

P5 presentation



MOVING THROUGH TRANSITIONS

A strategic urban design framework including the spatial conditions for a competitive environment



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1.1 INTRODUCTION



1.1 MOTIVATION

Croatia

	Rank (out of 28)	Score (1-7)
Europe 2020 Index (2014 edition)	24	3.9
Europe 2020 Index (2012 edition).....	n/a	4.0
Smart growth	24	3.7
Enterprise environment.....	27	3.3
Digital Agenda	22	4.0
Innovative Europe.....	26	3.2
Education and training.....	25	4.4
Inclusive growth	25	3.8
Labour market and employment.....	27	3.4
Social inclusion.....	23	4.2
Sustainable growth	15	4.7
Environmental sustainability	15	4.7

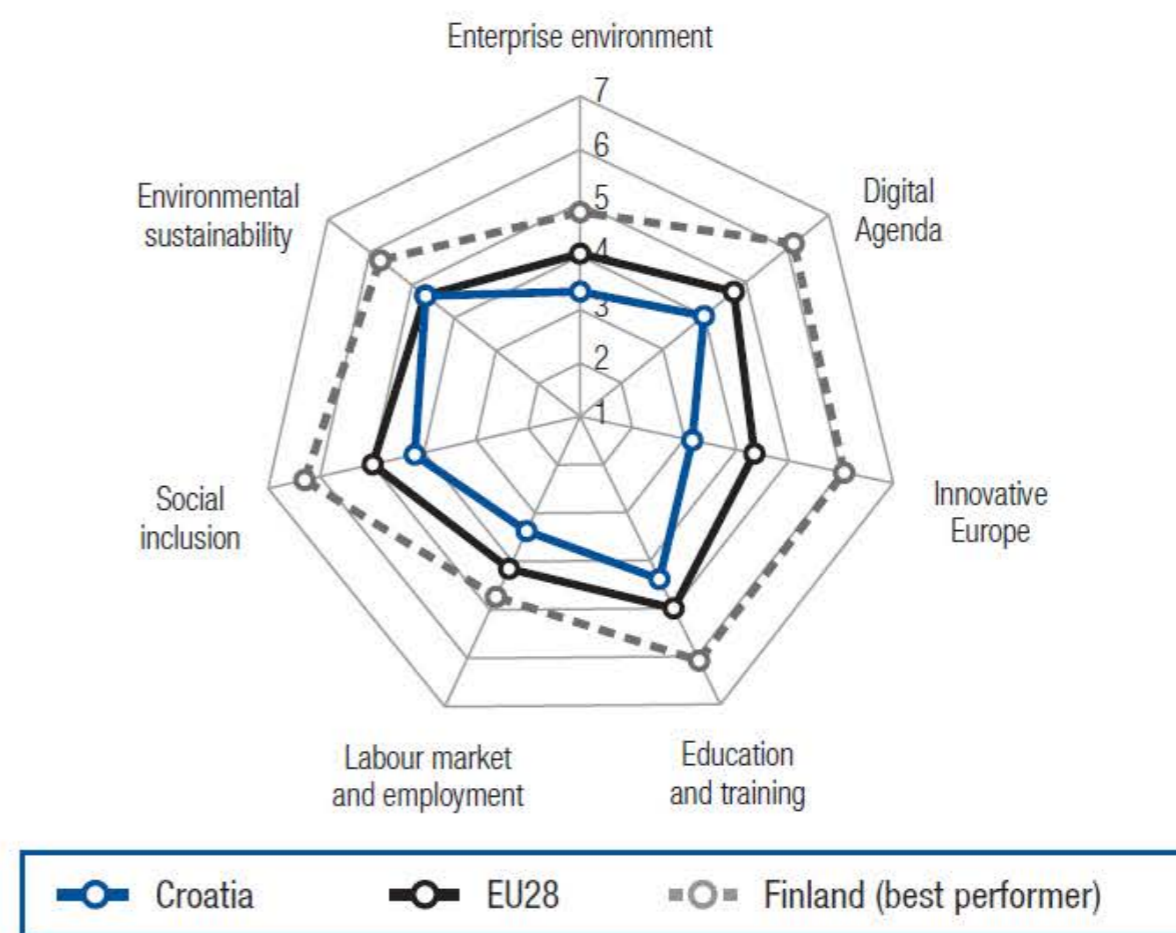


Figure 1 The benchmarking of Croatia with the performance indicators from the Europe 2020 strategy (Source : The Europe 2020 Competitiveness Report , © 2014 World Economic Forum)

1.2 PROBLEM FIELD

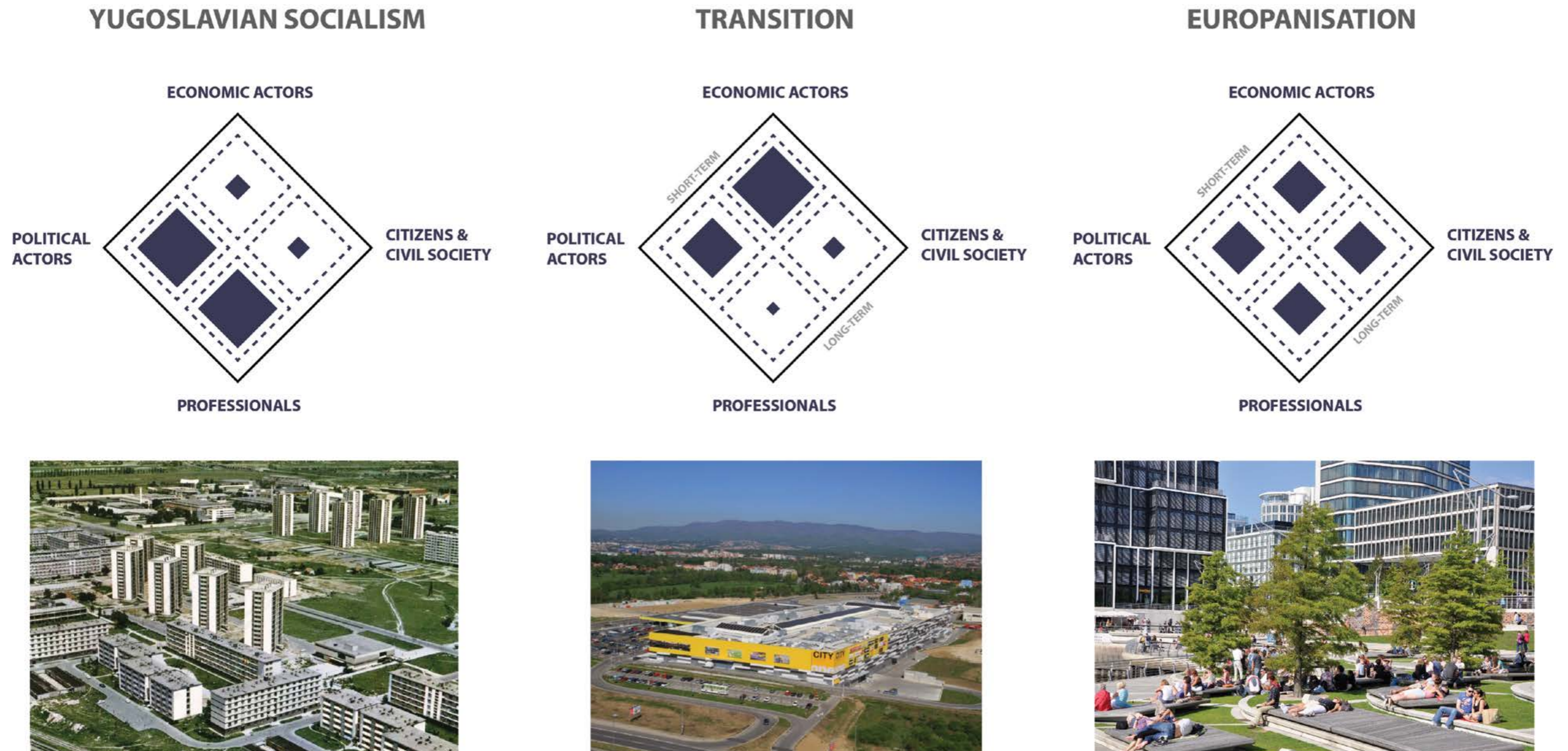
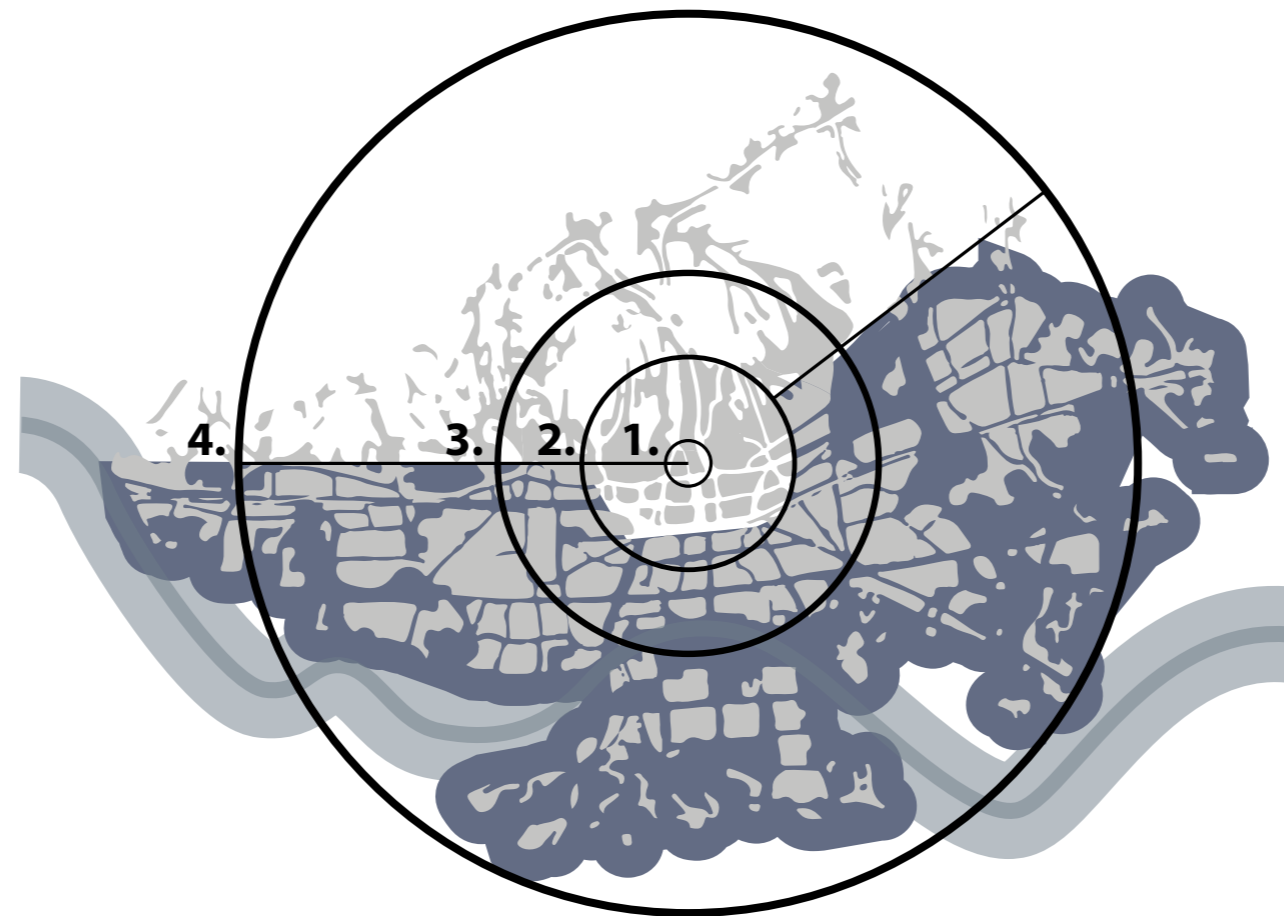


Figure 5: The power of four different actors in space during three socio-political times and the impact on the urban environment (Source: Image based on the article from Zlatar,2014)

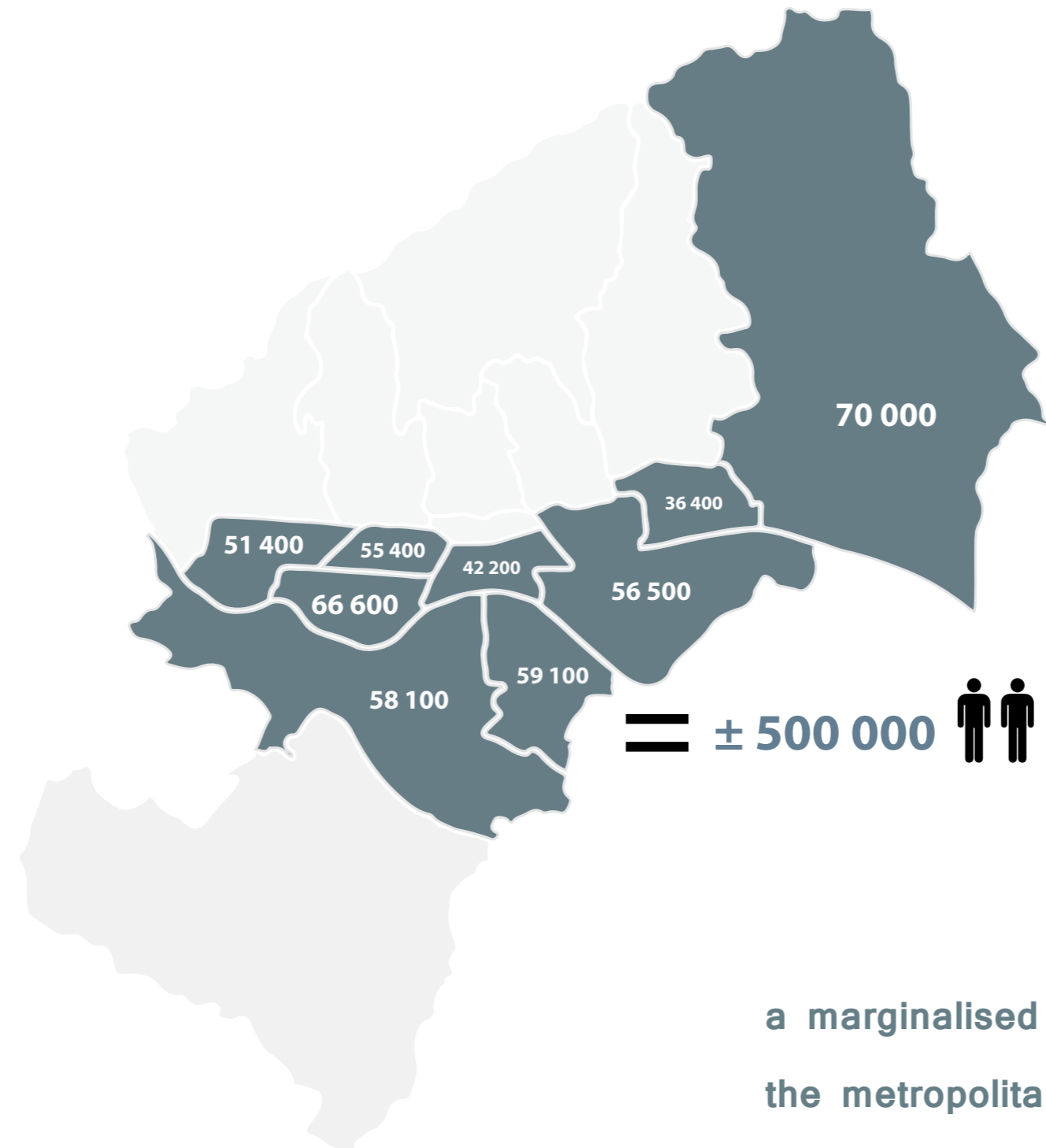
1.2 PROBLEM FIELD



PROBLEM STATEMENT

The context of a Post-Socialist transition and war conflict has led to a weakened spatial governance system which enabled a negative impact on the urban environment containing negative spatial externalities, which prevent the agglomeration of Zagreb in gaining competitive advantages.

1.3 RELEVANCE



a marginalised society on the fringe of the metropolitan area who have less opportunities

2.0 RESEARCH

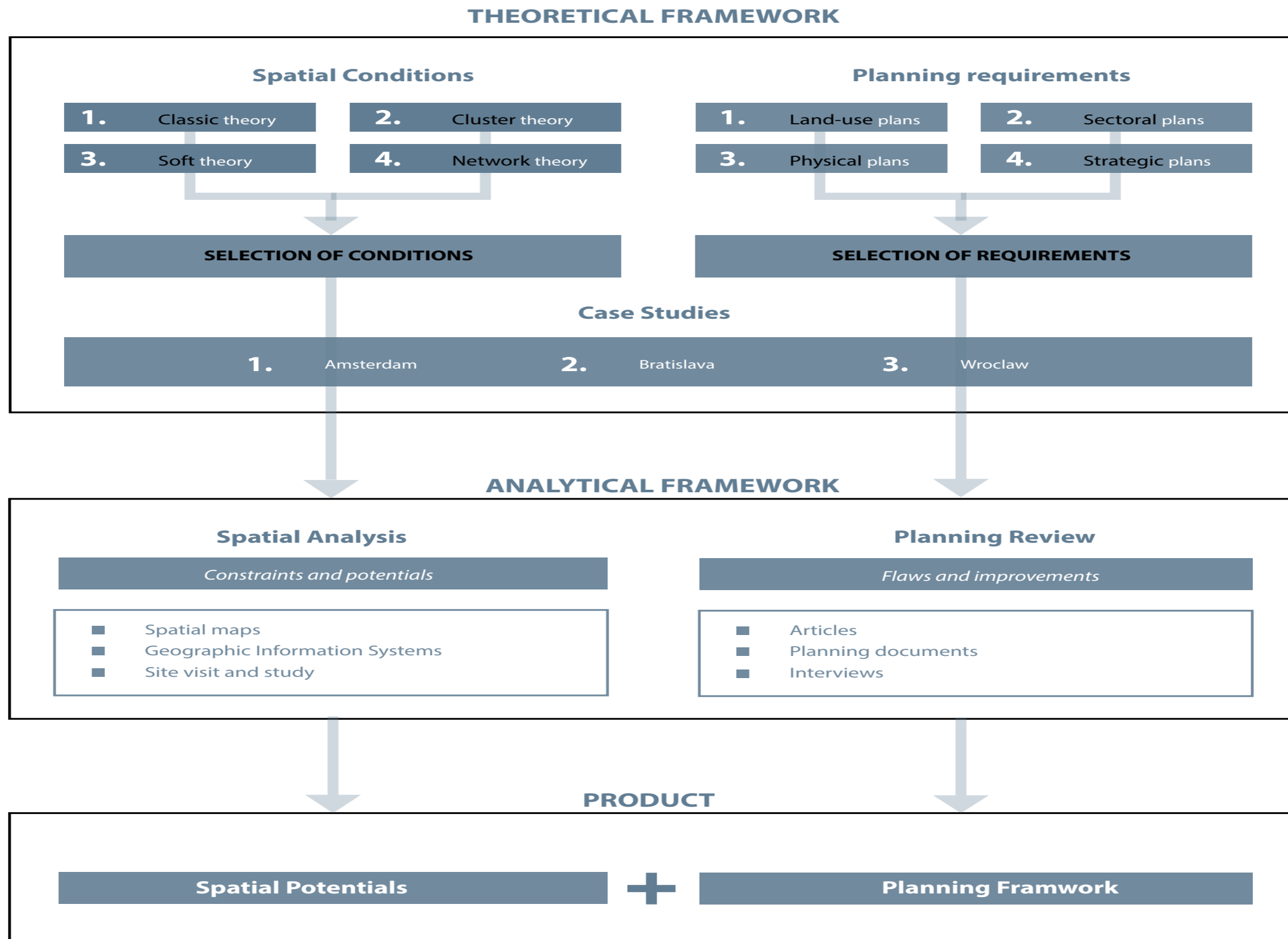


2.1 RESEARCH QUESTION

MAIN QUESTION

Which planning framework can consider the conditions for a competitive environment so that the third and fourth ring can be integrated into the metropolitan structure of Post-Socialist Zagreb using the four main theories on spatial competitiveness

2.2 METHODOLOGY



3.0 THEORY



3.1 DEFINITION

DEFINITION BY THE EU COMPETITIVENESS REPORT

Regional competitiveness can be defined as the ability to offer an attractive and sustainable environment for firms and residents to live and work (Dijkstra et al., 2011).

3.2 THE FOUR MAIN THEORIES



CLASSIC THEORY



CLUSTER THEORY



NETWORK THEORY



SOFT CONDITIONS THEORY

3.3 TAILOR MADE PLAN



CLASSIC THEORY

PRODUCTIVE SPACE

ECONOMIC FOCUS



CLUSTER THEORY

INNOVATIVE SPACE

ECONOMIC FOCUS



SOFT THEORY

SUSTAINING SPACE

SOCIAL &
ENVIRONMENTAL FOCUS



NETWORK THEORY

ENABLING SPACE

SOCIAL FOCUS

3.4 CONCLUSION

CLASSIC THEORY

- PRIVATE TRANSPORT INFRASTRUCTURE
- MIXED USE DEVELOPMENT
- PUBLIC TRANSPORT INFRASTRUCTURE
- DENSITIES

NETWORK THEORY

- LOCAL AND GLOBAL NETWORKS
- POLYCENTRIC STRUCTURE

CLUSTER THEORY

- INDUSTRY CLUSTERS
- KNOWLEDGE CLUSTERS
- KNOWLEDGE INSTITUTIONS
- OFFICE CLUSTERS

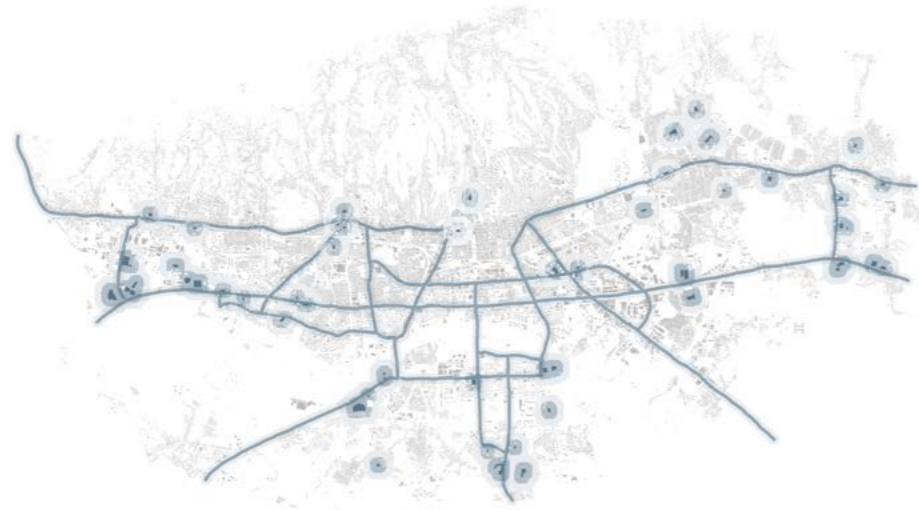
SOFT THEORY

- GREEN SPACE
- CULTURE AND LEISURE AMENITIES

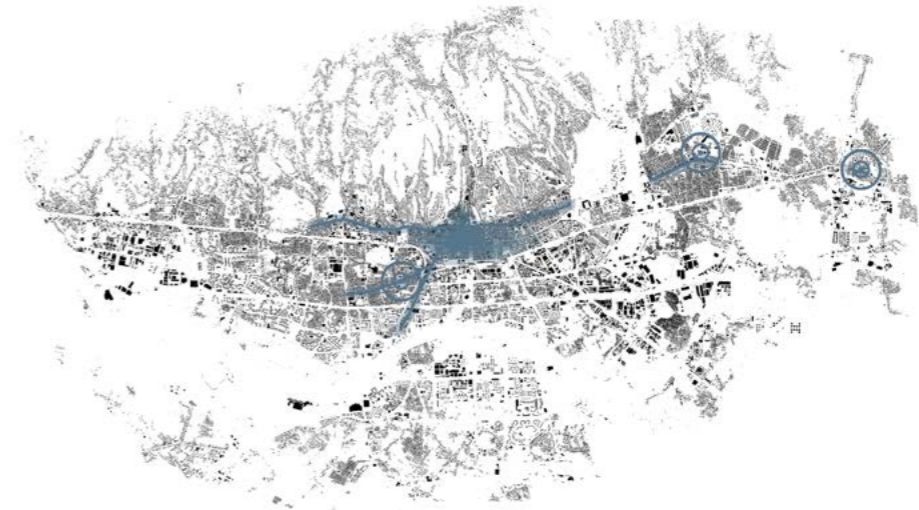
4.0 SPATIAL ANALYSIS



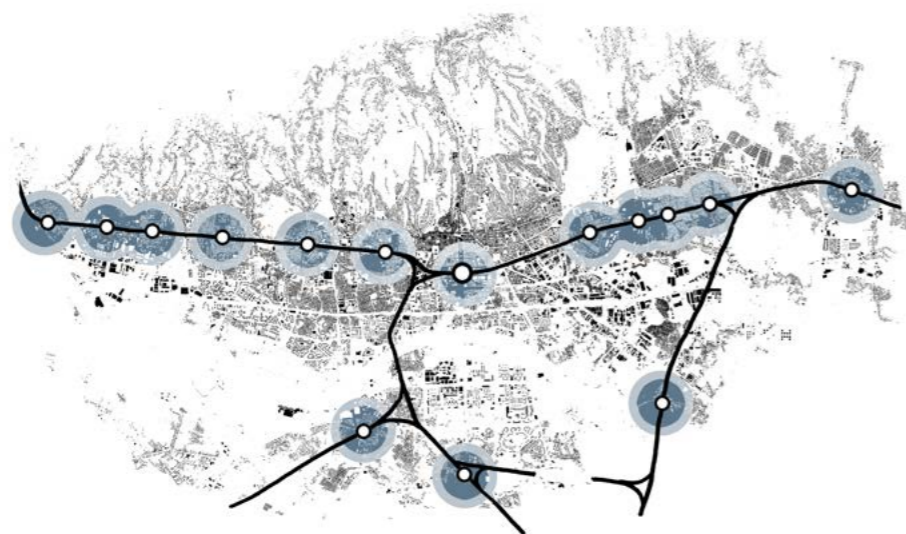
4.1 CLASSIC THEORY



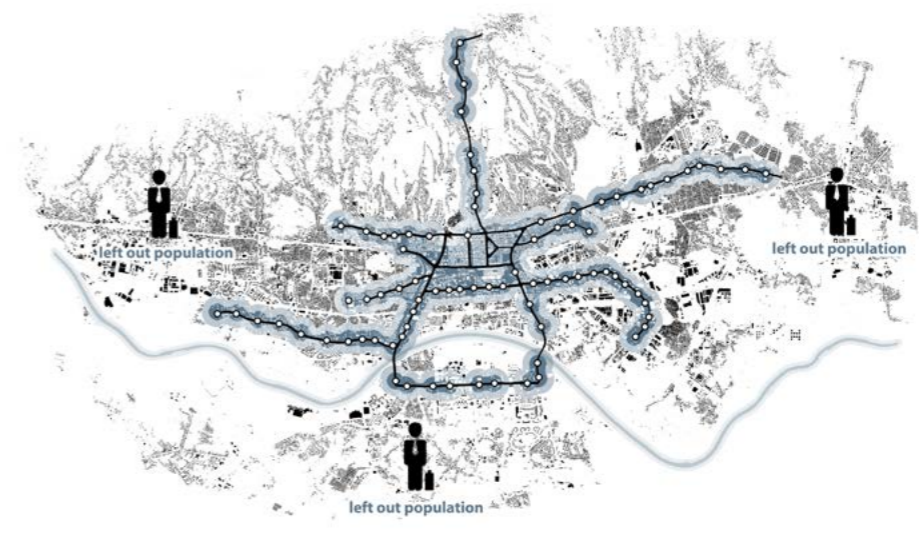
CAR INFRASTRUCTURE



MIXED USE DEVELOPMENT



TRAIN INFRASTRUCTURE

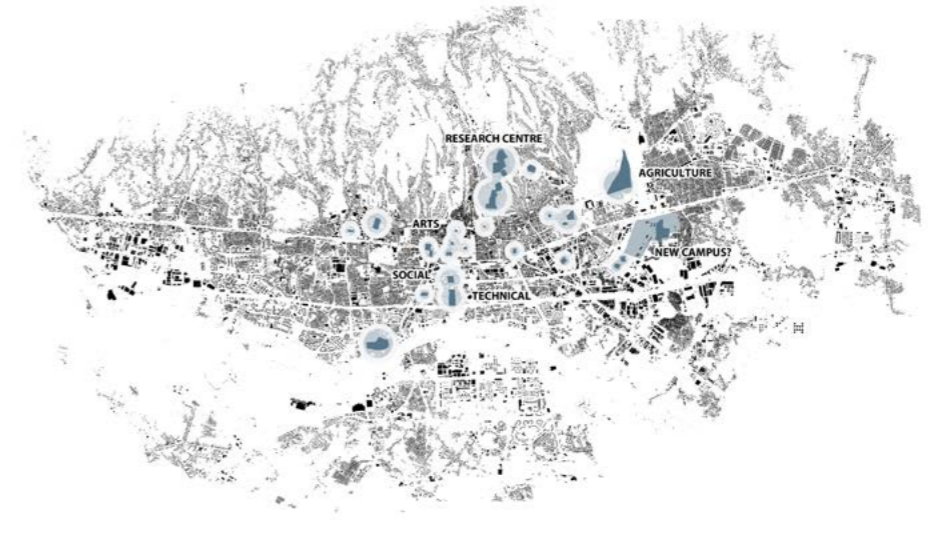


TRAM INFRASTRUCTURE

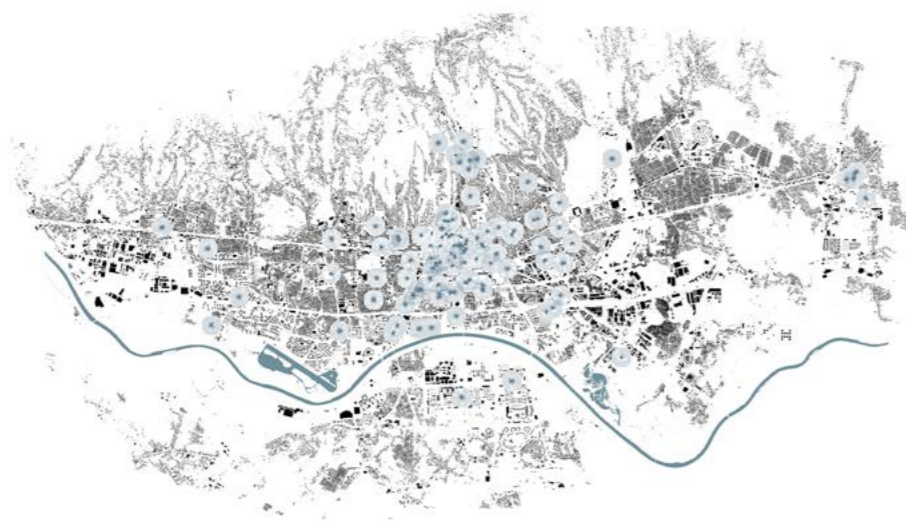
4.2 CLUSTER THEORY



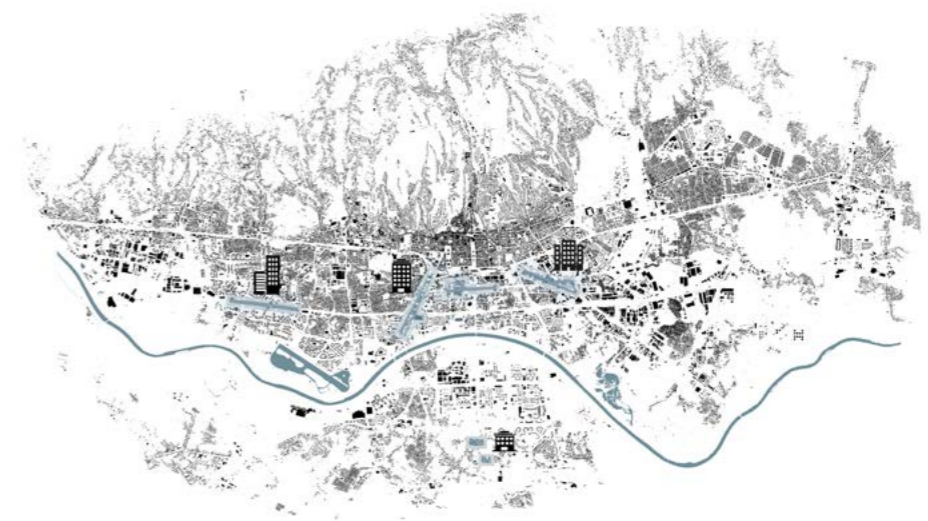
INDUSTRY CLUSTERS



KNOWLEDGE CLUSTERS



KNOWLEDGE INSTITUTIONS



OFFICE CLUSTERS

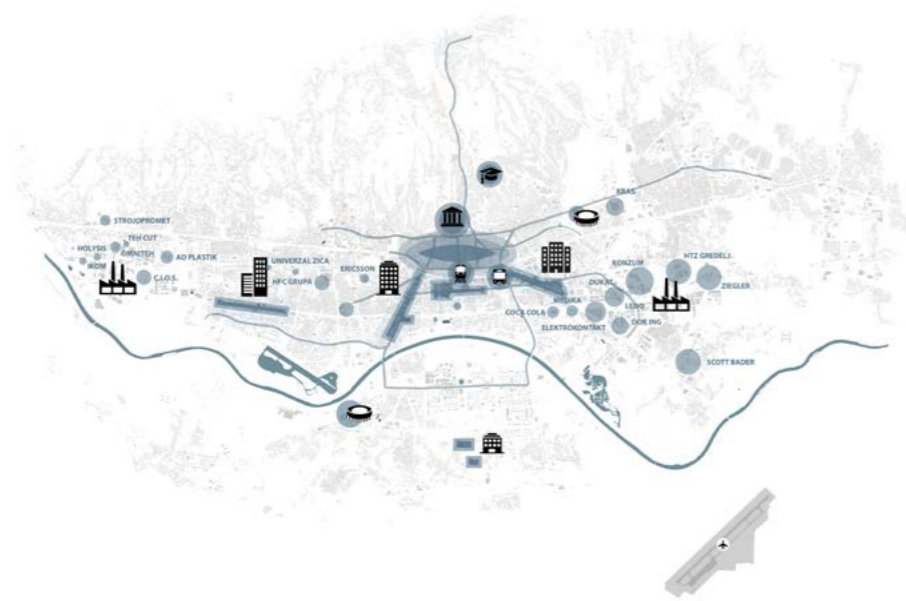
4.3 NETWORK AND SOFT THEORY



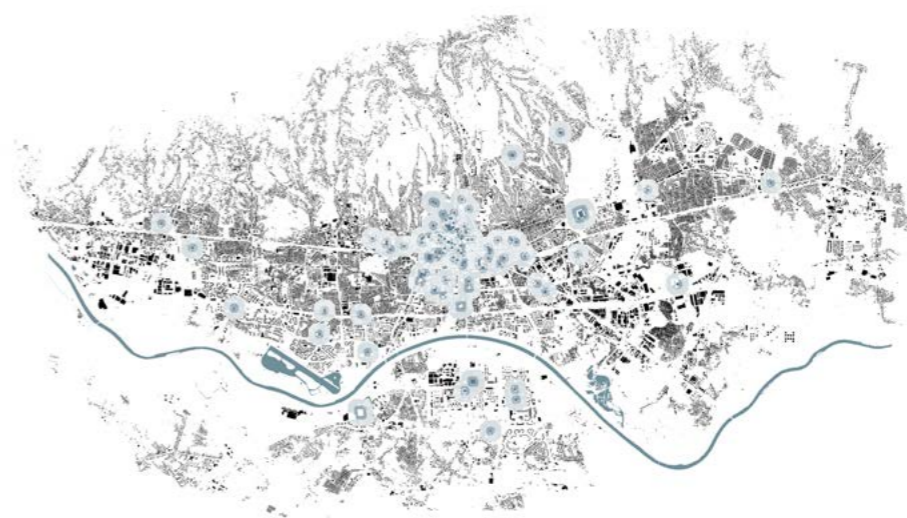
LOCAL NETWORKS



GREEN SPACE

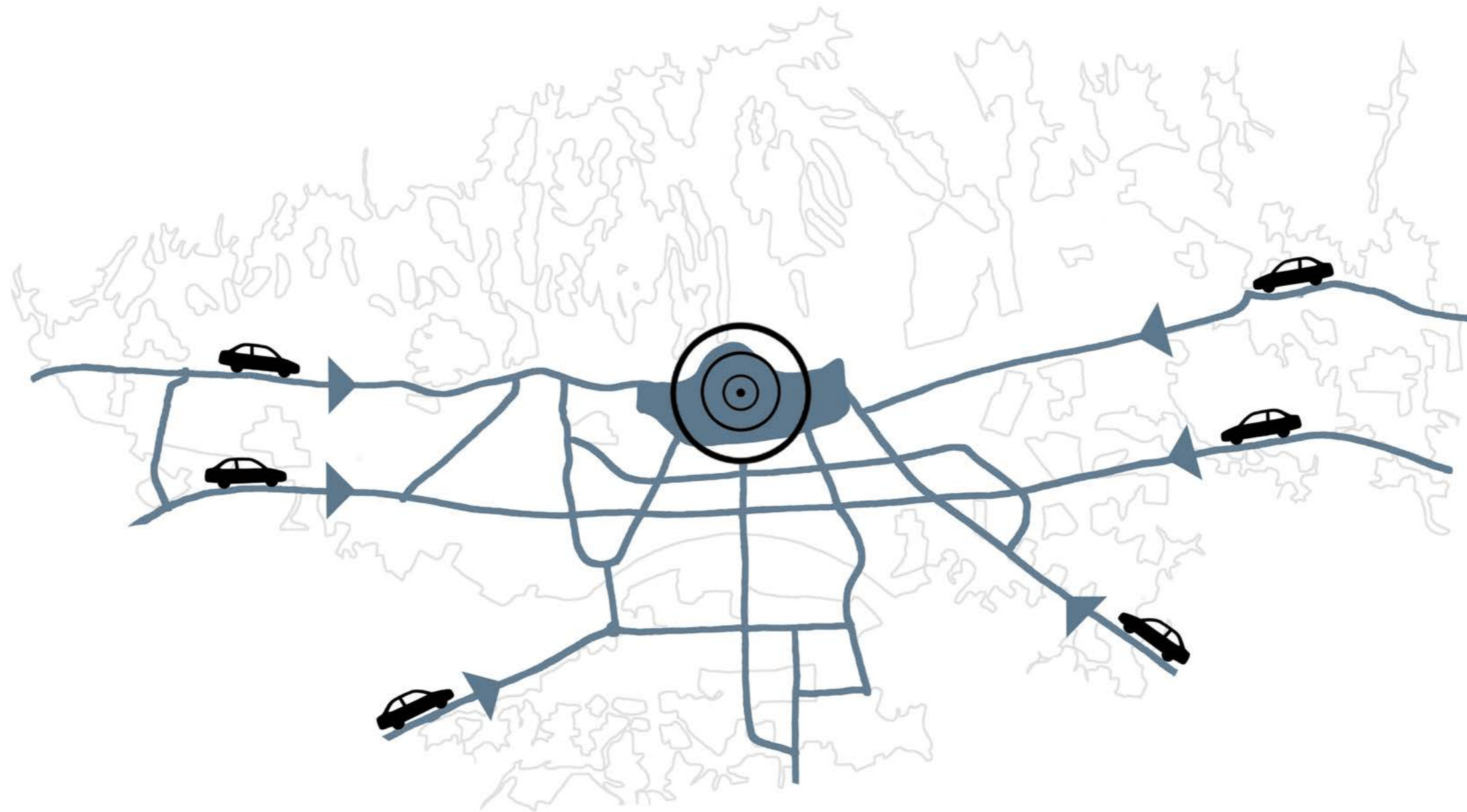


GLOBAL NETWORKS



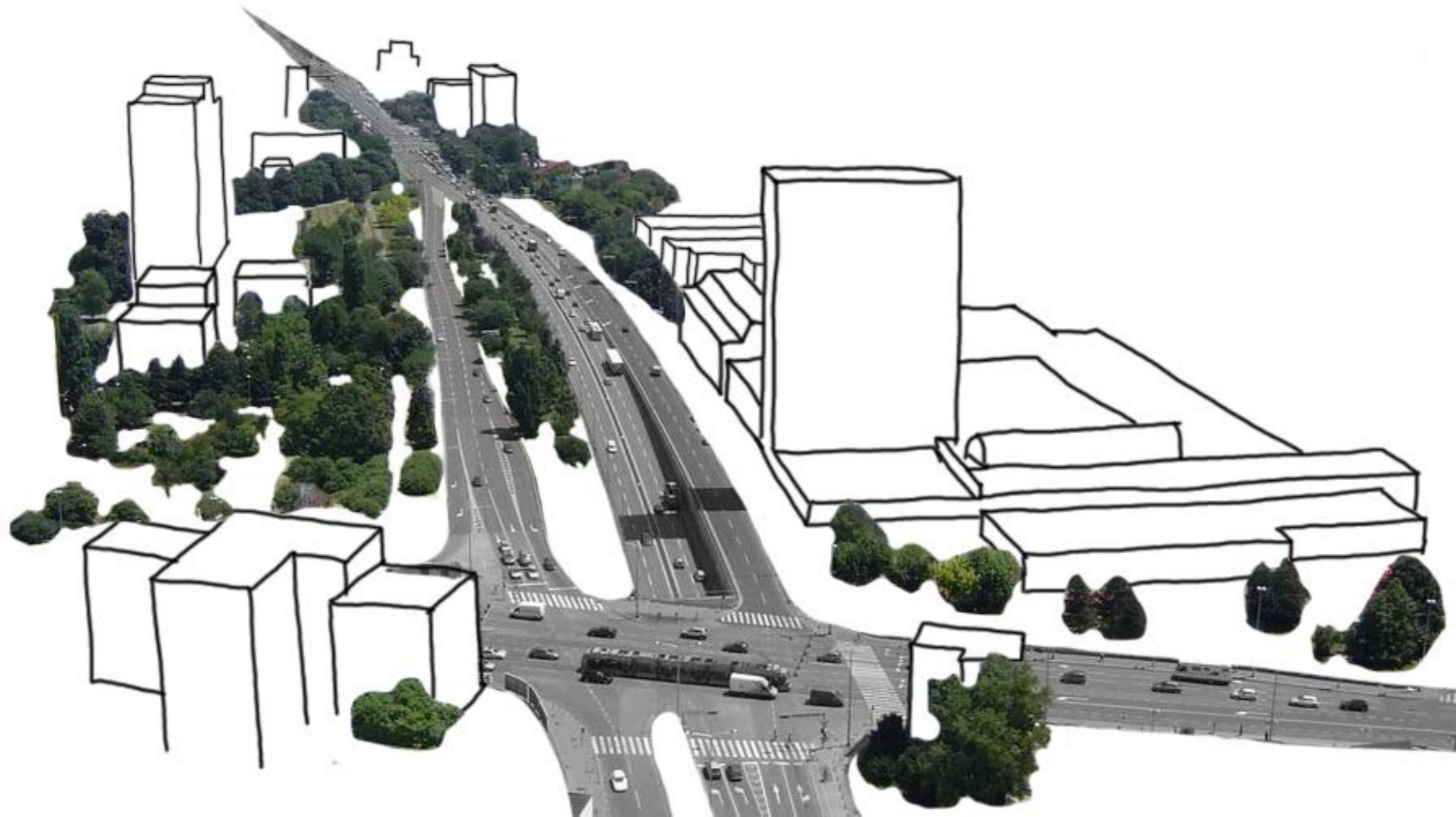
CULTURAL AMENITIES

4.4 CONCLUSION



A CAR DOMINATED MONOCENTRIC CITY

4.4 CONCLUSION







S

CULINEC

TRČE
LAG

CULINEC



iznad krovnog sela
DUPREX

MARTIMEX

MARTIMEX

DUPREX

Dvoiznad krovnog sela

DUPREX

**-30%
NA SAV
OMAKE**

221 TRAVNO

ZG7492FE



4.4 CONCLUSION

CLASSIC THEORY

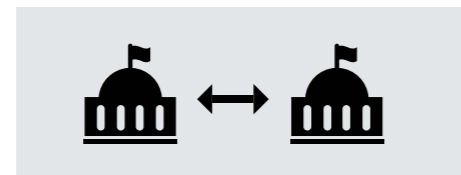


CONGESTION

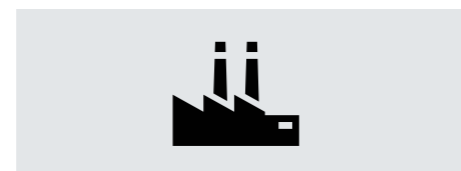


MONOFUNCTIONAL DEVELOPMENTS

CLUSTER THEORY



SEPERATED KNOWLEDGE INSTITUTIONS

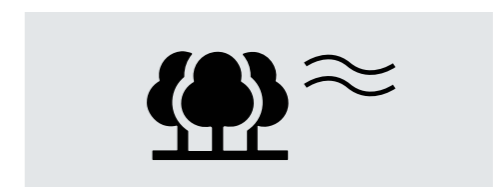


ISOLATED INDUSTRIES

SOFT THEORY

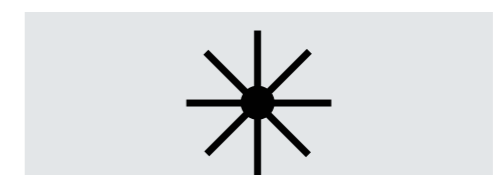


AUTOMOBILE DOMINATED PUBLIC SPACE



GREEN REST SPACE

NETWORK THEORY



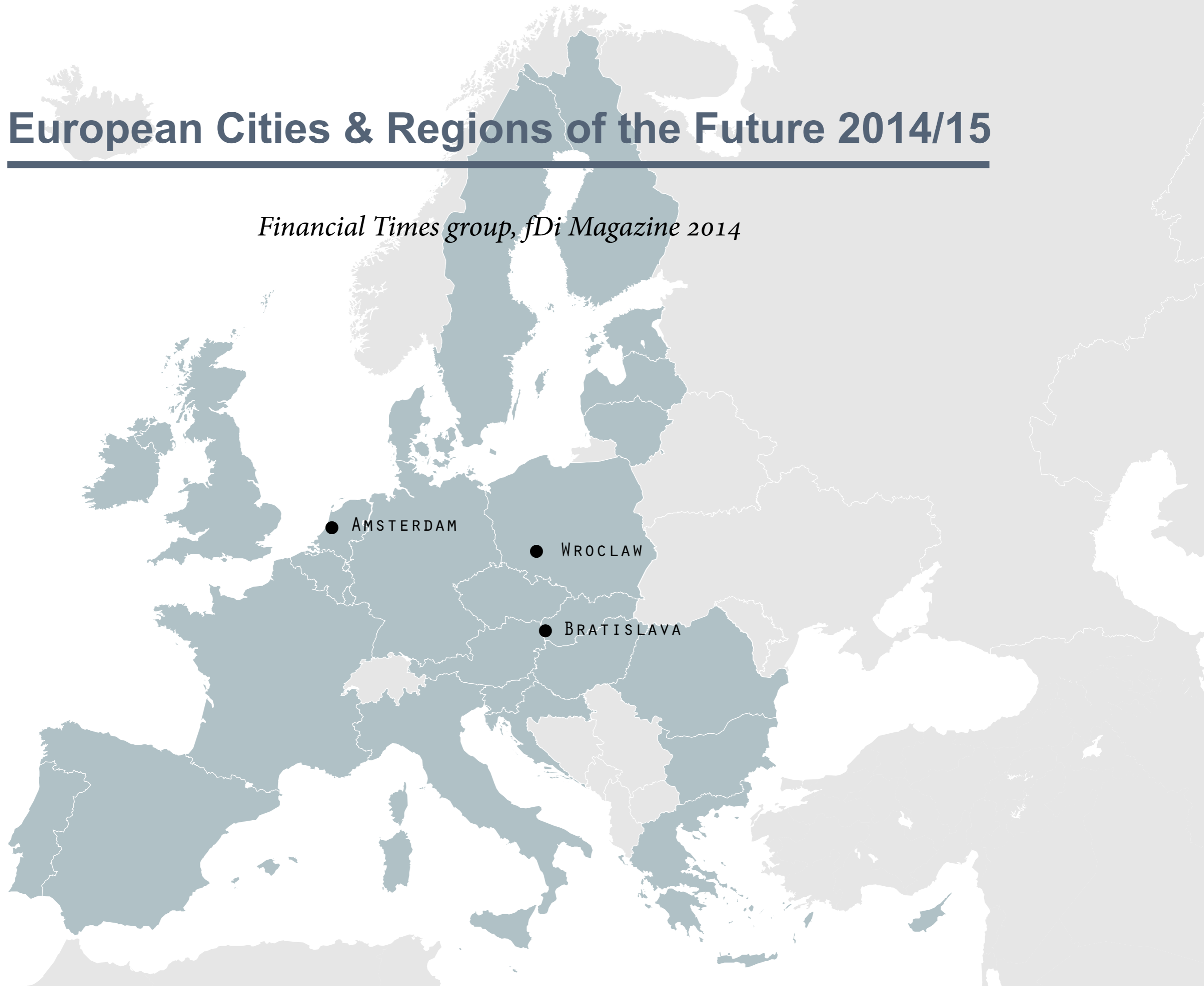
MONOCENTRIC CITY

5.0 CASE STUDIES



European Cities & Regions of the Future 2014/15


Financial Times group, fDi Magazine 2014

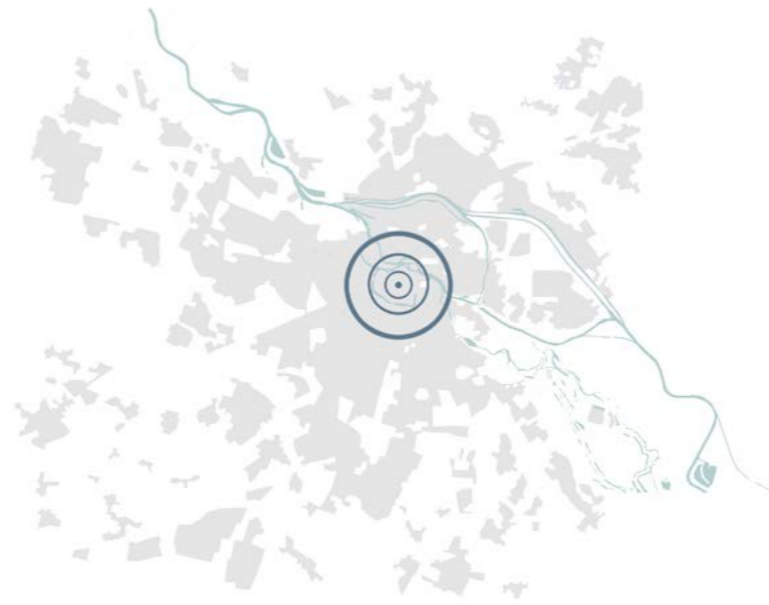


5.1 THREE CITIES




BRATISLAVA

 580 000




WROCLAW

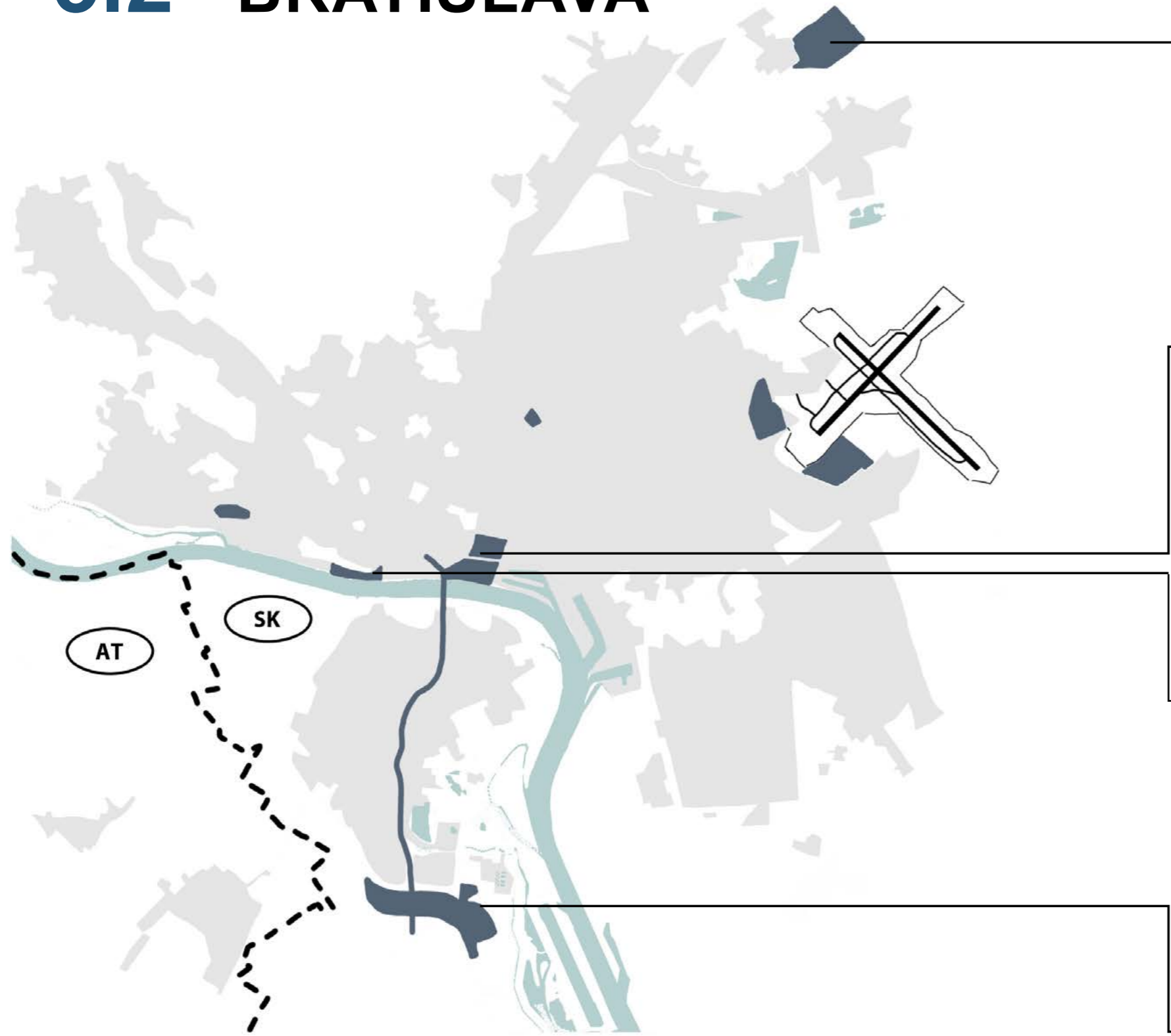
 650 000



AMSTERDAM

 1 200 000

5.2 BRATISLAVA



5.3 AMSTERDAM



5.4 WROCLAW



5.5 CONCLUSION

Policy Focus

BRATISLAVA

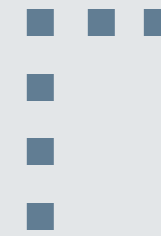
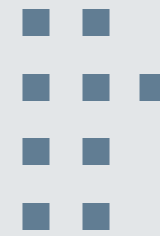
WROCLAW

AMSTERDAM

ZAGREB

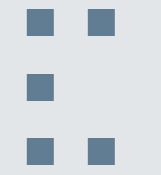
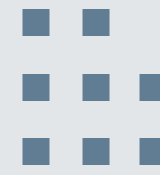
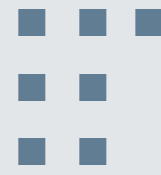
Classic theory

- Car infrastructure
- Public transport
- Densification
- Mixed-use environments



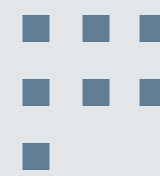
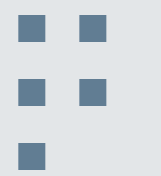
Cluster Theory

- Business Districts
- Knowledge Clusters
- Industry Clusters



Soft conditions Theory

- Pedestrian & Bicycle possibilities
- Culture and Leisure activities
- Parks and Nature



Network Theory

- Global Airport connectivity
- Local Public space for interaction



11th

5.6 POLICY RECOMMENDATIONS

CLASSIC THEORY



AUTOMOBILE INFRASTRUCTURE

TRAIN NETWORK INVESTMENT

TRAM NETWORK INVESTMENT



MONOFUNCTIONAL DEVELOPMENTS

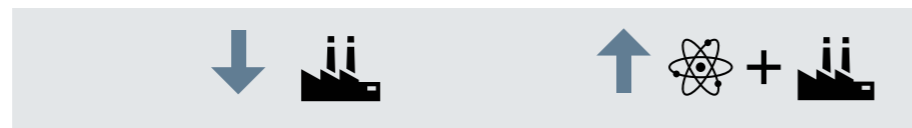
MIXED DENSE DEVELOPMENTS

CLUSTER THEORY



SEPERATED KNOWLEDGE INSTITUTIONS

JOINT CAMPUS DEVELOPMENT



ISOLATED INDUSTRIES

INDUSTRY AND RESEARCH COOPERATION

SOFT THEORY



AUTOMOBILE DOMINATED PUBLIC SPACE

CYCLIST-BASED PUBLIC SPACE

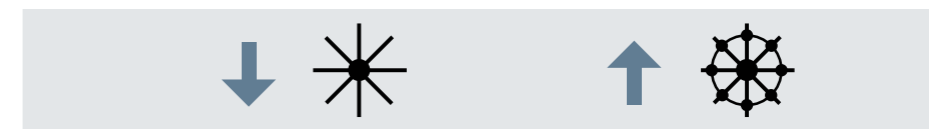
PEDESTRIAN-BASED PUBLIC SPACE



GREEN REST SPACE

ACTIVATED GREEN SPACE

NETWORK THEORY



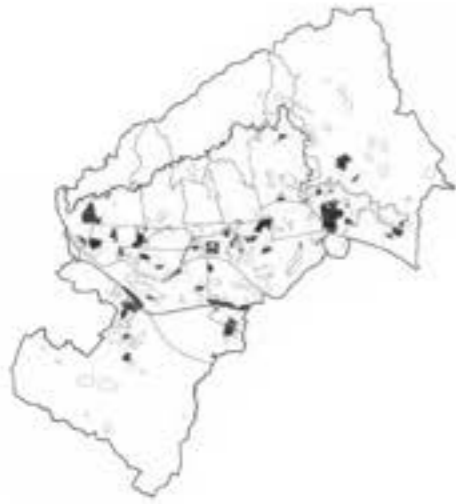
MONOCENTRIC CITY

POLYCENTRIC CITY

6.0 PLANNING REVIEW



6.1 REVIEW



PHYSICAL PLANNING



LAND-USE PLANNING



SECTORAL PLANNING



STRATEGIC PLANNING



6.2 INTERVIEWS AND STAKEHOLDER REVIEW

“ Visualisations are mostly only used when there already is a suitable investor. They are not used to attract them and then it limits itself to local plans. Attractive visualisations and visioning on a metropolitan scale does not exist in Croatia. ”

(Jesenko Horvat, Urban Design, University of Zagreb Faculty of Architecture, 2016)

6.2 INTERVIEWS AND STAKEHOLDER REVIEW

“ Regional strategic planning is not coordinated with with physical planning. There are enormous coordination problems. ”

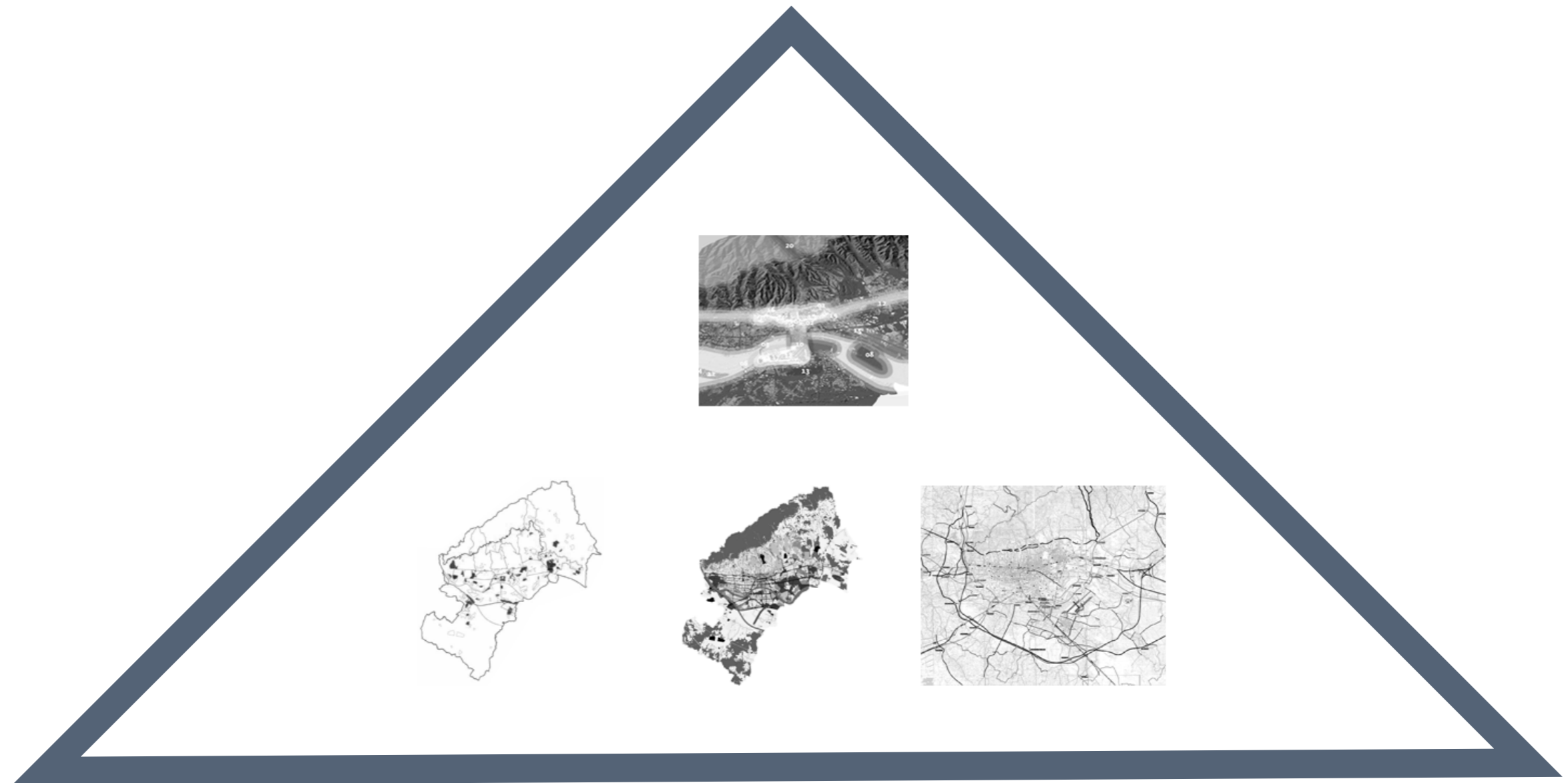
(Nives Mornar, Spatial planning office Zagreb, 2016)

6.3 CONCLUSION



6.4 PRODUCT

STRATEGIC PLANNING & VISIONING

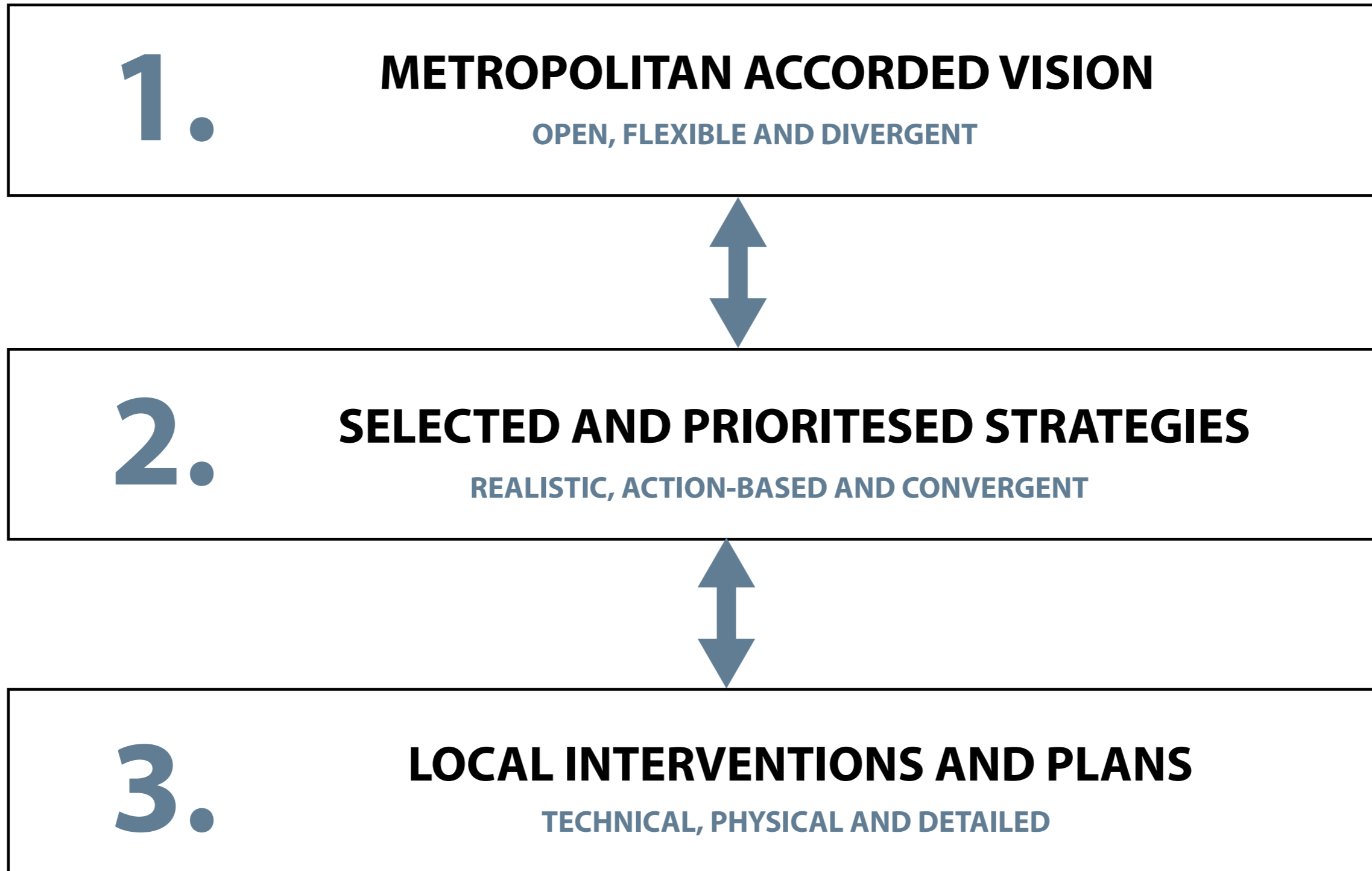


PHYSICAL SECTORAL LAND-USE PLANNING

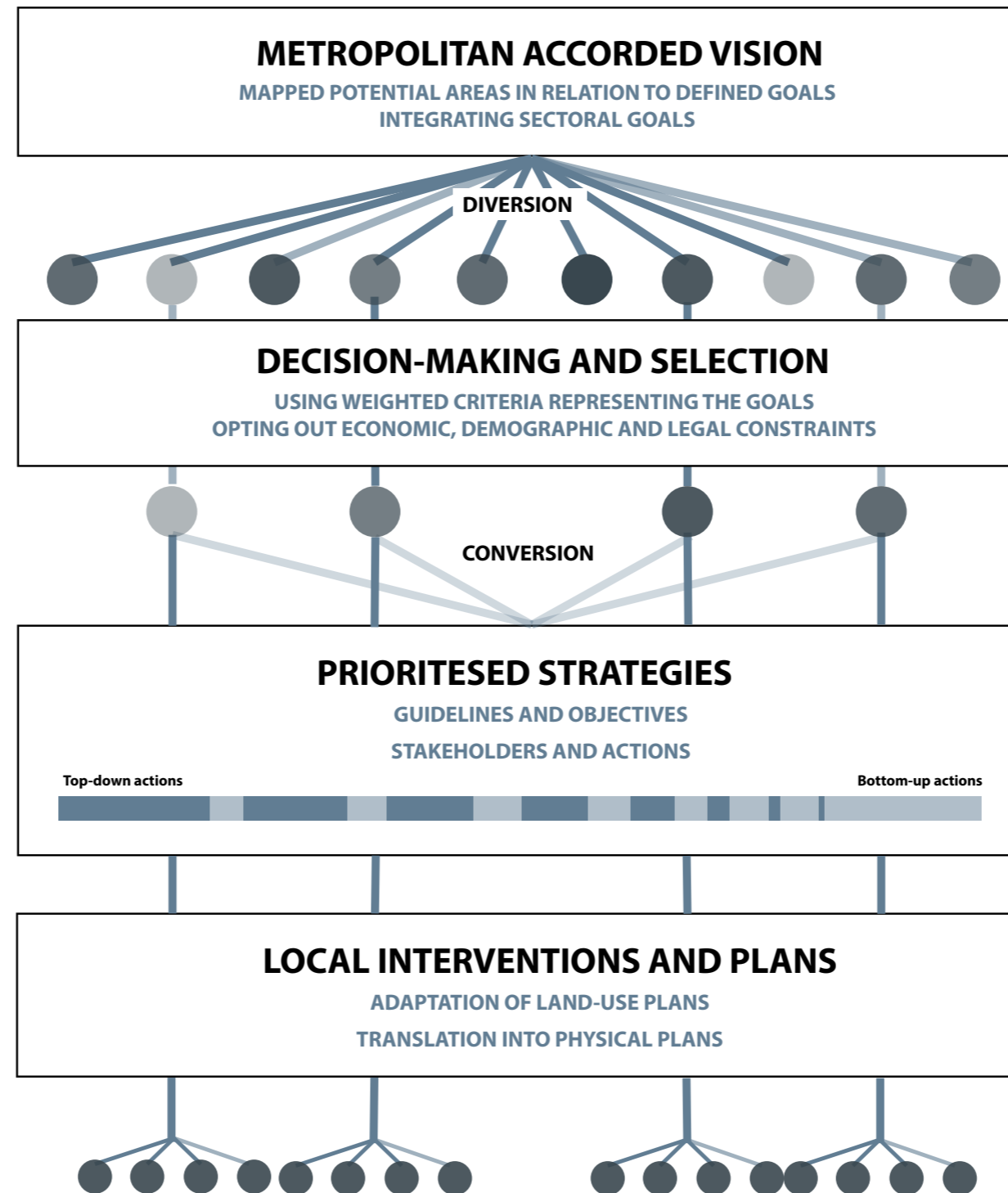
7.0 STRATEGIC FRAMEWORK



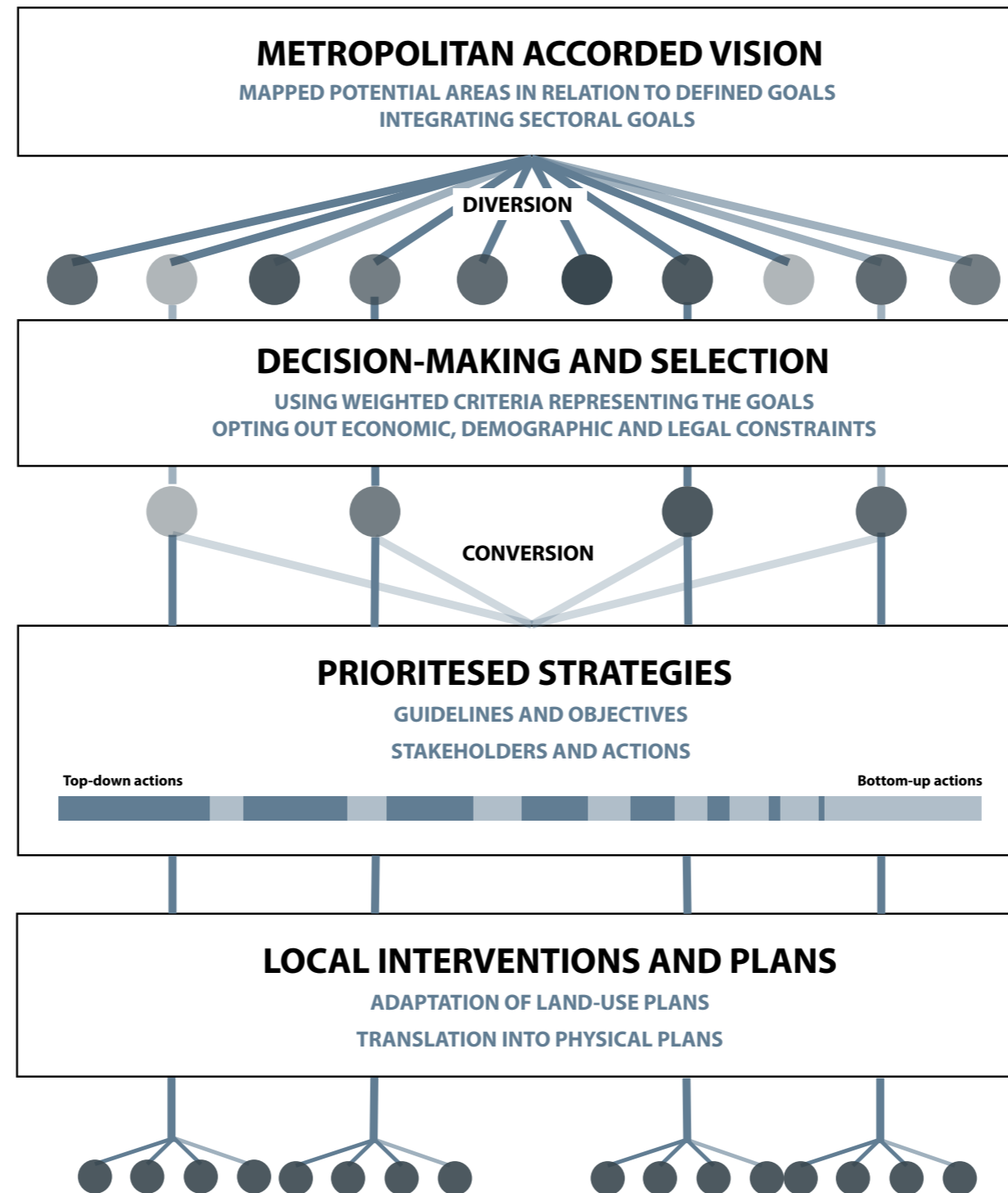
7.1 THREE SCALES FRAMEWORK



7.2 FRAMEWORK



7.2 FRAMEWORK



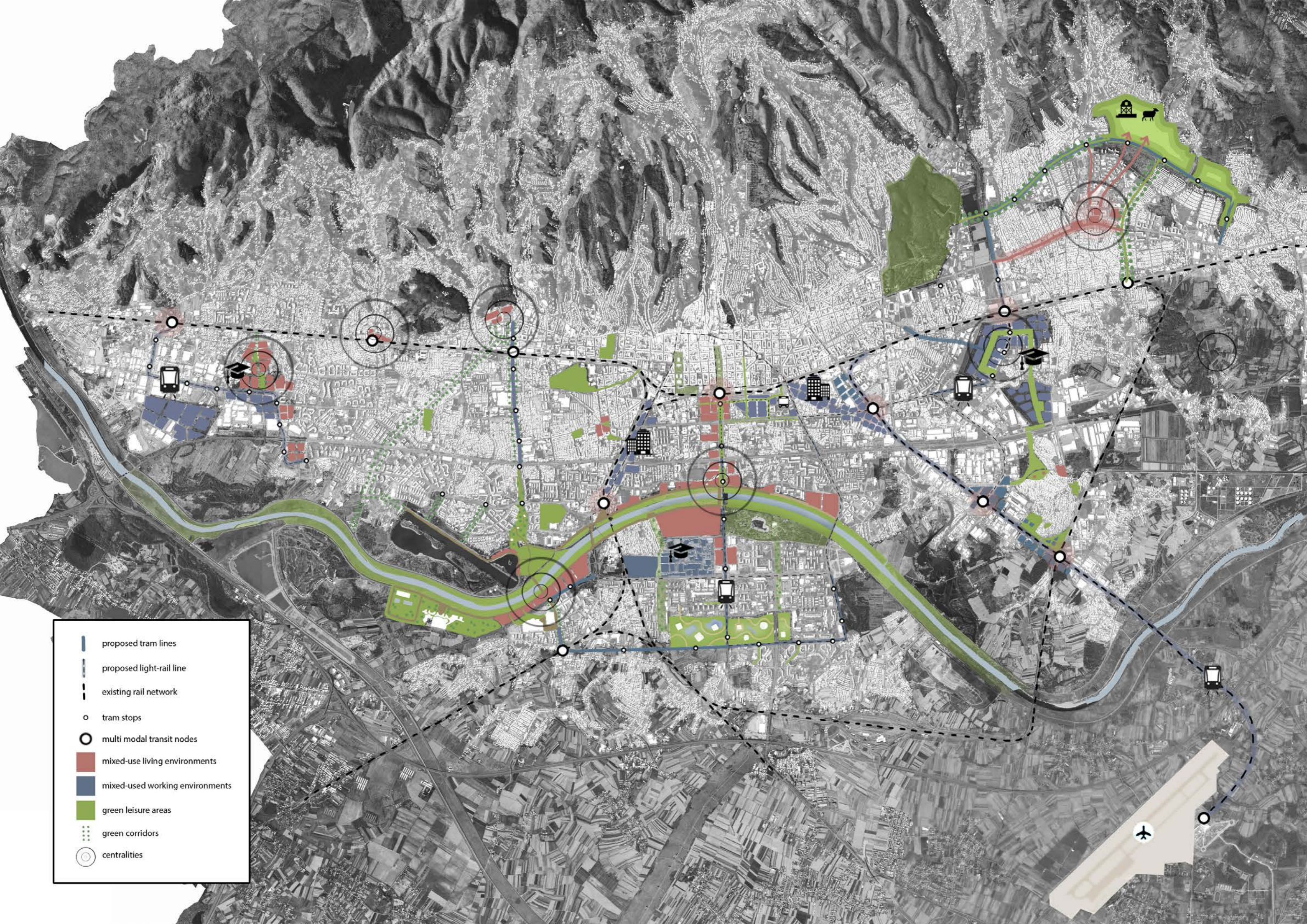
7.3 GOALS

GOAL

Increasing the spatial competitive position of the Metropolitan Area of Zagreb within the European Union

SUB GOALS

- **Investment in hard conditions in terms of public transport and creating dense mixed-use environments**
- **Strengthening knowledge, business and industry clusters and making their further growth possible**
- **Activating green structures and investing in culture and leisure**
- **Setting the right conditions for the growth a polycentric structure with public space for interaction**

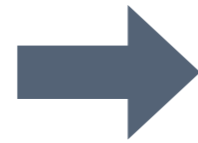


- proposed tram lines
- - - proposed light-rail line
- - - existing rail network
- tram stops
- multi modal transit nodes
- mixed-use living environments
- mixed-used working environments
- green leisure areas
- ⋯ green corridors
- centralities

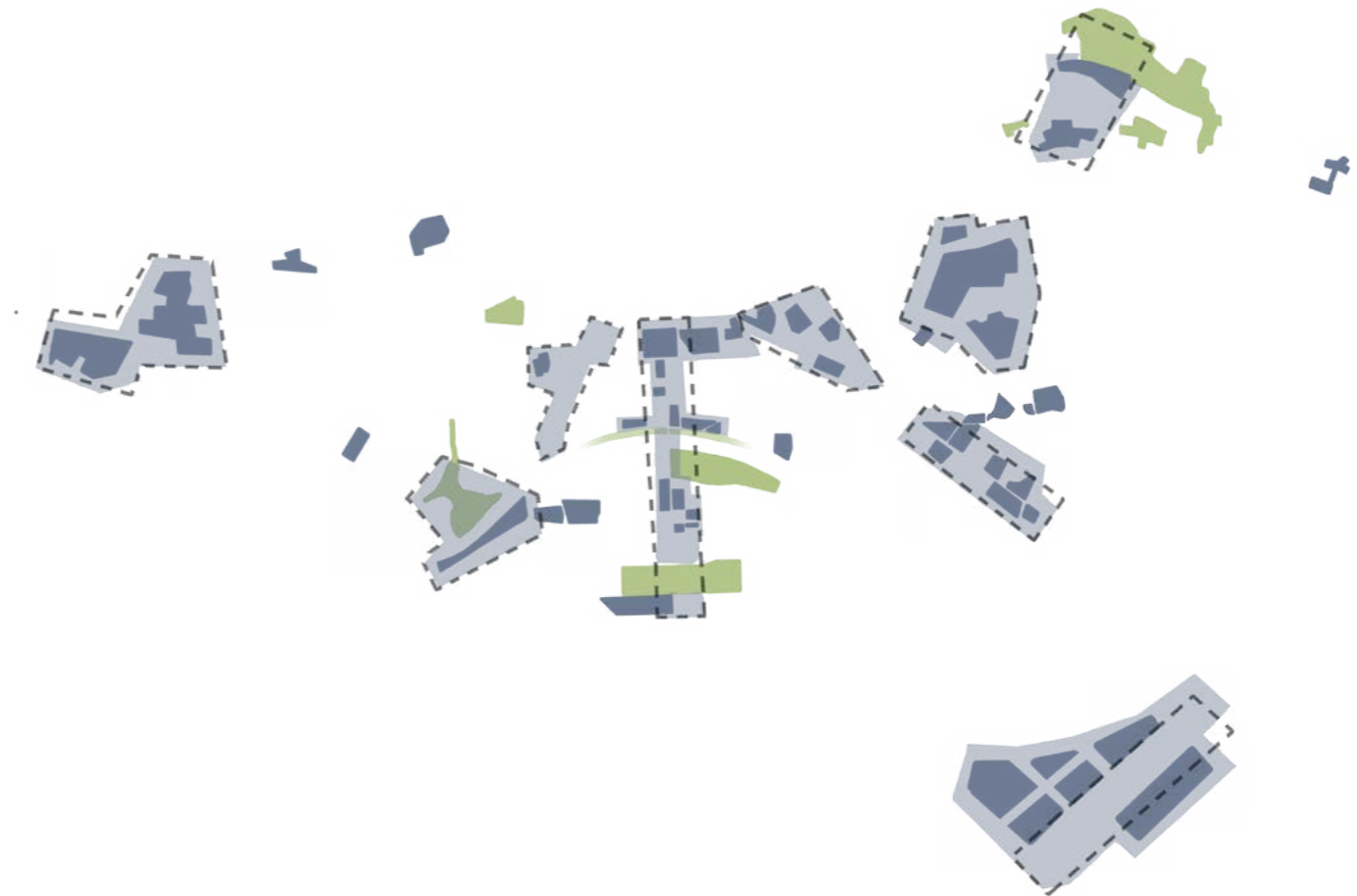


7.5 CURRENT PRACTICE

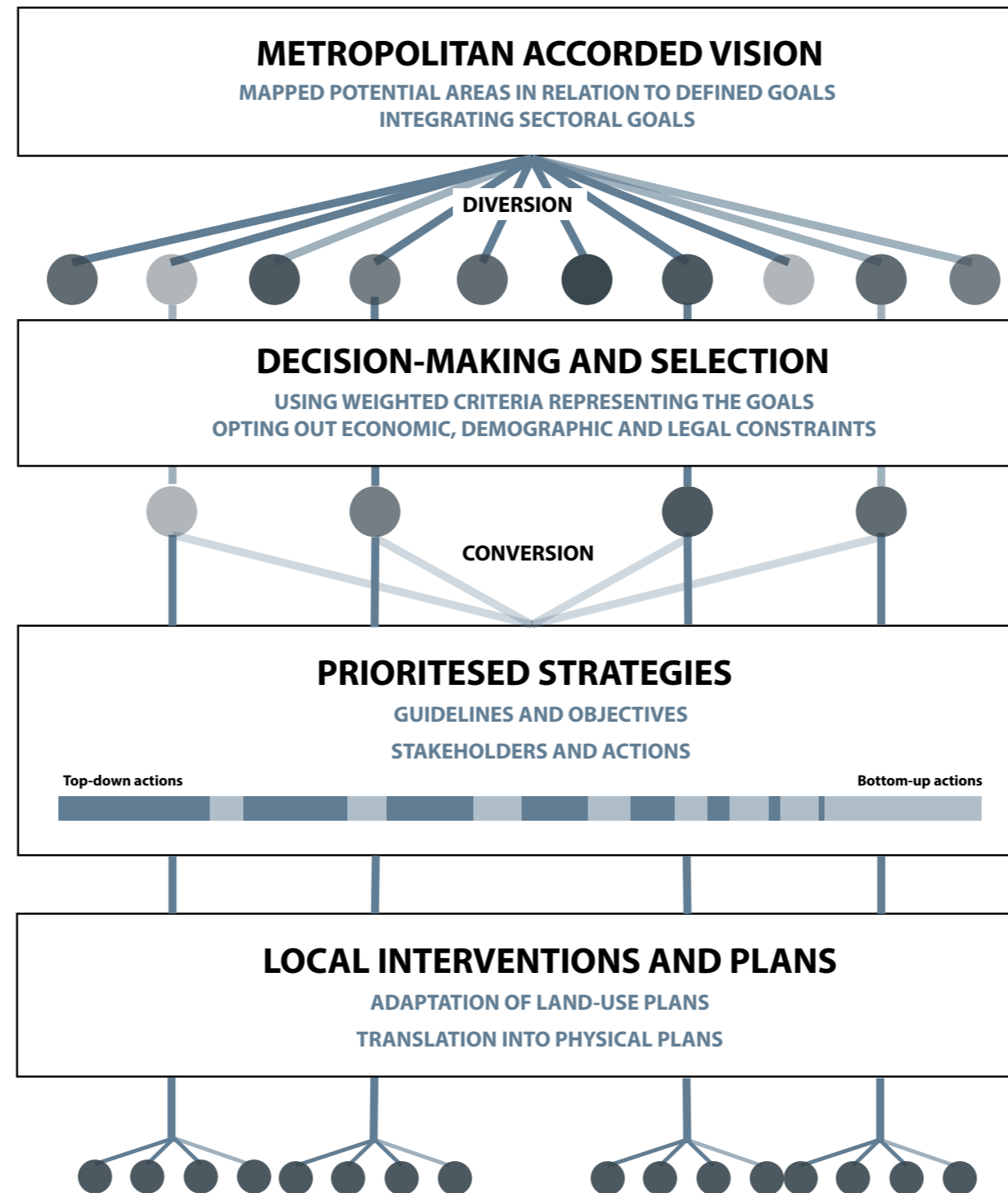
PROJECTS



AREAS & NETWORKS









7.6 DECISION MAKING



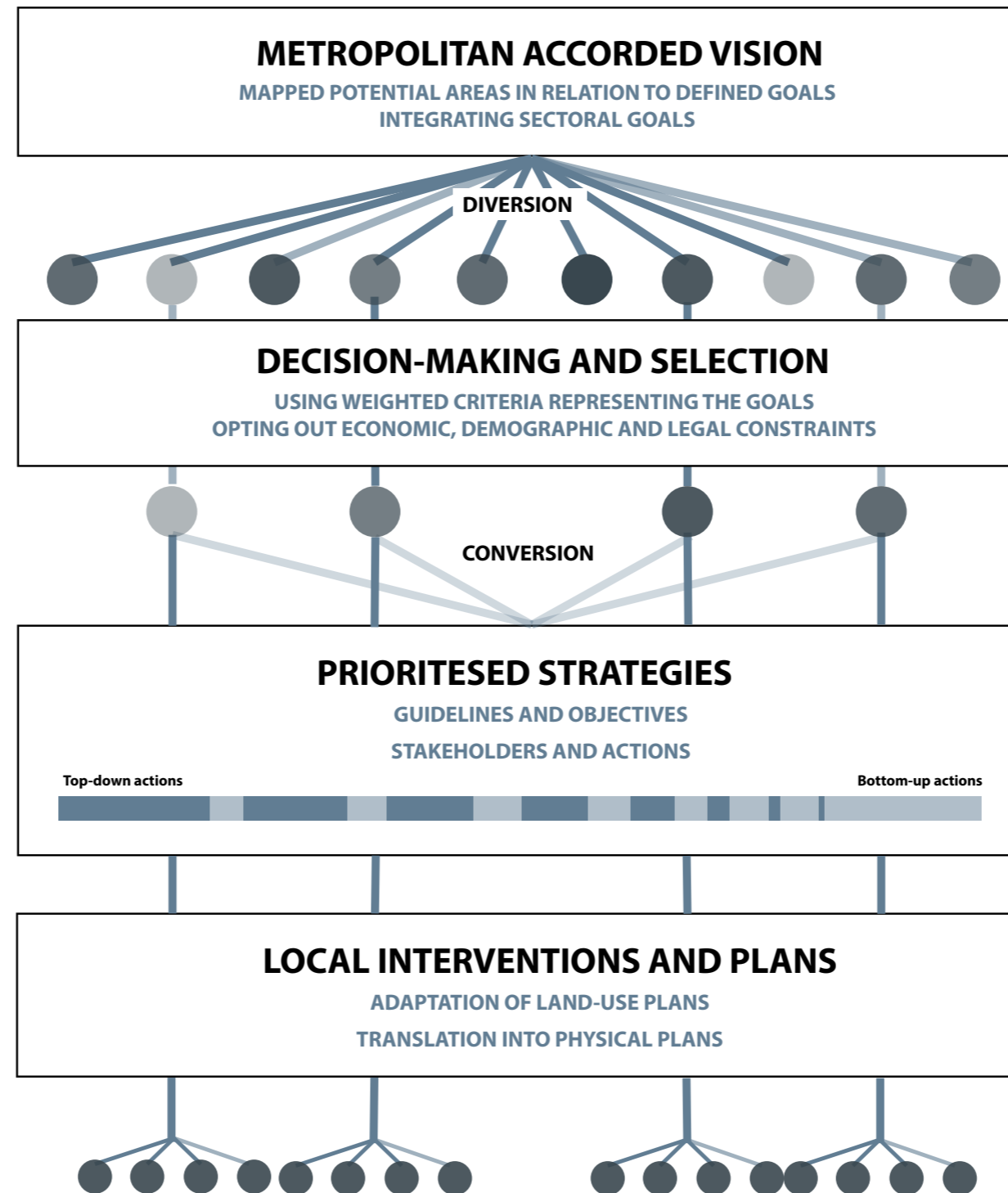
7.6 DECISION MAKING

GOAL: Increasing the spatial competitive position of the Metropolitan Area of Zagreb within the European Union

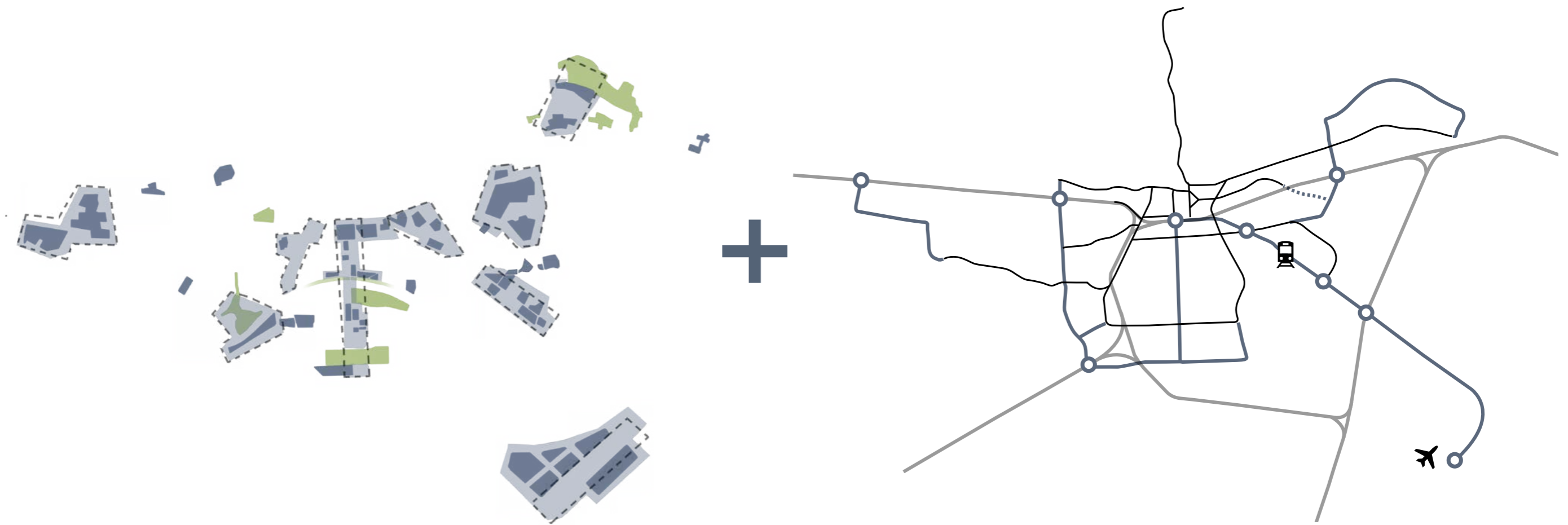
CRITERIA	AREA 1	AREA 2	AREA 3
Classic theory			
Public transport infrastructure	■ ■ ■ ■ ■	■	■ ■ ■ ■ ■
Densification	■ ■ ■	■ ■	■ ■ ■ ■ ■
Mixed-use environments	■ ■ ■ ■	■ ■	■ ■ ■ ■
Cluster Theory			
Business Districts	■ ■ ■ ■ ■	■ ■	■ ■ ■ ■ ■
Knowledge Clusters	■ ■ ■	■ ■	■ ■ ■ ■
Industry Clusters	■ ■	■	■ ■ ■
Soft conditions Theory			
Pedestrian & Bicycle possibilities	■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Culture and Leisure activities	■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Parks and Nature	■	■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■
Network Theory			
Polycentric city structure	■ ■ ■ ■	■ ■	■ ■ ■ ■ ■
Local Public space for interaction	■ ■ ■	■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■
TOTAL	■ ■ ■ ■ ■	■ ■ ■	■ ■ ■ ■ ■ ■
STRATEGY	 Cluster  Classic	 Soft	 Cluster  Network  Classic



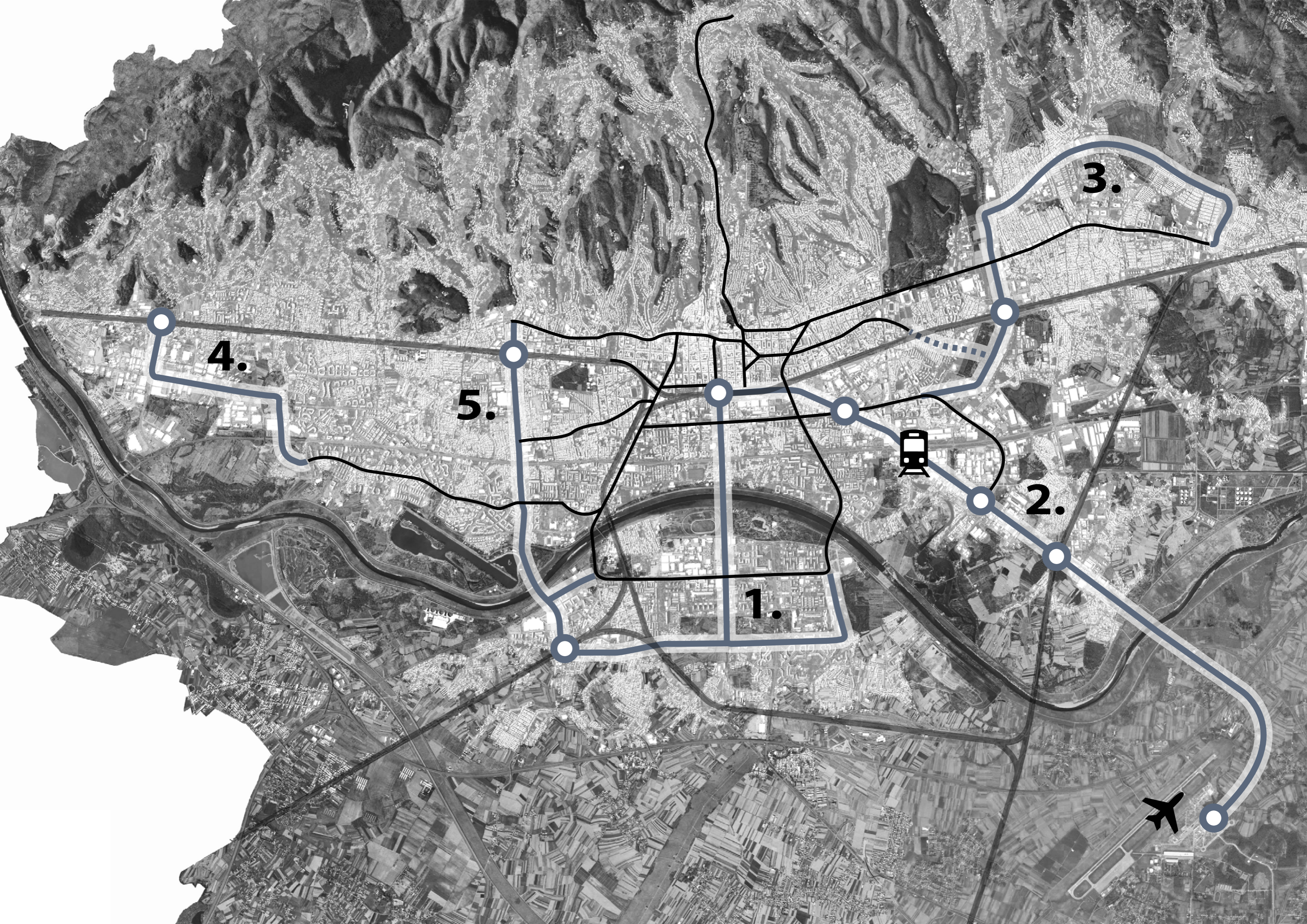
7.7 PRIORITISING STRATEGIES



7.8 FROM POTENTIAL LOCATIONS TO STRATEGIES







4.

5.

3.

2.

1.



7.9 STRATEGIC GUIDELINES

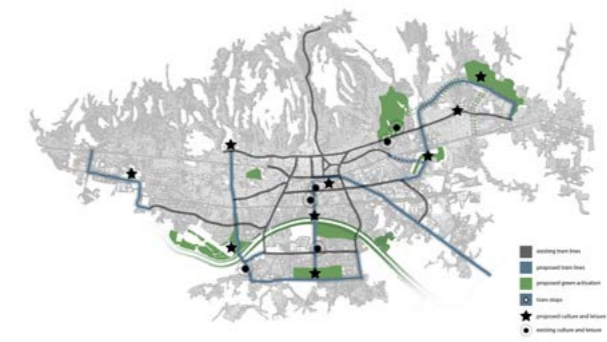
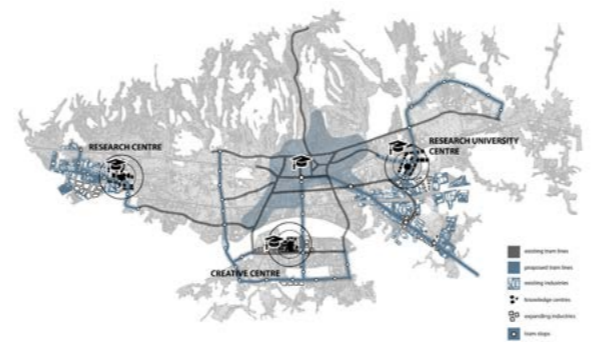
CLASSIC THEORY



SOFT THEORY



CLUSTER THEORY



NETWORK THEORY



CLASSIC THEORY



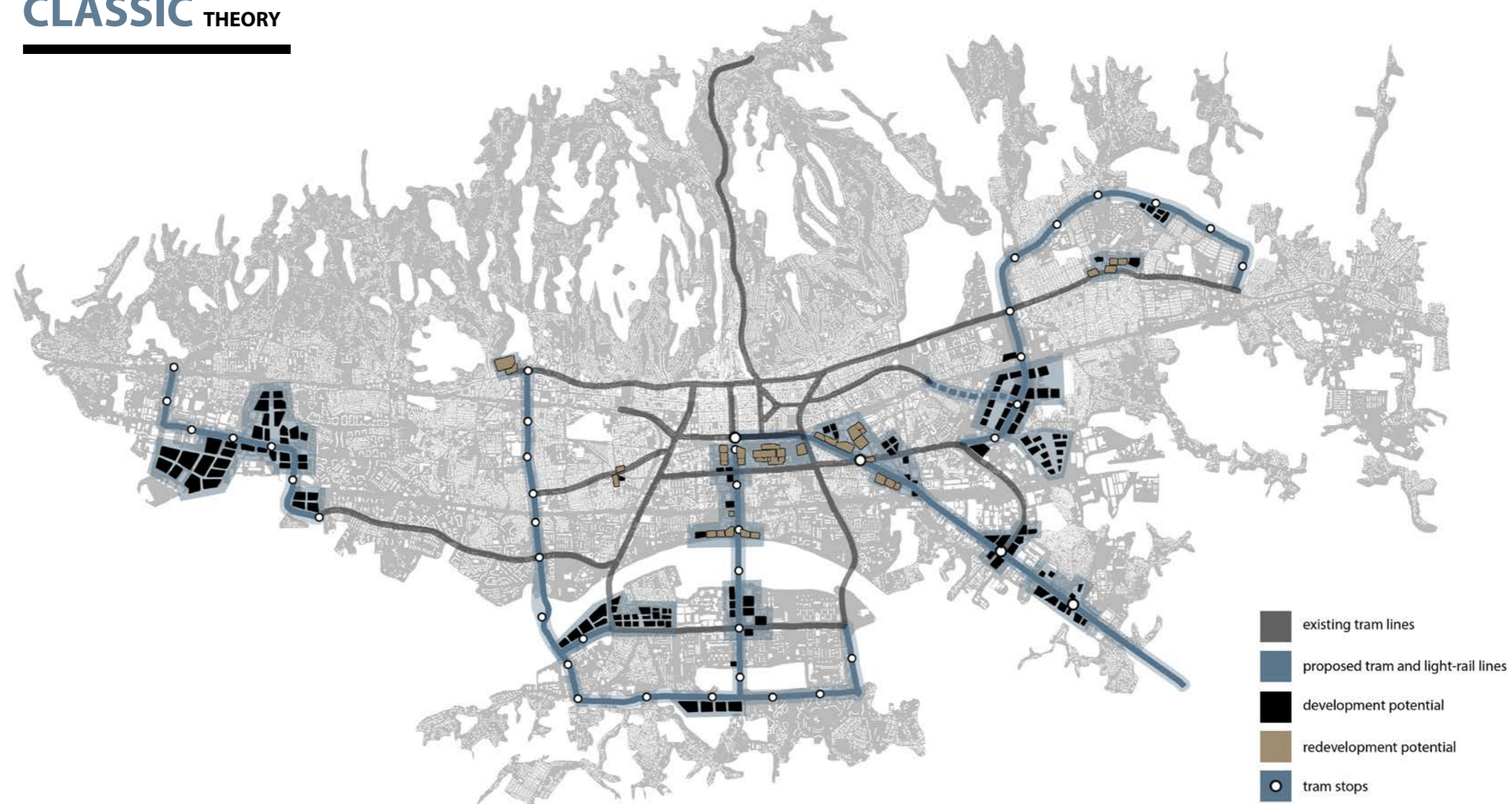
1. ■ INVEST IN THE EXTENSION OF THE PUBLIC TRANSPORT NETWORK TO
■ REDUCE CAR DEPENDENCY AND A RESULTING FRAGMENTED URBAN
STRUCTURE

CLASSIC THEORY



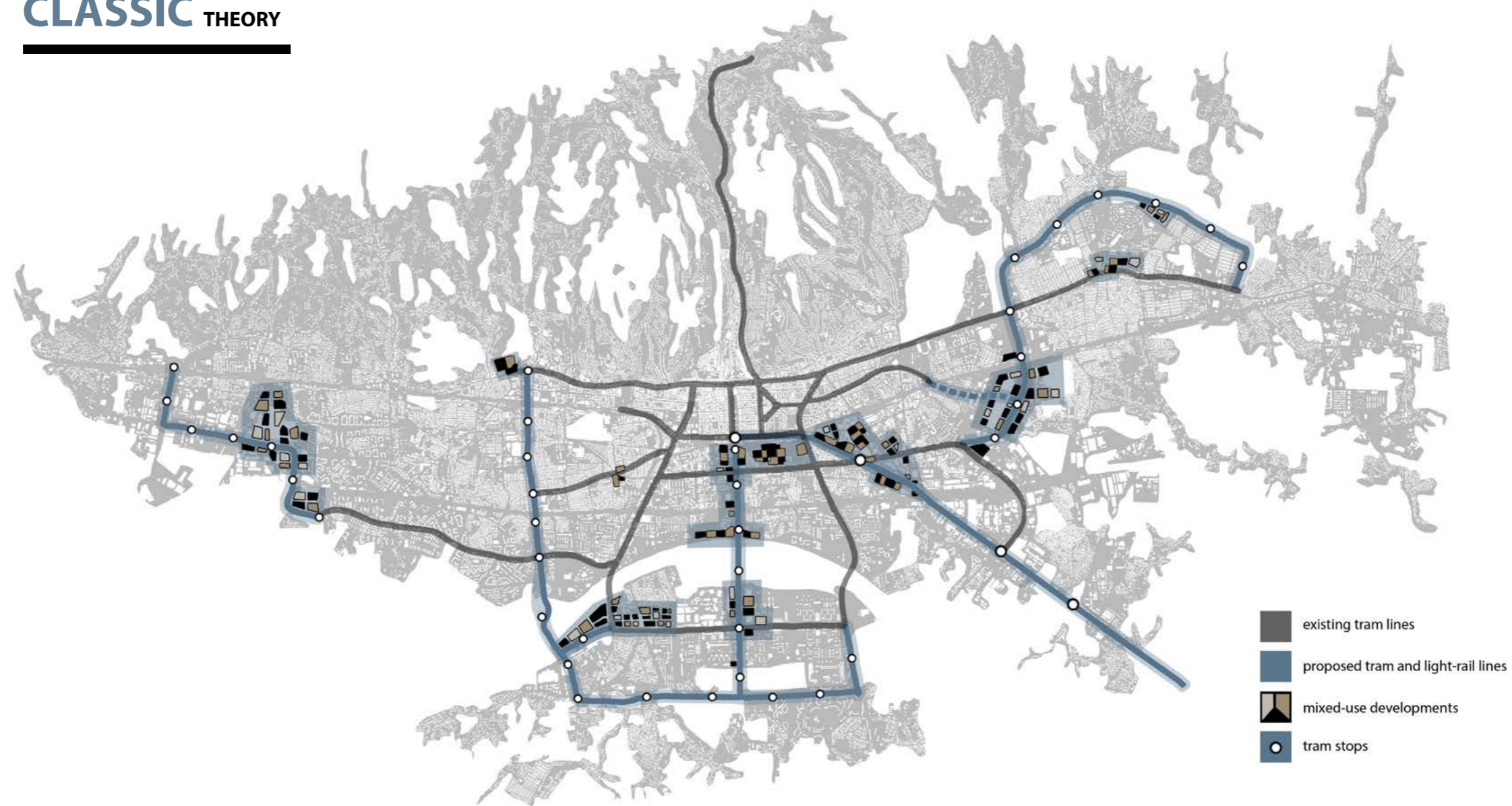
2: INVEST IN THE EXISTING TRAIN NETWORK, MAKING THE STOPS MORE ACCESSIBLE AND CREATING MULTI MODAL TRANSIT NODES

CLASSIC THEORY



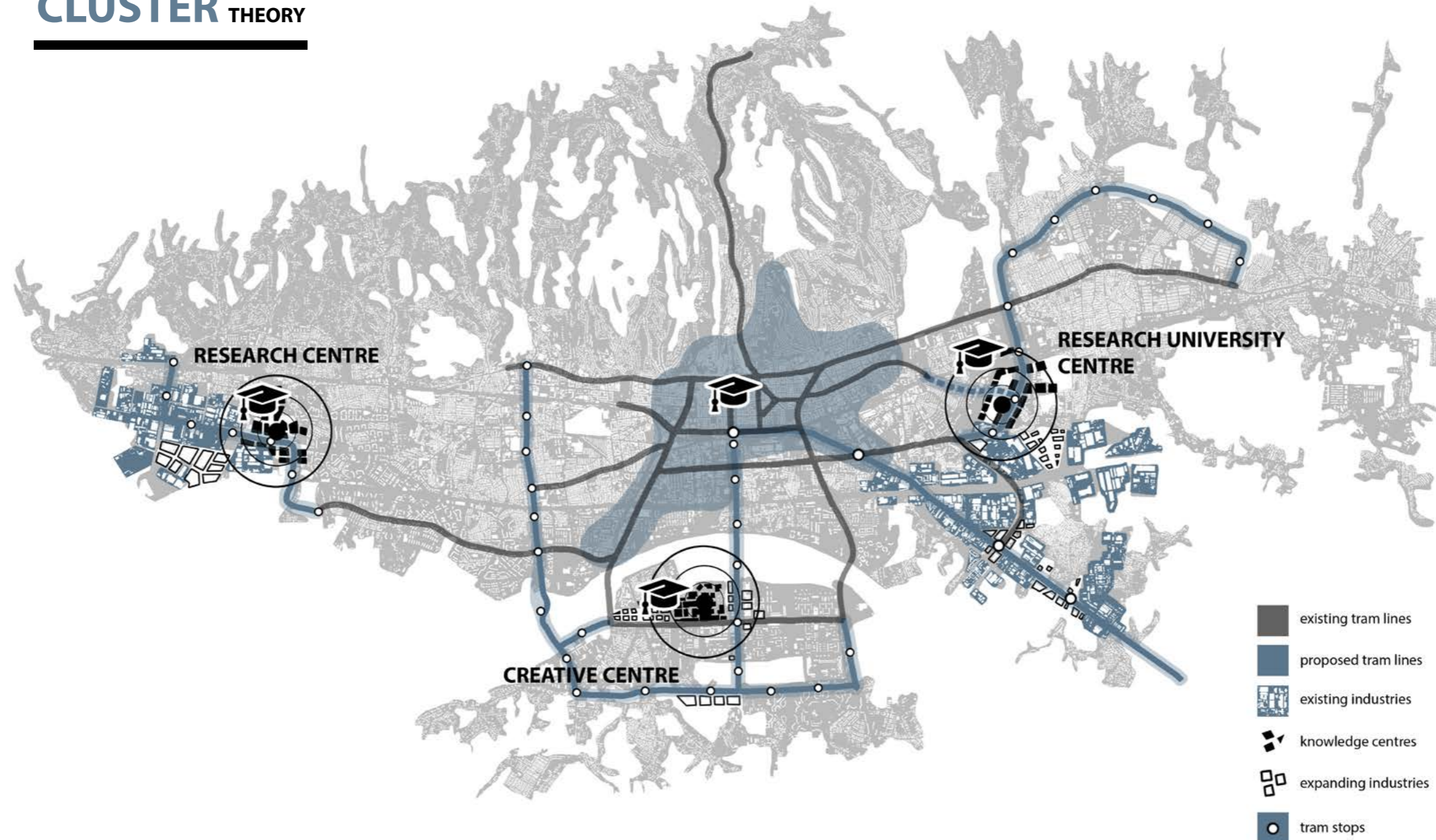
3. ATTRACT INVESTMENTS AND FOCUS ON DEVELOPMENTS WHICH CAN CREATE DENSE URBANISATION ECONOMIES

CLASSIC THEORY



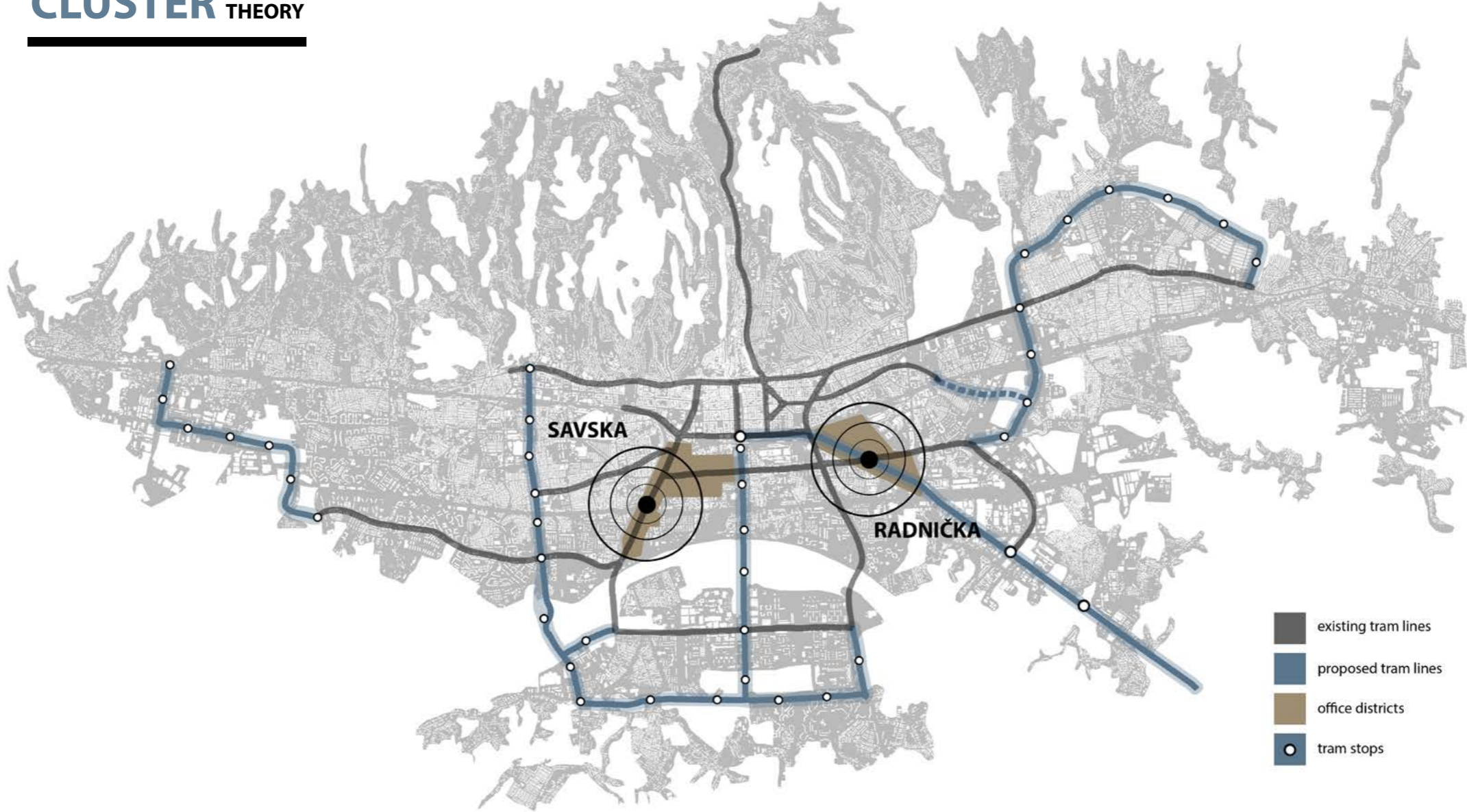
4: SET LOCAL GUIDELINES TO ENHANCE MIXED-USE ENVIRONMENTS TO ACTIVATE THE LOCAL ECONOMY

CLUSTER THEORY

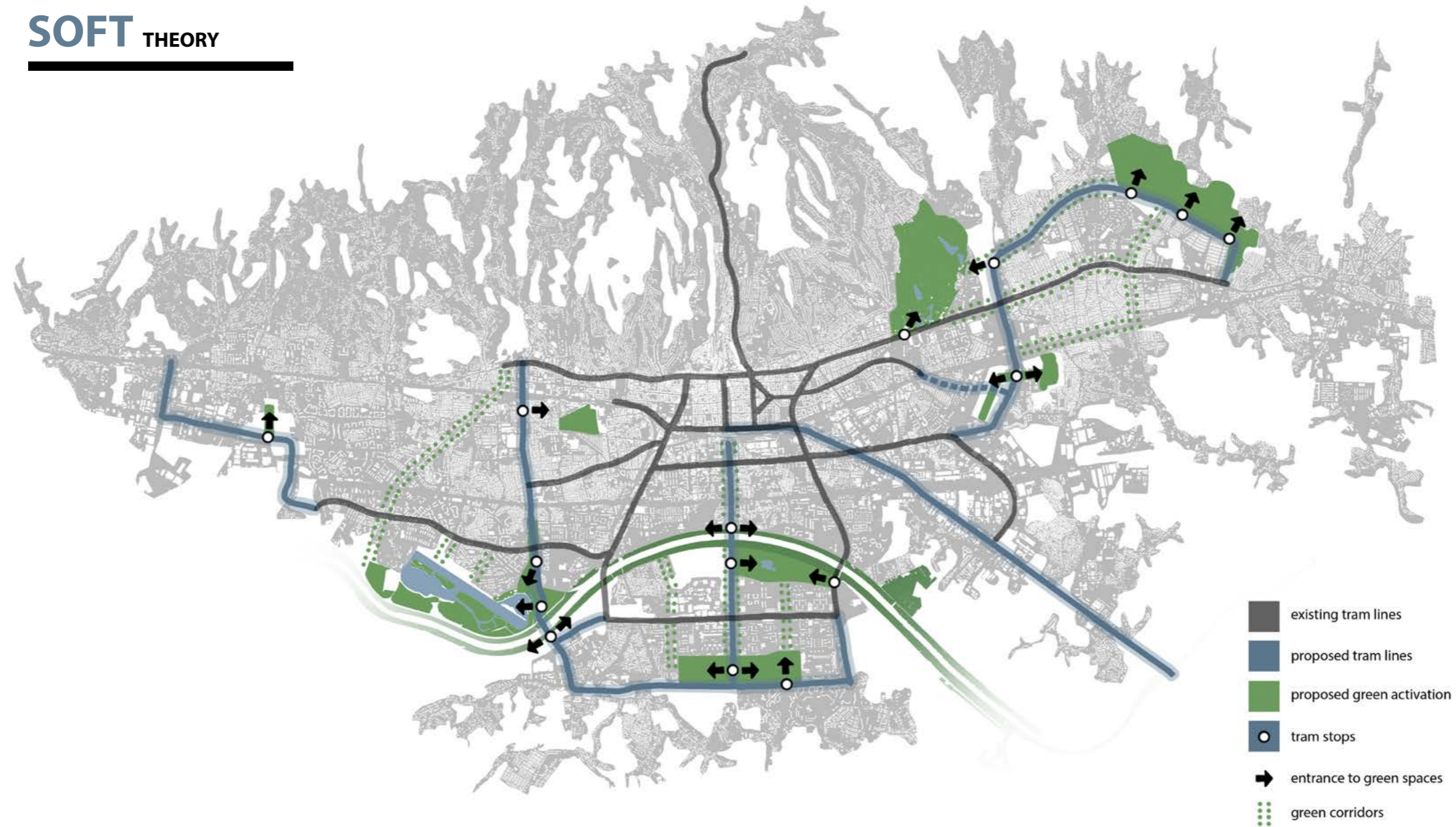


5: CREATE SCIENCE HUBS LINKED TO THE PRODUCTION CLUSTERS IN CO-OPERATION WITH THE UNIVERSITY TO ACT AS AN INCUBATOR

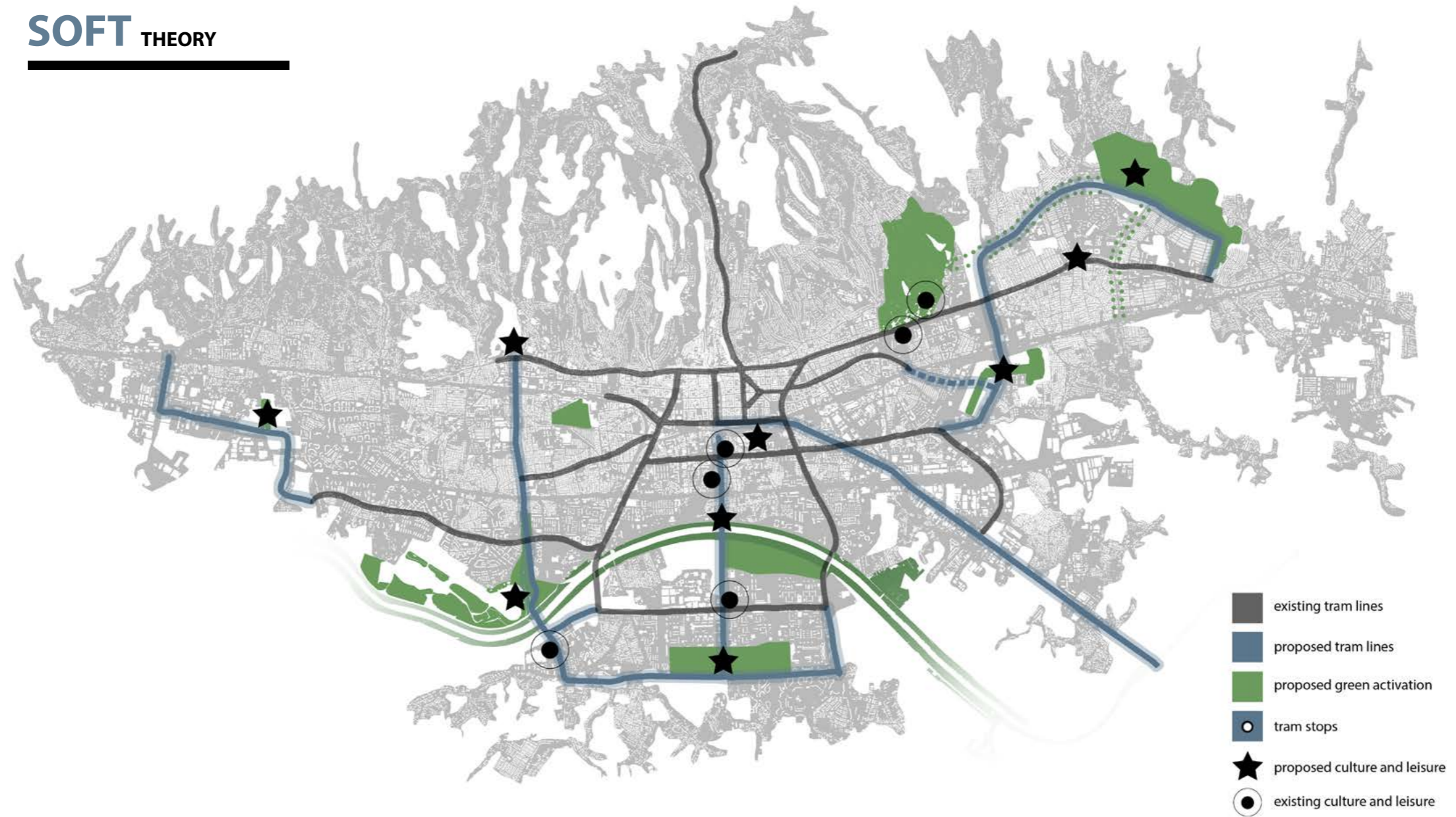
CLUSTER THEORY



6: LINK THE PUBLIC TRANSPORT SYSTEM TO BUSINESS DISTRICTS TO REDUCE CAR FLOWS AND CONGESTION

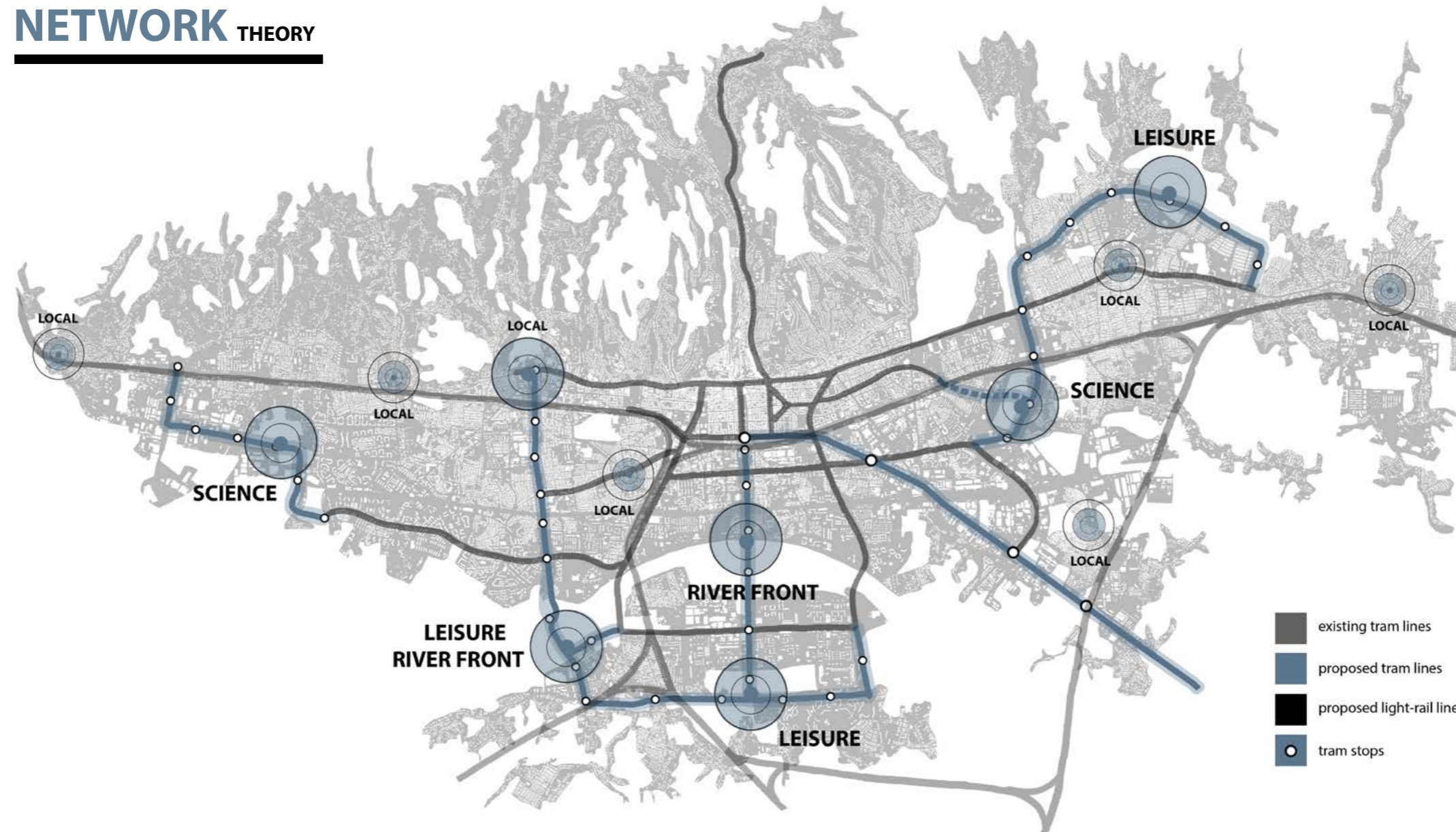


7. CONNECT PUBLIC GREEN SPACES TO THE PUBLIC TRANSPORT NETWORK



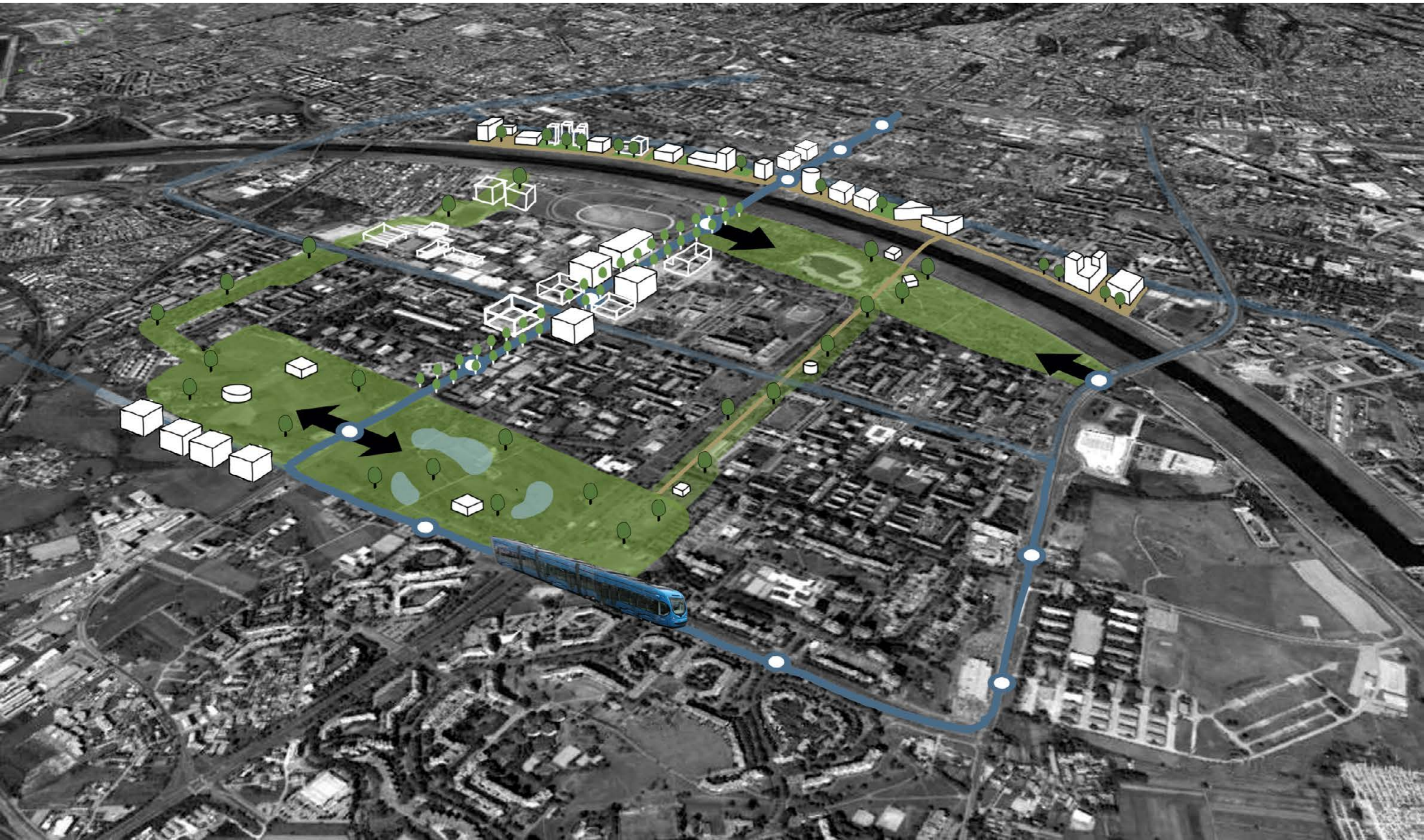
8. ATTRACT AND DEVELOP CULTURAL AND LEISURE ACTIVITIES WITHIN THE NETWORK

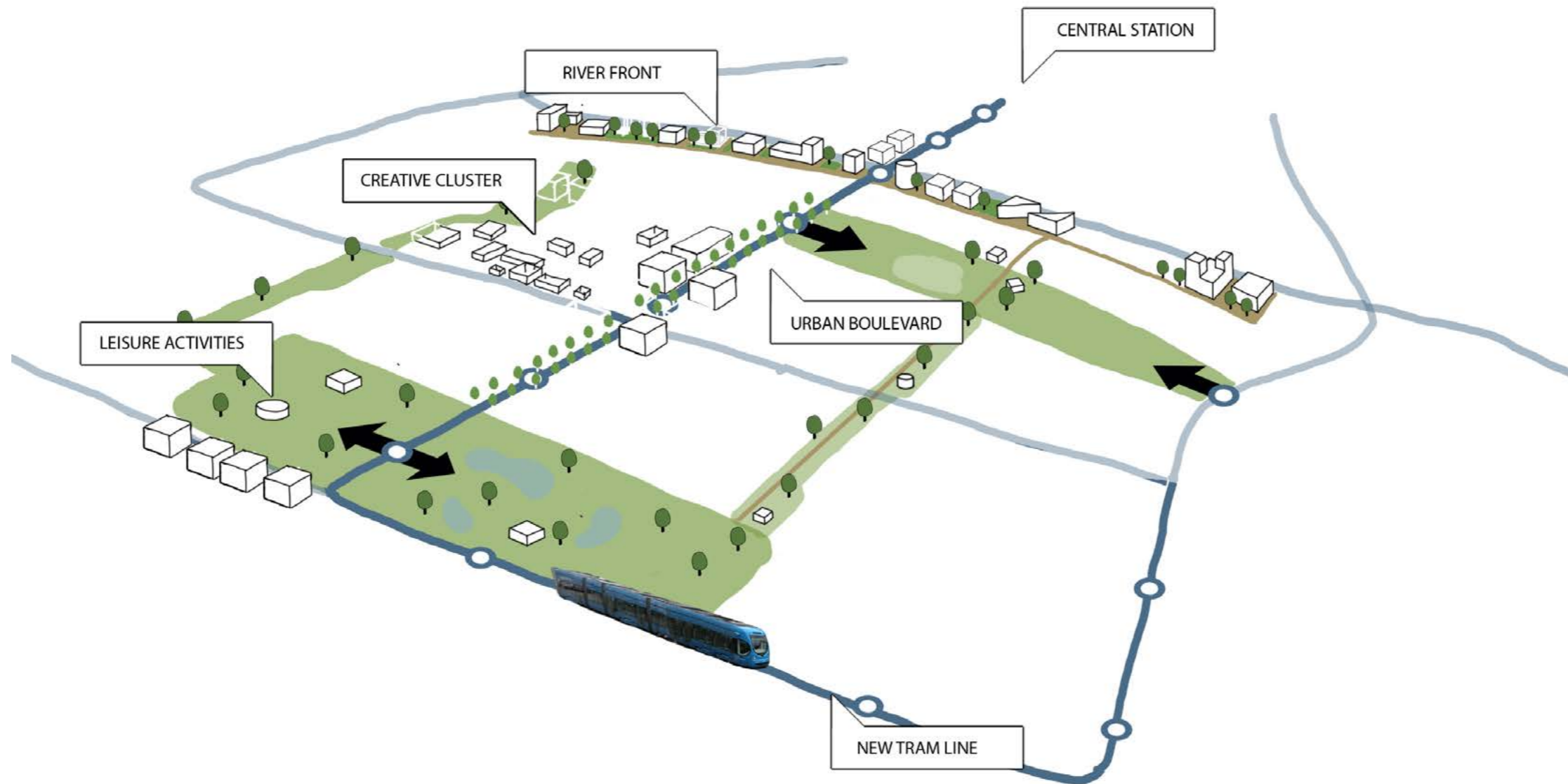
NETWORK THEORY



9: FOCUS ON THE DEVELOPMENT OF A POLYCENTRIC CITY STRUCTURE

7.10 NOVI ZAGREB STRATEGY





DEVELOPMENTS

Riverfront



Soft



Network

Tram Line



Classic

Urban Boulevard



Classic



Network



Soft

Creative cluster



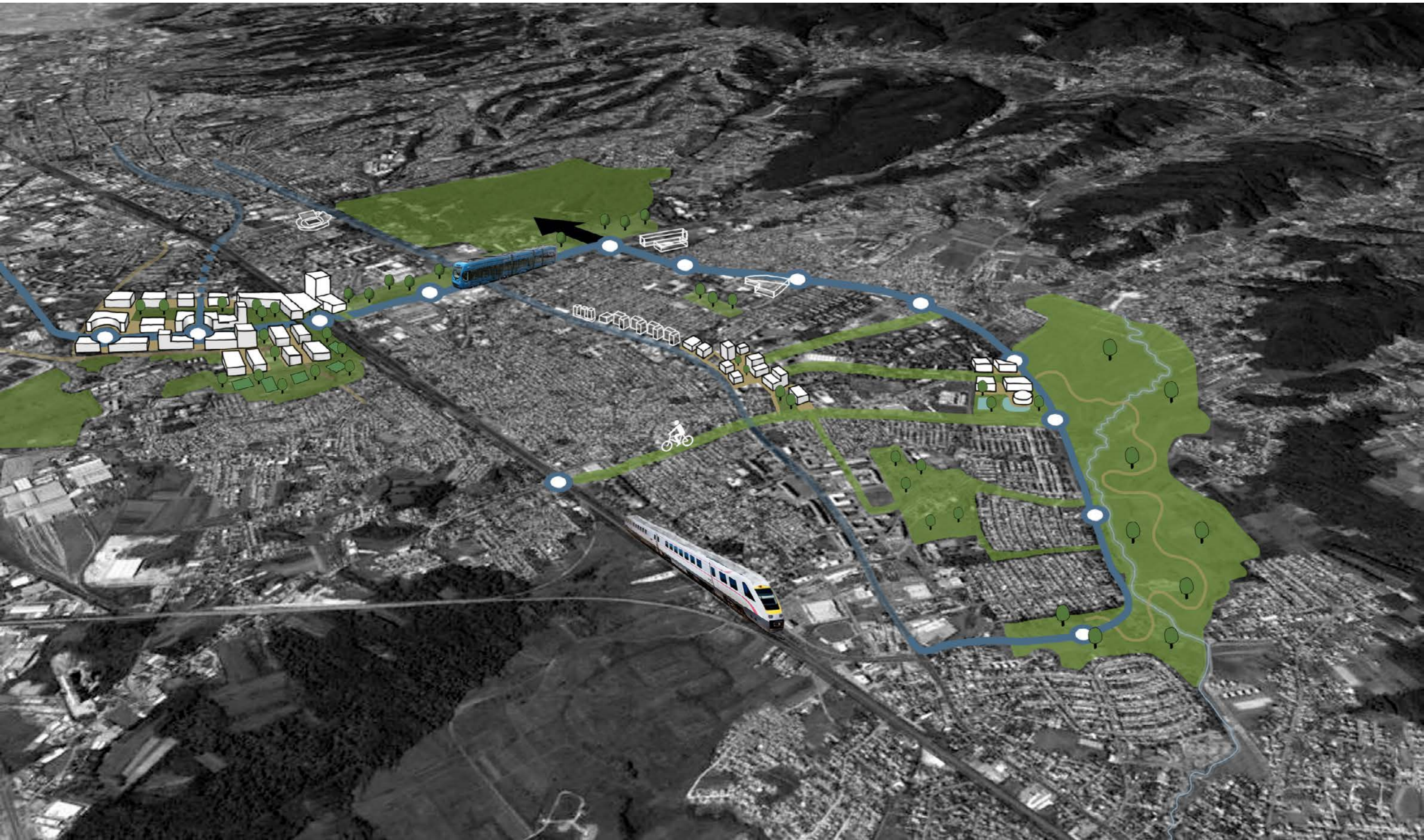
Cluster

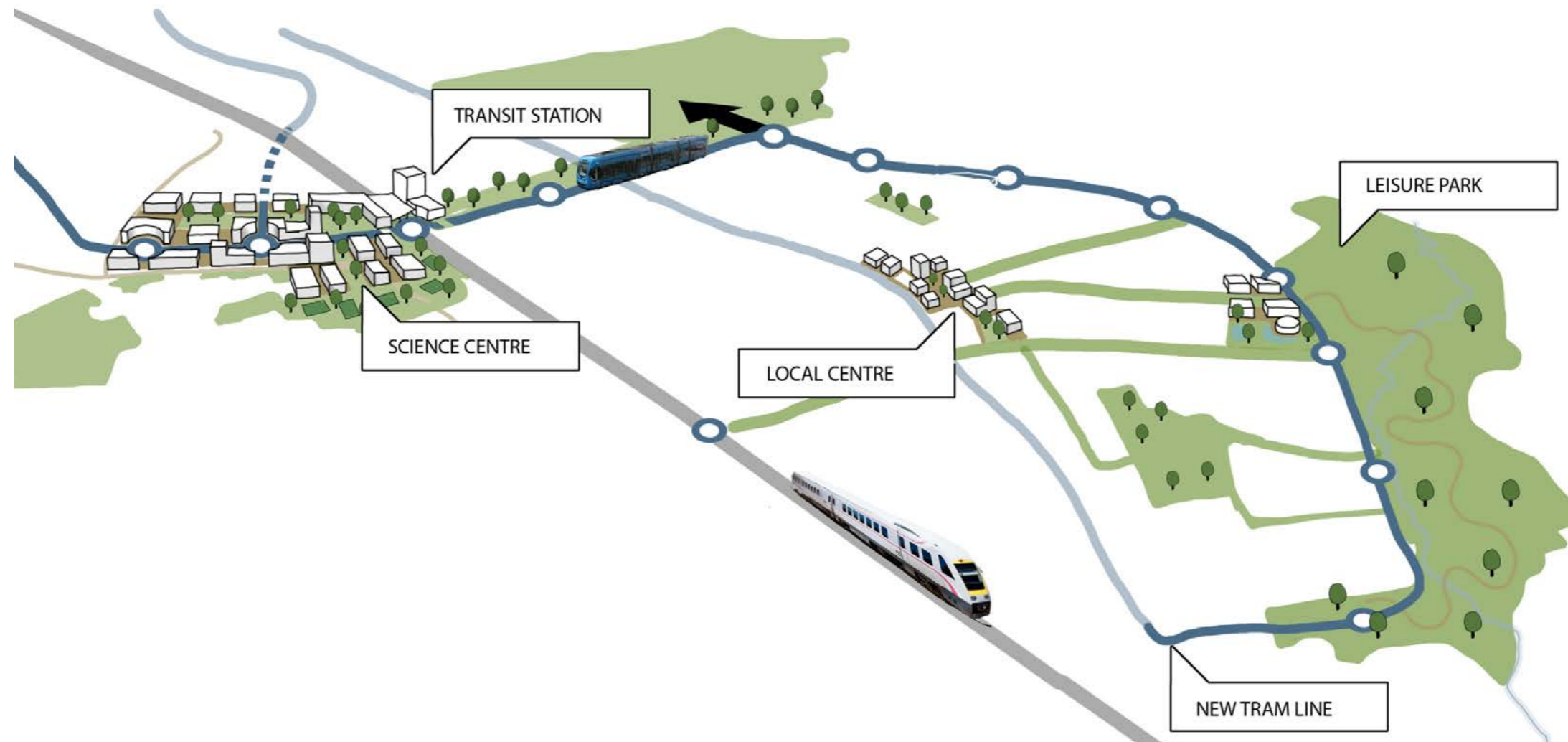
Leisure park



Soft

7.11 DUBRAVA STRATEGY





DEVELOPMENTS

Science centre



Cluster



Soft



Network



Classic

Tram Line



Classic

Local centre



Classic



Network



Soft

Transit station



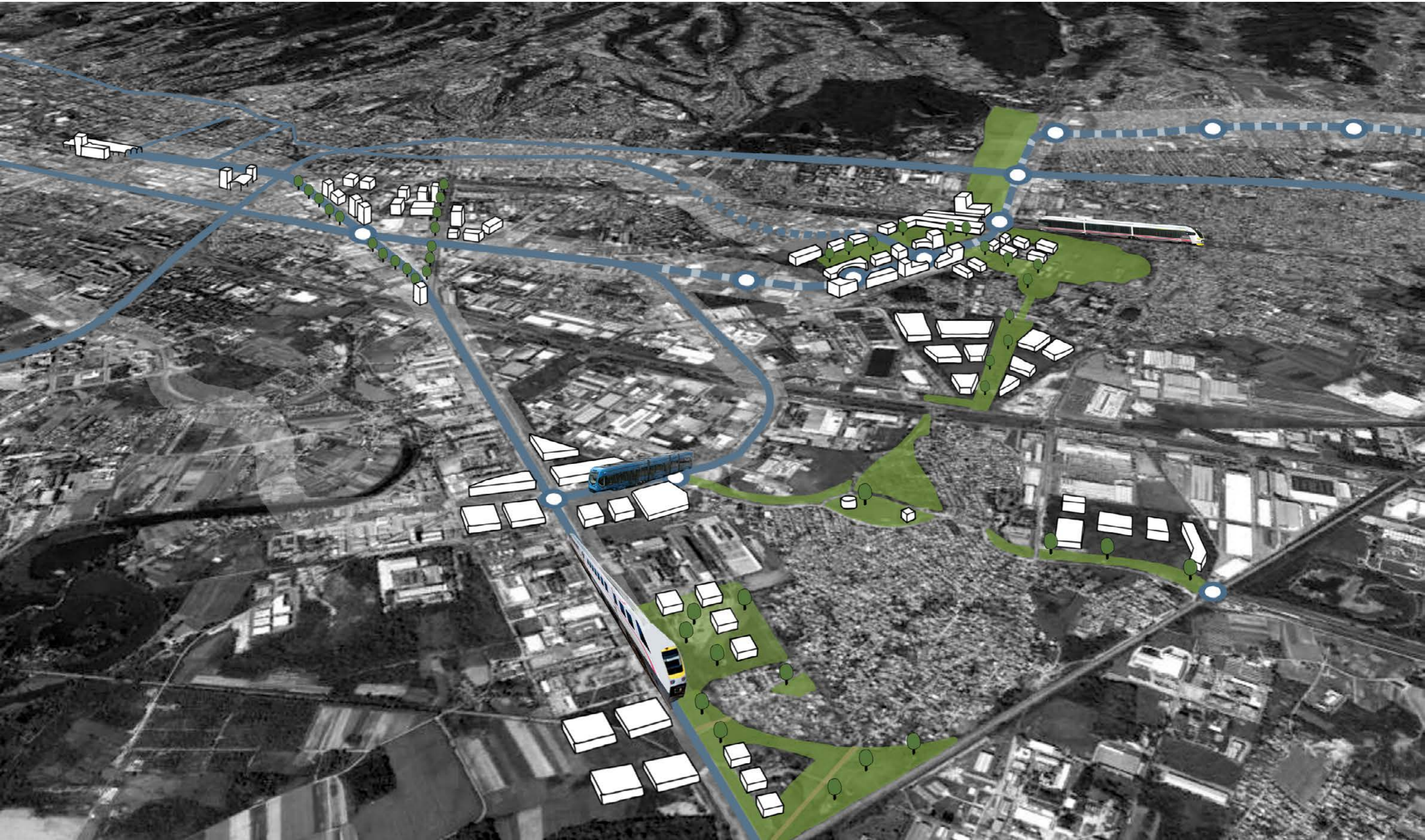
Classic

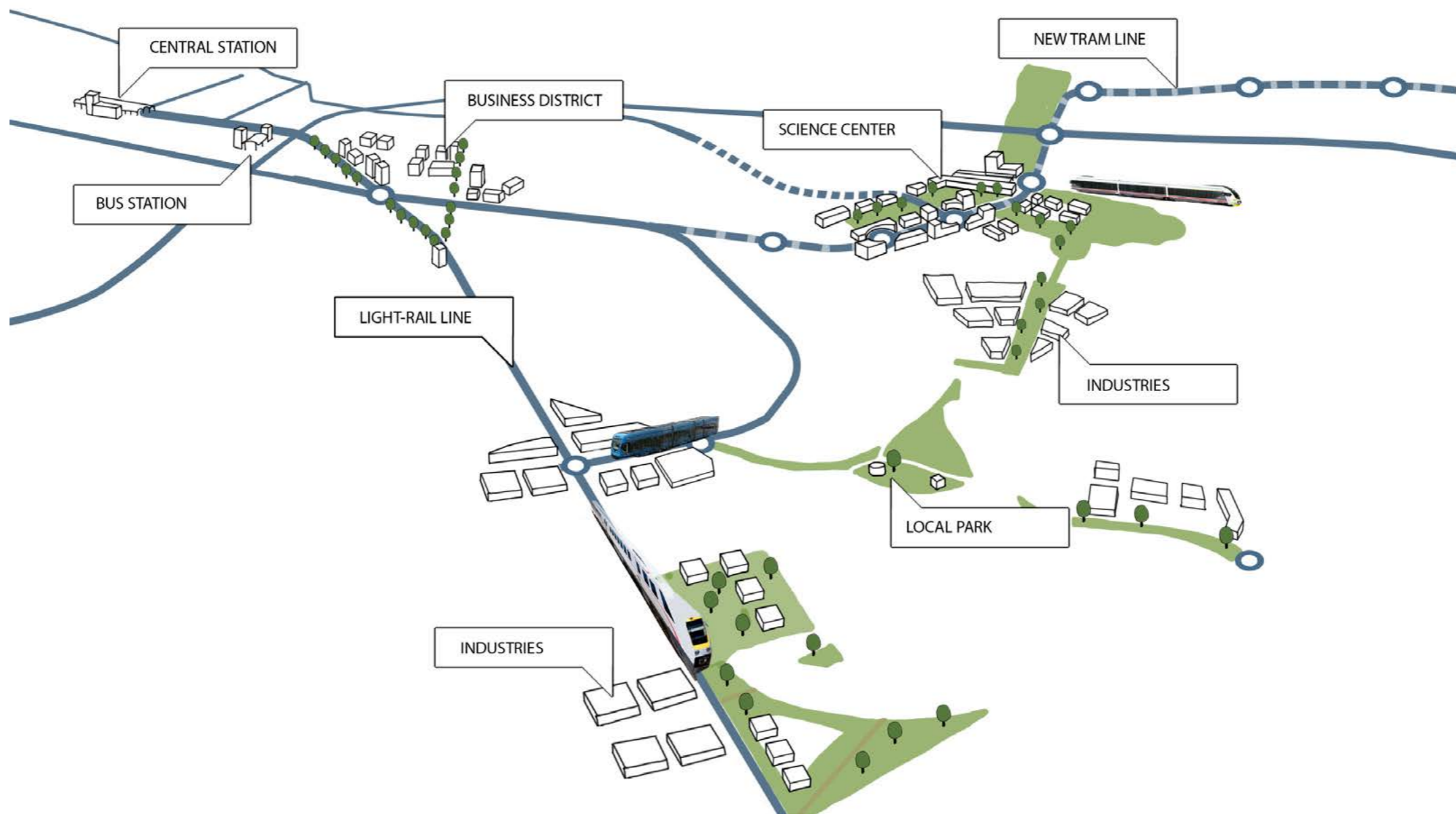
Leisure park



Soft




7.12 LIGHT-RAIL STRATEGY





DEVELOPMENTS

Business district

-  Cluster
-  Network
-  Classic

Light-rail

-  Classic

Industries

-  Cluster

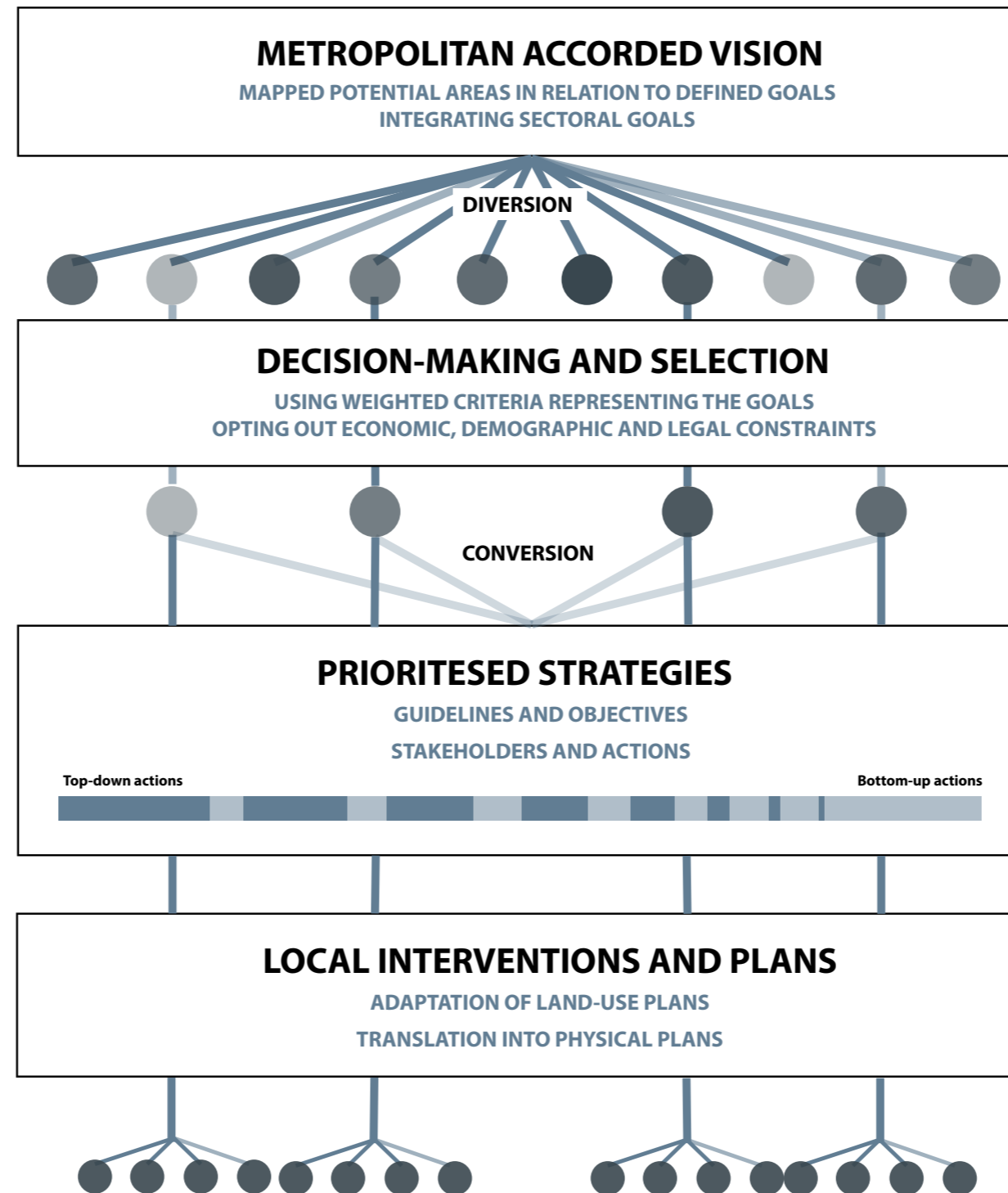
Local park

-  Soft

Bus station

-  Classic

7.13 INFORMING LOCAL INTERVENTIONS



7.14 VERTICAL COORDINATION



Top-down

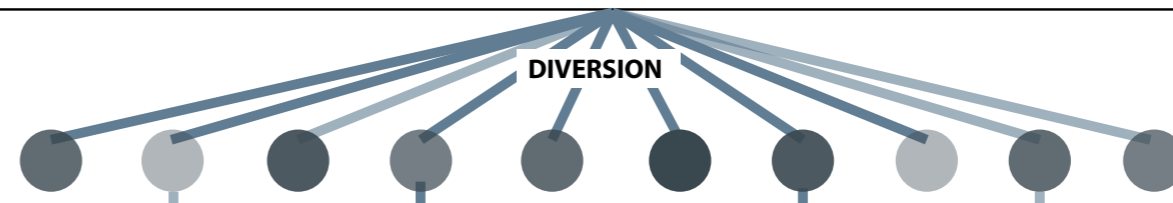
Bottom-up



7.15 CONCLUSION



METROPOLITAN ACCORDED VISION
MAPPED POTENTIAL AREAS IN RELATION TO DEFINED GOALS
INTEGRATING SECTORAL GOALS



DECISION-MAKING AND SELECTION
USING WEIGHTED CRITERIA REPRESENTING THE GOALS
OPTING OUT ECONOMIC, DEMOGRAPHIC AND LEGAL CONSTRAINTS

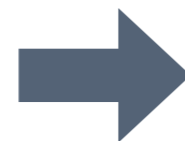


PRIORITISED STRATEGIES
GUIDELINES AND OBJECTIVES
STAKEHOLDERS AND ACTIONS

Top-down actions Bottom-up actions



A JUMP TOWARDS
PROJECTS



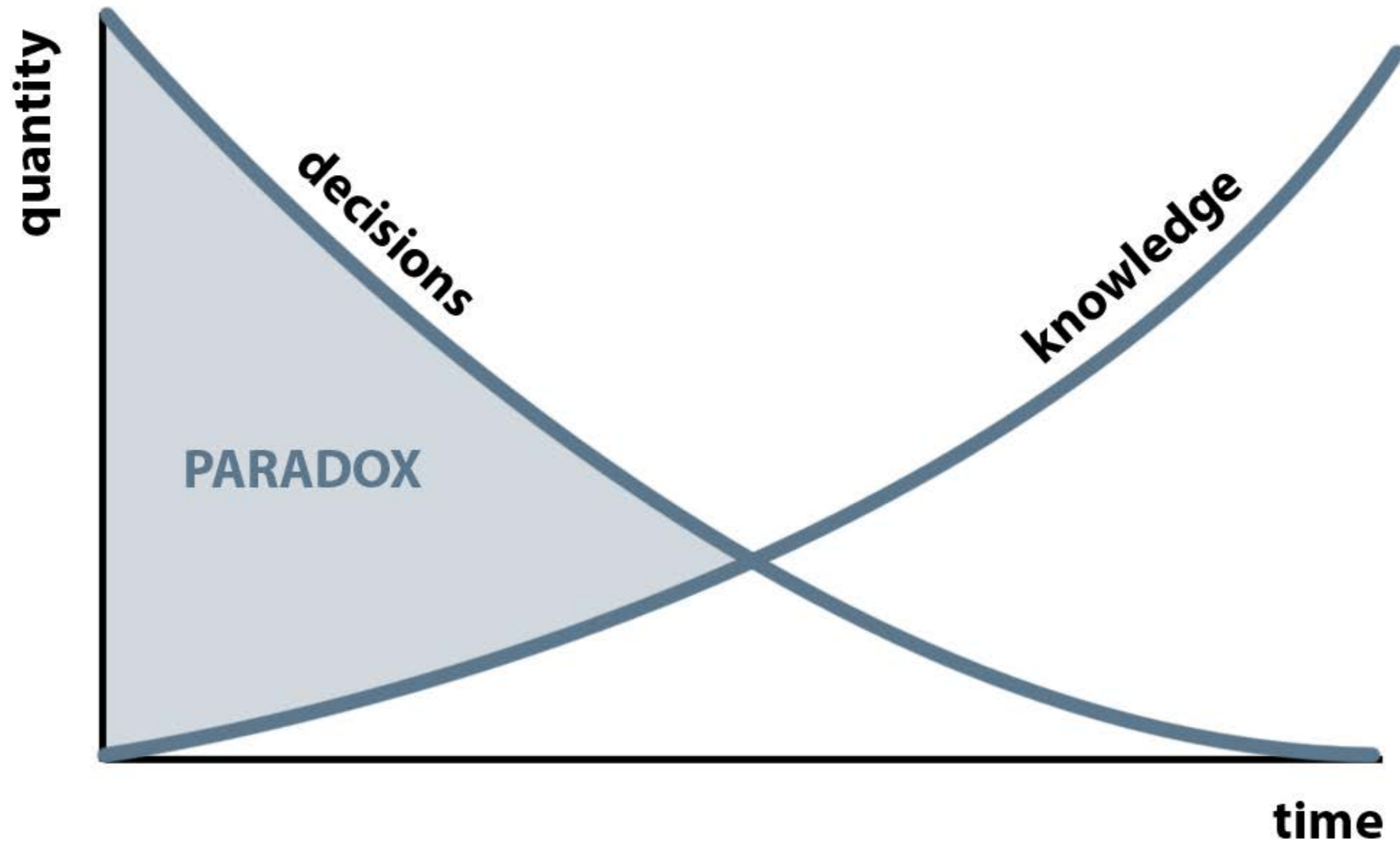
LOCAL INTERVENTIONS AND PLANS
ADAPTATION OF LAND-USE PLANS
TRANSLATION INTO PHYSICAL PLANS



8.0 REFLECTION

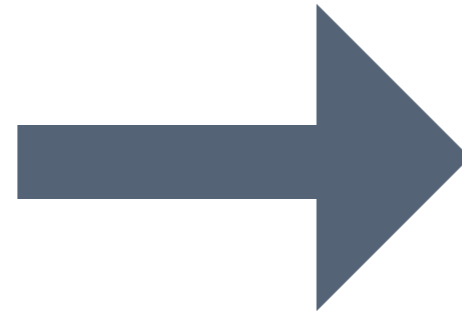


8.1 PROCESS



8.2 CONCLUSION

KNOWLEDGE CITY



TAILOR MADE PLAN

THANK YOU FOR YOUR ATTENTION

- proposed tram lines
- proposed light-rail line
- - - existing rail network
- o tram stops
- multi modal transit nodes
- mixed-use living environments
- mixed-used working environments
- green leisure areas
- ⋮ green corridors
- centralities

