

# Lost in the City



Searching for urban vitality in city centre of Kaunas

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COMPLEX CITIES

P5 PRESENTATION

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# Lost in the City

An aerial photograph of Kaunas, Lithuania, in winter. The city is densely packed with buildings, and the Neris river winds through the center. The ground is covered in snow, and the sky is a pale, hazy blue. The city center is the focal point, with a mix of old and new architecture.

Searching for urban vitality in city centre of Kaunas

## Keywords

city centre

public space

urban life

street vitality

shifted centralities

infrastructures

public transport

Eastern Europe

meeting place

urban society

urban structures

transition economies

market oriented economy

commoditization of land

How to reuse public spaces as a tool to recreate vital city centre of Kaunas

which is used by a new capitalist society that emerged after the fall of USSR?



# Content

READING THE CITY

CONSIDERATIONS

STRATEGY

STATION AREA

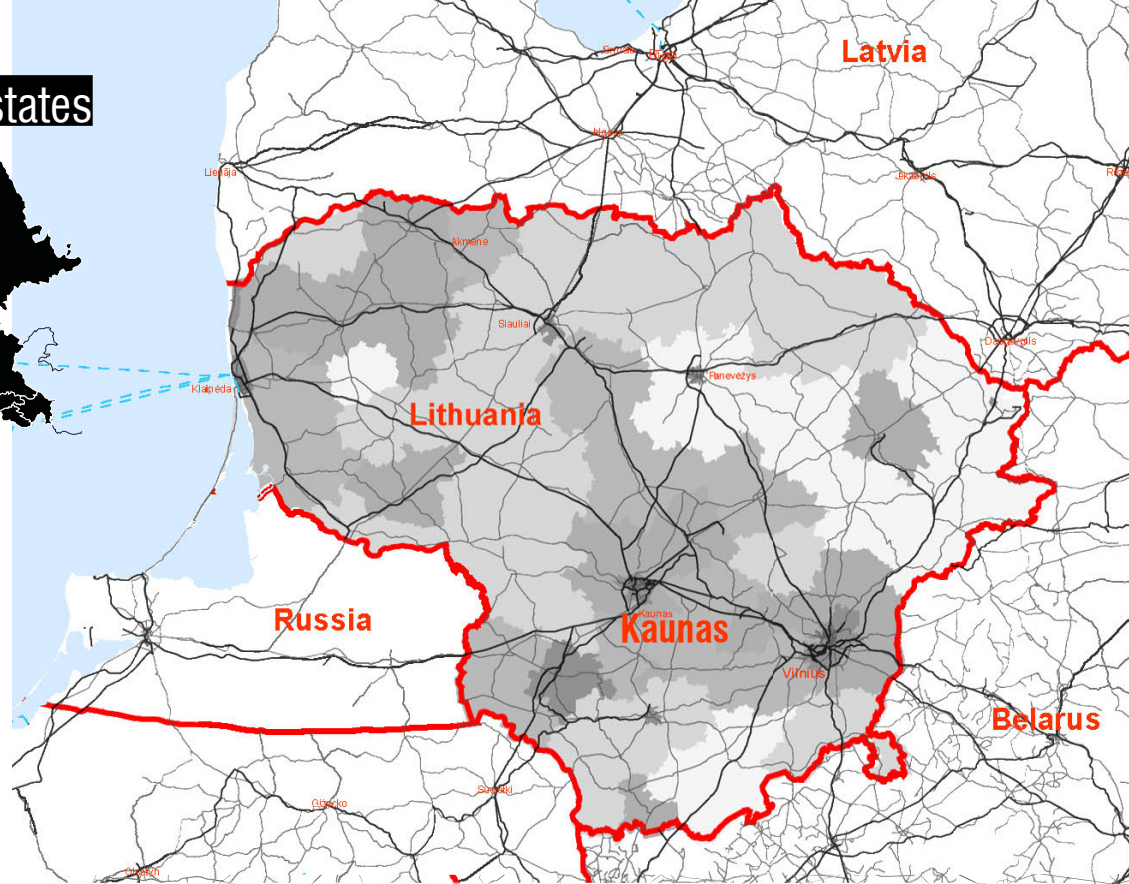
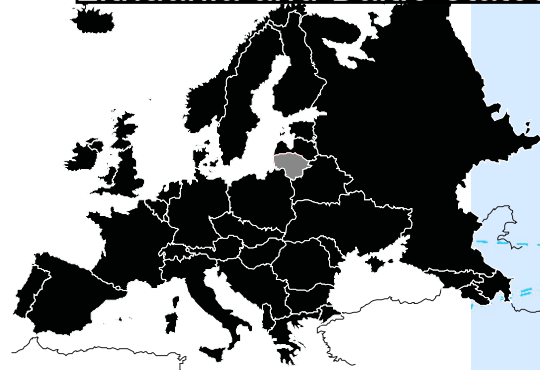
EVALUATION



# INTRODUCTION

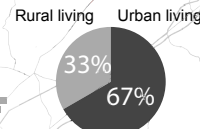
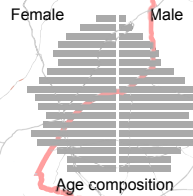
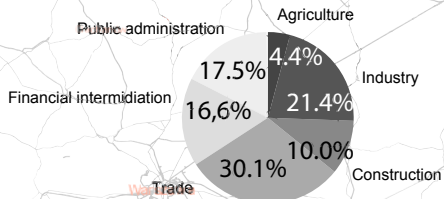


# Lithuania and Baltic states

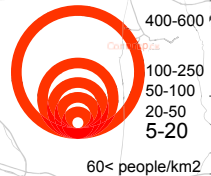


## Lithuania facts

Population 3,349,872  
 Area 65,200 km<sup>2</sup>  
 Density 52/km<sup>2</sup>

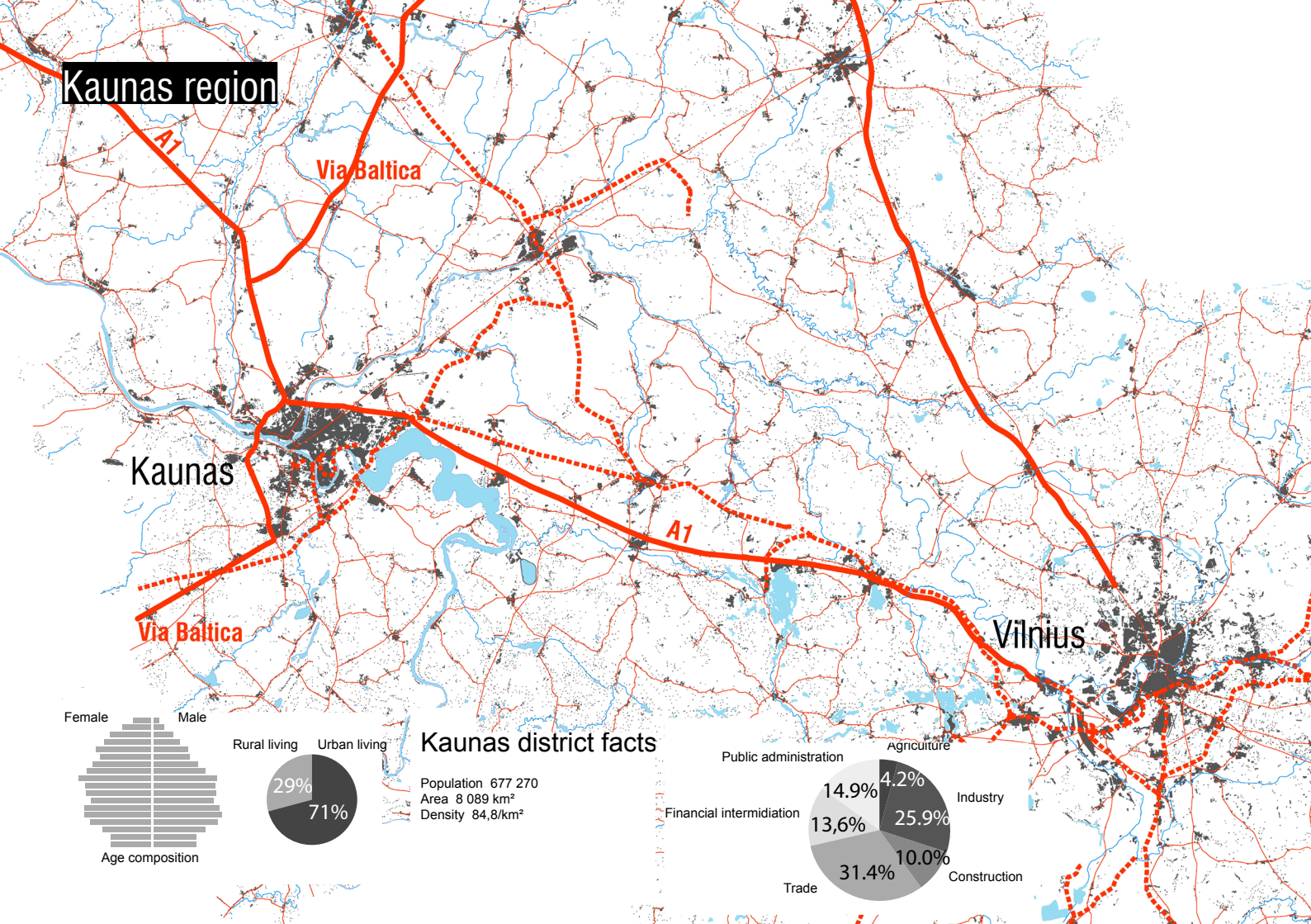


Population density in municipalities of Lithuania  
 >20 people/km<sup>2</sup>



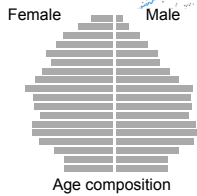


# Kaunas region

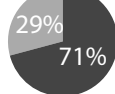


Kaunas

Vilnius

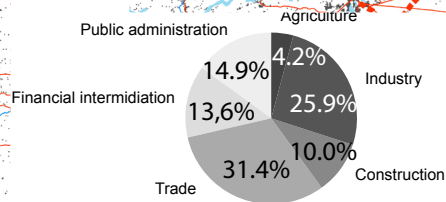


Rural living Urban living



## Kaunas district facts

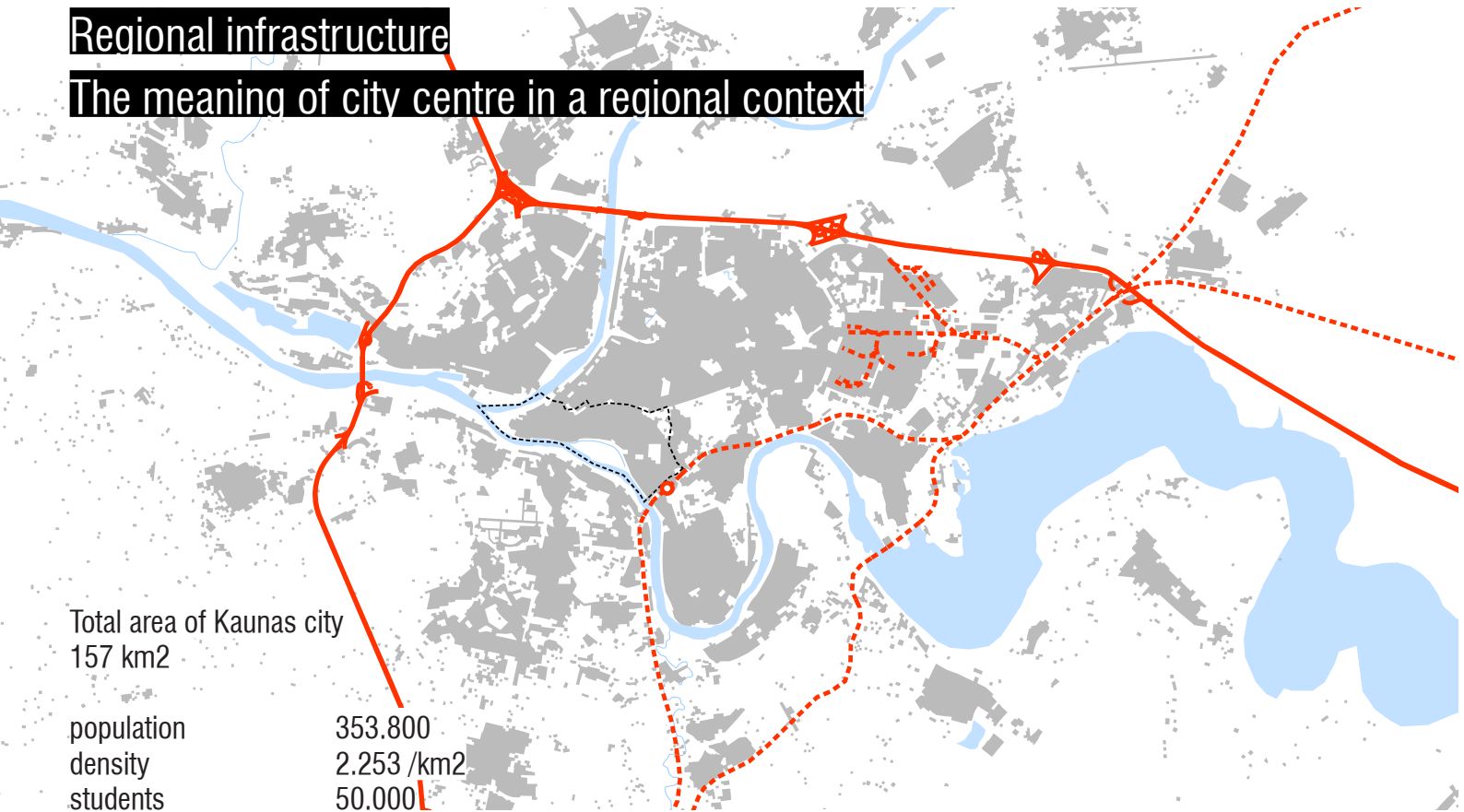
Population 677 270  
Area 8 089 km<sup>2</sup>  
Density 84,8/km<sup>2</sup>





## Regional infrastructure

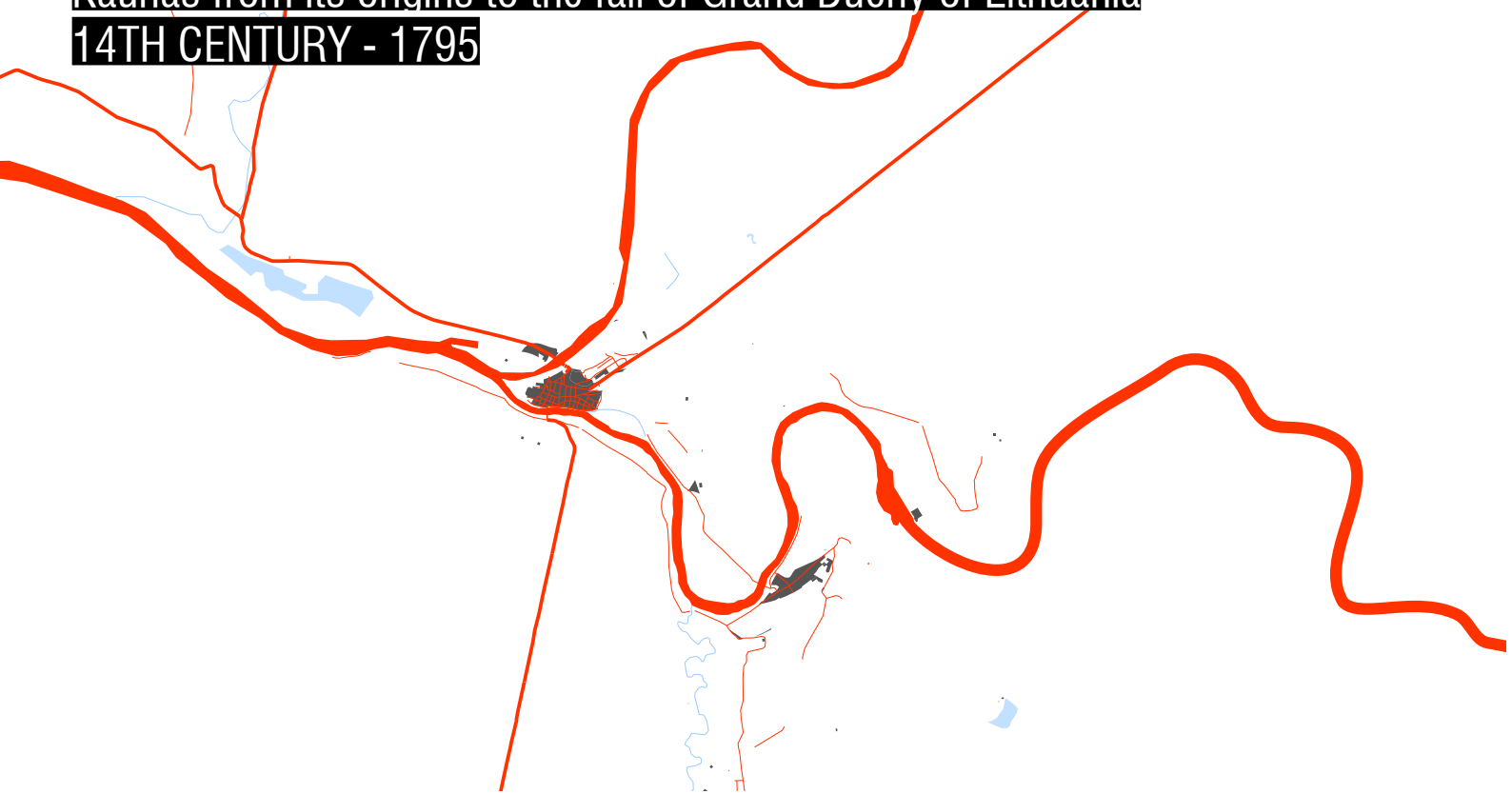
## The meaning of city centre in a regional context



READING THE CITY



**Kaunas from its origins to the fall of Grand Duchy of Lithuania**  
**14TH CENTURY - 1795**







Under the rule of Tsarist Russia  
1795 - 1915



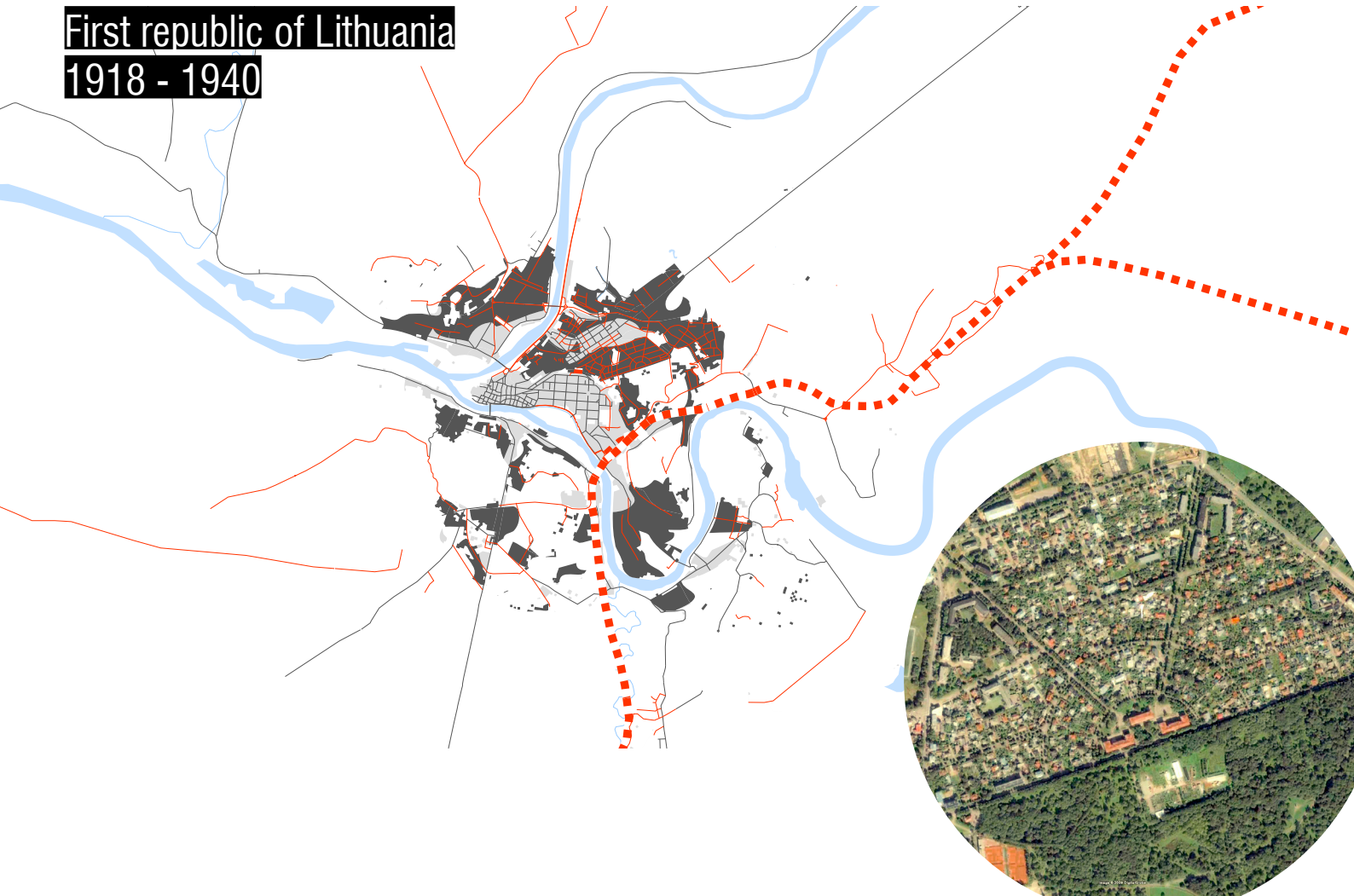
КОВНА — KOWNO, Николаевский проспект. Prospekt Mikołajewski



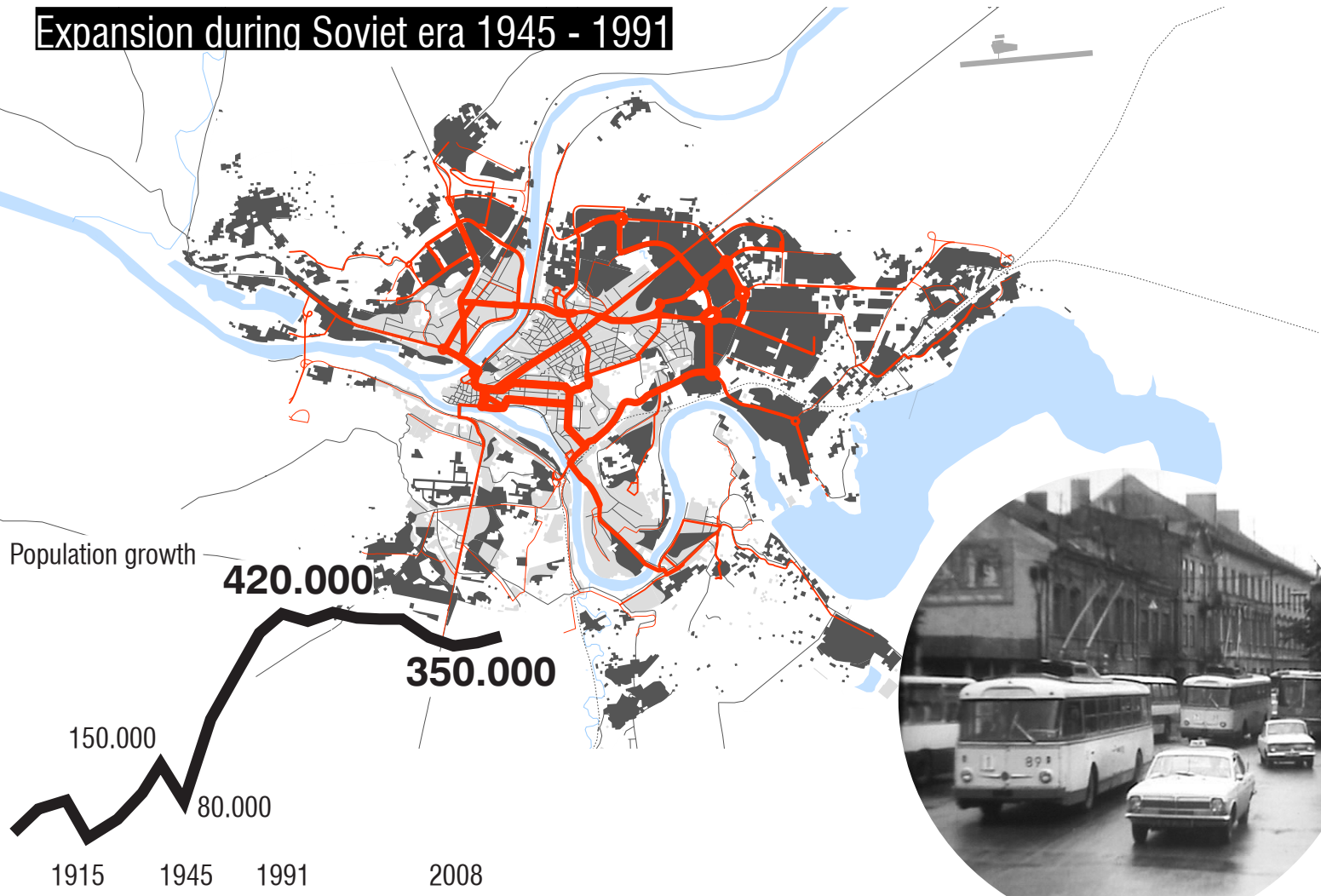




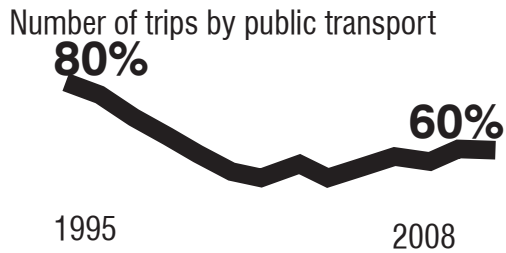
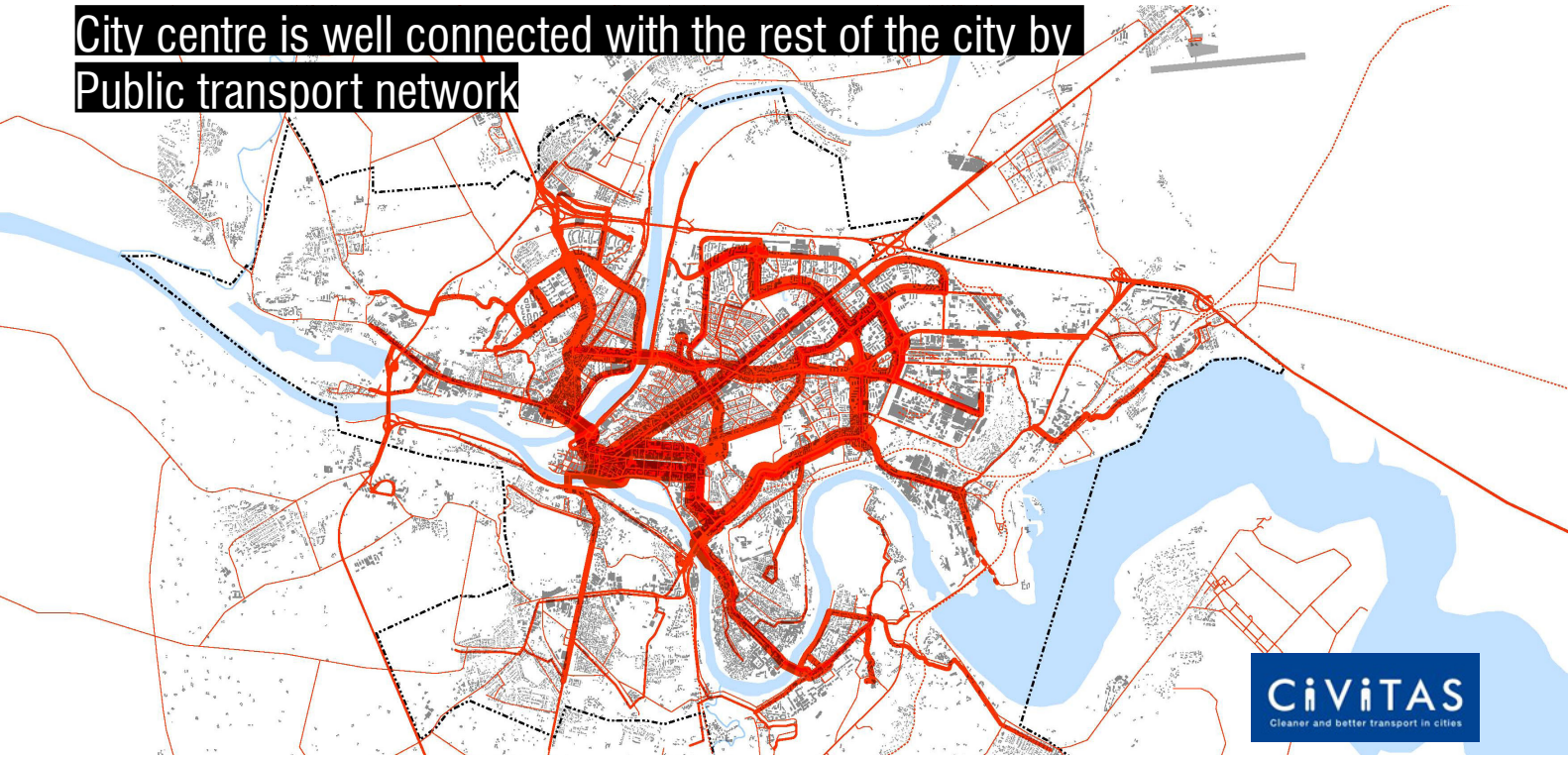
First republic of Lithuania  
1918 - 1940



# Expansion during Soviet era 1945 - 1991



# City centre is well connected with the rest of the city by Public transport network



Trolleybus



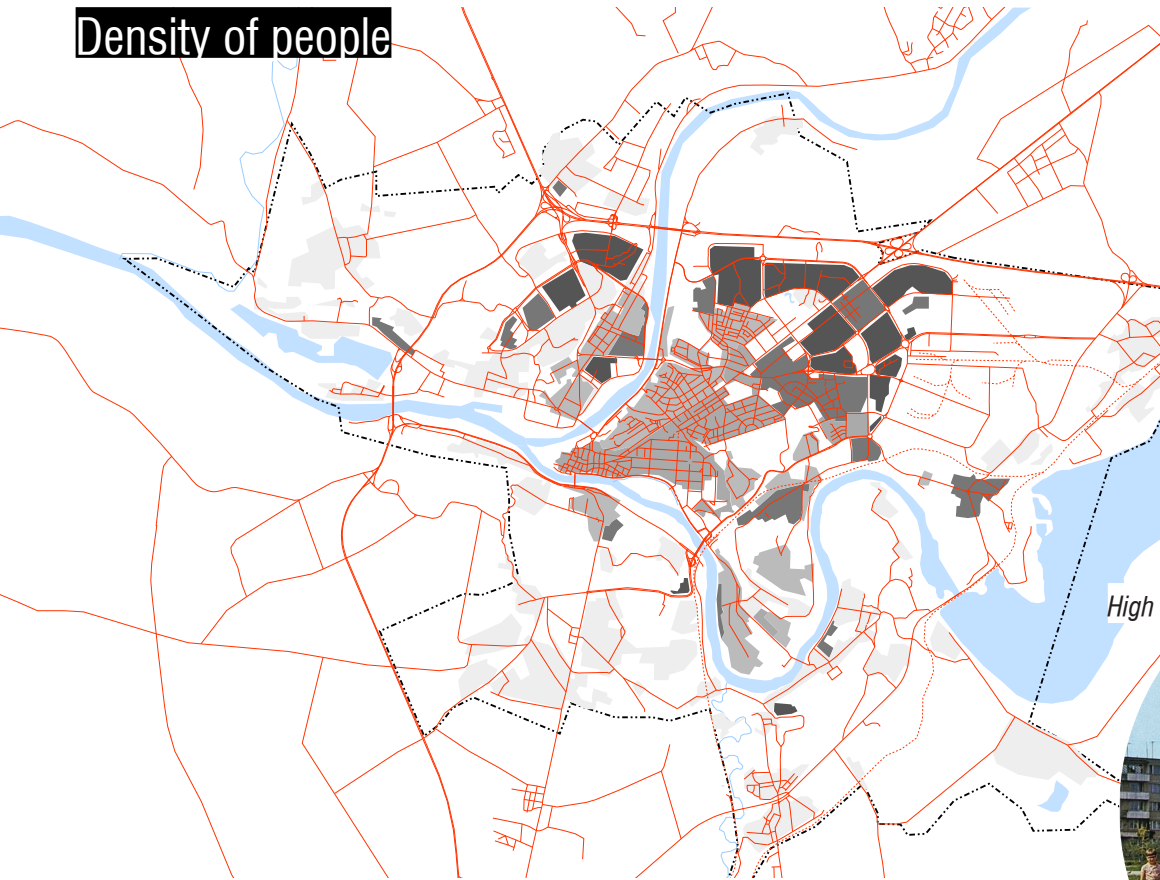
Bus



Minibus



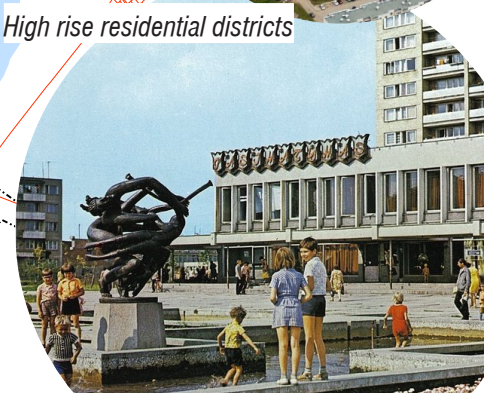
# Density of people



*Big open green spaces*

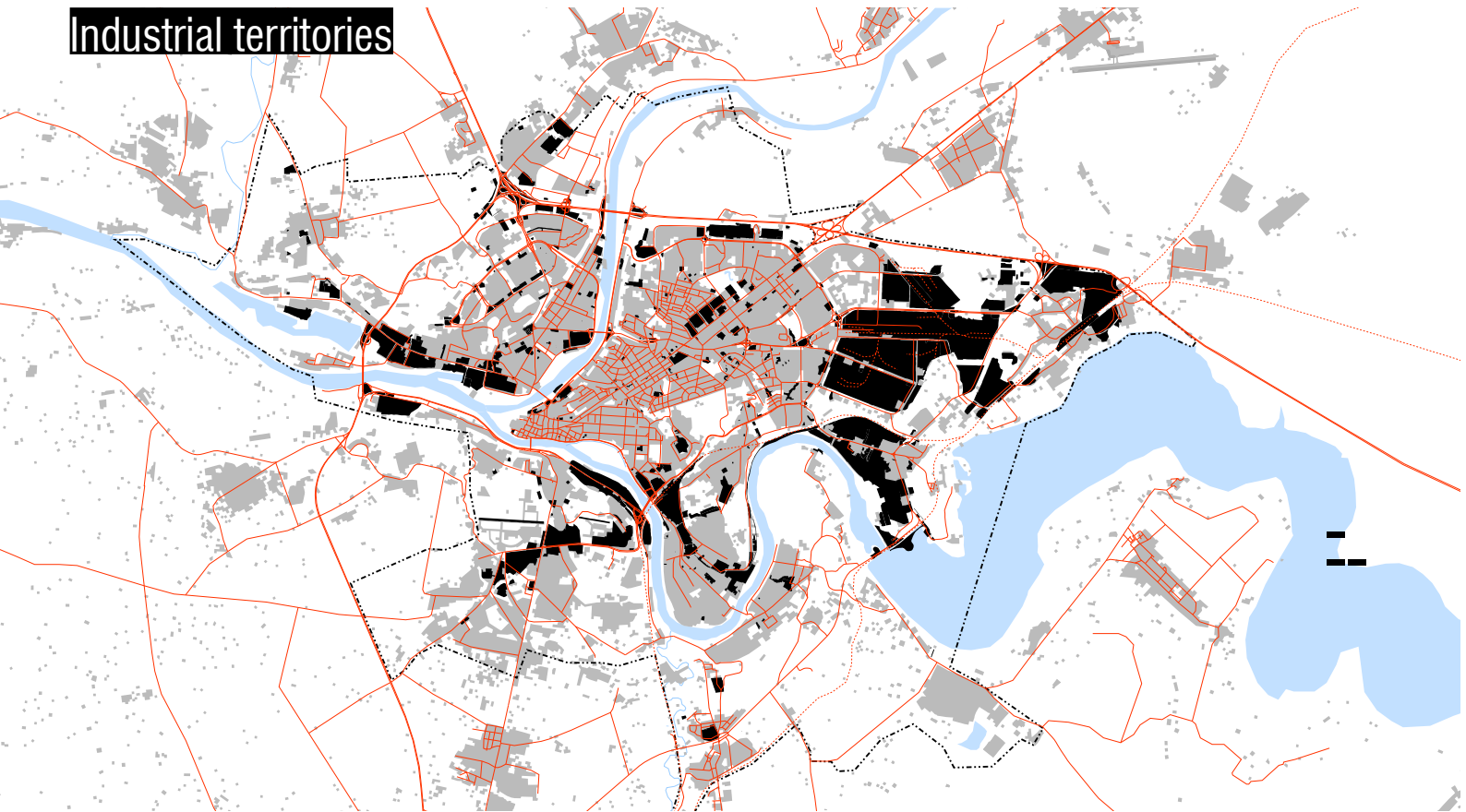


*High rise residential districts*



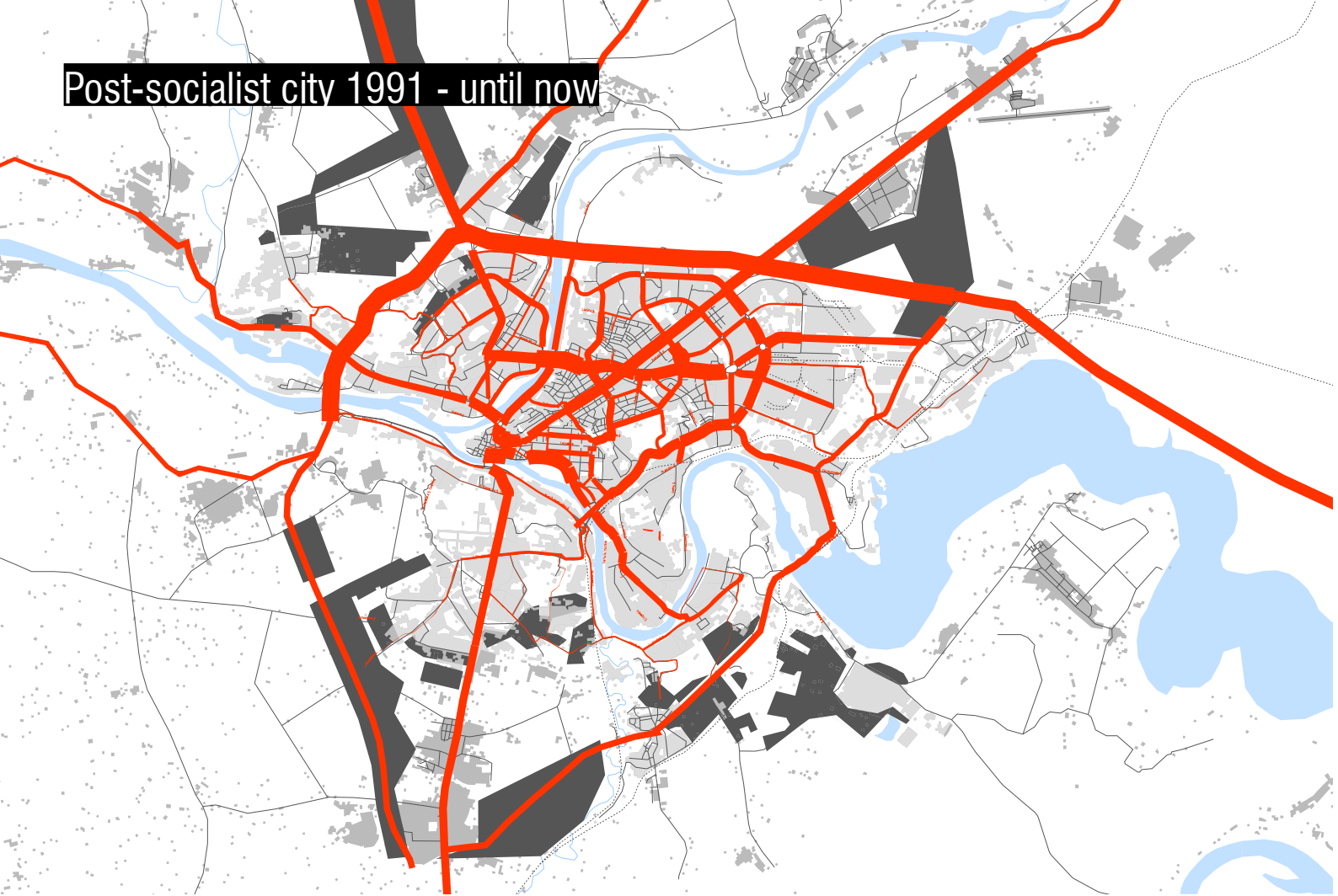
*Active public space in neighborhood centre*

# Industrial territories



26% of economic sector

Post-socialist city 1991 - until now





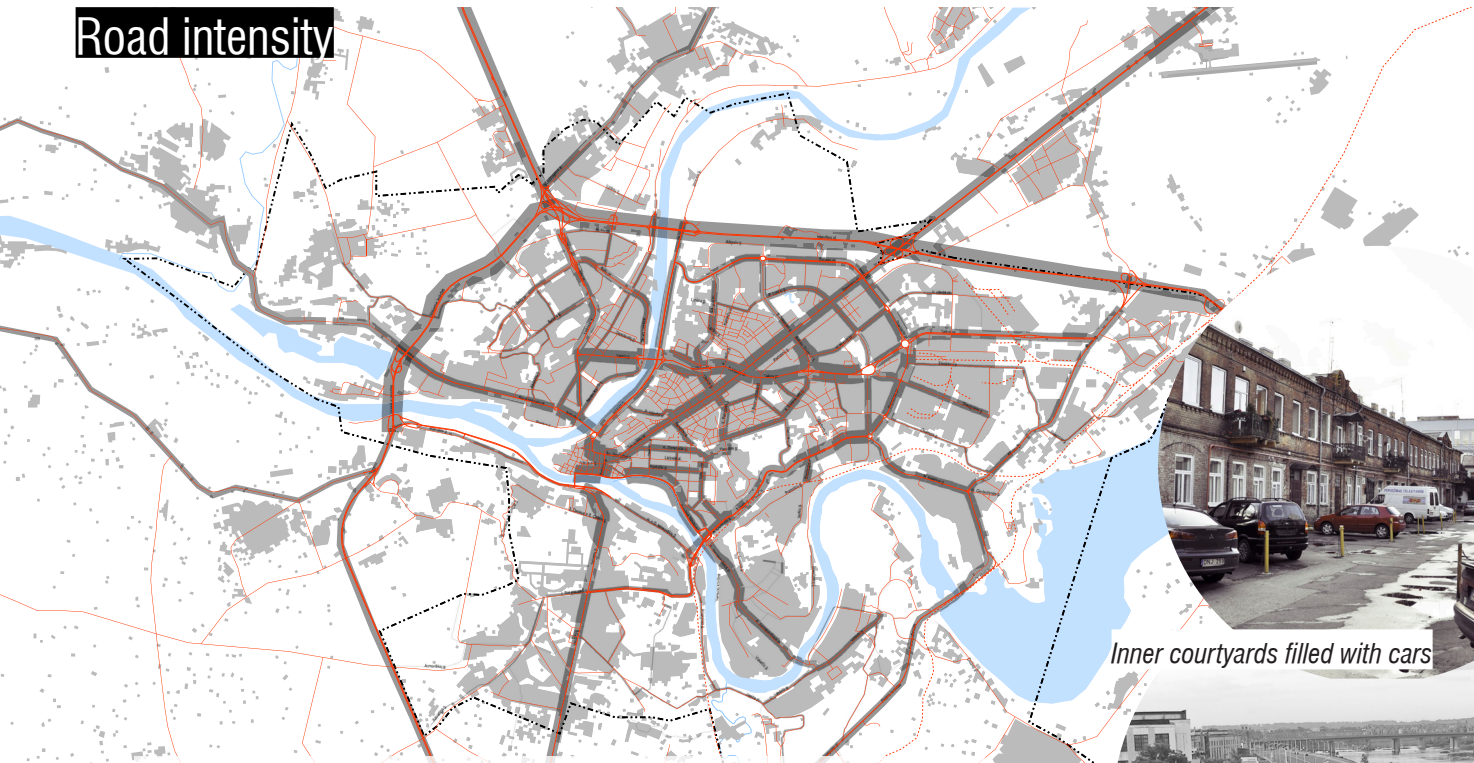
# Mobility process

Number of private cars

**130/1000**  
1995

**400/1000**  
2008

# Road intensity

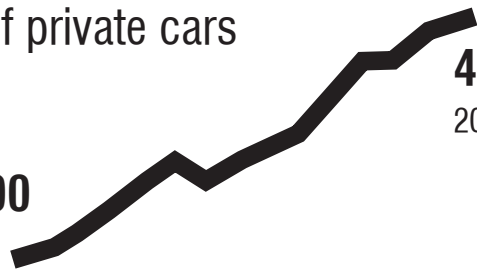


*Inner courtyards filled with cars*

# Number of private cars

**130/1000**

1995



**400/1000**

2008



*Wide roads on the edge of historic centre*



# Commercial land use and big shopping centres



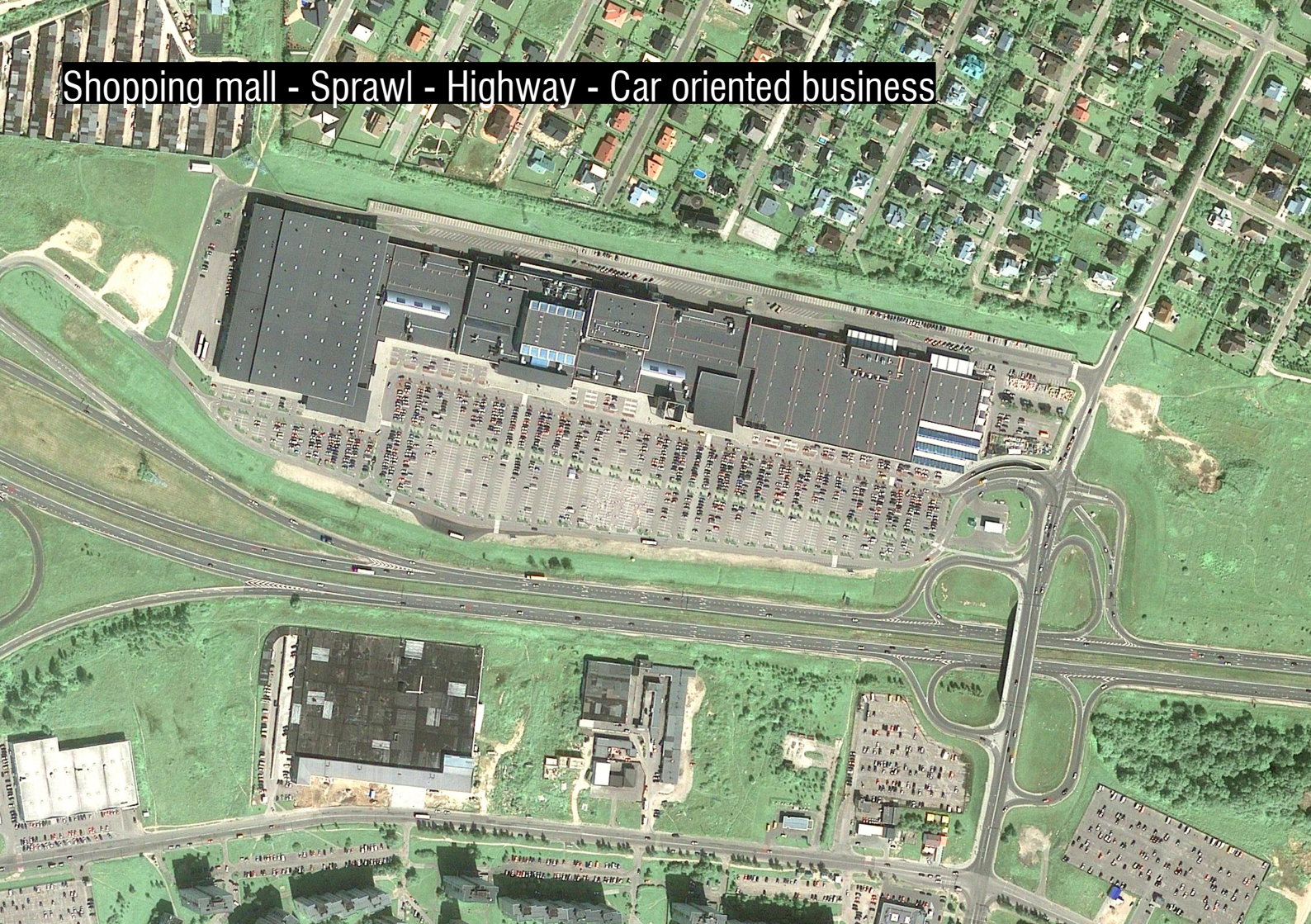
*Commercial activities along the main streets*

*Car oriented economies*

*Shopping mall in the centre of Kaunas*



Shopping mall - Sprawl - Highway - Car oriented business





# Private house





## Privatization process / Suburbanization

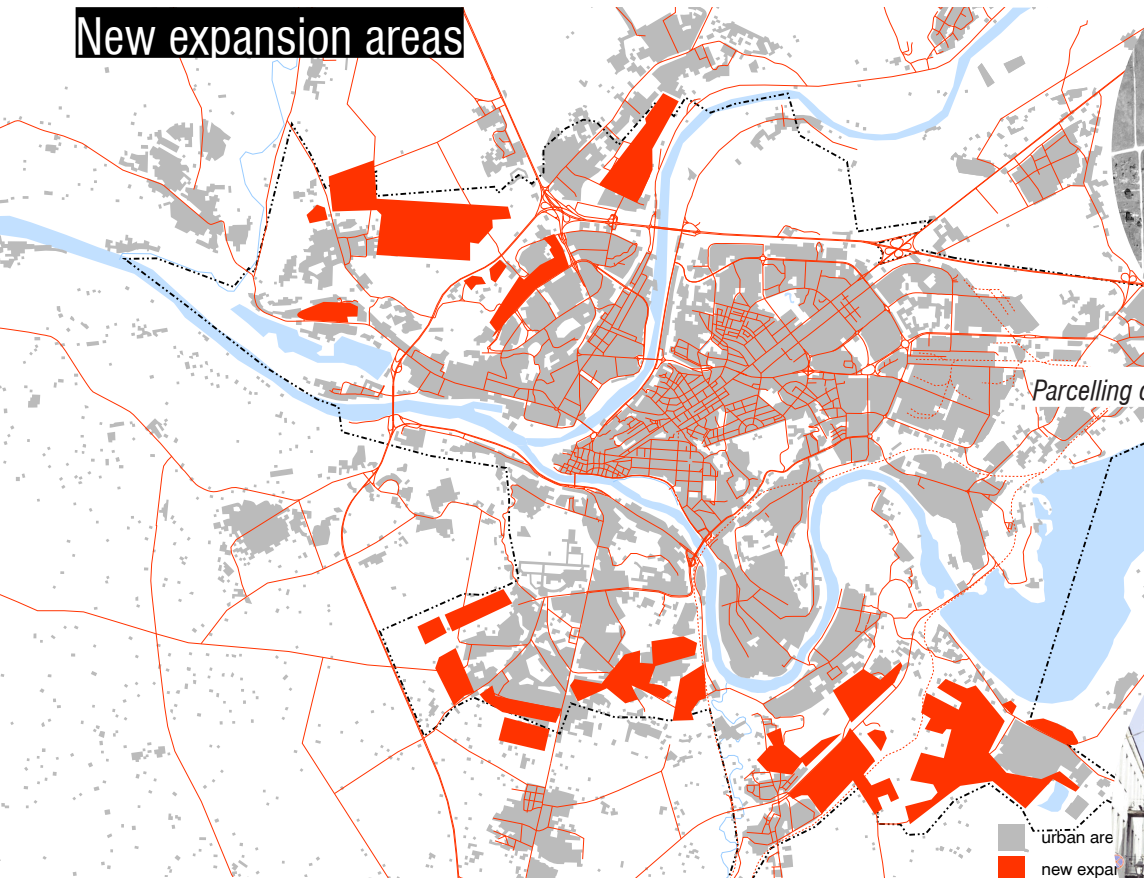


35% of total living area occupies single family houses

16% of people live in private house



# New expansion areas



*Parcelling of agriculture land for single family houses*

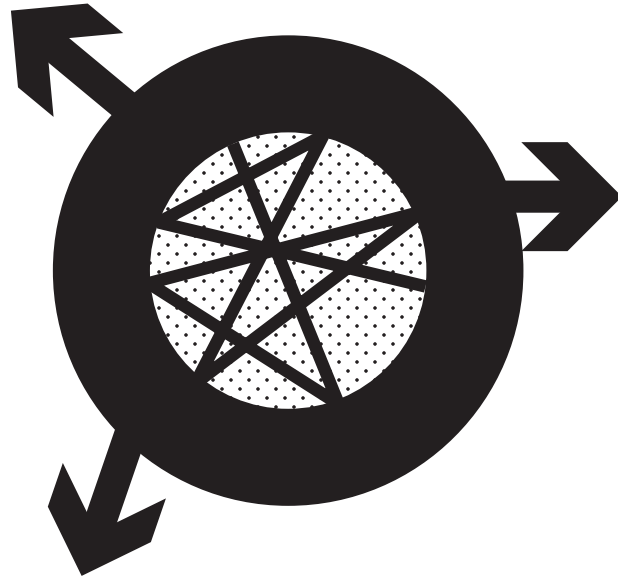
*Kaunas general plan 2010*

urban are  
new expan



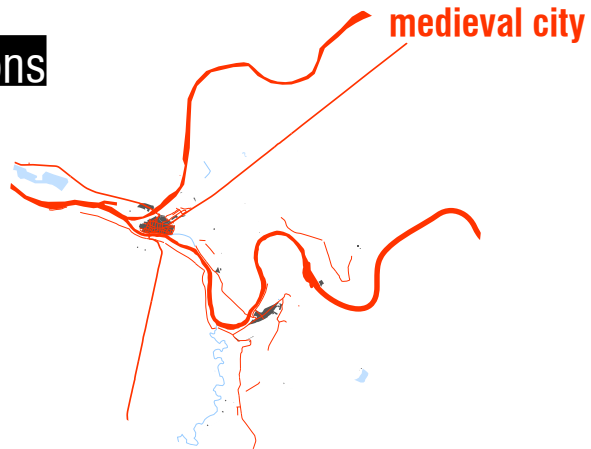
# Commoditization of land

## Schematic city model

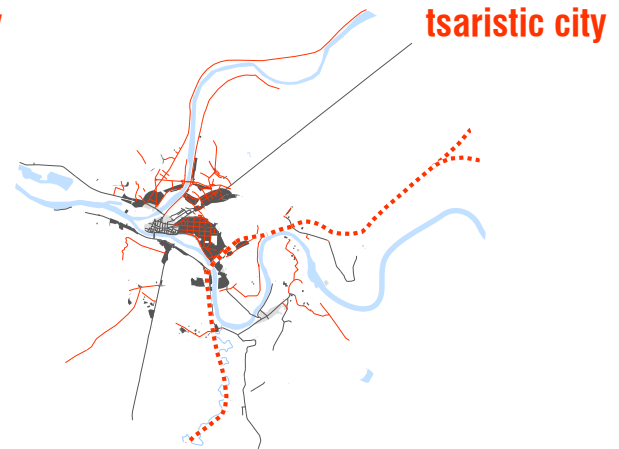


- City is expanding along the highways
- Dominating industrial sector is along the highways
- Commercial activities are situated along main roads
- Regional connectivity is driving force for cities expansion

# Conclusions

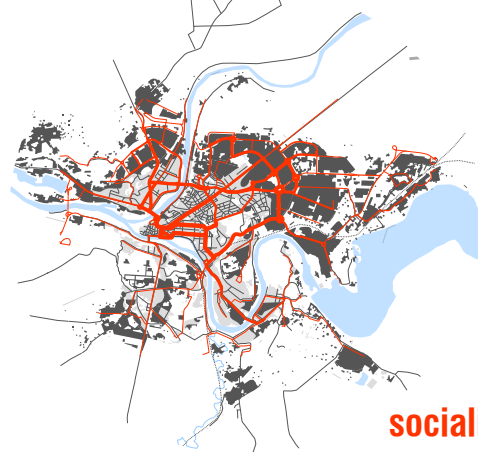


river network / pedestrian network



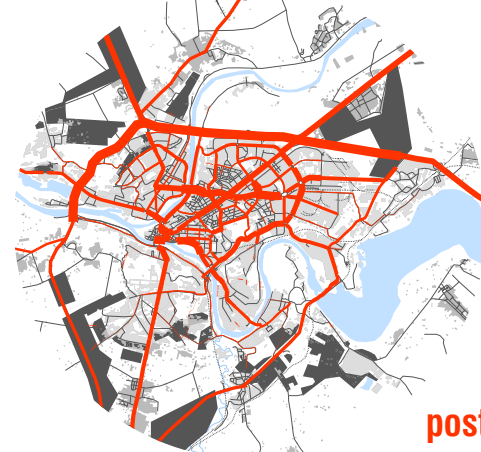
railway network / horse tram

public transport network



socialist city

car network



post-socialist city



# Considerations

	<b>CITY / suburbia</b>	<b>CITY CENTRE</b>
<b>MOBILIZATION</b>	More highways, traffic congestion	Bigger roads, Pedestrian unfriendly environment
<b>COMMERCIALIZATION</b>	Car oriented economies	Not desired shopping areas in the centre because of low car accessibility
<b>COMMODITIZATION of land</b>	Land for sale, suburbanisation	Empty houses and neglected spaces because of the high market price
<b>PRIVATIZATION</b>	private property	Neglected communal spaces because of ownership, managment, mentainance problems

Metropolitan networks and new technologies enabled the larger region to be accessible for Kaunas citizens.

## **Potentials** of the city centre:

60% of trips are being done by **public transport** and city centre is very well connected with the rest of the city

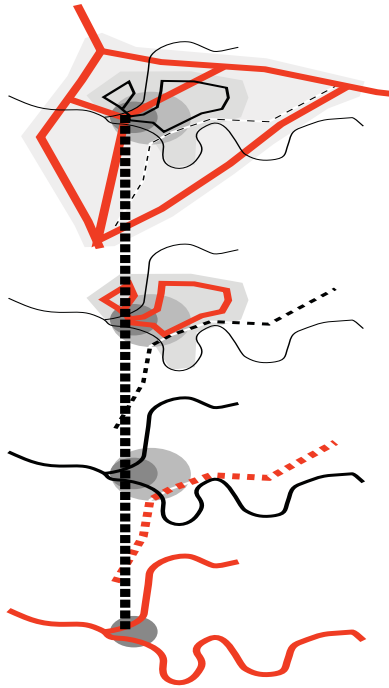
**Regional roads** are going through or are leading to the city centre

City centre have **scale** suitable for **pedestrians**

**Cultural** centre

**Public / administrative** centre

# Ambition

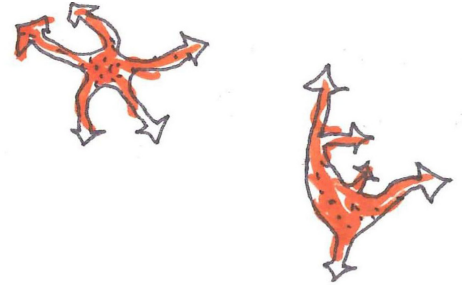


Kaunas **region** which has the economic power to expand the city, will be **re-connected** back into the city centre by different **infrastructure** networks which will be **linked** together by re-organized **public space** network in the city centre what shall create more opportunities for different activities, economies and actions to emerge and shall bring the urban **vitality** back to the city **centre**.

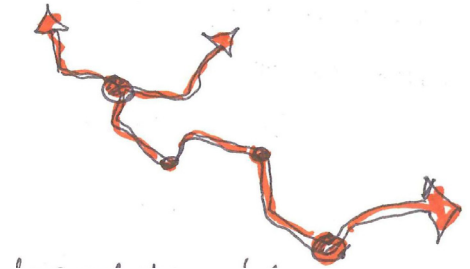


Vision

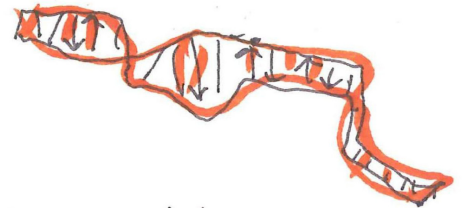
**Well organized metropolitan Hubs will connect city centre with the region via public space**



**Upgraded Public transport will exploit advantages of socialist city**



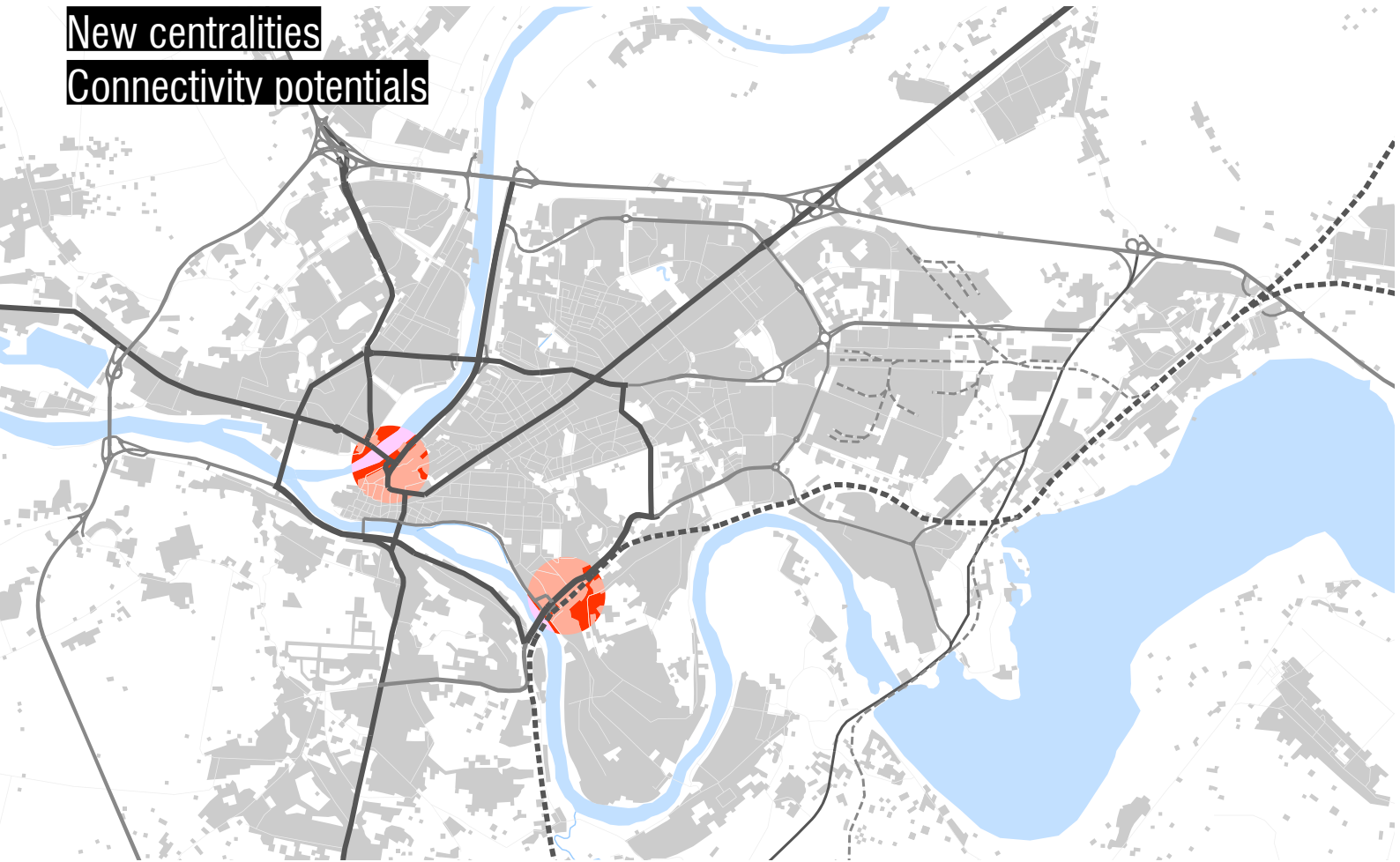
**New public spine will create active, mix use, pedestrian oriented and diverse backbone for the city centre**



STRATEGY

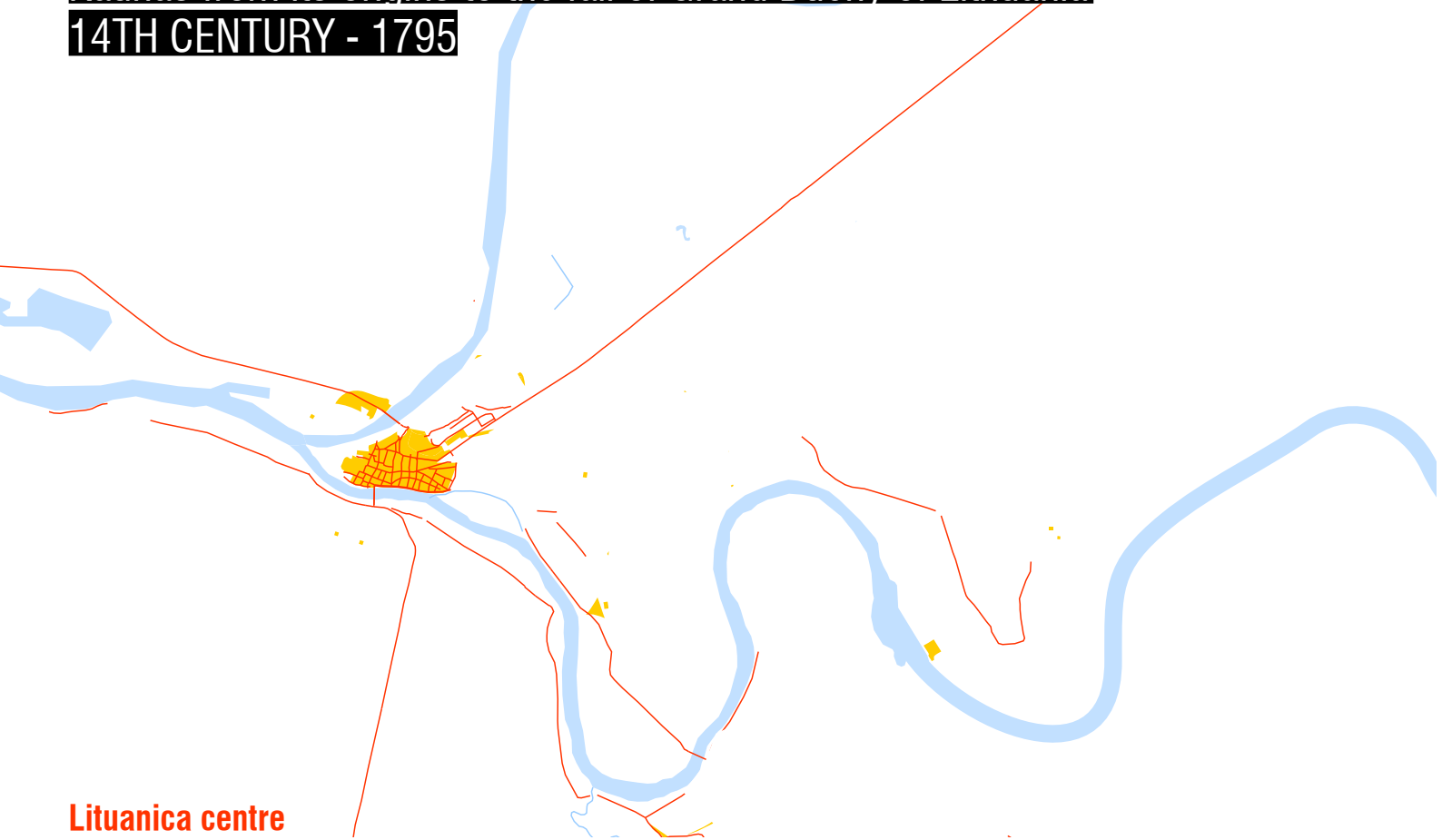
**New centralities**

**Connectivity potentials**



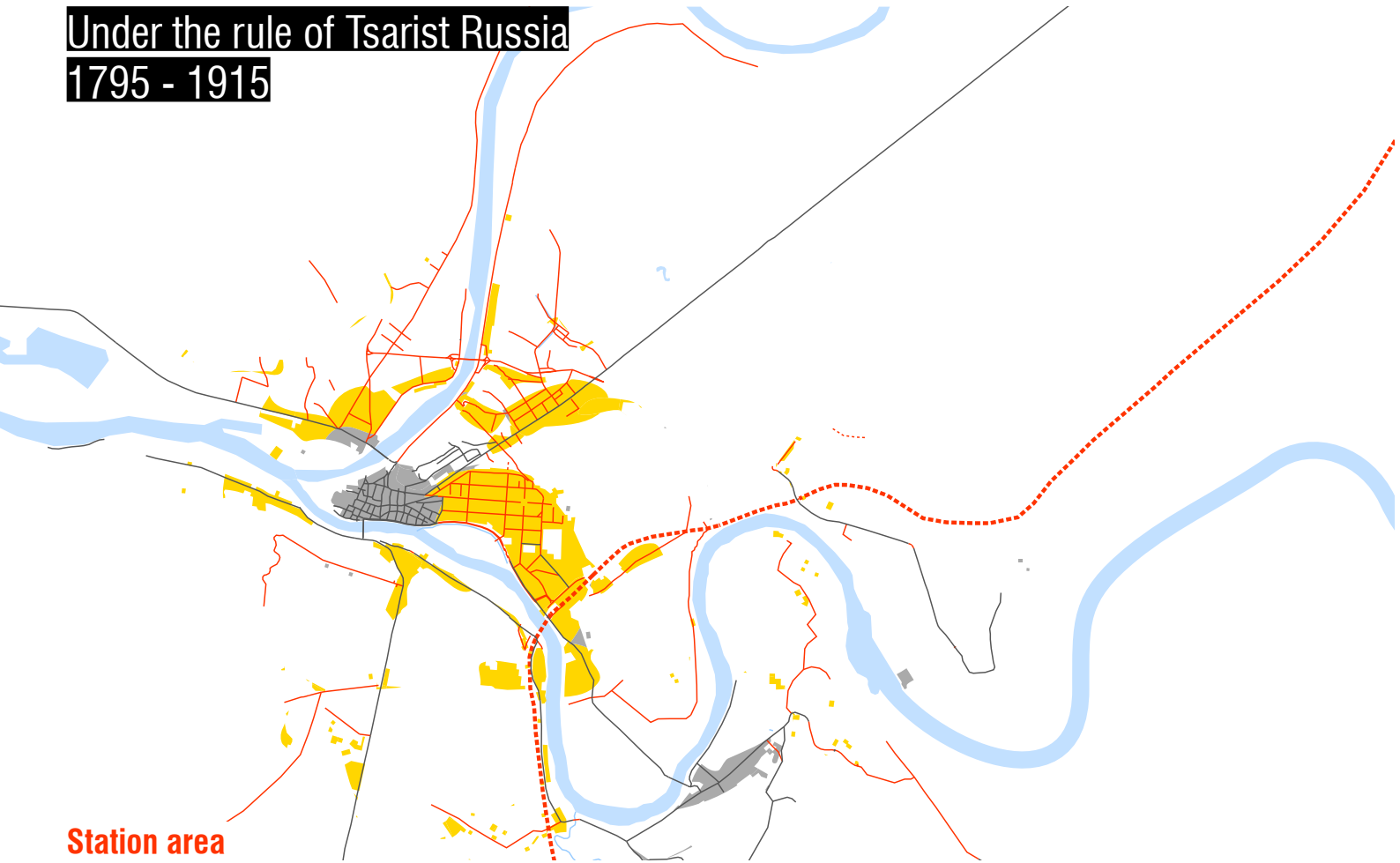


# Kaunas from its origins to the fall of Grand Duchy of Lithuania 14TH CENTURY - 1795



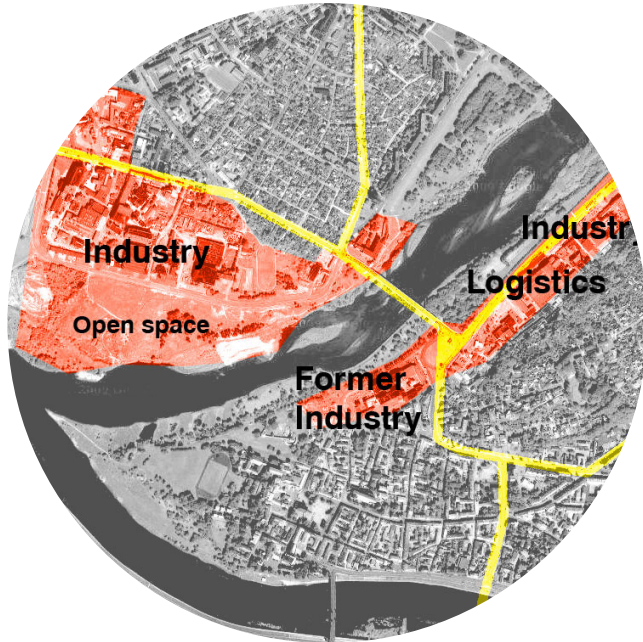
Lituanica centre

**Under the rule of Tsarist Russia  
1795 - 1915**



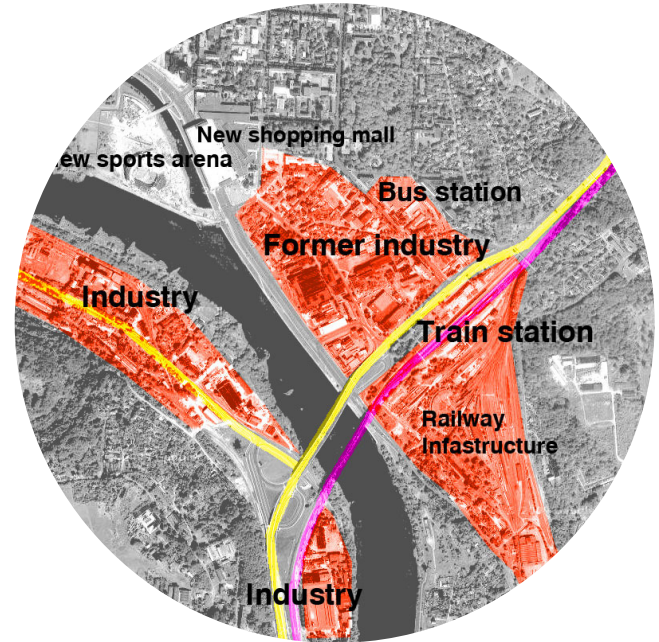
**Station area**

# Territorial potentials



## Lituanica centre

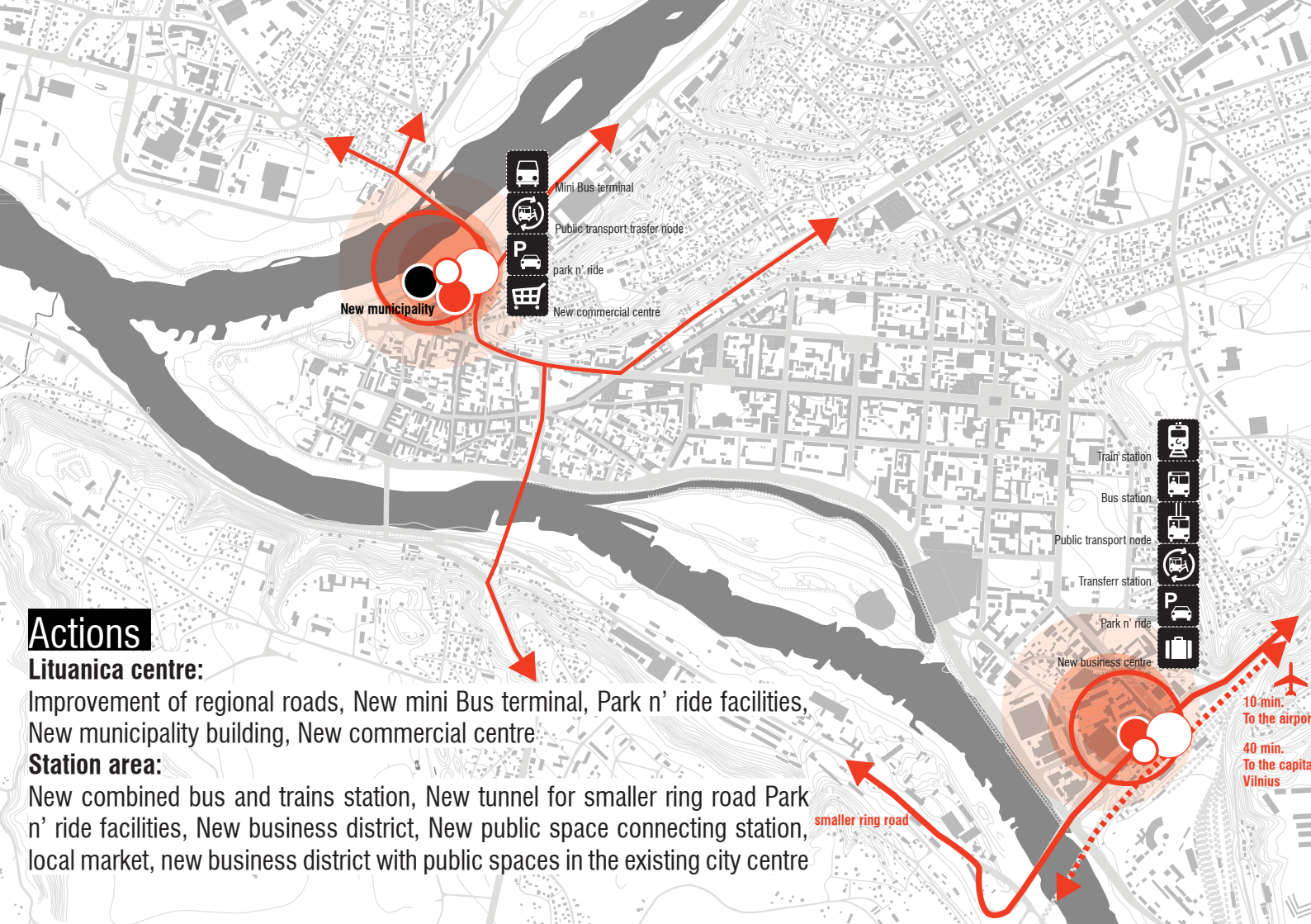
- Old industrial sites
- Close to the old town
- Natural environment qualities
- Main roads are leading and intersect here







## Station area







- Bus and Train stations
- Former industrial territories
- Large areas for conversion
- Smaller ring road





New municipality

-  Mini Bus terminal
-  Public transport transfer node
-  park n' ride
-  New commercial centre

-  Train station
-  Bus station
-  Public transport node
-  Transfer station
-  Park n' ride
-  New business centre

## Actions

### Lituanica centre:

Improvement of regional roads, New mini Bus terminal, Park n' ride facilities, New municipality building, New commercial centre

### Station area:

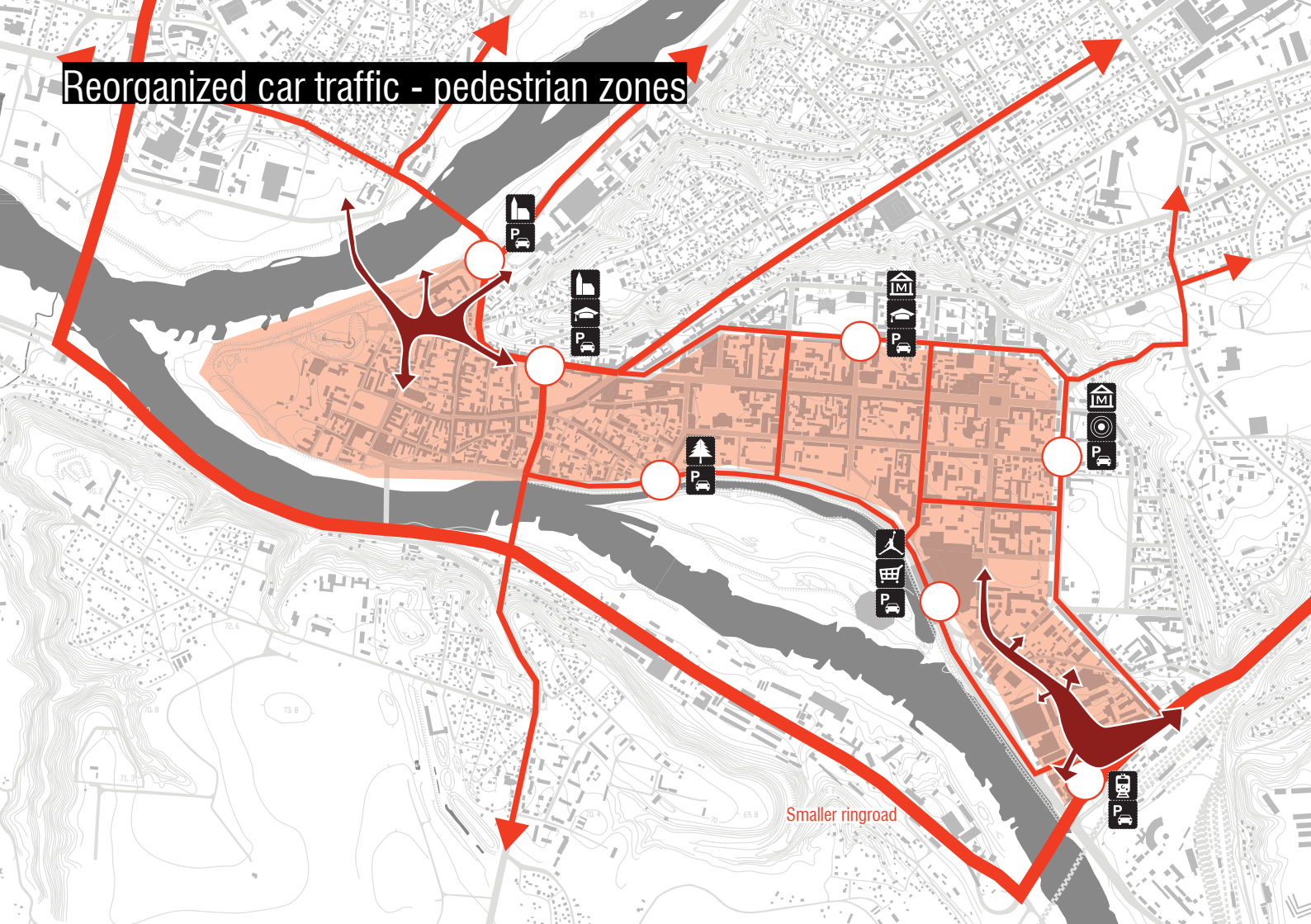
New combined bus and trains station, New tunnel for smaller ring road Park n' ride facilities, New business district, New public space connecting station, local market, new business district with public spaces in the existing city centre

smaller ring road

10 min.  
To the airport

40 min.  
To the capital  
Vilnius

# Reorganized car traffic - pedestrian zones



Smaller ringroad





**New Lituania centrality**

**New Station centrality**



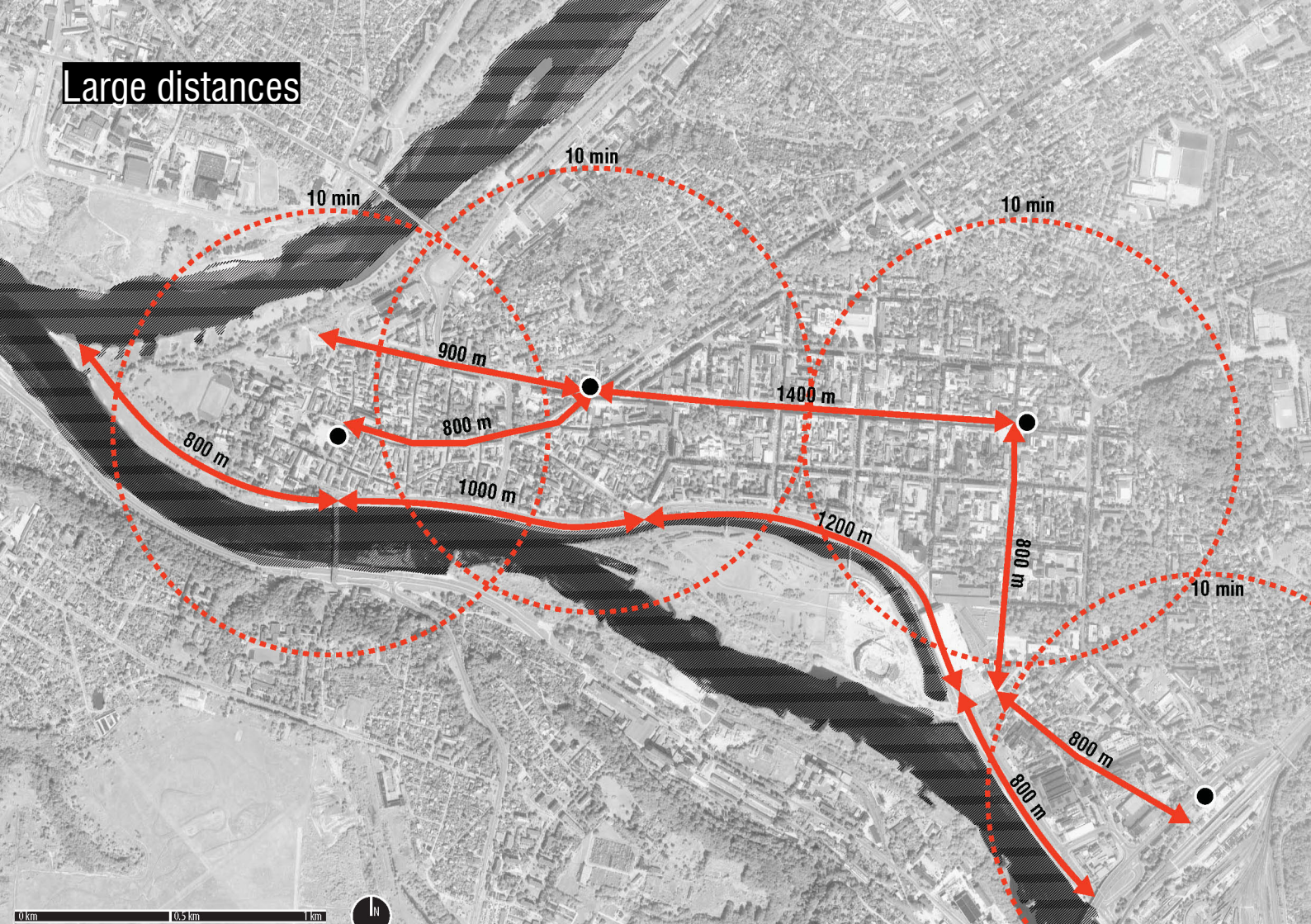


New Lituania centrality

New Station centrality



# Large distances

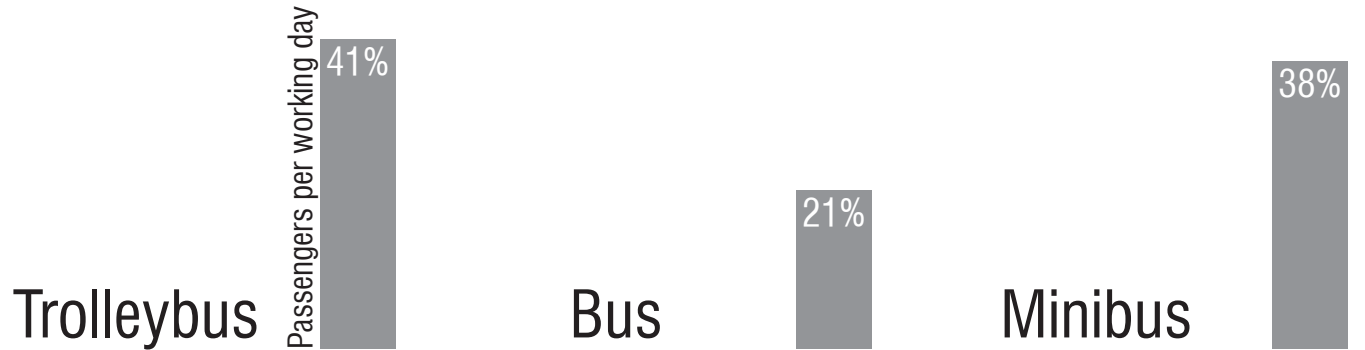


0 km 0.5 km 1 km



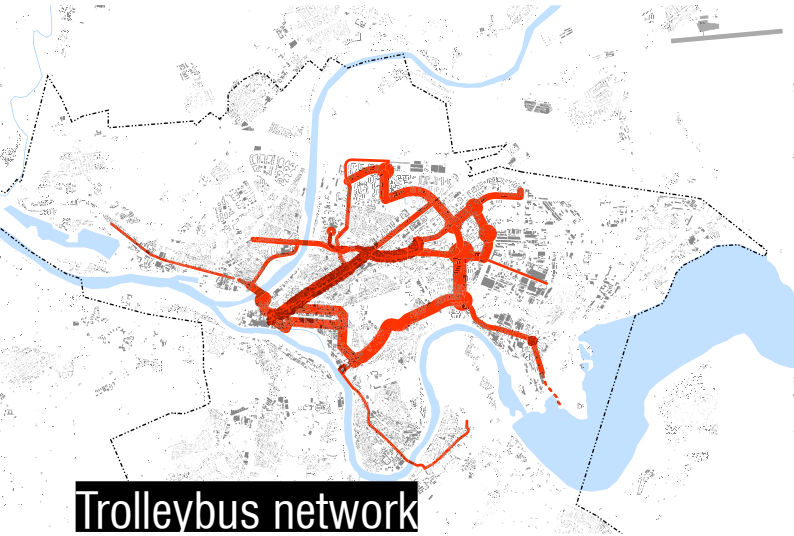
# Public transport in Kaunas

60% of trips are made by public transport in 2008





# Comparing Trolleybus and Bus networks

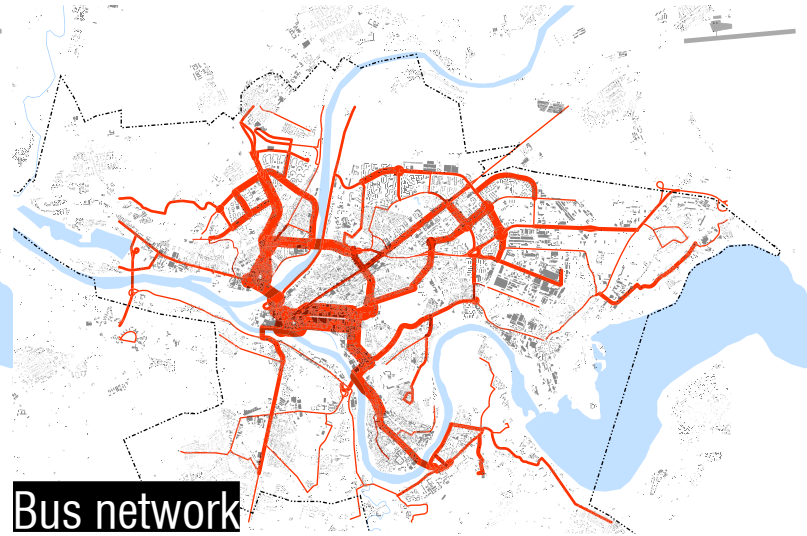


## Trolleybus network

Length of the routes - 374 km

Total travelled distance - 32.670 km/day

41% of total passengers



## Bus network

Length of the routes - 1042 km

Total travelled distance - 31.000 km/day

21% of total passengers

# Bus Rapid Transit system

## Conventional Bus services

- Publicly or privately owned
- Often subsidized
- On-board fare collection
- Stops with posts or basic shelters
- Poor customer service
- Standard bus vehicles

## Basic bus ways

- Segregated bus way / single corridor services
- On-board fare collection
- Basic bus shelters
- Standard bus vehicles

## BRT - lite

- Some form of bus priority but not fully segregated bus ways
- Improved travel times
- Higher quality shelters
- Clean vehicle technology
- Marketing identity

## BRT transport

- Segregated bus ways
- Typical pre-board fare payment
- Higher quality stations
- Clean vehicle technology
- Marketing identity

## Full BRT

- Metro-quality service
- Integrated networks of routes and corridors
- Closed, high quality stations
- Pre-board fare collection
- Frequent and rapid service
- Modern, clean vehicles
- Marketing identity
- Superior customer services



Local integration in the urban fabric

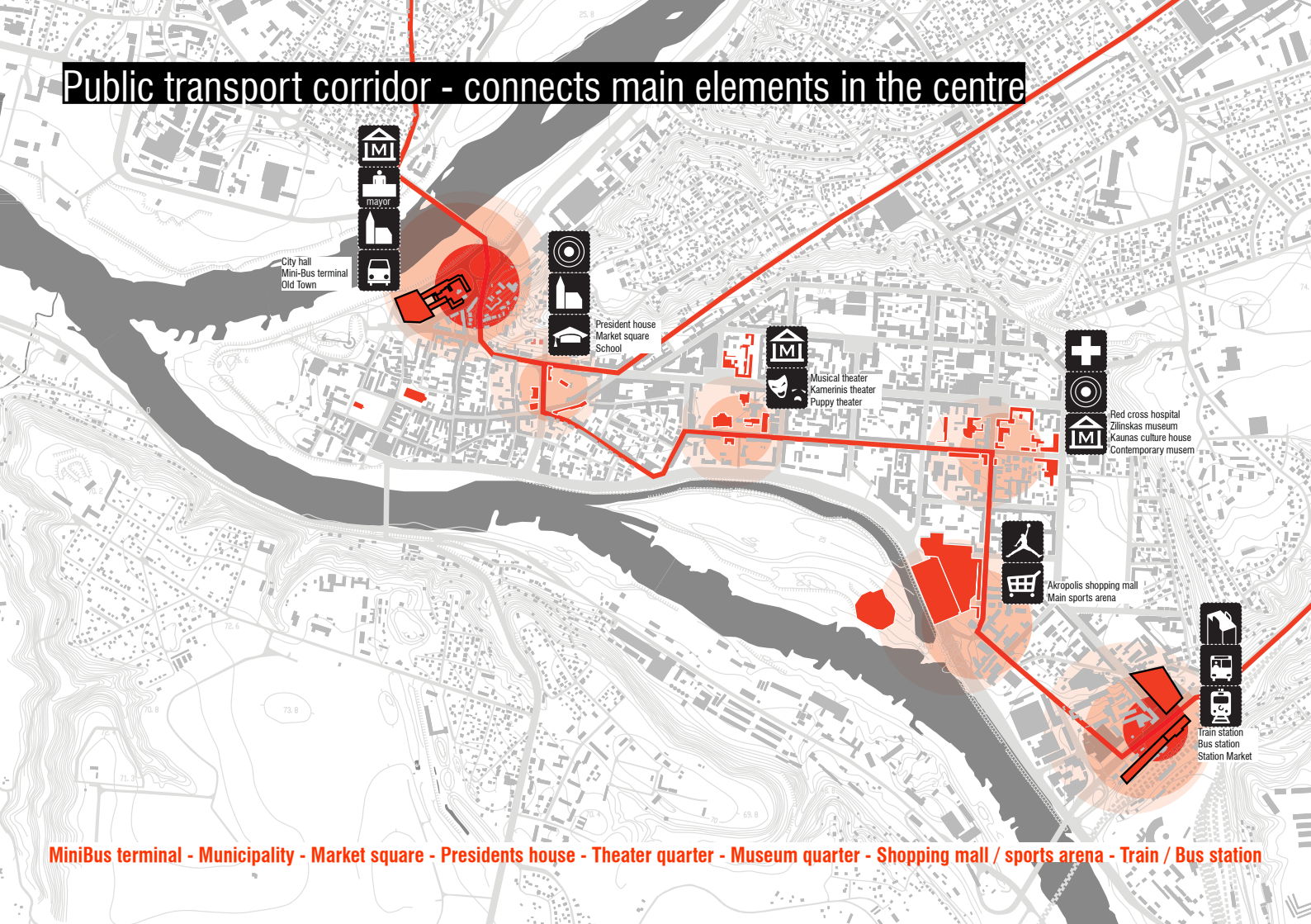


Advanced bus / trolley bus stops and stations



Car traffic free - independent bus corridor

# Public transport corridor - connects main elements in the centre



City hall  
Mini-Bus terminal  
Old Town

President house  
Market square  
School

Musical theater  
Kamerinis theater  
Puppy theater

Red cross hospital  
Zilinskas museum  
Kaunas culture house  
Contemporary museum

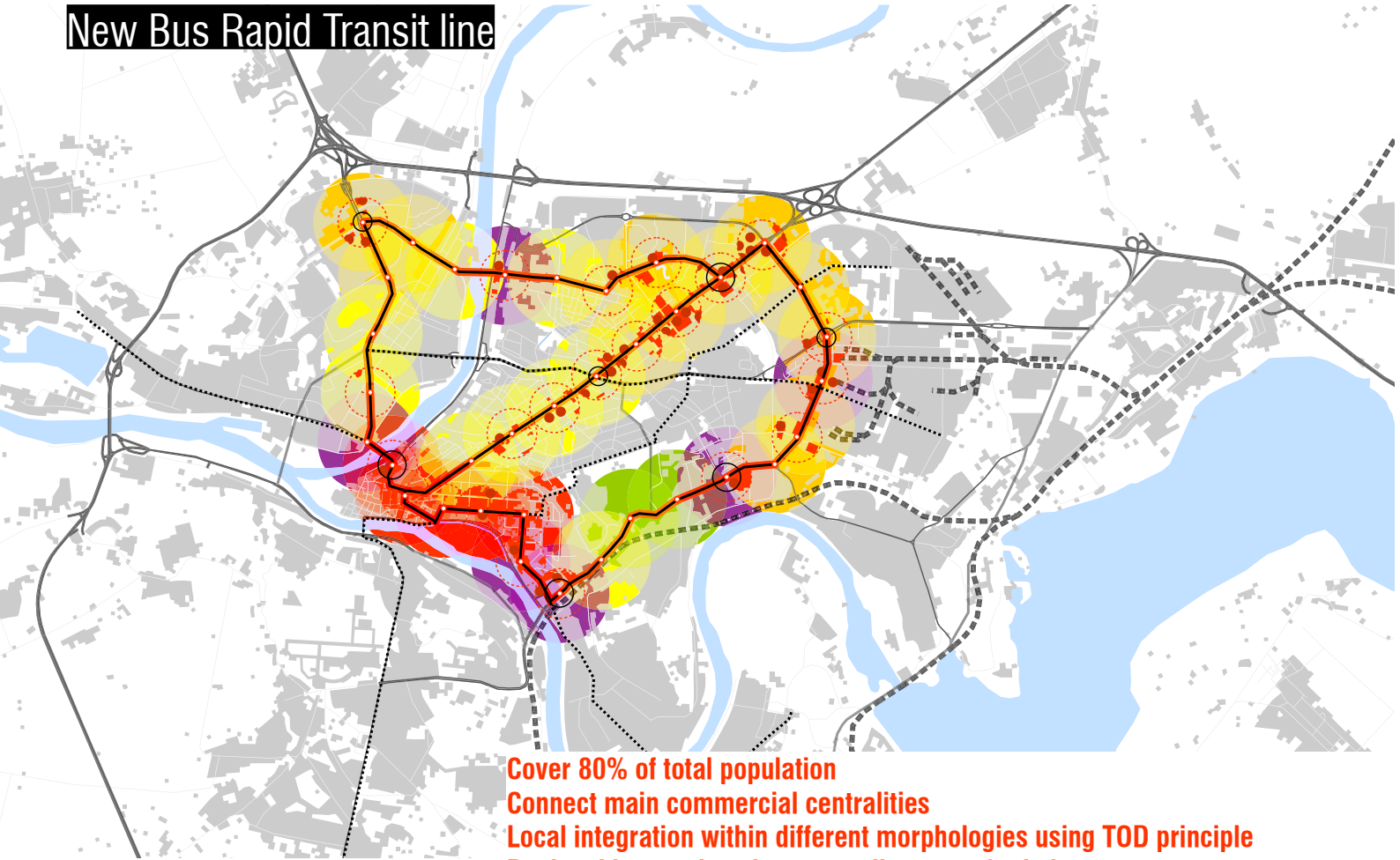
Akropolis shopping mall  
Main sports arena

Train station  
Bus station  
Station Market

**MiniBus terminal - Municipality - Market square - Presidents house - Theater quarter - Museum quarter - Shopping mall / sports arena - Train / Bus station**



## New Bus Rapid Transit line



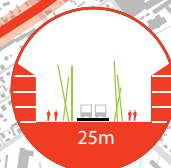
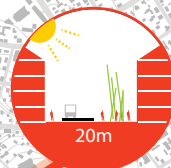
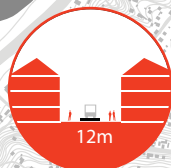
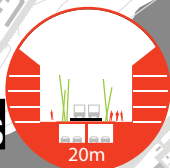
**Cover 80% of total population**

**Connect main commercial centralities**

**Local integration within different morphologies using TOD principle**

**Regional integration via metropolitan transfer hubs**

# Implementing the corridor New types of public spaces



BRT line  
Pedestrian route  
Car traffic

Narrow BRT line

BRT line

BRT line  
Pedestrian route

Spaces accessible by pedestrians  
Spaces accessible by public transport  
Spaces accessible by cars

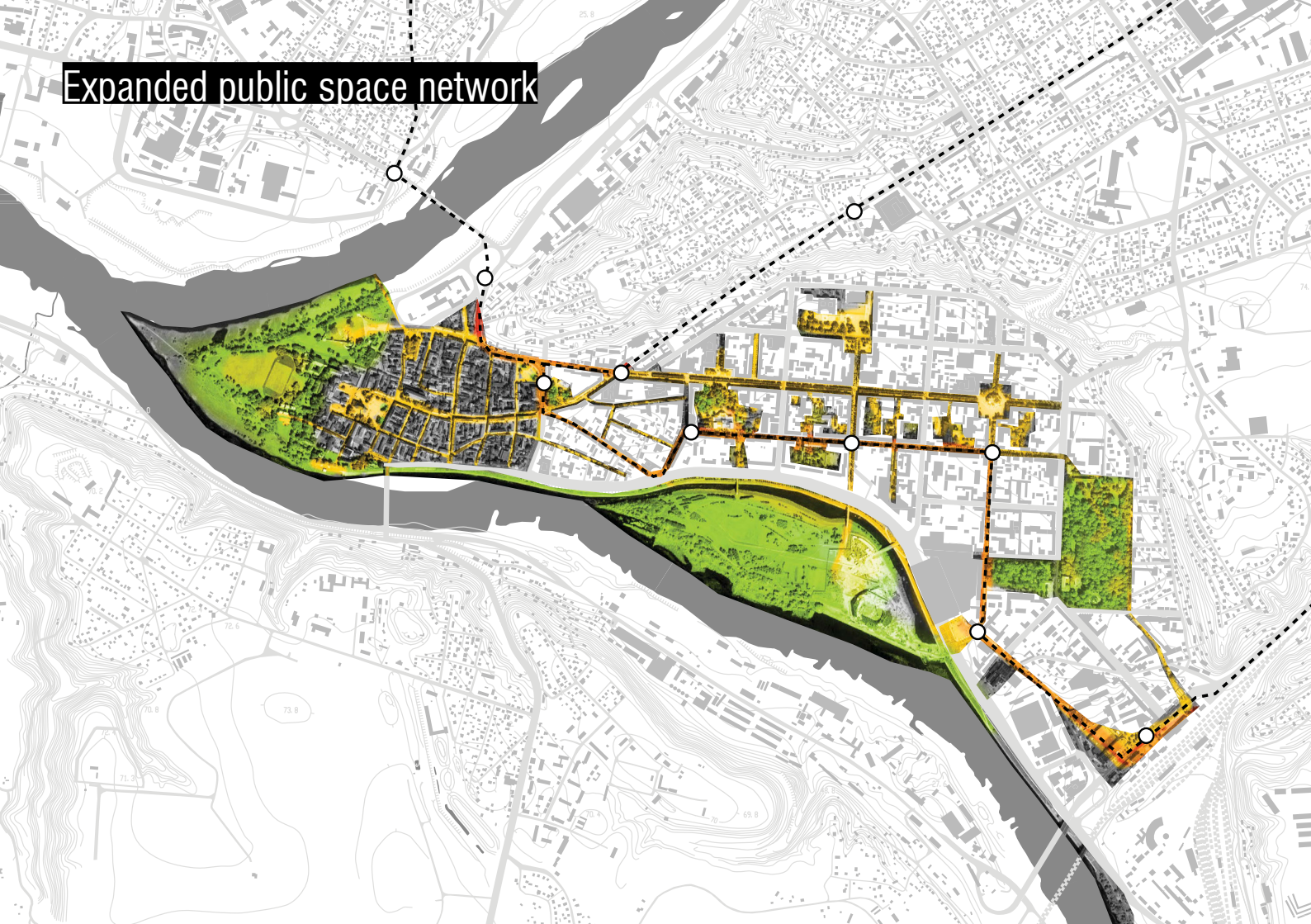


# Existing public spaces

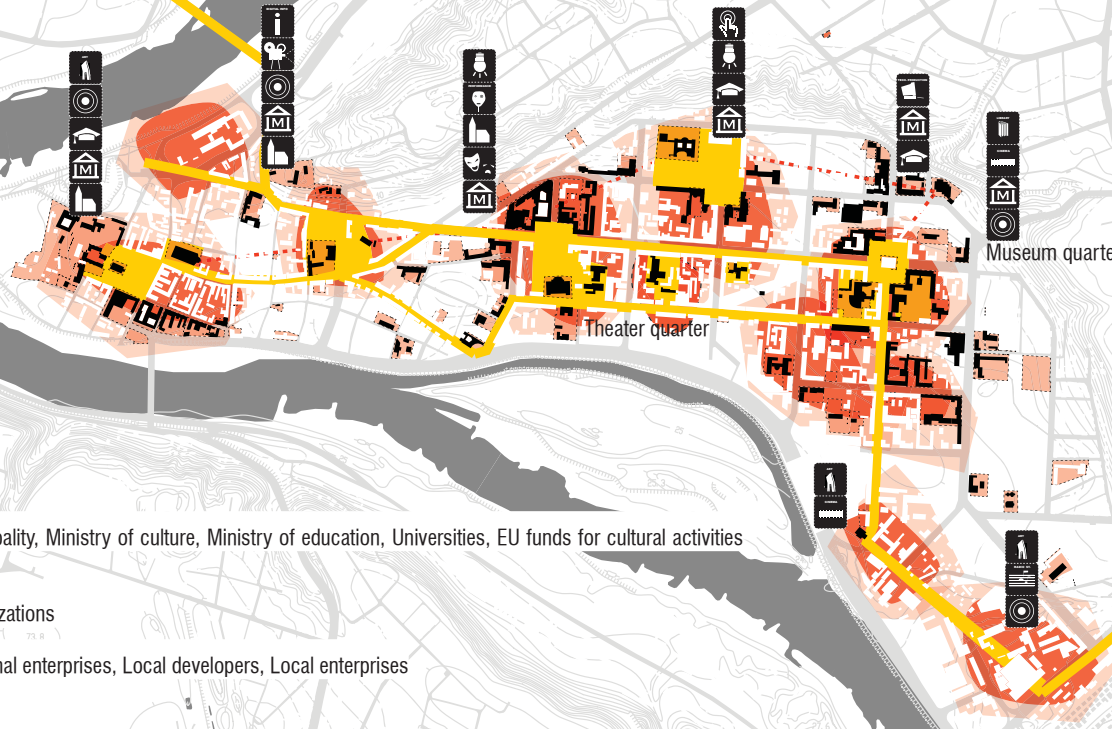




# Expanded public space network



## Public backbone



## Stakeholders

### GOVERNMENTAL:

National government, Municipality, Ministry of culture, Ministry of education, Universities, EU funds for cultural activities and projects,

### SOCIETY:

Local residents, Public organizations

### INVESTORS:

Creative industries, International enterprises, Local developers, Local enterprises

## Actions

Stimulation for public functions and creative industries.

Attraction of international events and taking advantages of the conditions that it creates.

New public spaces will create more public and culture oriented spaces in the centre.

New creative and public zone will create clusters and districts for different activities.



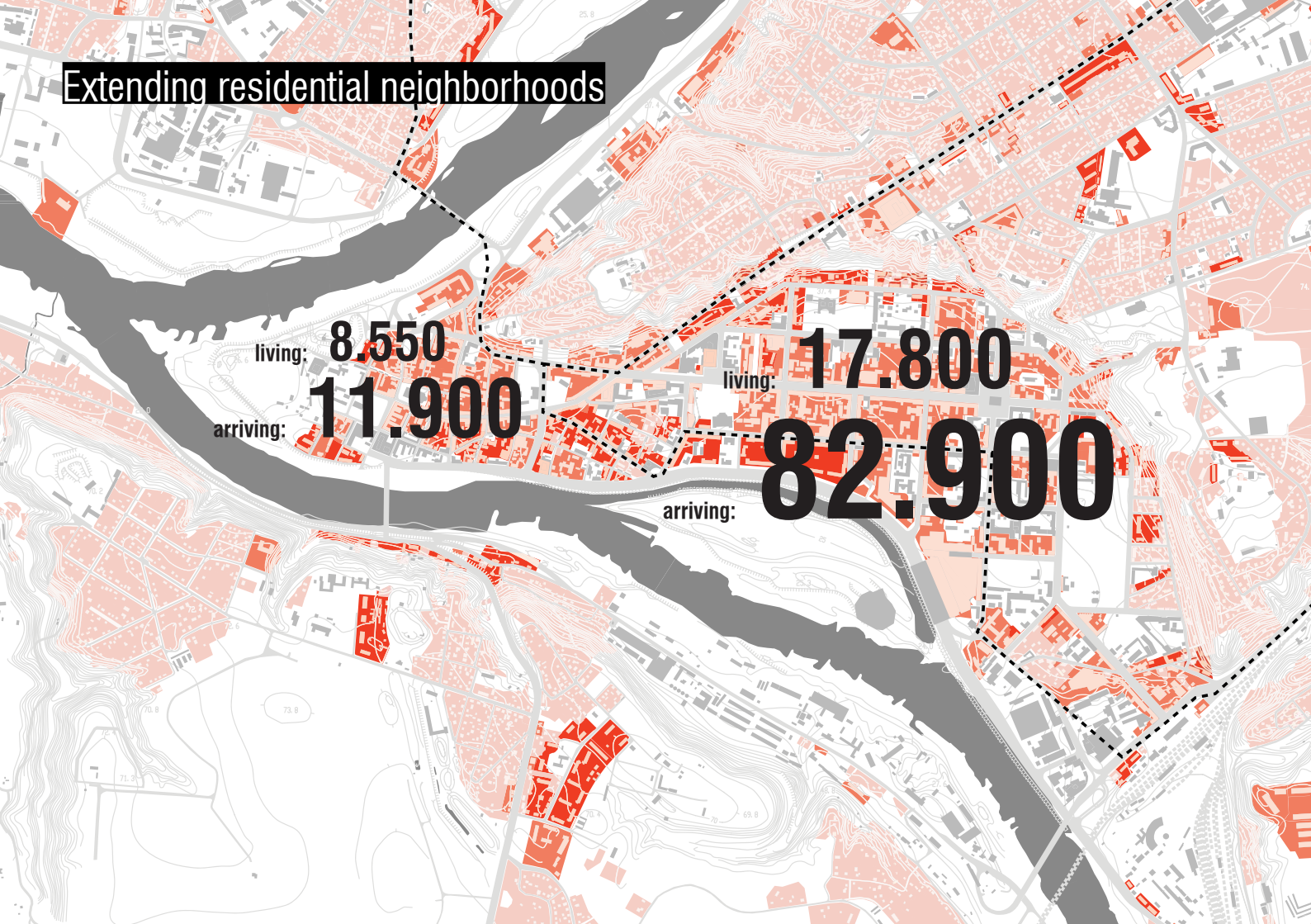
# Extending residential neighborhoods

living: 8.550

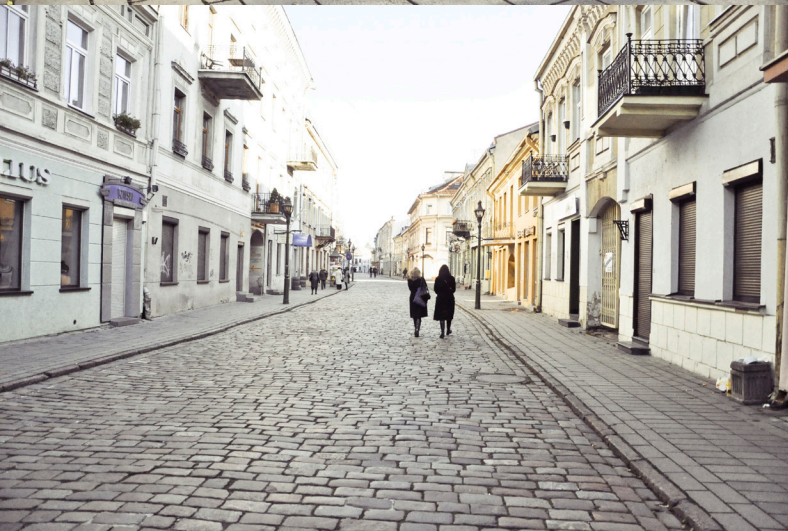
arriving: 11.900

living: 17.800

arriving: 82.900

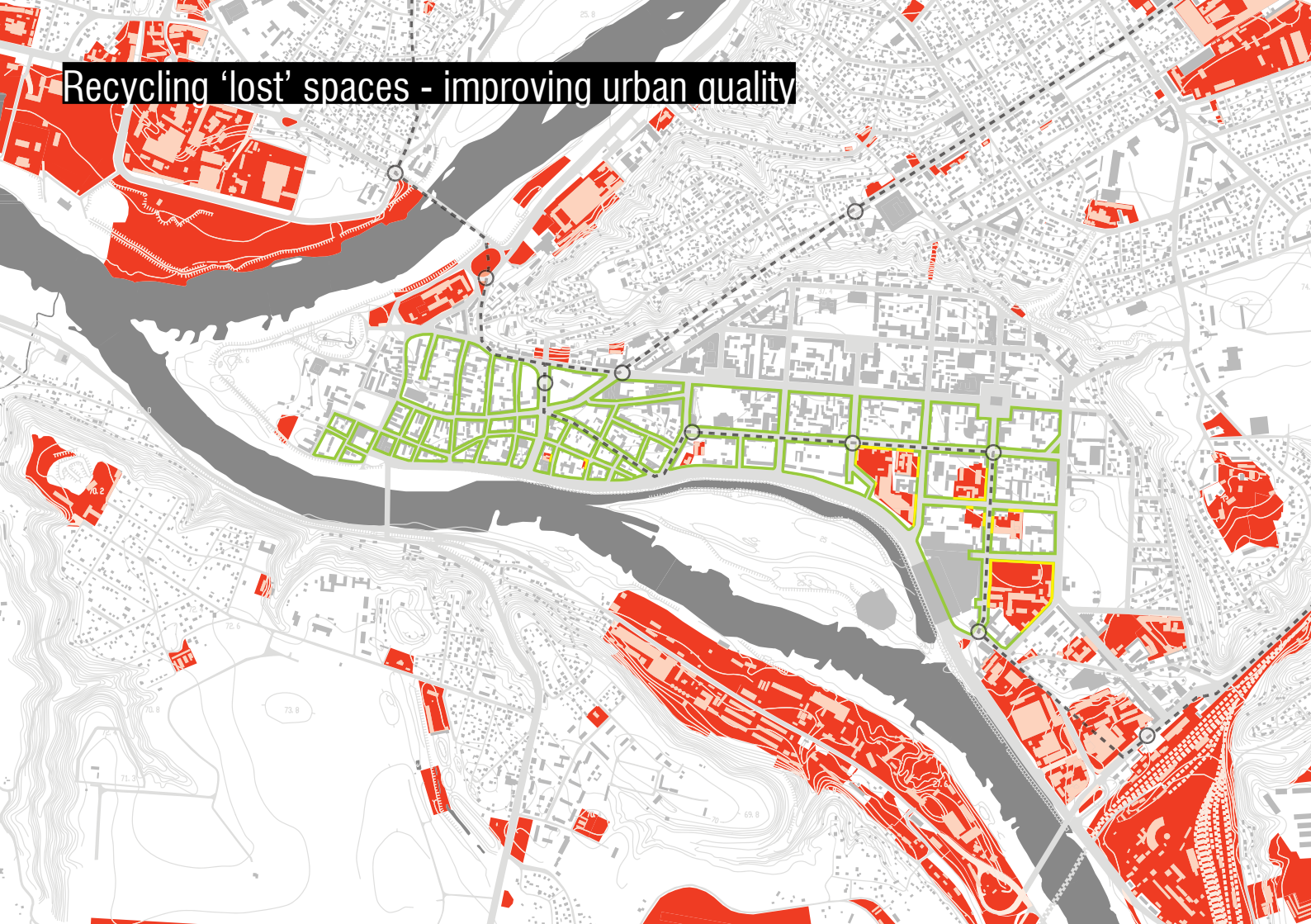








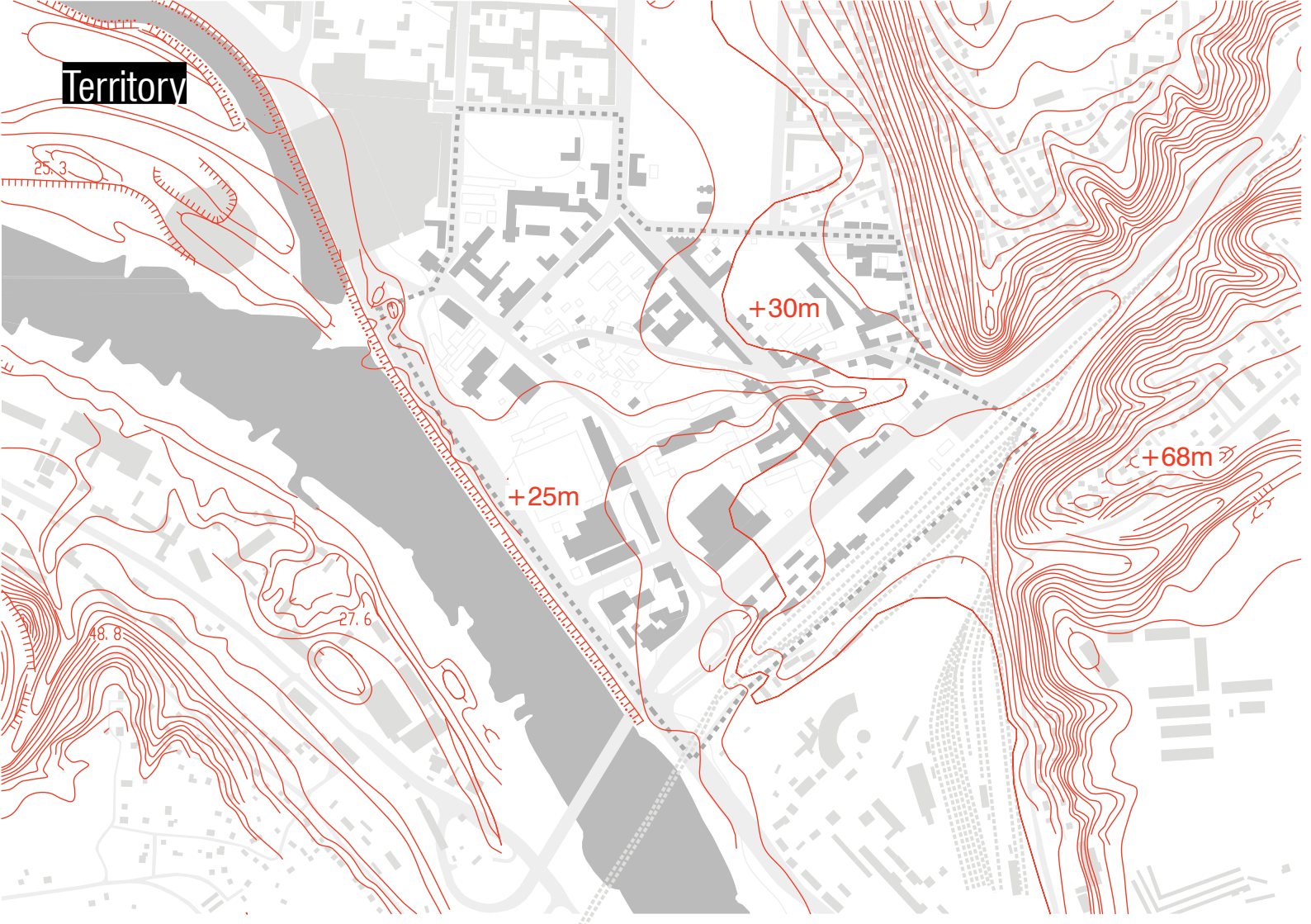
# Recycling 'lost' spaces - improving urban quality



STATION AREA



**Territory**



# Main functions

Sports arena

Shopping mall  
'Akropolis'

Military hospital

Monestry

Bus station

Liquer factory

Open air' factory

Train station

Beer factory

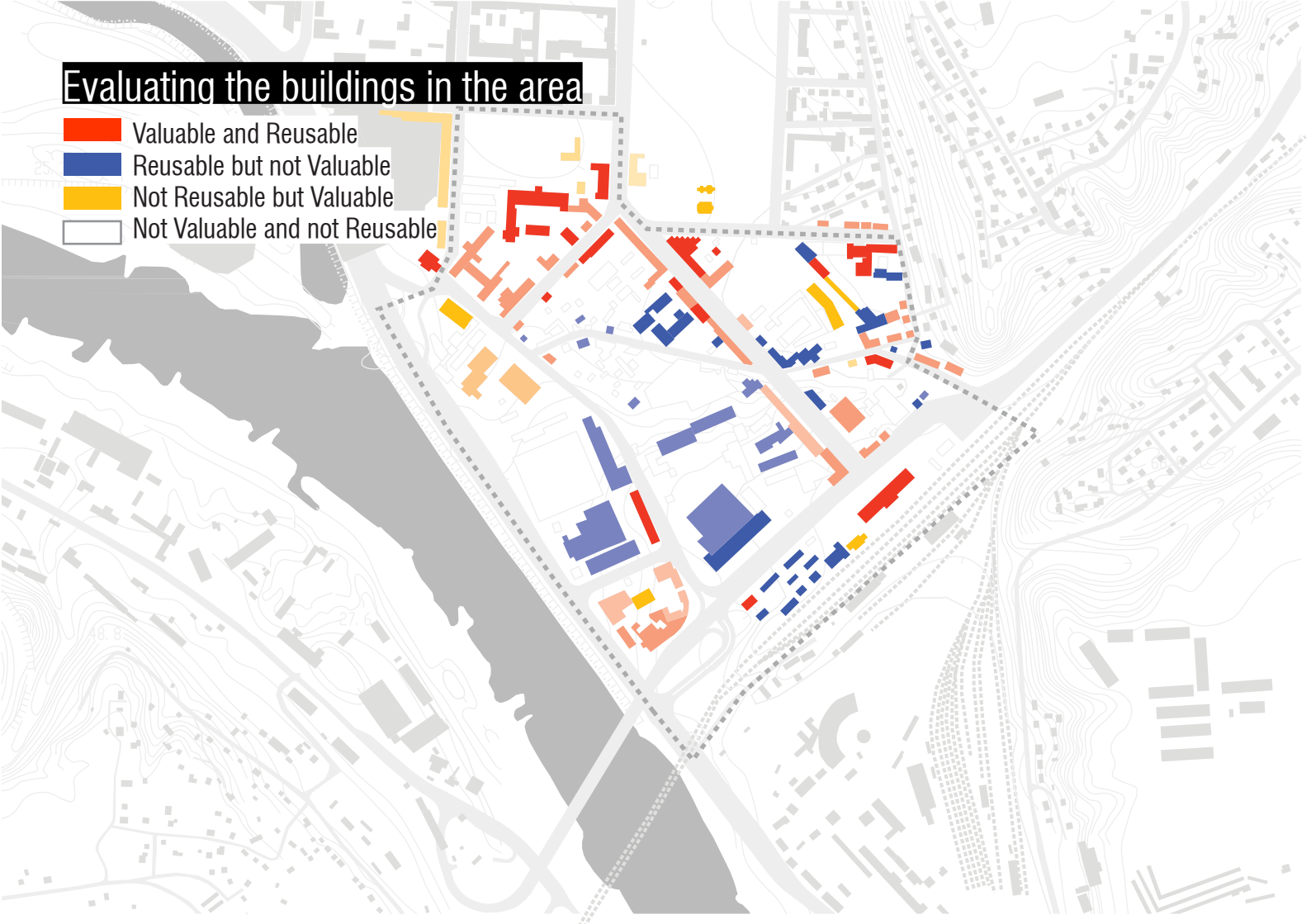






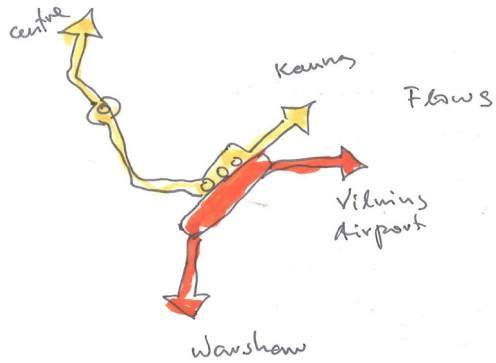
# Evaluating the buildings in the area

- Valuable and Reusable
- Reusable but not Valuable
- Not Reusable but Valuable
- Not Valuable and not Reusable

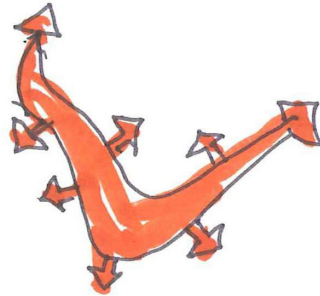


# Vision

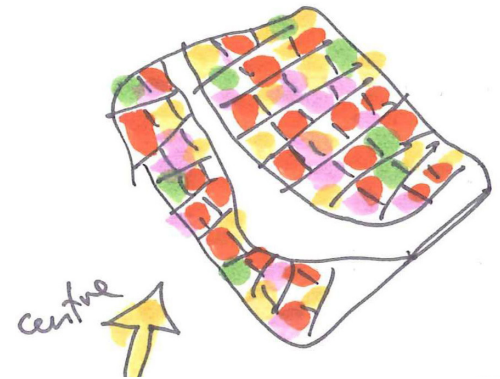
## Networks of flows



## Active public backbone



## Mix functions and program



# Master plan



Sport arena

Shopping mall  
"Akropolis"

Vytautas park

Community centre

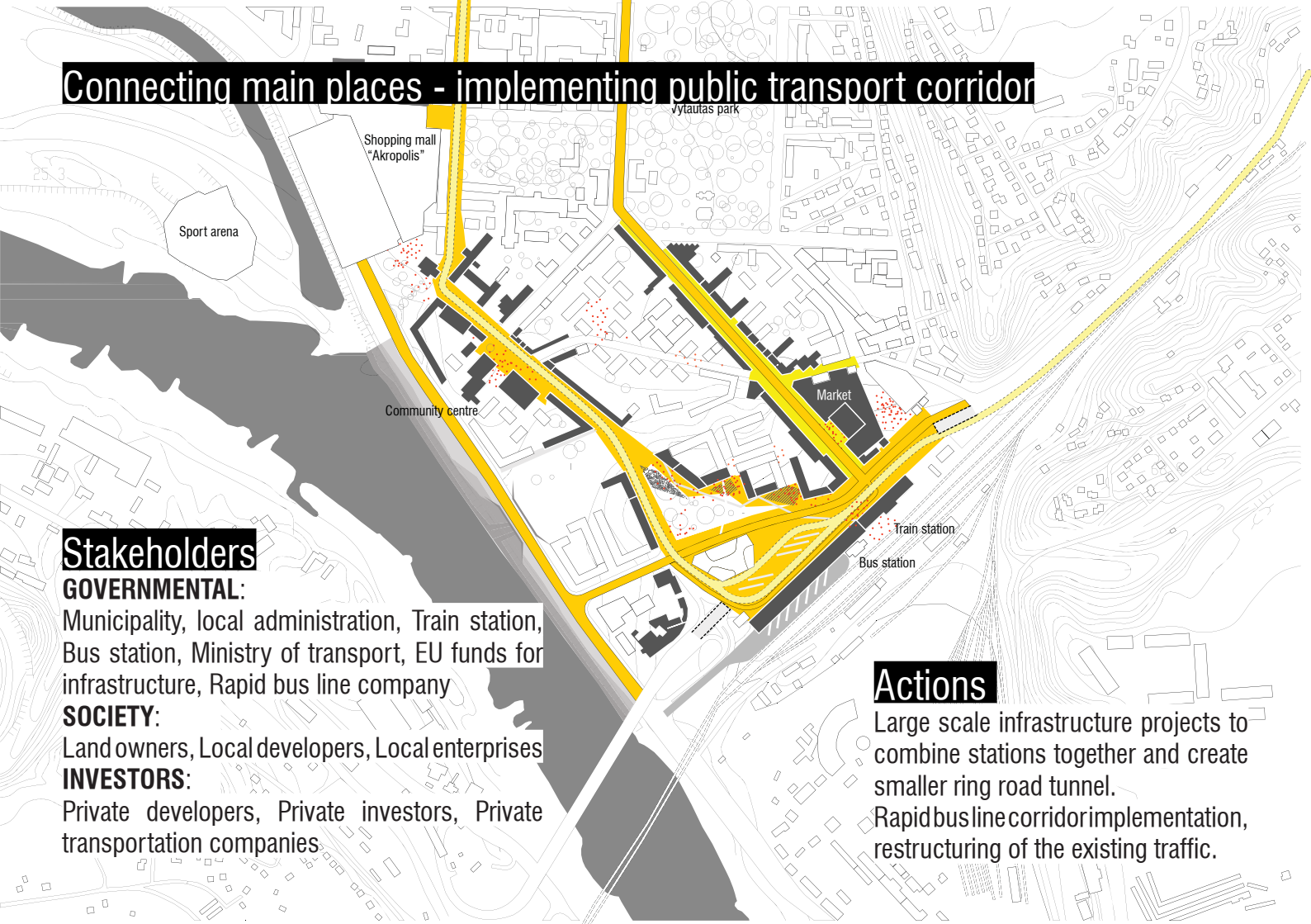
Market

Train station

Bus station



# Connecting main places - implementing public transport corridor



## Stakeholders

### GOVERNMENTAL:

Municipality, local administration, Train station, Bus station, Ministry of transport, EU funds for infrastructure, Rapid bus line company

### SOCIETY:

Land owners, Local developers, Local enterprises

### INVESTORS:

Private developers, Private investors, Private transportation companies

## Actions

Large scale infrastructure projects to combine stations together and create smaller ring road tunnel.

Rapid bus line corridor implementation, restructuring of the existing traffic.

# Pedestrian oriented spaces



## Station square

A topographic map of a city area. A yellow highlighted area, labeled 'Station square', is located in the center-right. To its north is 'Vytautas park'. To its east is a 'Market' and a 'Train station' with a 'Bus station' below it. The map shows building footprints, contour lines, and a river on the left.

## Stakeholders

### GOVERNMENTAL:

Municipality, local administration, Station company, Ministry of transport

### SOCIETY:

Local residents, Land owners, public organisations, cultural organisations

### INVESTORS:

Private developers, Private investors, international investors, international enterprises

## Actions

Establishment of public private partnership for the new square in the business district.

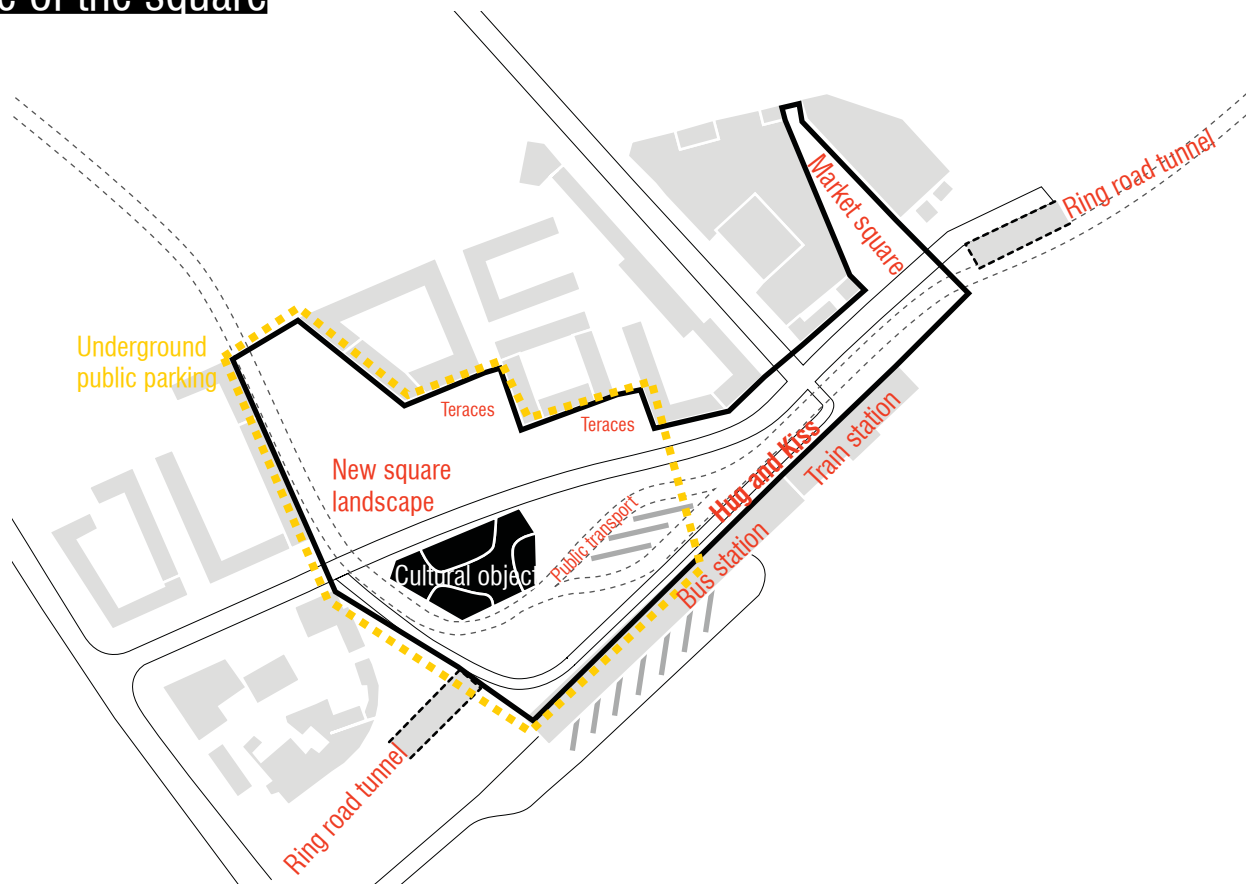
Attracting large public function to be placed here.

Providing well designed square for different activities.

Providing park n' ride facilities.



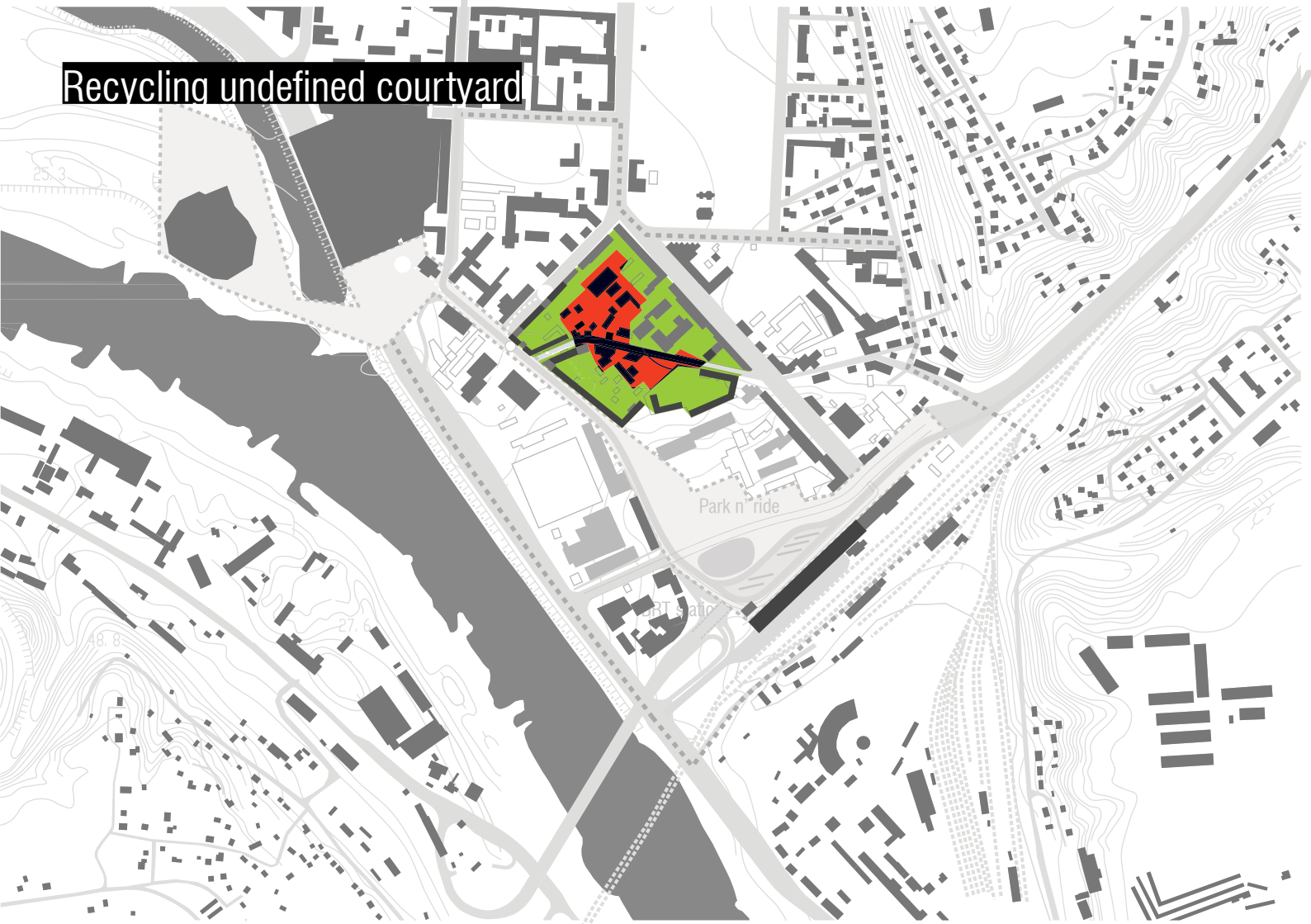
# Scheme of the square



# Active public spaces



# Recycling undefined courtyard

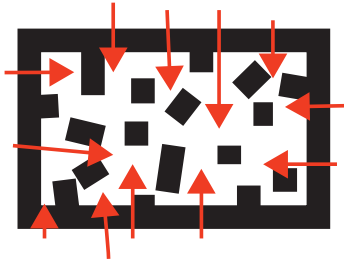


Park n' ride

TNT station



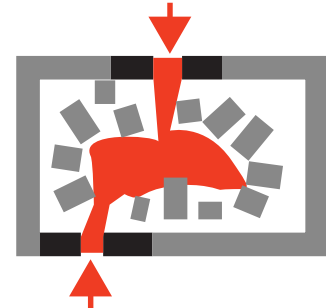
# Reorganising the block



Access to the buildings directly from the street



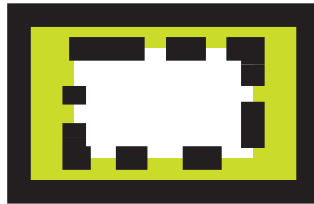
New inner public space will create access from the inside



The entrance points have to be visible and recognizable



Block in the middle creates more private spaces



Open block creates less formal environment

# Making inner block - block in BLOCK

A topographic map of an urban area. The map shows contour lines, buildings, and a river. A central area is highlighted in green and yellow, indicating a development site. This site is bounded by a thick black line. The area is divided into several blocks. A 'Community centre' is labeled within the highlighted area. 'Vytautas park' is labeled in the upper right. Red dots are scattered throughout the map, particularly around the highlighted area and along a road. The map also shows a railway line and other urban infrastructure.

## Stakeholders

### GOVERNMENTAL:

Local administration, Municipality

### SOCIETY:

Local residents, Land owners, Local developers

### INVESTORS:

Private developers, Private investors

## Actions

First of all public private partnership model have to be established.

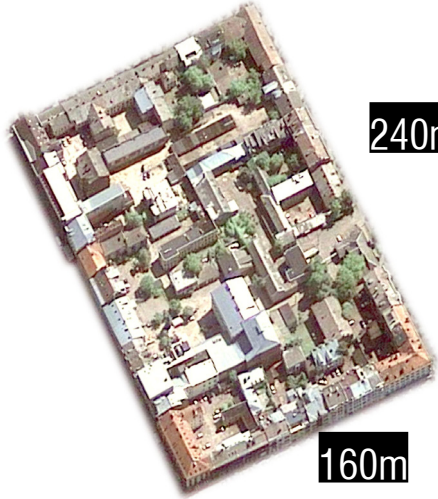
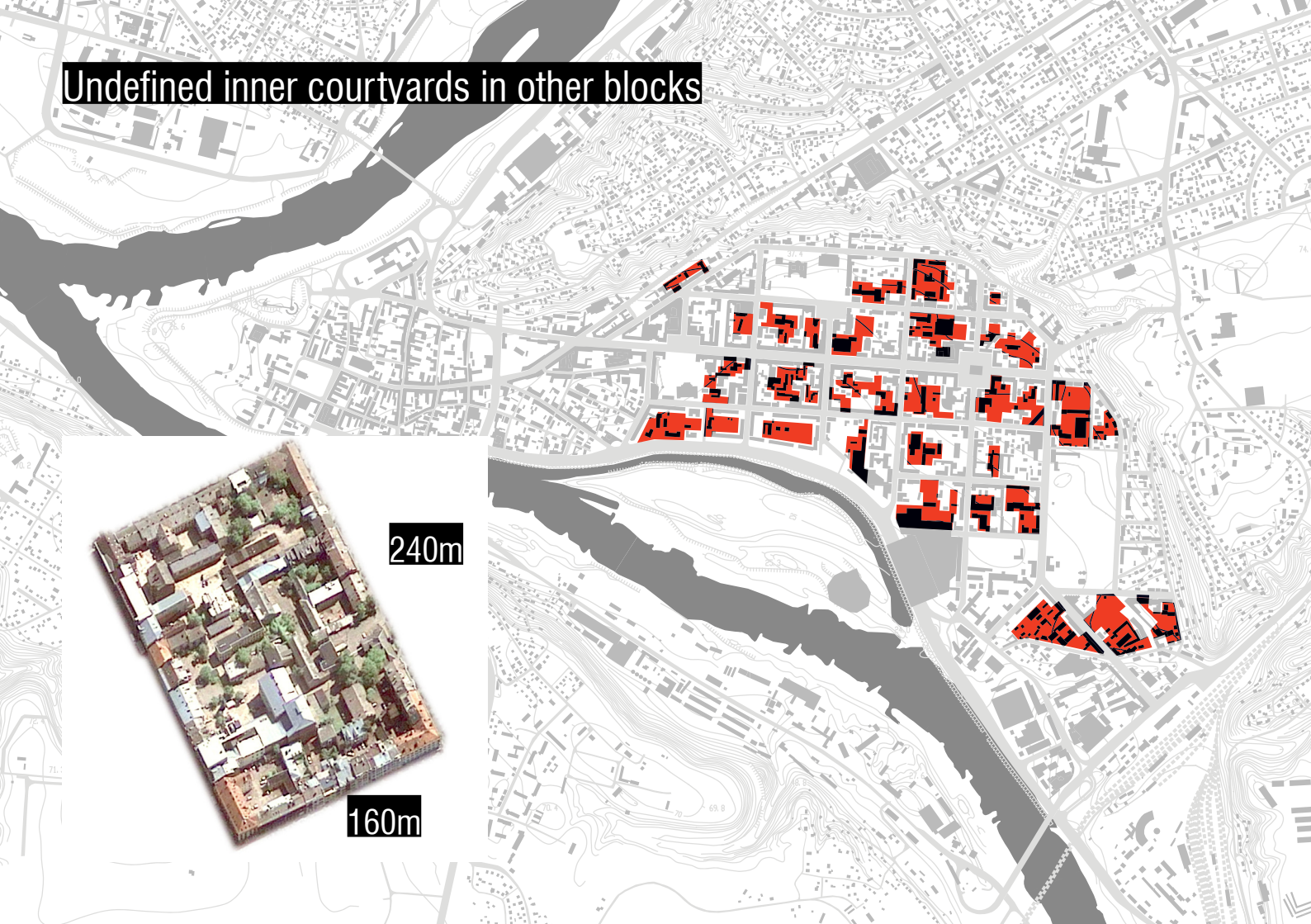
Urban plan and possible restructure of the inner spaces will provide new public space around which new development could take place.

# Informal spaces





# Undefined inner courtyards in other blocks



240m

160m

# Expanded public spaces



Evaluation

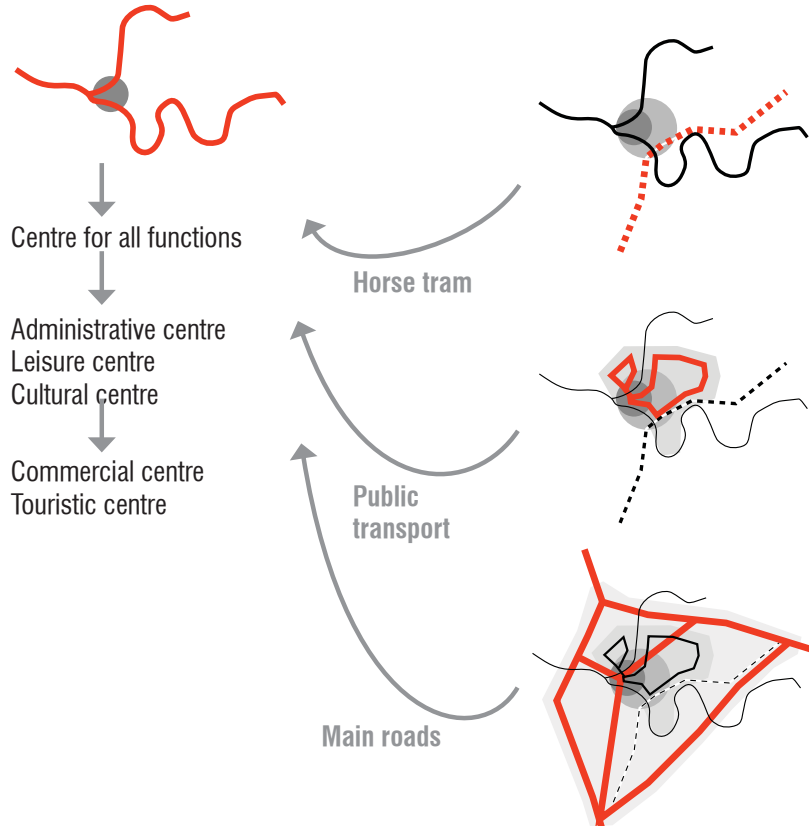


# starting point

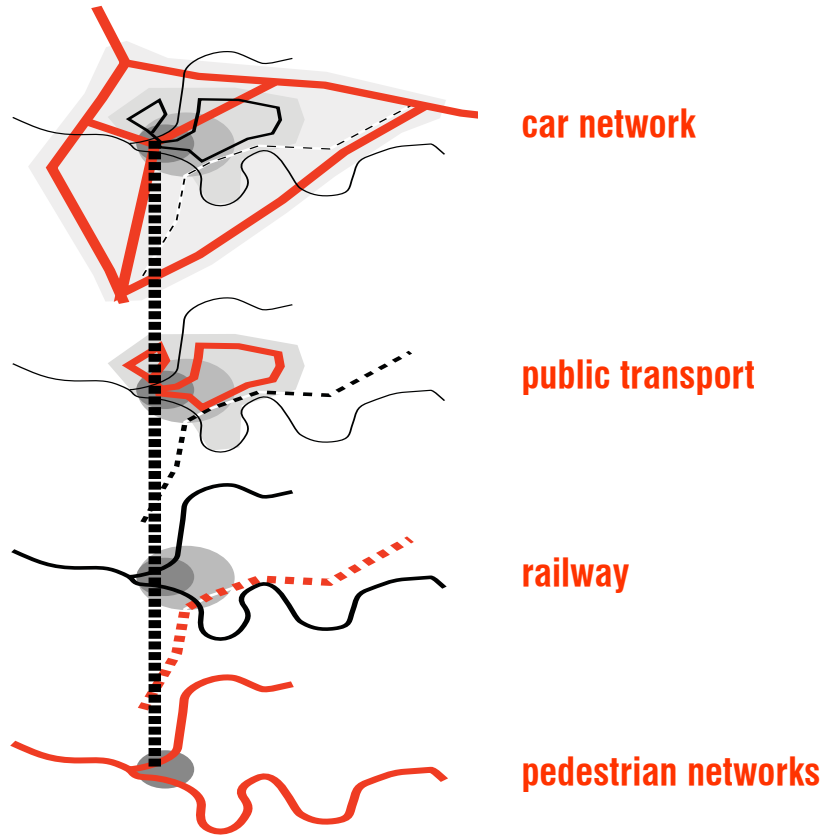
# analysis

The use of the city centre have decayed in last 20 years what resulted in empty public spaces

## Why city center was actively used before?



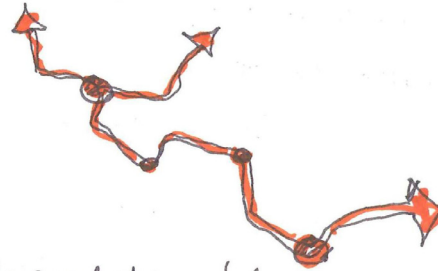
**ambition**



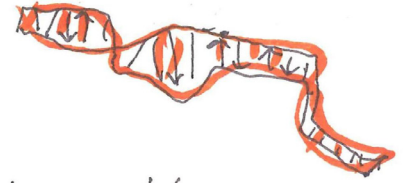
# strategy



metropolitan hubs

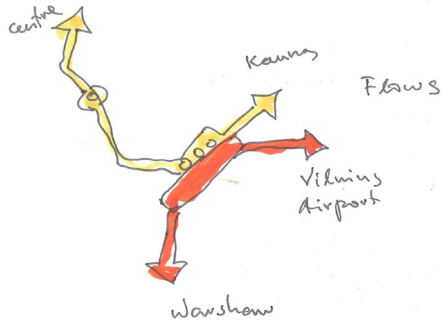


public transport

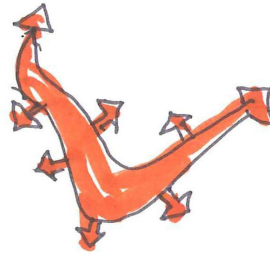


public backbone

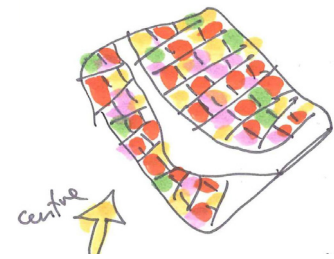
# design



places of flows



active public backbone



mix functions, diverse environment





THANK YOU