | semi-public spaces

improve public transport network

improve | create
pedestrian | cyclist connections

connect natural | wild places

reuse industrial sites

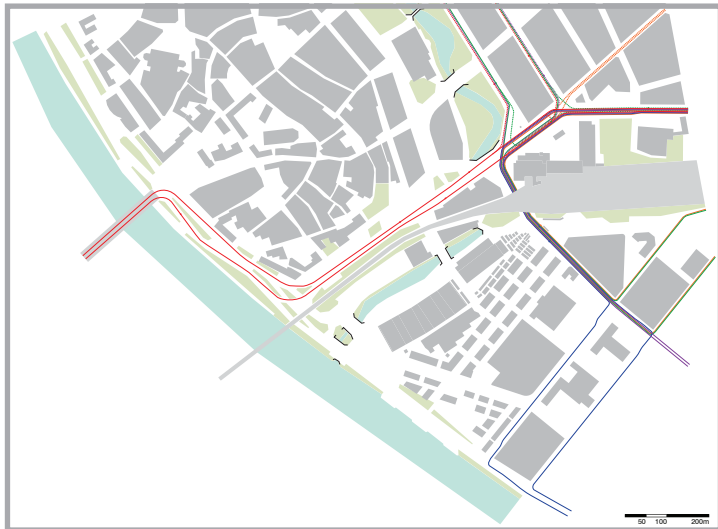
reduce crime figures
/create safe environment/



car traffic | existing



car traffic | proposed



bus traffic | existing



bus traffic | proposed

local scale

design

traffic flows |

car & bus

car traffic |

redirected

car-free zone

bus traffic |

redirected

new stops added

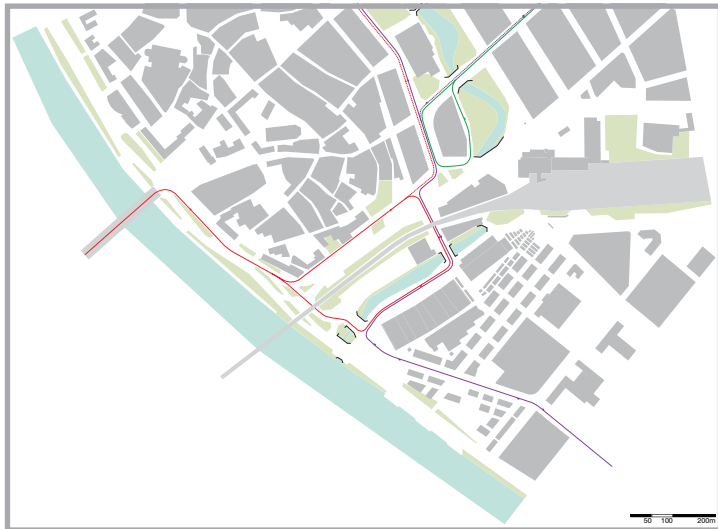
- to facilitate access to city market
- to avoid return loops



trolleybus traffic | existing



trolleybus traffic | proposed



tram traffic | existing



tram traffic | proposed

local scale

design

traffic flows |

trolleybus & tram

/redevelop trolleybus traffic in a similar way/

trolleybus traffic |

redirected

new stops added

- to facilitate access to city market
- to avoid return loops

tram traffic |

significantly redirected

- to cut the area as little as possible
- to 'define' the market area

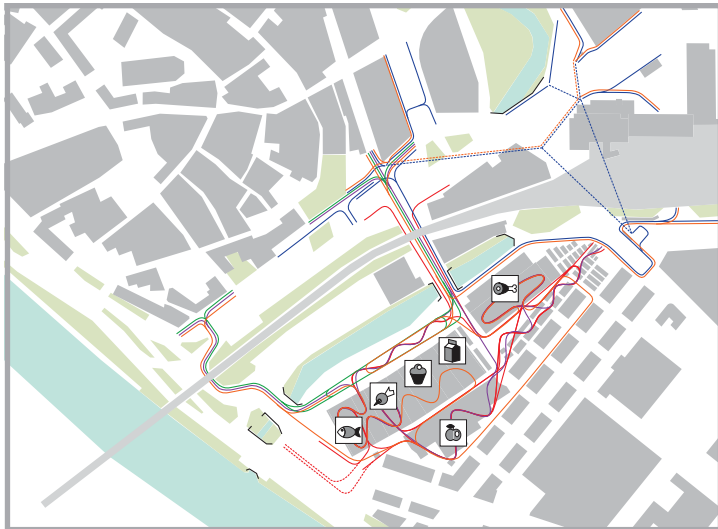
new stops added

- to facilitate access to city market
- to avoid return loops

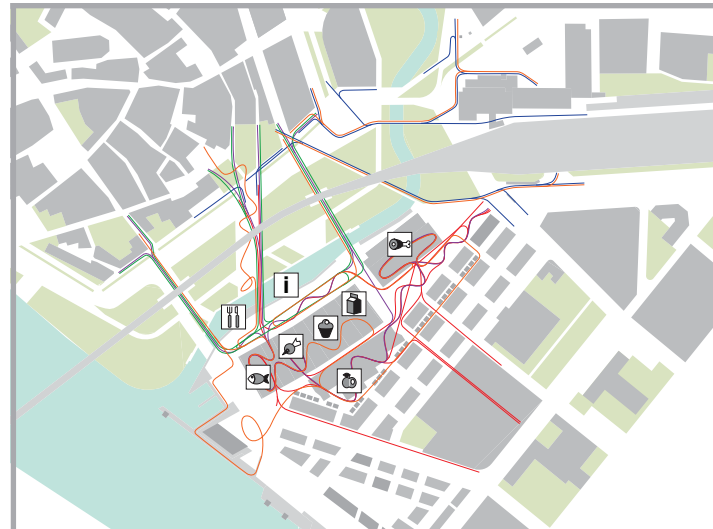
local scale

design

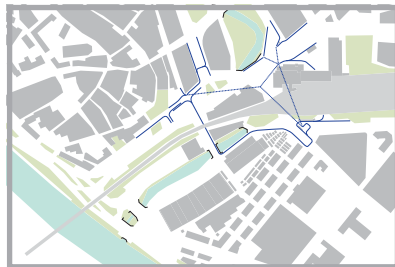
pedestrian flows



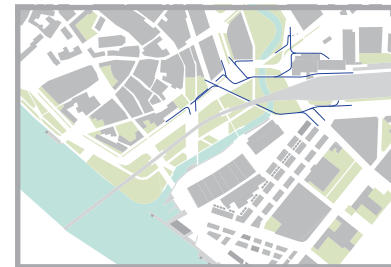
pedestrian flows | existing



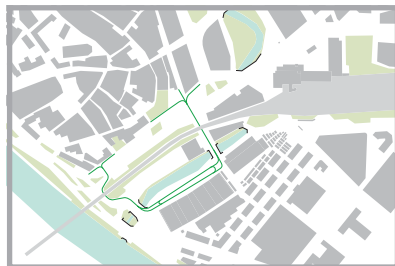
pedestrian flows | proposed



commuters | existing



commuters | proposed



office workers | future *
*if city market develops catering facilities



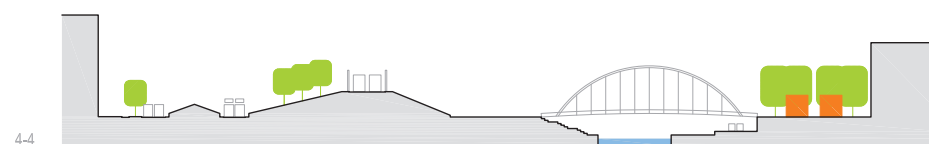
tram traffic | proposed

new bridges - new shortcuts |

compared to existing situation

- pedestrian routes are shorter
- all pedestrians - on the surface
/before, in underground tunnels/
- suitable for people with disabilities
- efficient access to most popular market pavilions

/2 out of 5 groups are shown here/



local scale

design

landscapes |

vegetation & paving character



channel park

(1) city channel park, riga



slope

(2) parc de la marina, viladecans



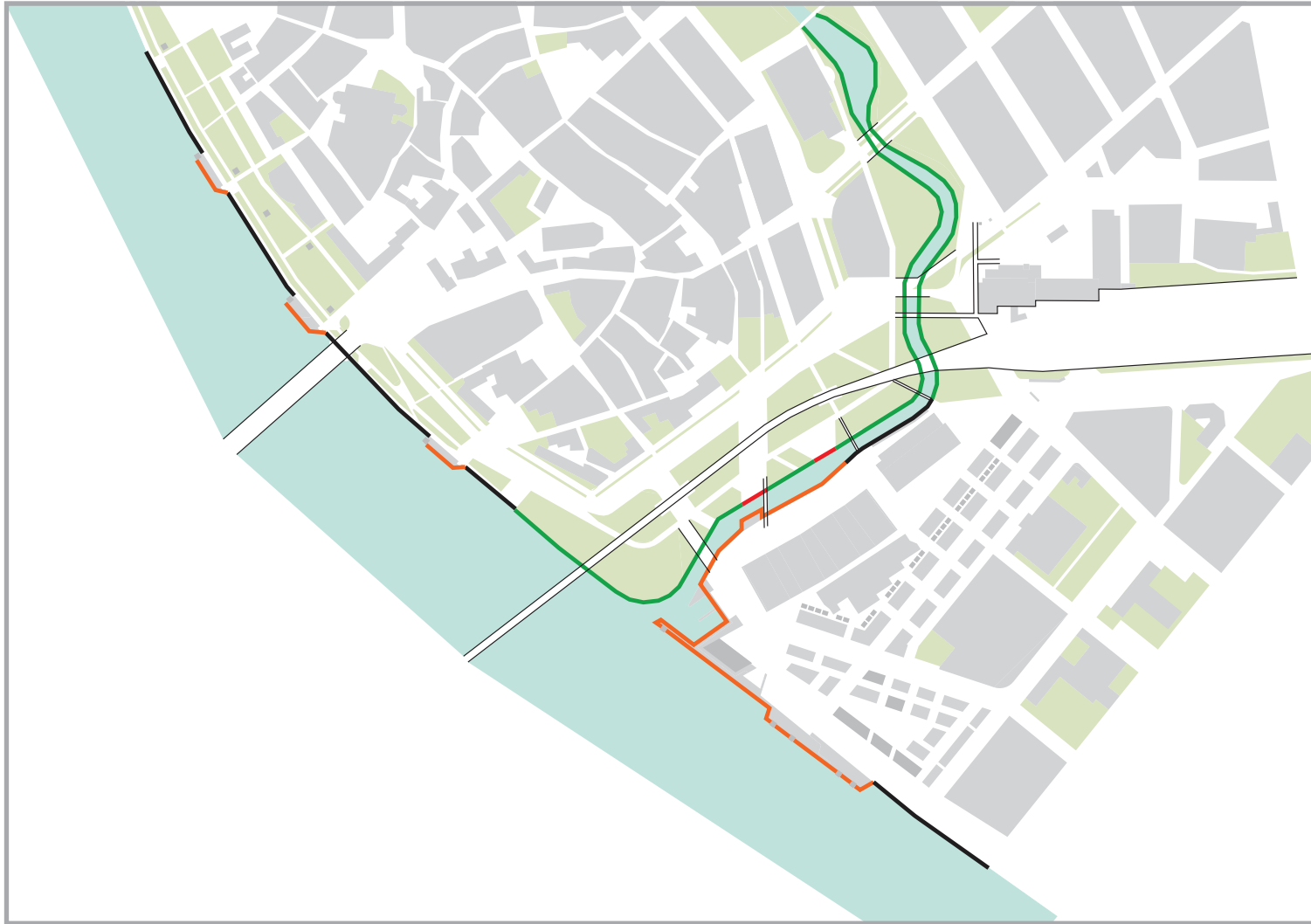
waterfront promenade

(3) battery park, new york



waterfront terraces

hafencity, hamburg



local scale

design

edges |

relationship with the water



high urban

(1) battery park, new york



smooth slope

(2) brooklyn bridge park, new york



terrace

(3) 21st c waterfront park, chattanooga



low urban

(4) kalvebod waves, jds architects

3-3

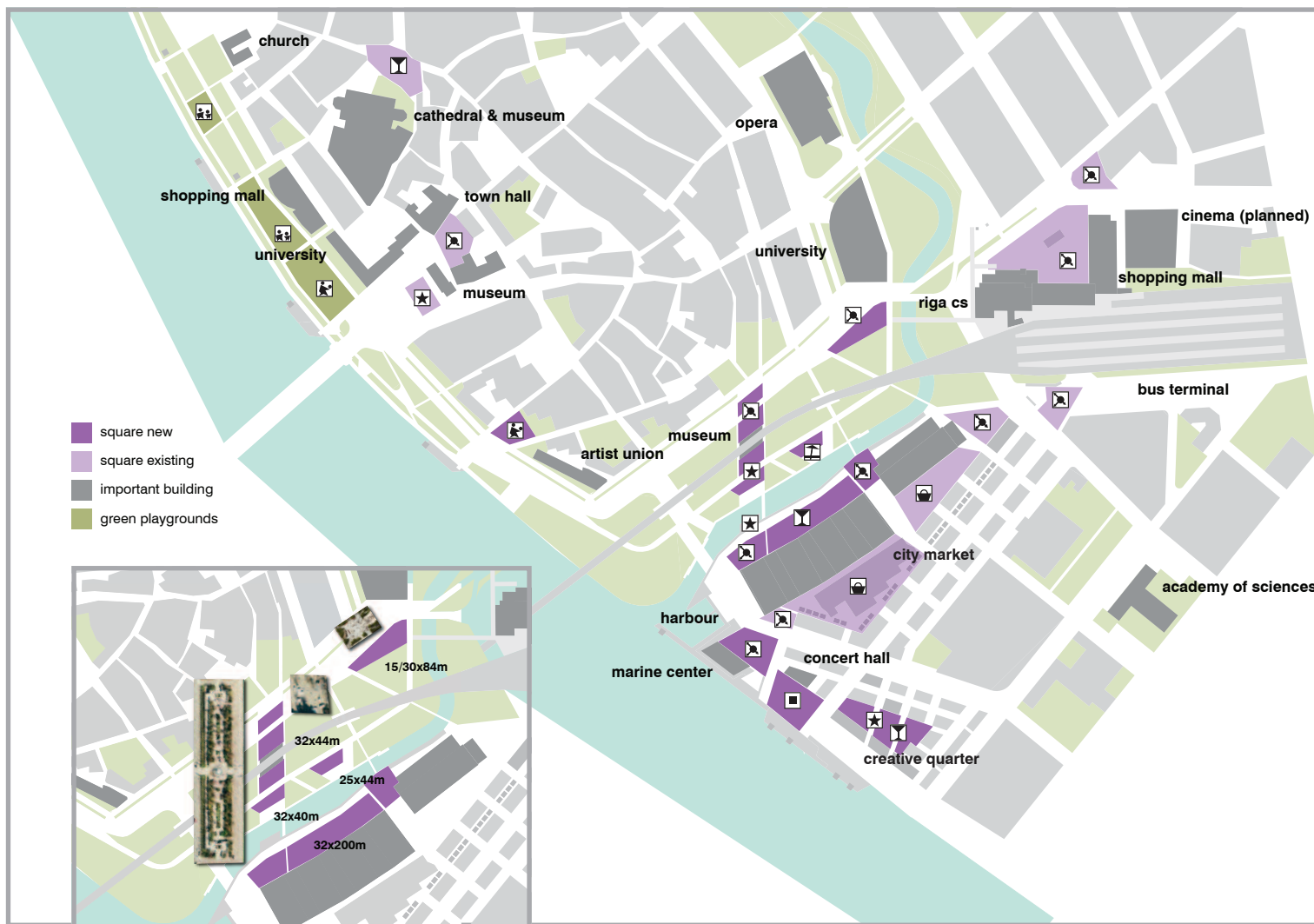


6-6



7-7





size comparison study

to existing successful squares /Copenhagen, Portland/



playing

(1) battery park, new york



mood creating

carlsberg factory patio, copenhagen

local scale

design
squares



through traffic

(2) bailey plaza, ithaca



market

(3) central market, riga



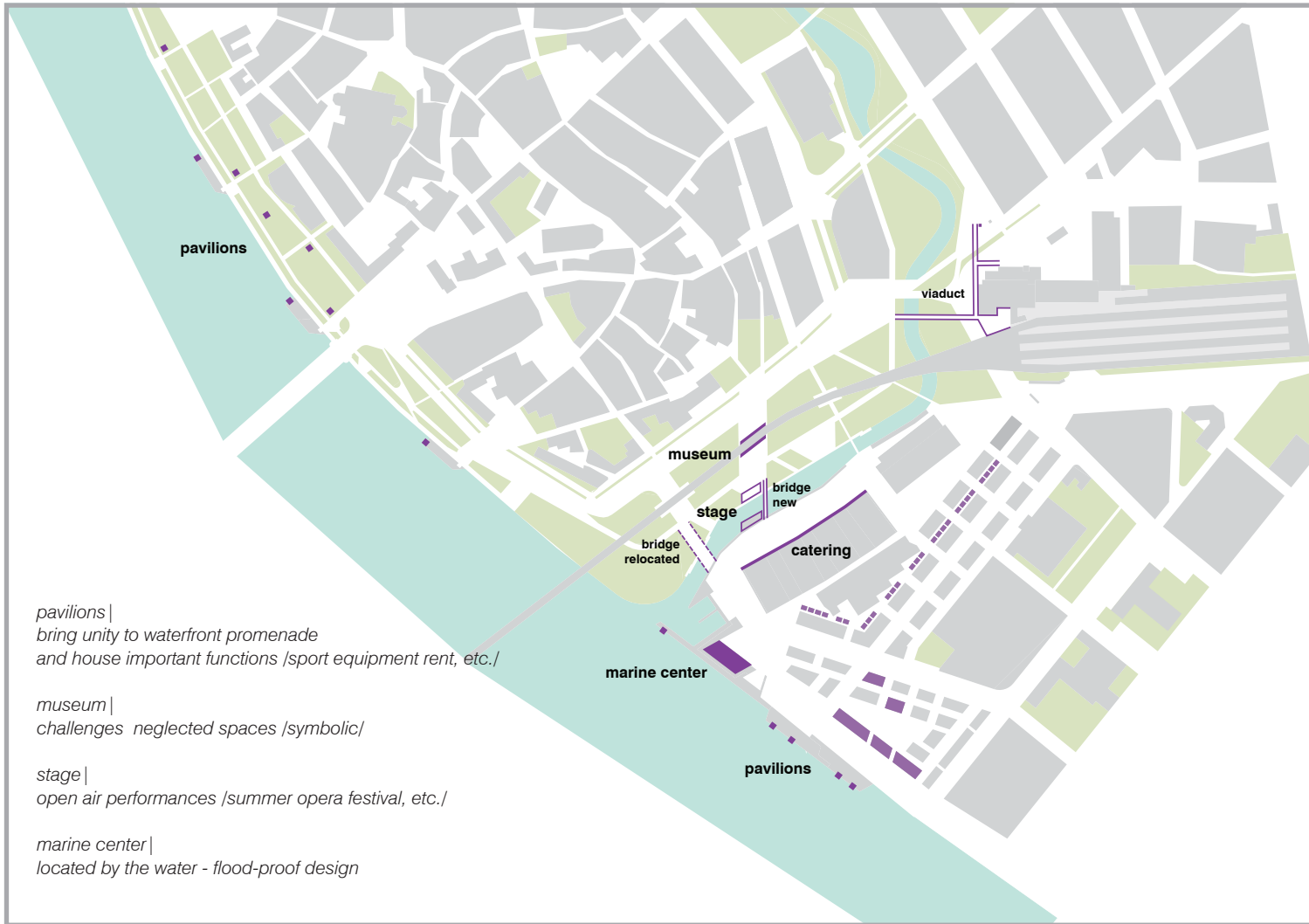
staying

(4) pioneer courthouse square, portland



semi-private

(5) berga bazars, riga



*pavilions |
bring unity to waterfront promenade
and house important functions /sport equipment rent, etc./*

*museum |
challenges neglected spaces /symbolic/*

*stage |
open air performances /summer opera festival, etc./*

*marine center |
located by the water - flood-proof design*



local scale

design

buildings



pavilions
(1) parc la villette, paris



museum
(2) galerie bunker, stephane malka



stage
(3) regent's park open air theatre, london



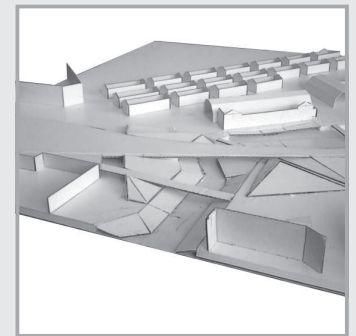
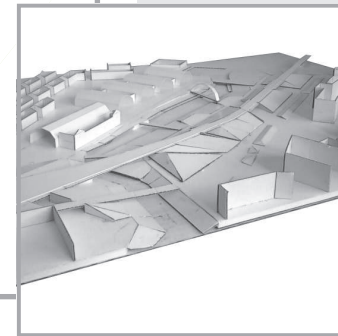
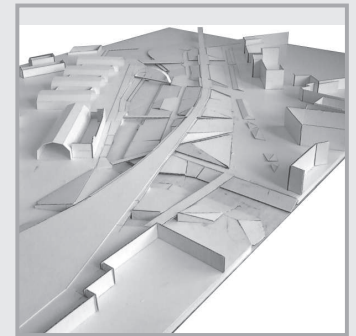
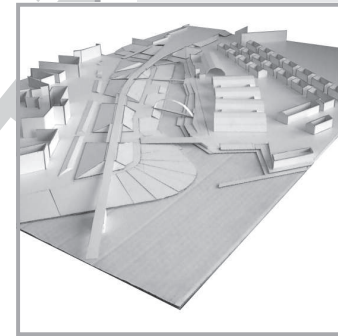
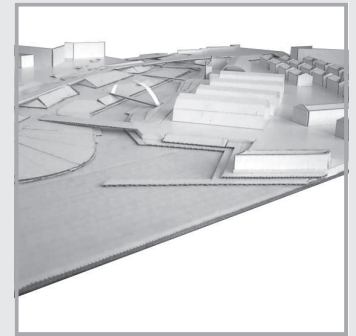
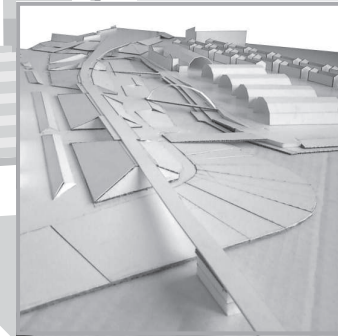
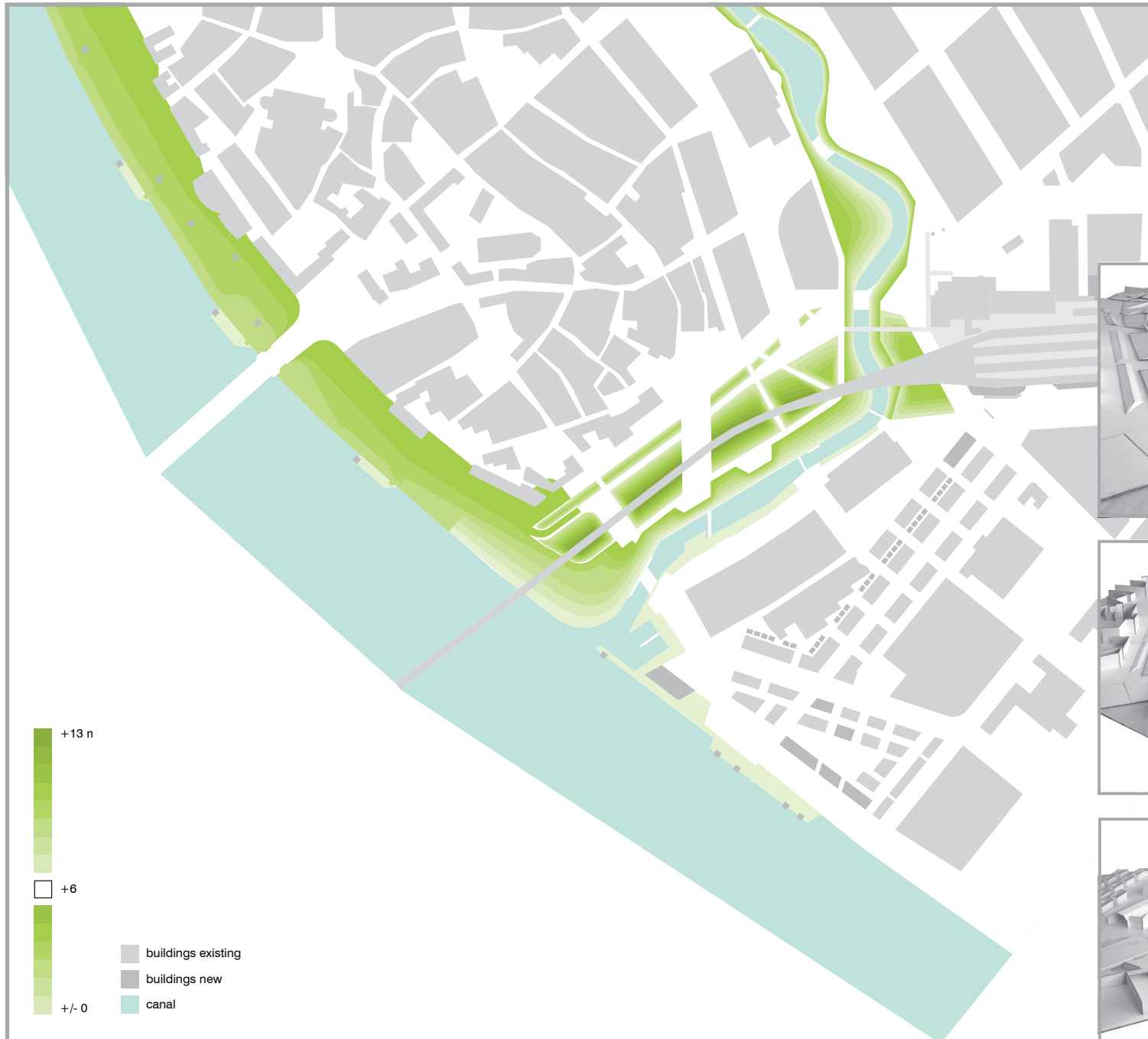
marine center
hafencity, hamburg

local scale

design

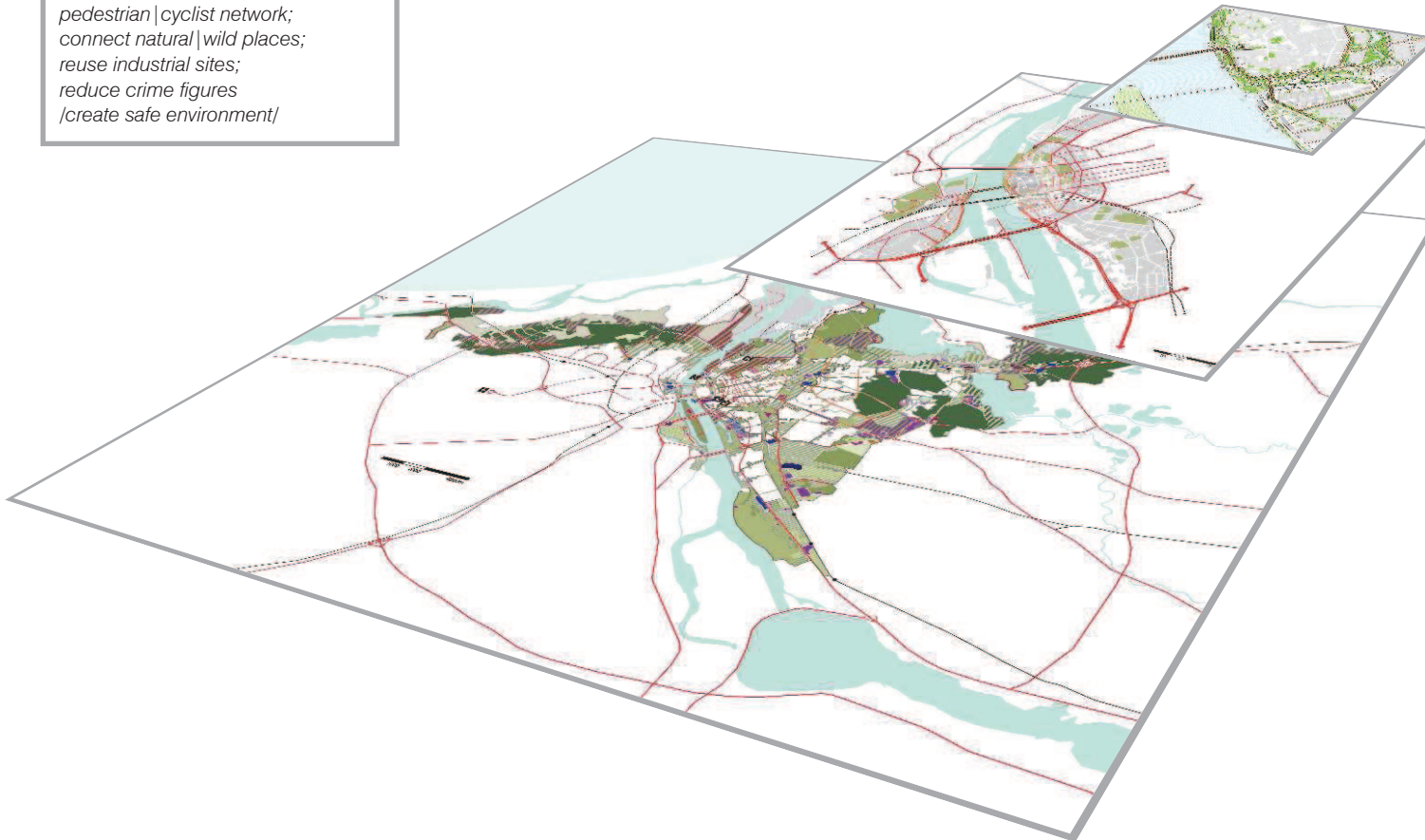
topography |

designed based on existing



Riga - a Green Capital of Europe

create recreational areas
with sport facilities;
create public | semi-public spaces;
improve public transport network;
improve | create
pedestrian | cyclist network;
connect natural | wild places;
reuse industrial sites;
reduce crime figures
/create safe environment/



reflection

contribution

all scales |

city spatial quality improvement

**all scales interconnected
and supplement each other |**

city scale |

network of recreational spaces

every neighbourhood has access
to high quality recreational spaces
of different functional levels

people can move through the city
by bike | on foot

waterfront scale |

accessible & attractive riverside

most popular recreational
and entertainment venue of the city

a 'trademark' of the city

local scale |

/a manifestation of the previous two/
an urban park
which is a recreational space in itself
and a connector between
the centralities

photo sources

p.3

- (1) *Exploring the Baltic Sea Region – On territorial capital and spatial integration*. 2008. Stockholm: Nordregio.
- (2) *Latvijas Ģeografijas Atlants*. 2009. Rīga: Jana Seta.

p.4

- (1) jurnalaphoto.wordpress.com / Gubumakonis
- (2) www.travelnews.lv / Ilze Vanaga (KNPA)

p.5

- (1) *Latvijas Ģeografijas Atlants*. 2009. Rīga: Jana Seta.
- (2) balticreports.com / Arturs Budahs
- (3) *Field Workers* / www.anglobalticnews.co.uk from September 15, 2011

p.7

- (1) en.wikipedia.org / Stephane D'Alu
- (2) *South San Diego Beaches* / www.oceanfront-hotels.net

p.8

- (1) www.panoramio.com / vipe
- (2) lv.wikipedia.org / ScAvanger
- (3) www.panoramio.com / valentin0
- (4) *Hanzas Street* / maps.google.com (street view)

p.9

- (1) *RIGAS DOMES PILSETAS ATTISTIBAS DEPARTAMENTS (RDPAD) 2005a. Rīgas attīstības plāns 2006.-2018. gadam*.
- (2) *Zakusala* / www.spacegroup.no
- (3) *Daudzstāvu dzīvojamās ēkas jaunbūve Rīgā, Lucavsala* / www.arhis.lv
- (4) www.panoramio.com / valentin0
- (5) *New Hanza City* / www.schallerarchitekten.com

p.10

- (1) *Two Stunning Examples of Urban Waterfront Renewal* / www.fastcodesign.com
- (2) *Pier 1 Brooklyn Bridge Park* / www.mvva-inc.com
- (3) *When Factories Close Down* / supersustainable.org
- (4) www.essen-fuer-das-ruhrgebiet.ruhr2010.de / Maier-Jantzen (RVR)

p.14

- (1) lv.wikipedia.org / ScAvanger
- (2) *Venue Information* / www.belgraderowing2012.rs
- (3) *Daily Life In Belgrade: Fun For The Whole Family At Ada Ciganlija* / www.ambassador-serbia.com from May 10, 2010

photo sources

- (4) www.panoramio.com / valentin0
- (5) www.flickr.com / dysturb

p.15

- (1) www.panoramio.com / Renars
- (2) www.panoramio.com / alinco_fan
- (3) Top Five Community Gardens / www.radicalmontreal.com from June 1, 2011
- (4) www.urbancincy.com / Randy A. Simes

p.16

- (1) www.flickr.com / dysturb
- (2) Sustainability / Ecology / www.docksidegreen.com
- (3) Portland MAX Downtown / light-rail-big.blogspot.nl from June 20, 2009
- (4) www.panoramio.com / Davis Klavins

p.18

- (1) A Look at Cycling in Malmo, Sweden / walkeaglerock.wordpress.com from October 8, 2010
- (2) sfpavementtoparks.sfplanning.org

p.20

- (1) MUNSTER S. 1575. Cosmographia Universalis.
- (2) www.letonika.lv / ©Tilde, 1998 - 2012
- (3) www.rigasvesture.lv
- (4) www.russkije.lv
- (5) www.zudusilatvija.lv

p.25

maps.google.com (satellite view)

p.26

- (1) lv.wikipedia.org / Digital 1
- (2) www.panoramio.com / Davis Klavins
- (3) lv.wikipedia.org / Janis Vilnins
- (4) spikeri.lv

p.27

- (1) Par Uzņemumu / Vesture / www.ruterminal.lv
- (2) www.rigasvesture.lv
- (3) 13. Janvara iela sesdesmitajos gados / www.kambaris.lv from June 11, 2012

photo sources | references

p.33

www.panoramio.com / Svenne102

Parc de la Marina, Viladecans, Barcelona / www.battleiroig.com

Battery Park – Park Of Dreams Million / worldislandparadise.com

p.34

en.wikipedia.org / Gryffindor

Pier 1 Brooklyn Bridge Park / www.mvvainc.com

Chattanooga 21st Century Waterfront Park, Chattanooga, Tennessee / www.hargreaves.com

Kalvebod Waves / jdsa.eu

p.35

Project: 90 Days / Urban Volleyball / doncrossland.com from July 31, 2010

Bailey Plaza / www.mvvainc.com

Piektdien, 22.junija Rīga, Doma laukuma, tradicionālais Zāļu tirgus / epadomi.lv from June 18, 2012

North America's Top 12 Public Squares / www.pps.org

Bērga bazārs / www.liveriga.com

p.36

www.flickr.com / tsaaby (Tina Saaby)

Bunker Gallerie / www.stephanemalka.com

openairtheatre.org,

Staro Rīga 2010 / www.staro.lv

BROWN, J. & MECZYNSKI, M. 2009. 'Complexcities': Locational choices of creative knowledge workers. *Built Environment*, 35, 238-252.

HAZANS, M. 2011. Kas sodien dzīvo Latvijā? Reālā demogrāfiskā situācija skersgriezumā. LU Ekonomikas un vadības fakultāte.

KRISJANE, Z. & BAULS, A. 2011. Latvijas iedzīvotāju starpvalstu mobilitāte pēc Eiropas Savienības paplašināšanas. *Latvijas Zinātņu Akadēmijas Vestis*, 65, 71-85.

LORENZEN, M. 2010. Knowledge city models: lessons from a study of the Danish creative class. *The 3rd Knowledge Cities world summit: from theory to practice*.

TRIP, J. J. 2007. Assessing Quality of Place: a comparative analysis of Amsterdam and Rotterdam. *Journal of Urban Affairs*, 29, 501-515.