The case studies framework

The methodological approach to Cluster Spatialisation, The structure of case studies analysis

Preliminary Insights from Cluster-led Initiative Analysis
Working Package No. 2 Cluster Policy and Spatial Planning

Carmelina Bevilacqua
PAU unit

First International Workshops
MAPS-LED PROJECT
05.06-12-2016
Università "La Sapienza", Focus Unit, ITALY

MAPS-LED "Multidisciplinary Approach to Plan Smart Specialisation Strategies for Local Economic Development" is a Marie Sklodowska-Curie RISE research project funded by the European Union's HORIZON 2020 program for Research and Innovation under the Grant Agreement 645651

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Outline

Introduction

I. MAPS-LED GIS: Cluster Spatialisation from the Regional to the Urban dimension
II. Cluster policy and Spatial Planning at city level
III. Target Area Analysis

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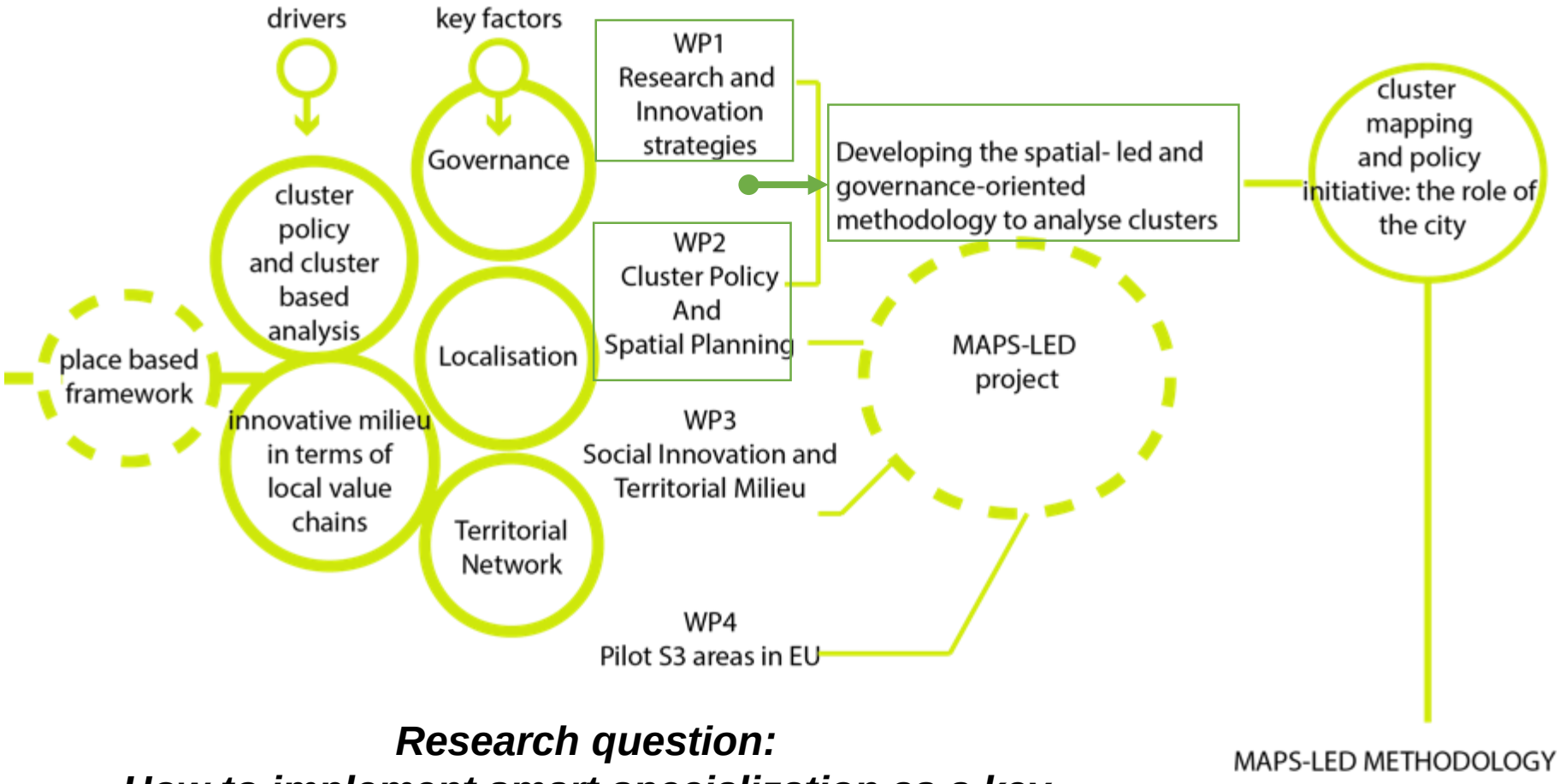
Introduction



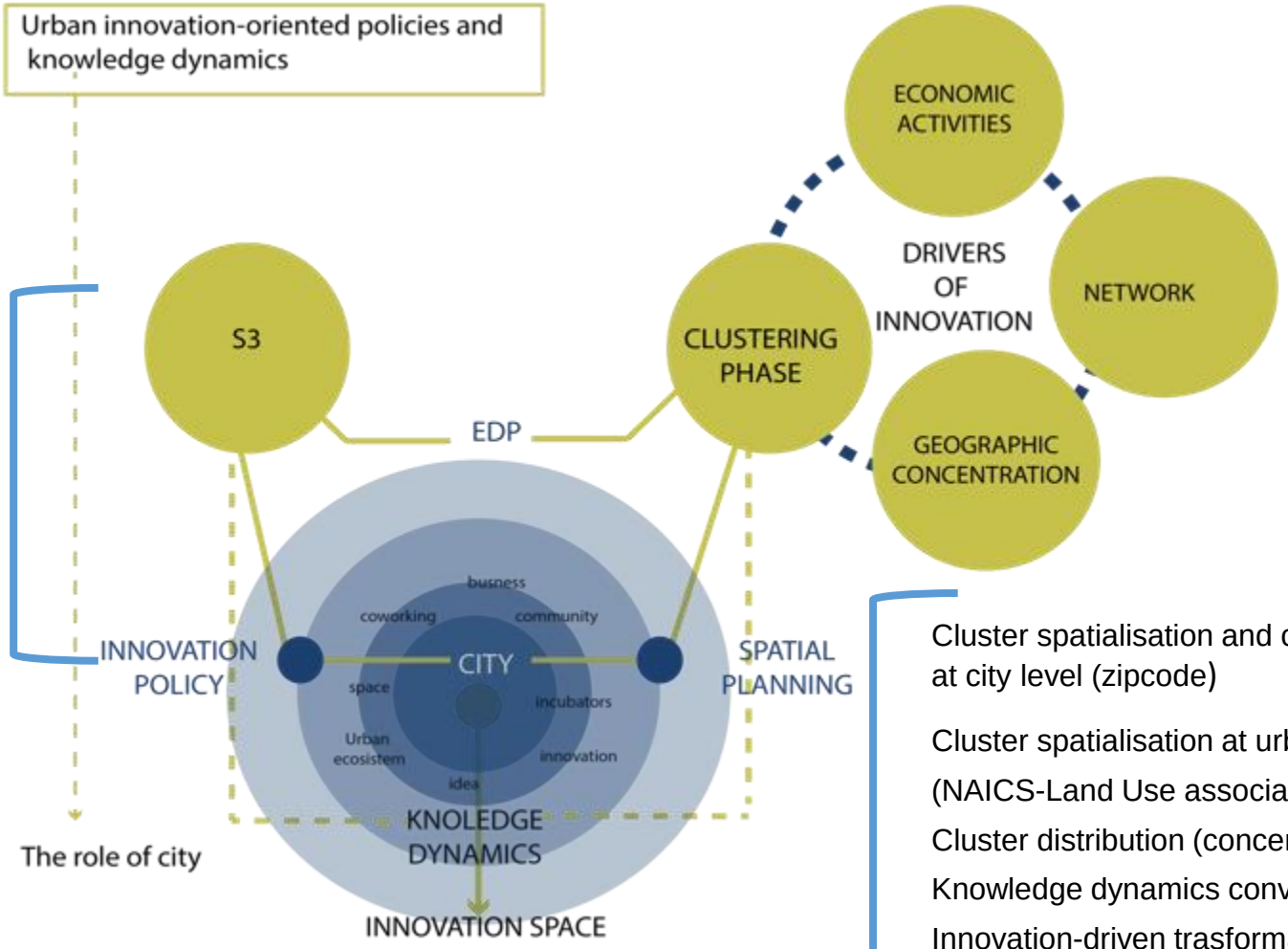
Research question:
How to implement smart specialization as a key element for place-based regeneration policies for local economic areas…

Introduction: The MAPS-LED approach for the Cluster Spatialisation

Regional dimension

luster spatialisation at county level (per zipcode). **cluster morphology and contiguity**

City dimension



Cluster spatialisation and cluster dynamics at city level (zipcode)

Cluster spatialisation at urban level (NAICS-Land Use association).

Cluster distribution (concentration/dispersion)

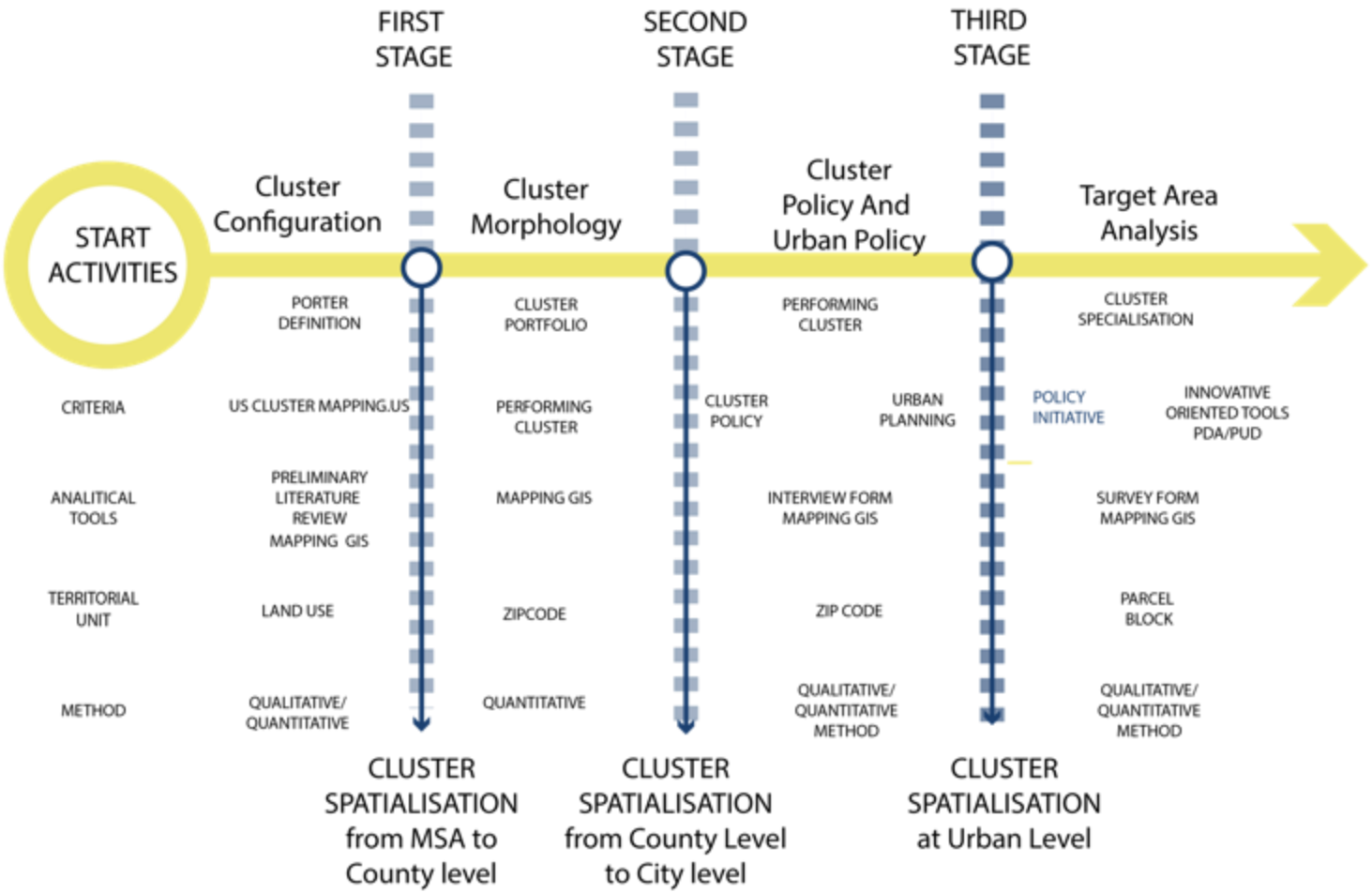
Knowledge dynamics convergence

Innovation-driven trasformation

City dimension

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-MAPS-LED project: The Methodological stage

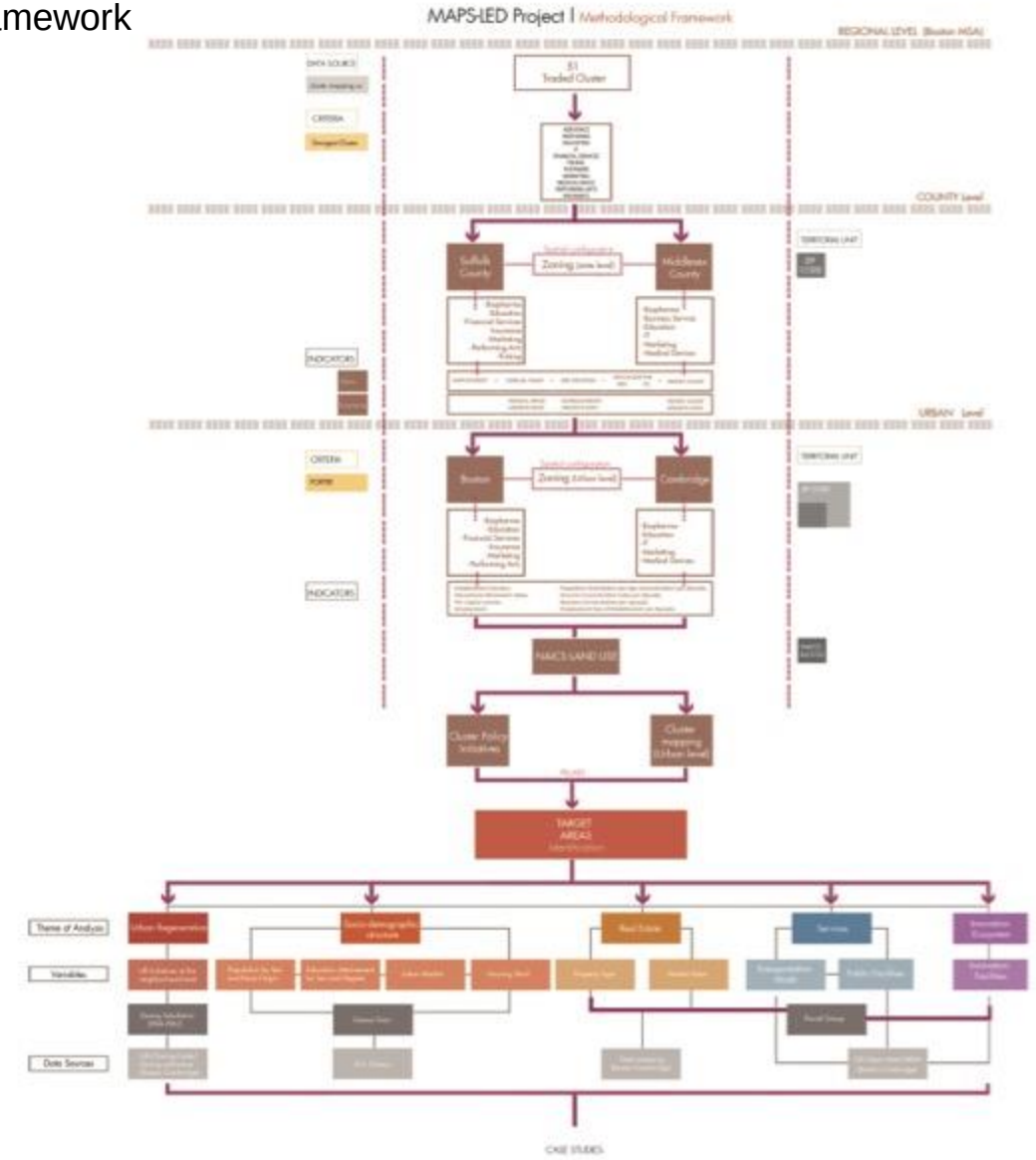


I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-MAPS-LED Project: The Methodological framework

MAIN GOALS

To build an evidence-based methodology that investigate the spatial planning and governance-oriented features of cluster approach



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-MAPS-LED GIS: Costruction of GIS for Cluster Spatialisation

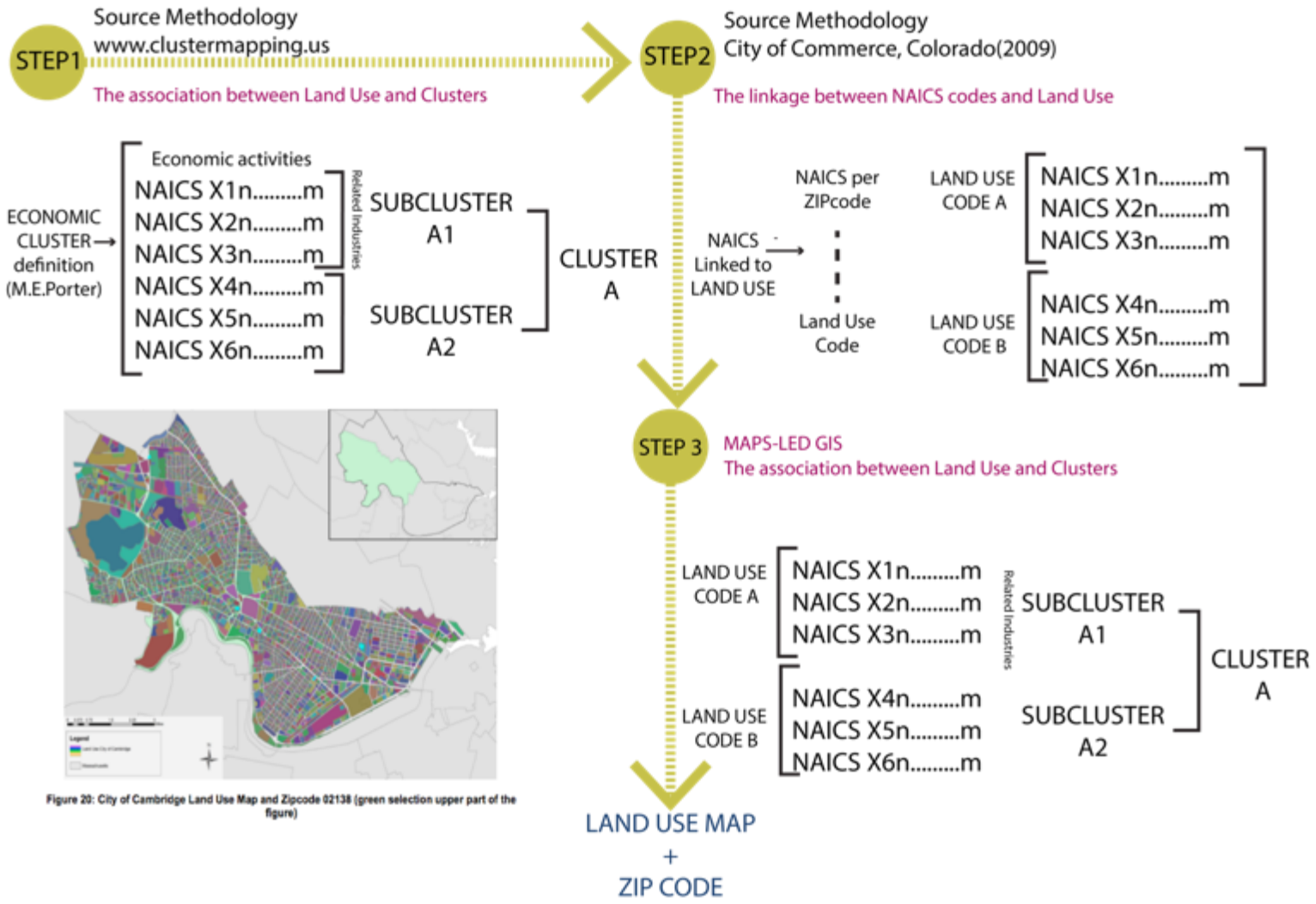
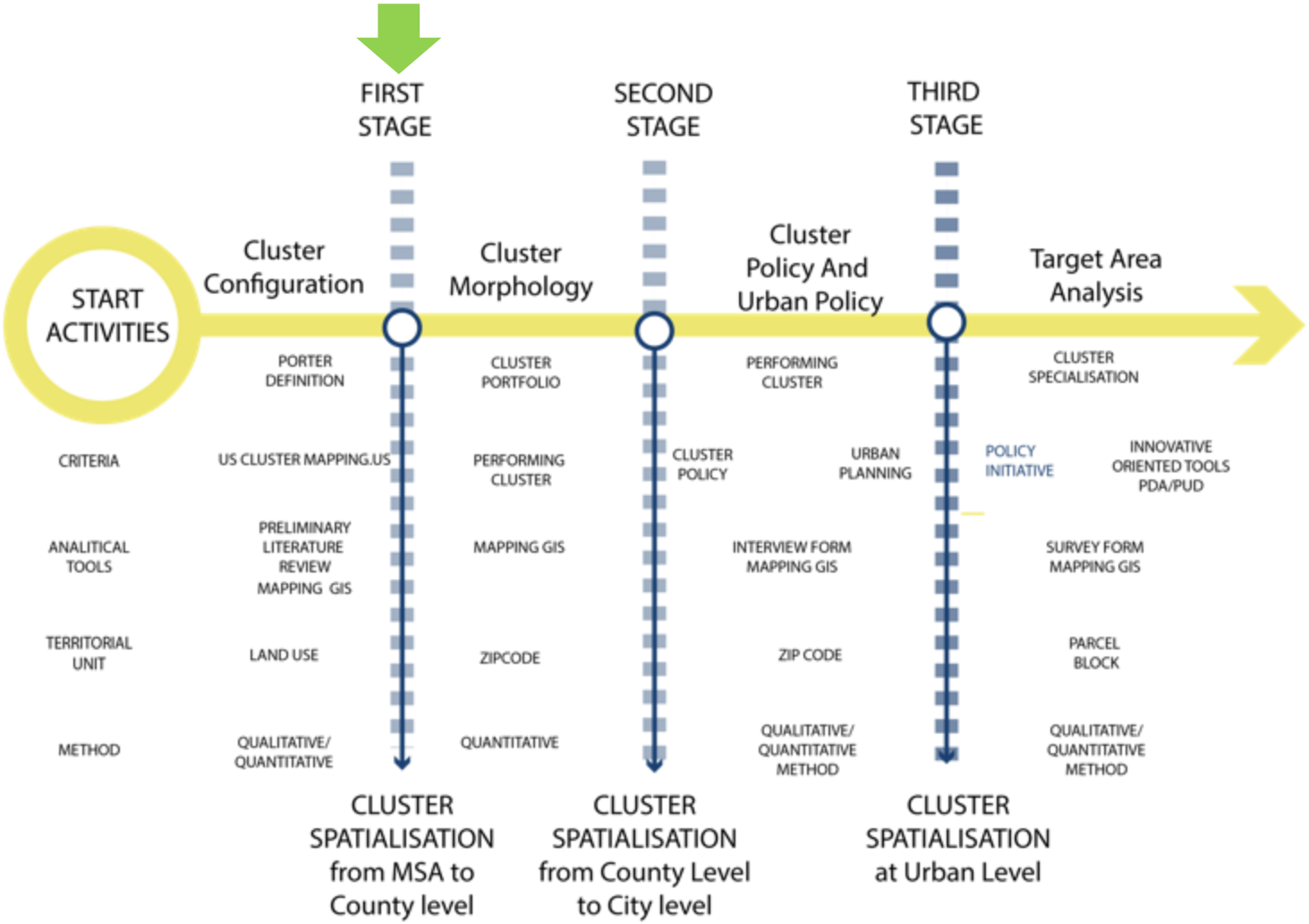


Figure 20: City of Cambridge Land Use Map and Zipcode 02138 (green selection upper part of the figure)

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

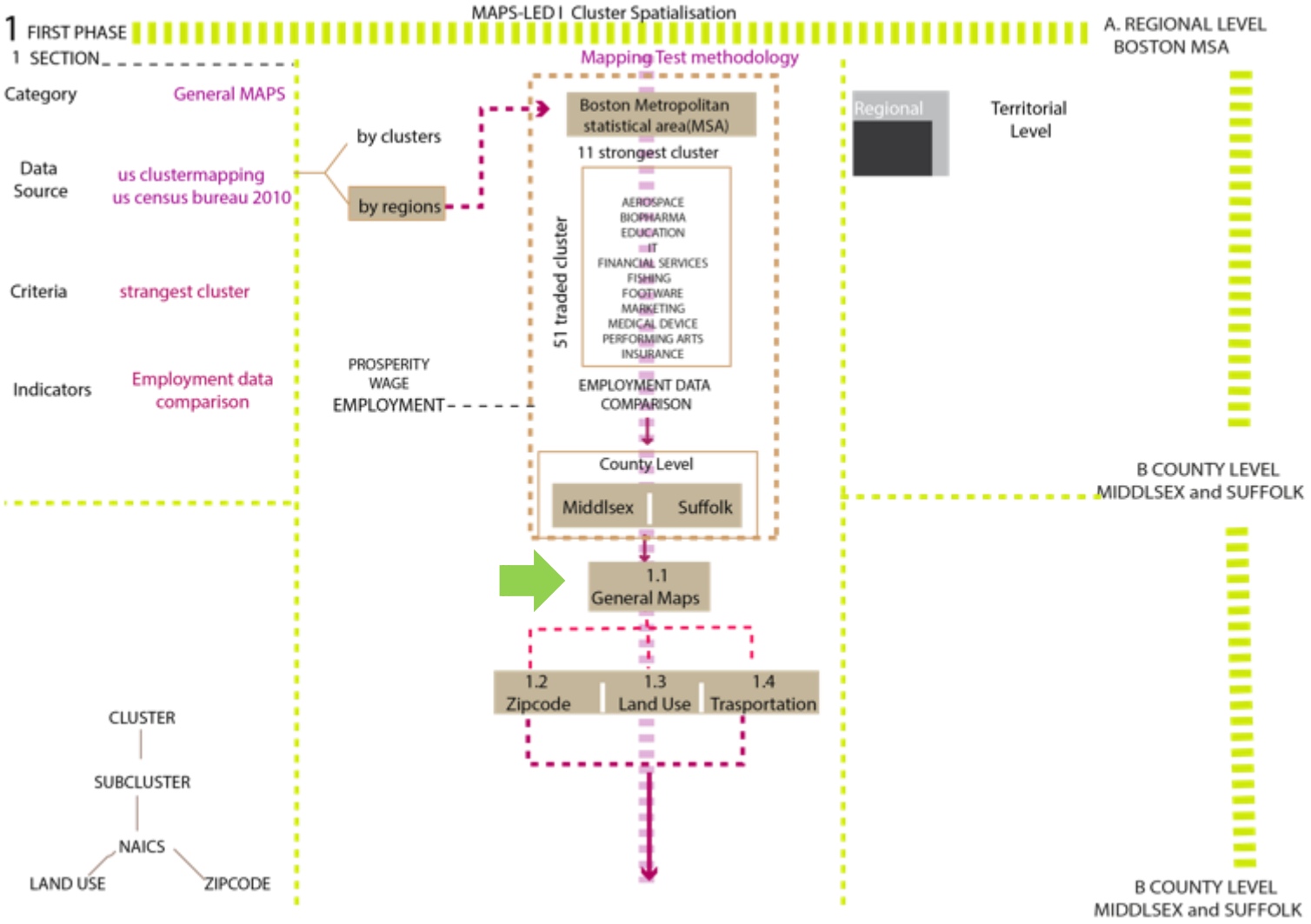
-MAPS-LED PROJECT:THE METHODOLOGICAL STAGE



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Spatialisation from Boston Metropolitan Statistical Area to County Level

Cluster configuration Based On Porter's Definition



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-Cluster Spatialisation from Boston Metropolitan Statistical Area to County Level

General MAPS: BOSTON METROPOLITAN STATISTICAL AREA

MAPS-LED
"Multidisciplinary Approach to Plan Smart Specialisation Strategies for Local Economic Development"

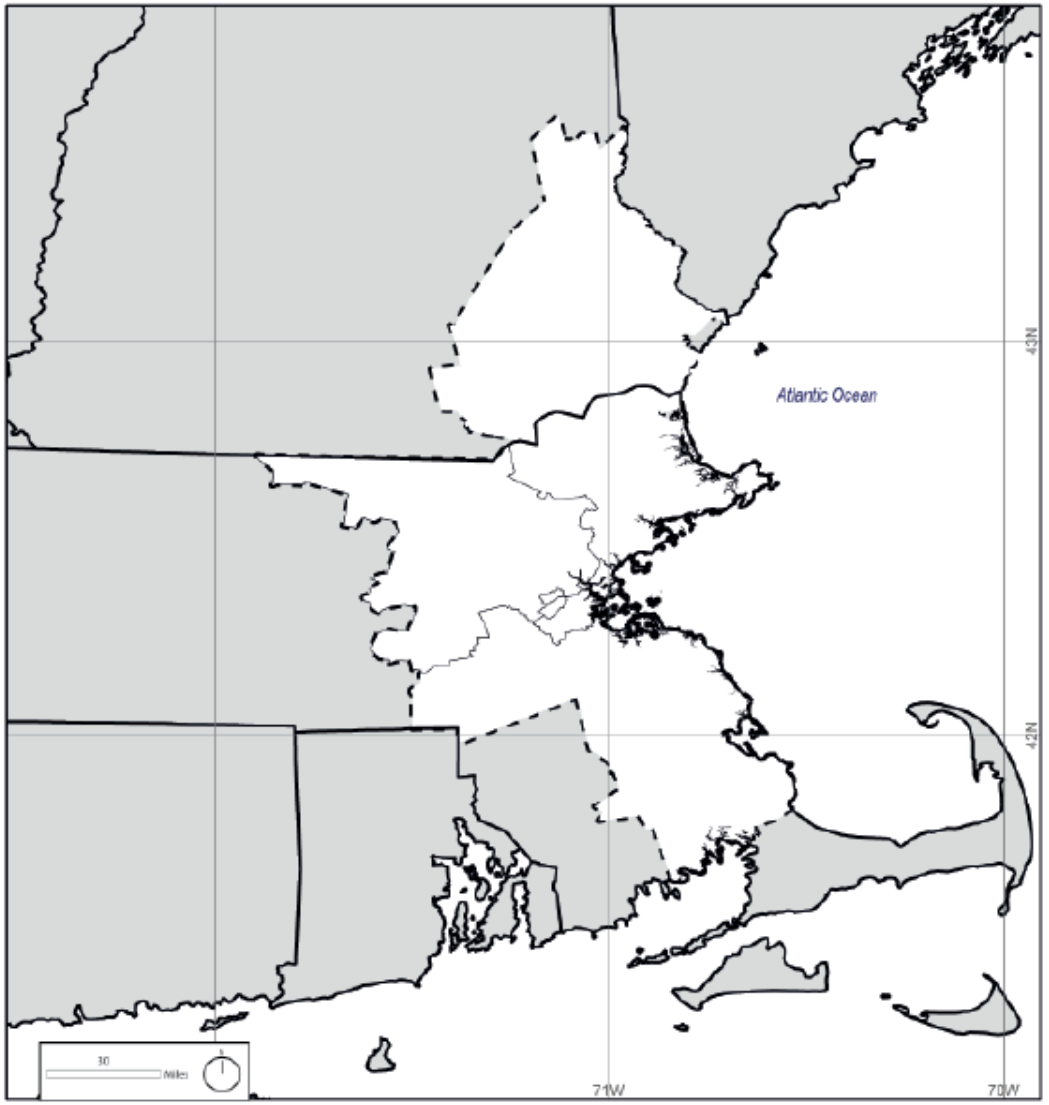
Marie Sklodowska-Curie
Research and Innovation Staff
Exchange (RISE)

Working Package No.2
S3: Cluster policy & Spatial Planning

February - June 2016
Università degli Studi Mediterranea di Reggio Calabria - PRU UNIT
Northeastern University - Department of Economics

GA No: 645661-MAPS-LED-H2020-MSCA-RISE-2014

1.1 Boston Metropolitan Statistical Area



Legend

Administrative Boundaries

State Boundaries

Boston Metropolitan Statistical Area (MSA)

County of Middlesex and Suffolk

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Spatialisation from Boston Metropolitan Statistical Area to County Level

General MAPS: MIDDLSEX and Suffolk County ZIPCODE Boundaries

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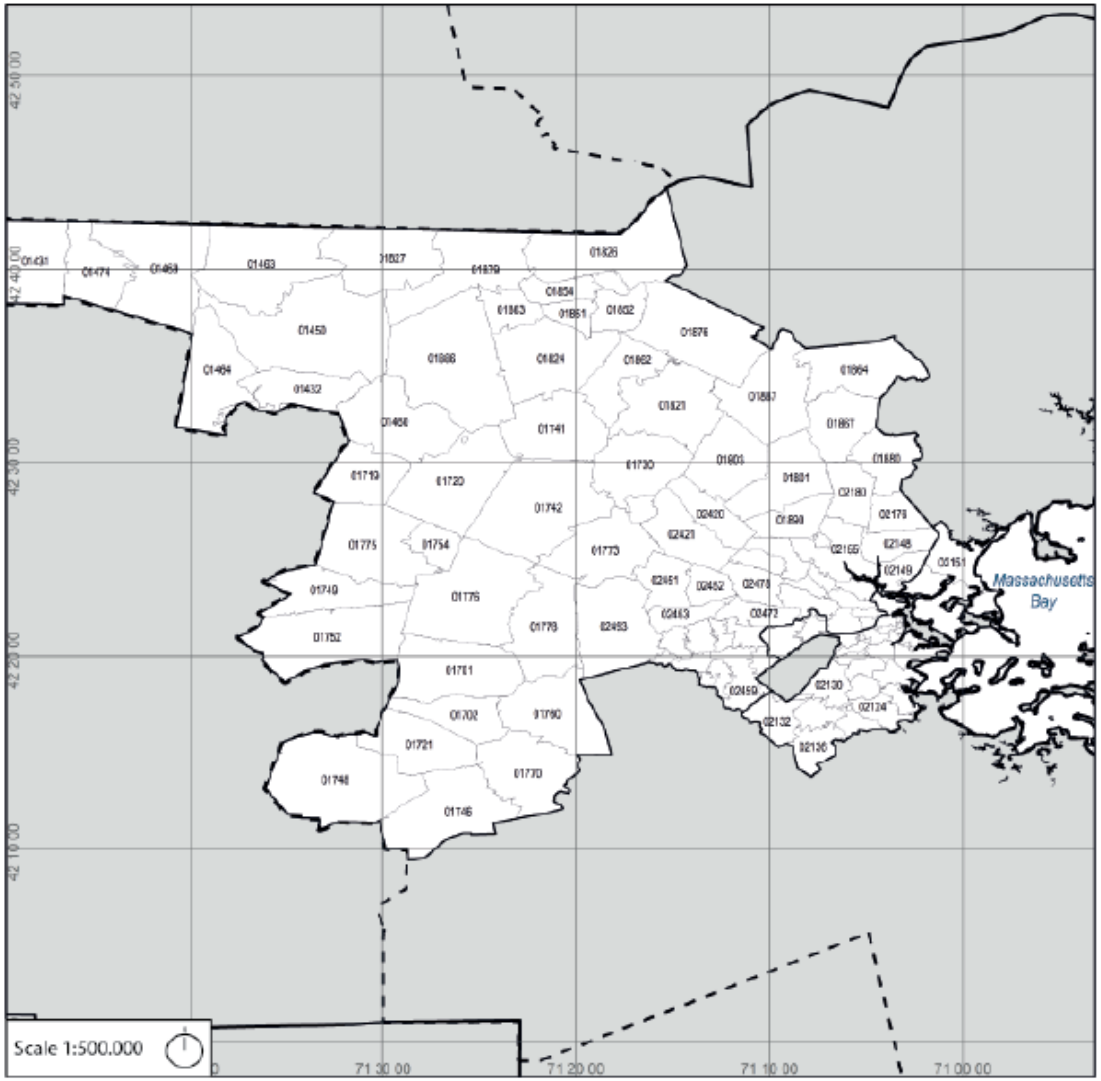
1.2 Middlesex and Suffolk County
Zipcodes bounddaries



Legend

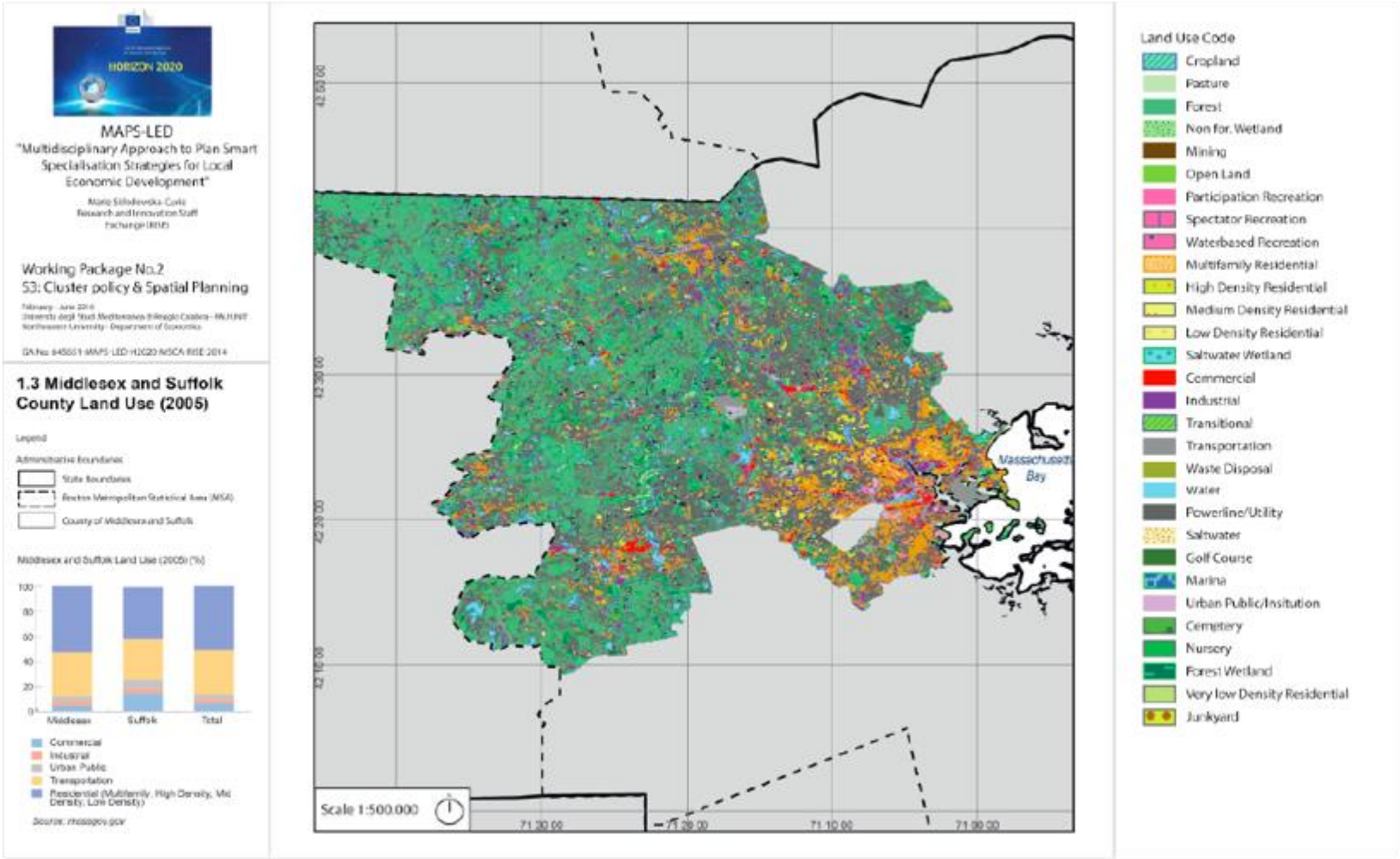
Administrative Boundaries

- State Boundaries
- Boston Metropolitan Statistical Area (MSA)
- County of Middlesex and Suffolk
- 02118 ZipCode Boundaries

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Spatialisation from Boston Metropolitan Statistical Area to County Level

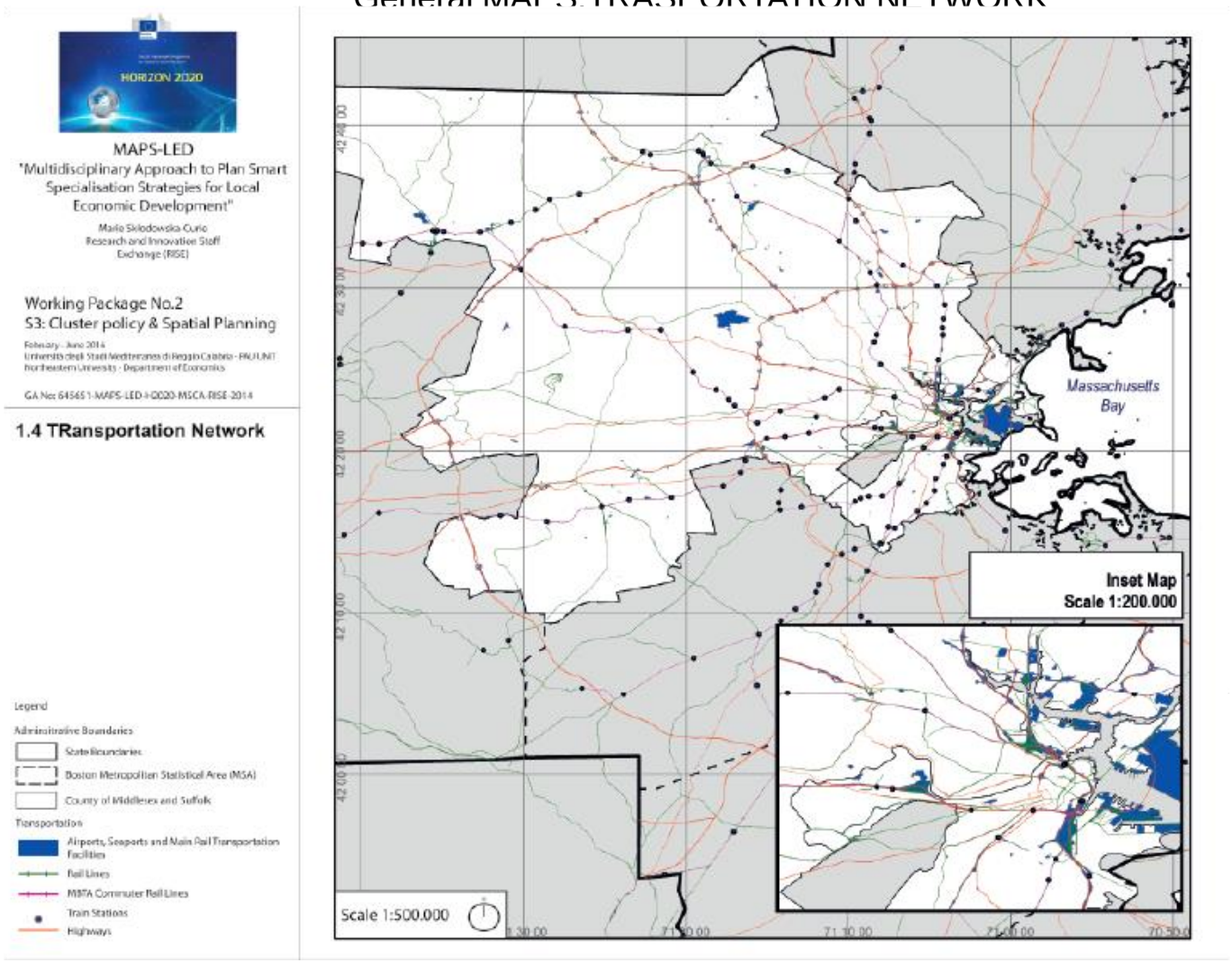
General MAPS:MIDDLSEX and Suffolk County LAND USE(2005)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

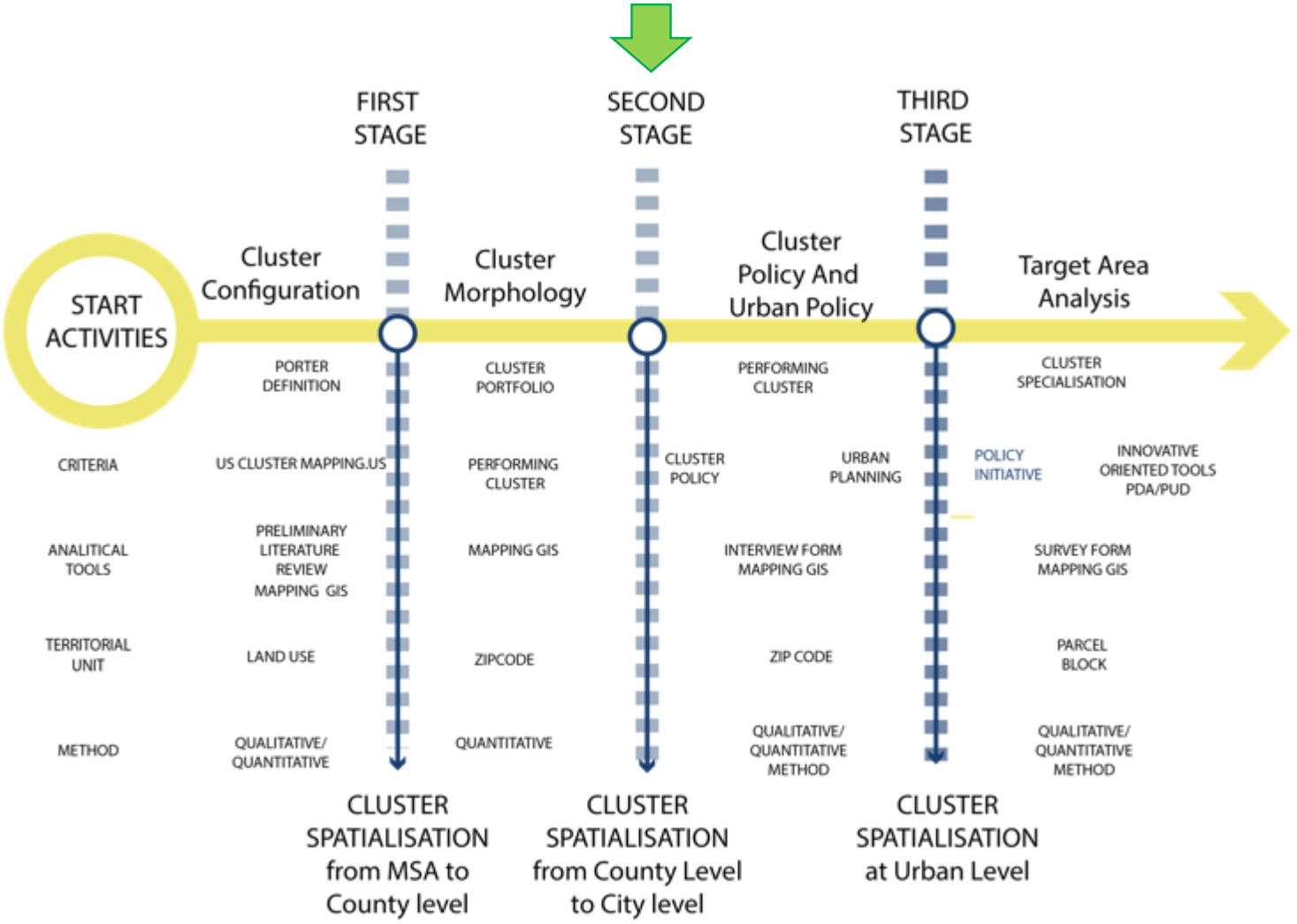
-Cluster Spatialisation from Boston Metropolitan Statistical Area to County Level

General MAPS:TRASPORTATION NETWORK



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

- A SPATIALLY ORIENTED PERSPECTIVE: Cluster Morphology at County Level



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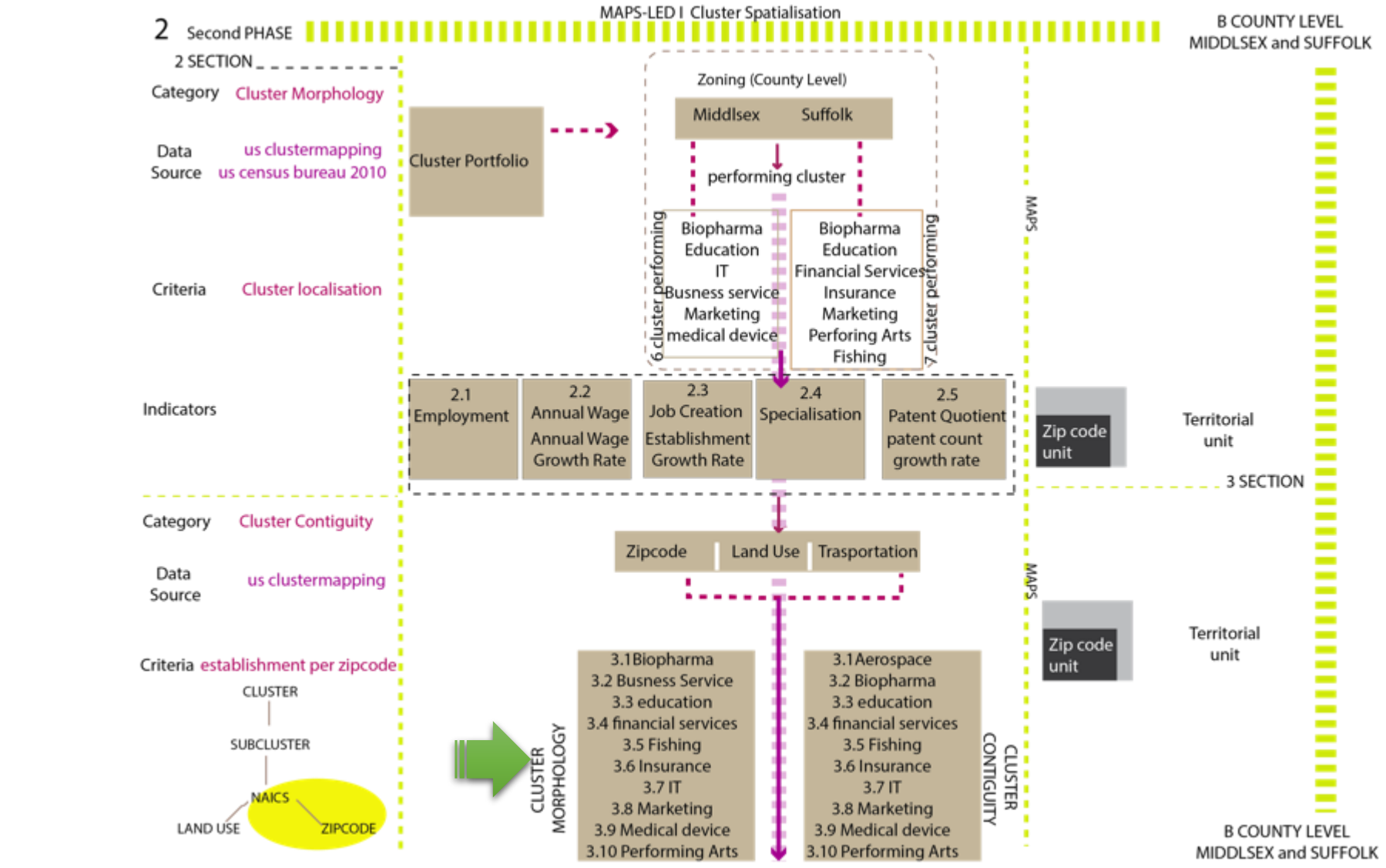
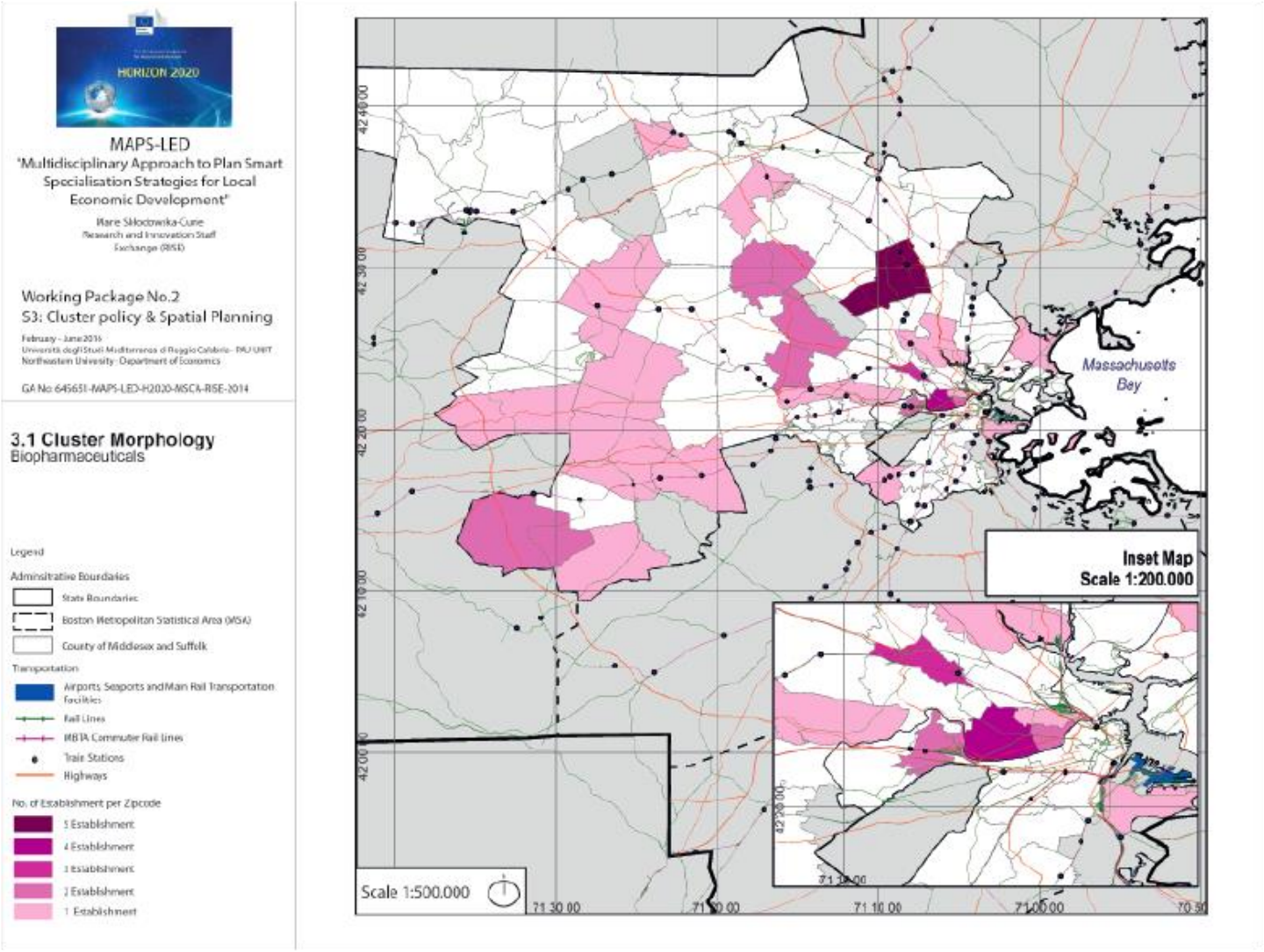


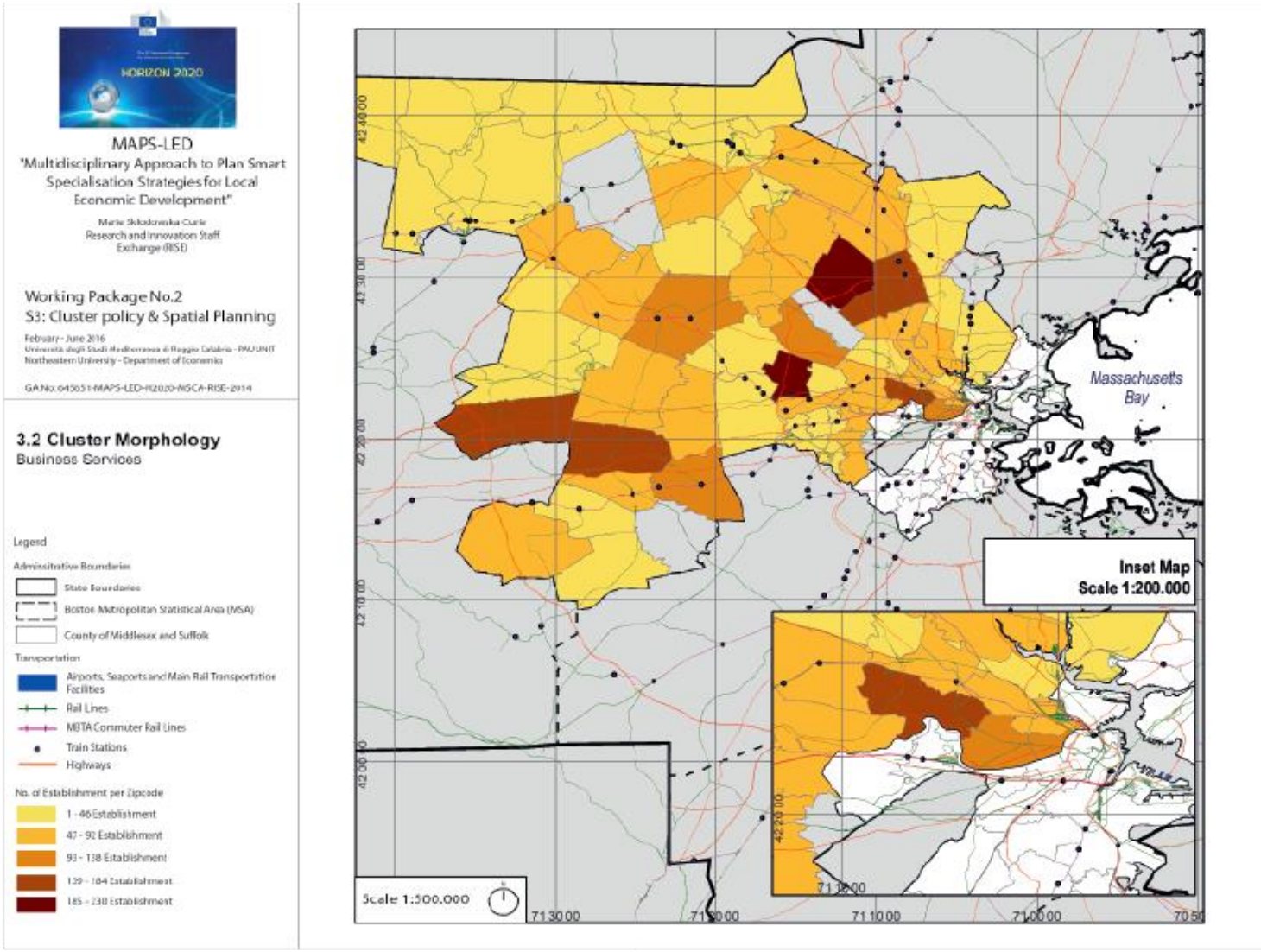
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

- Cluster Morphology at County Level: **BIOPHARMACEUTICAL CLUSTER (No. Of Establishment per ZIPCODE)**



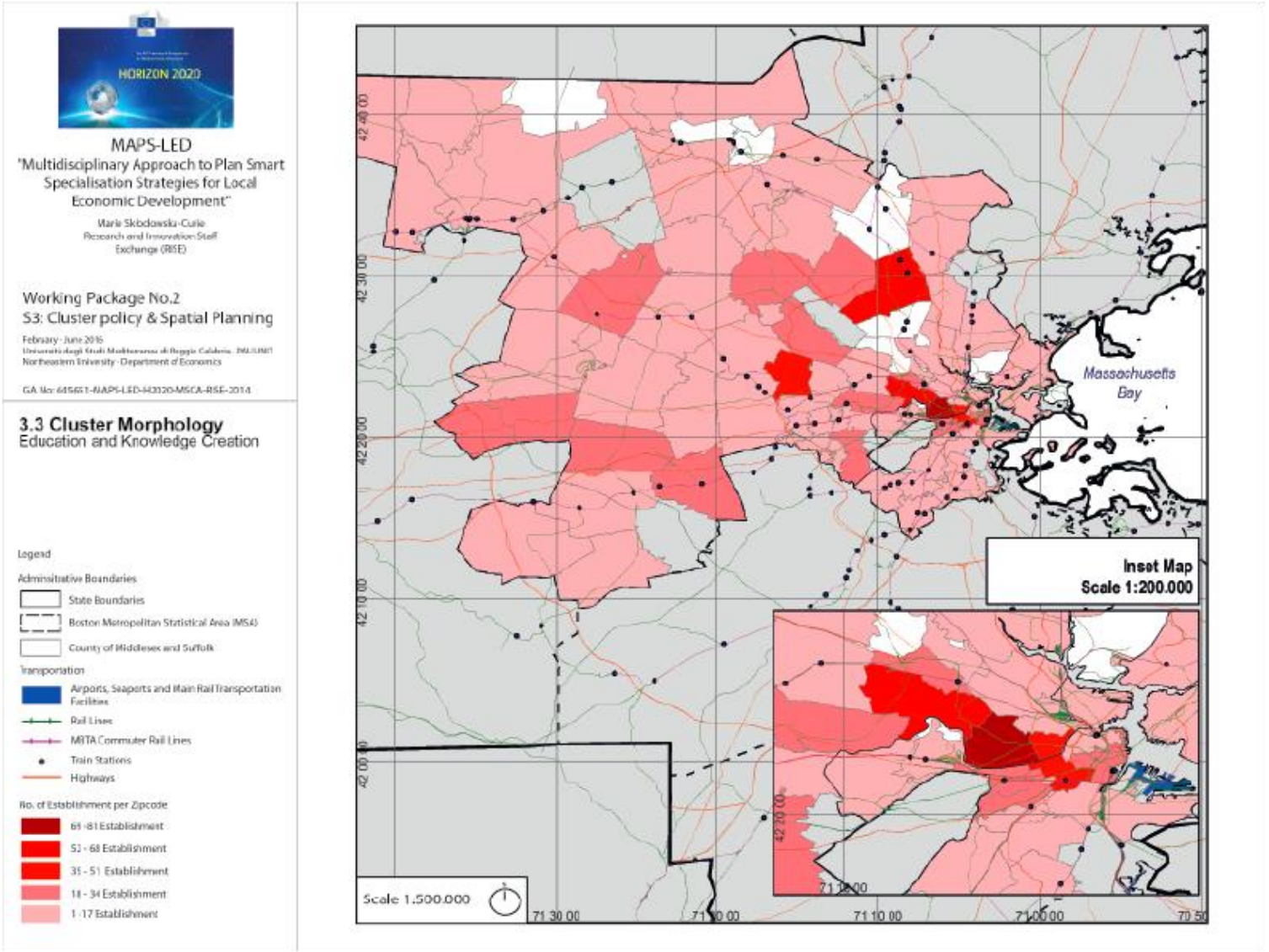
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: **BUSINESS SERVICESCLUSTER (No. Of Establishment per ZIPCODE)**



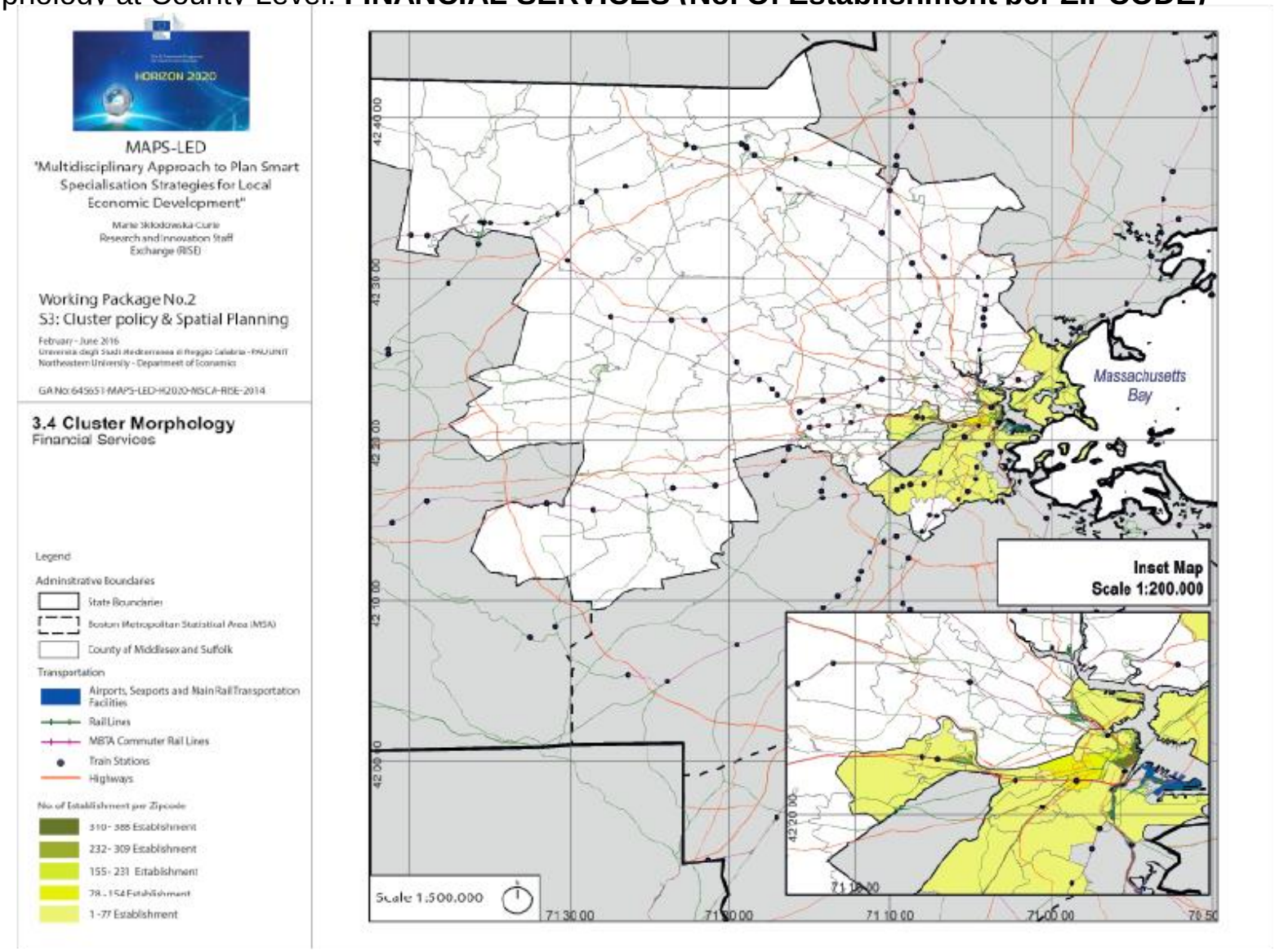
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: **EDUCATION and Knowledge Creation (No. Of Establishment per ZIPCODE)**



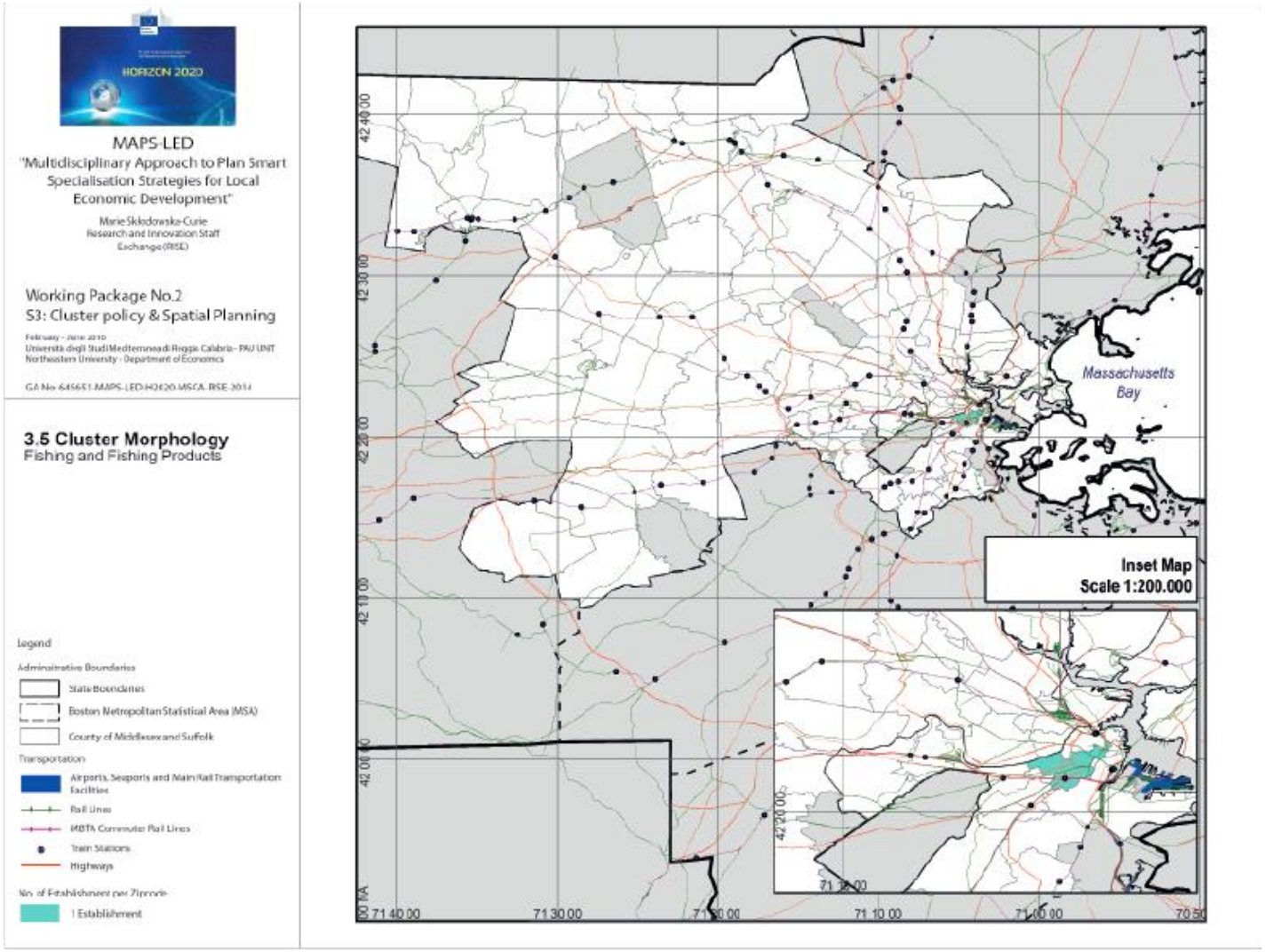
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: **FINANCIAL SERVICES (No. Of Establishment per ZIPCODE)**



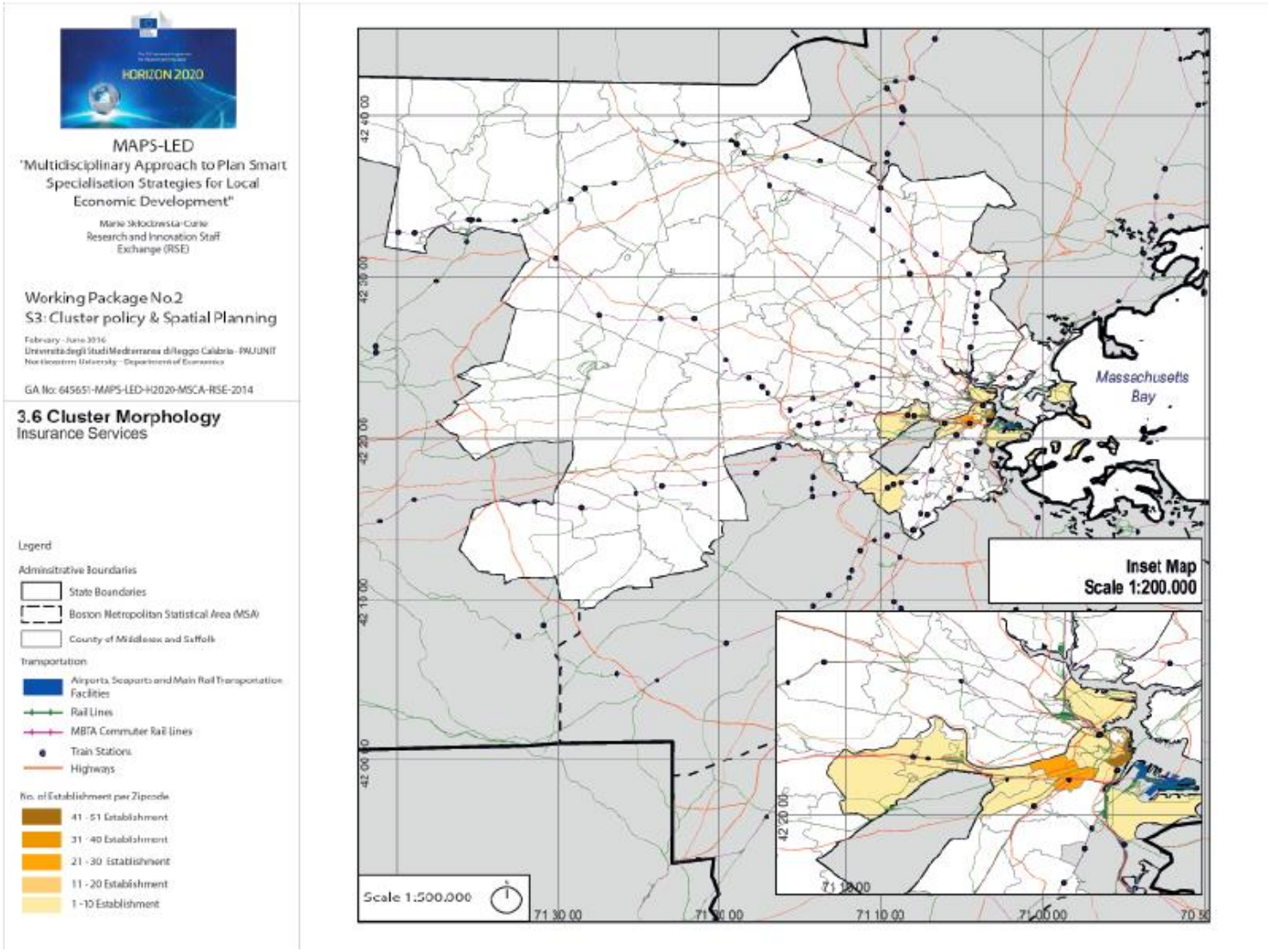
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: FISHING and FISHING PRODUCTS(**No. Of Establishment per ZIPCODE)**



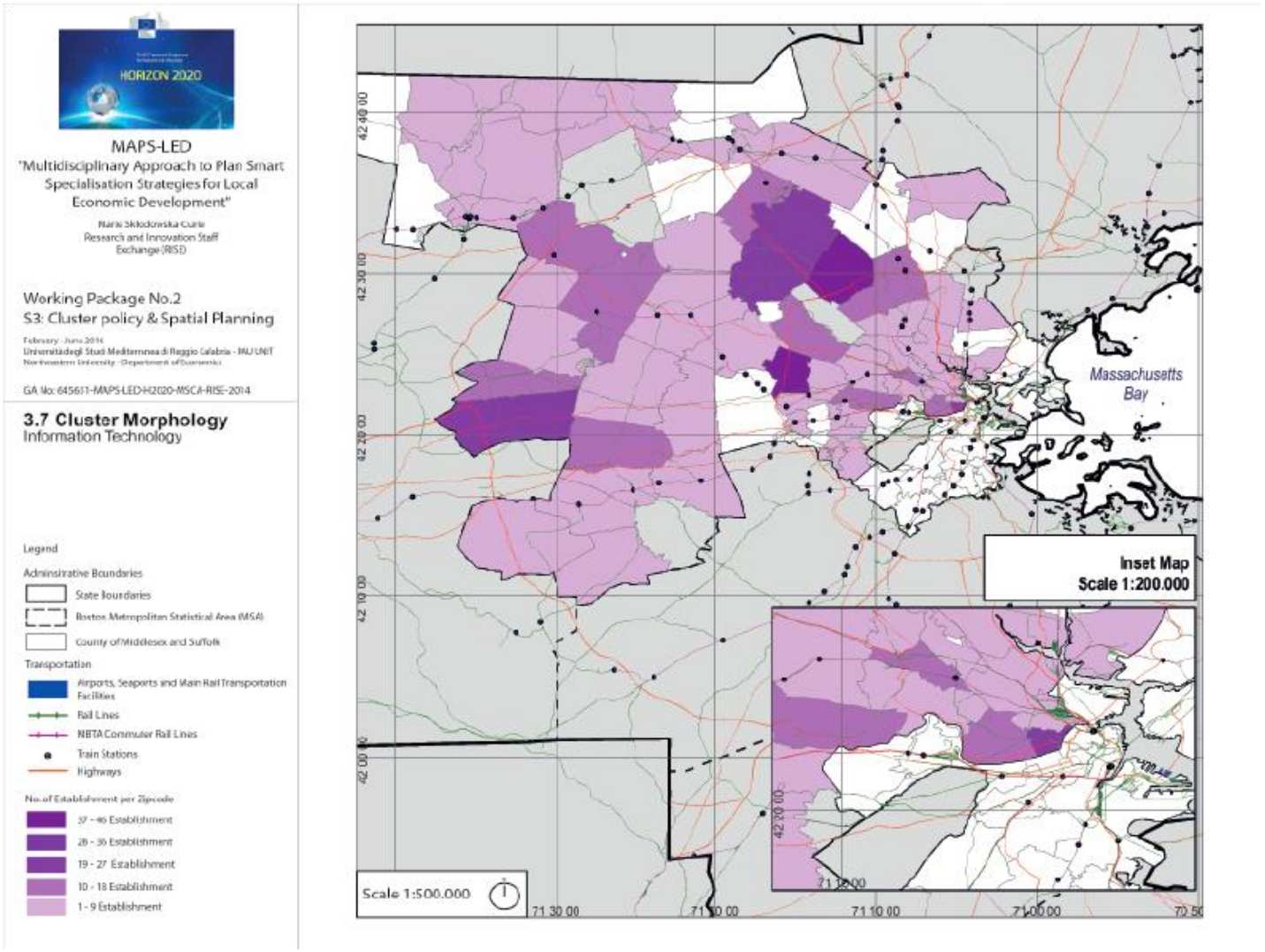
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: **INSURANCE SERVICES** (**No. Of Establishment per ZIPCODE)**



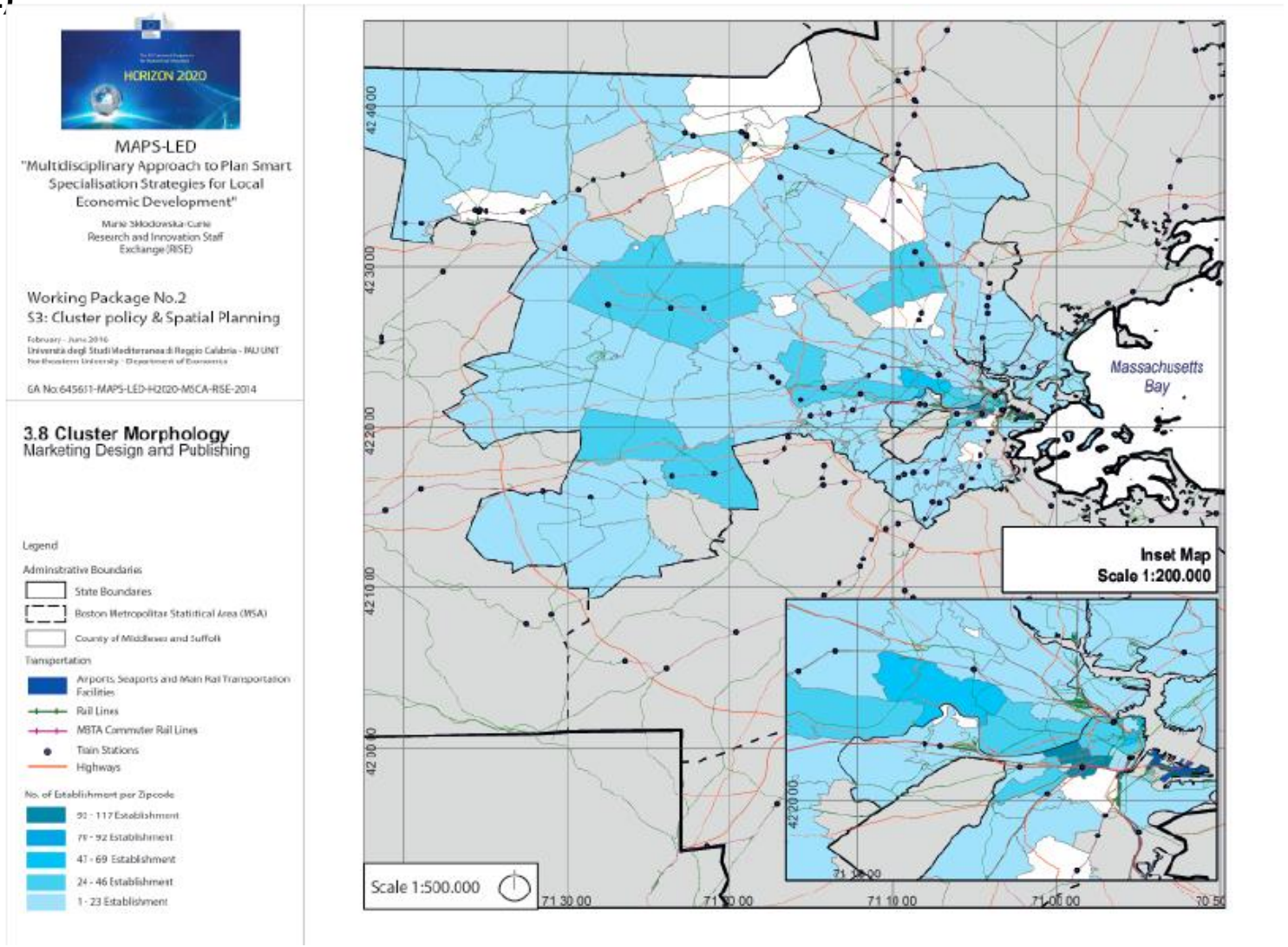
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: **INFORMATION TECHNOLOGY** (**No. Of Establishment per ZIPCODE)**



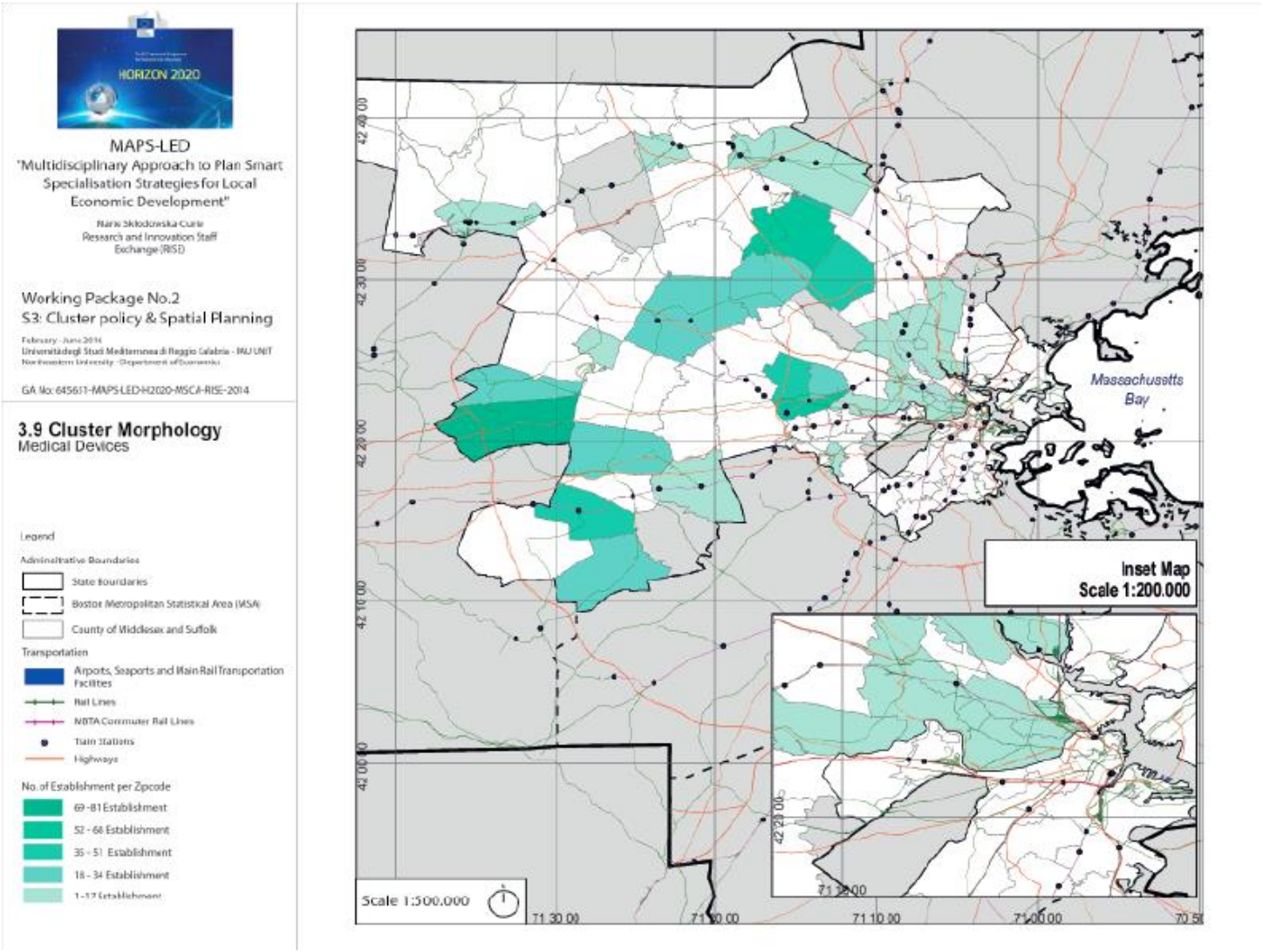
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at County Level: **MARKETING DESIGN and PUBLISHING(No. Of Establishment per ZIPCODE)**



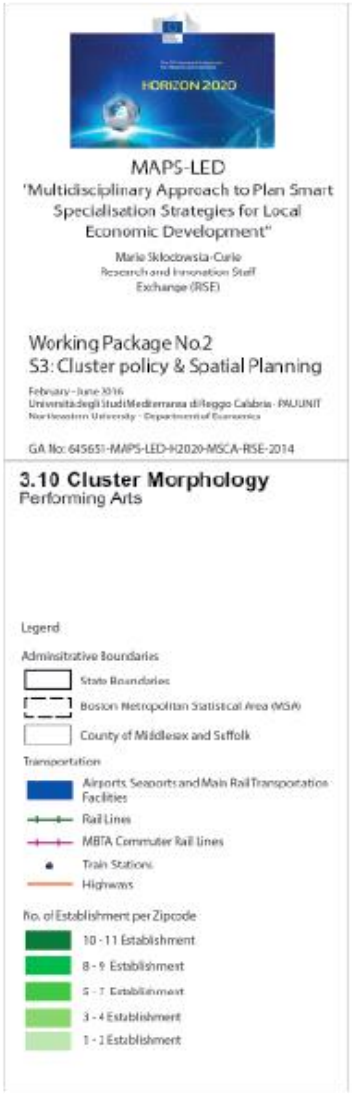
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

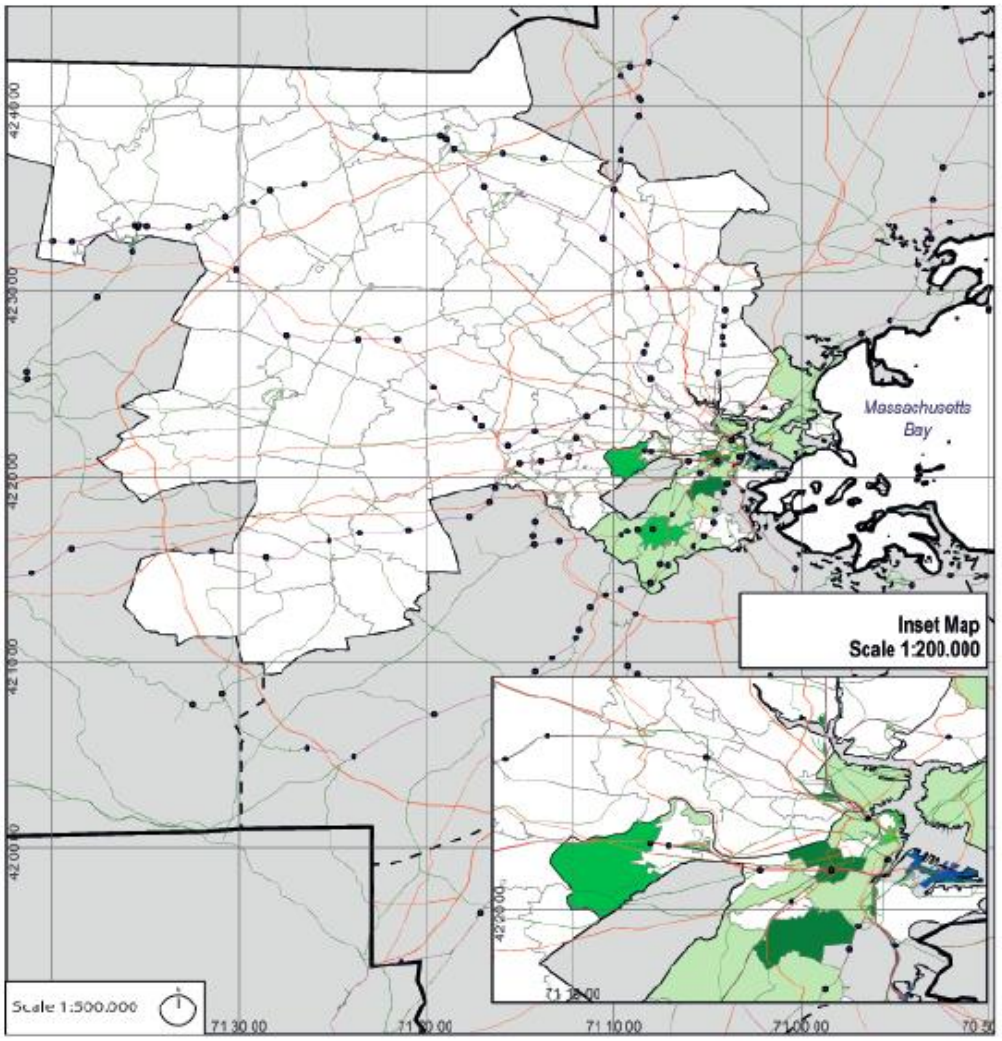
-Cluster Morphology at County Level: **MEDICAL DEVICES** (No**. of Establishment per ZIPCODE)**



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

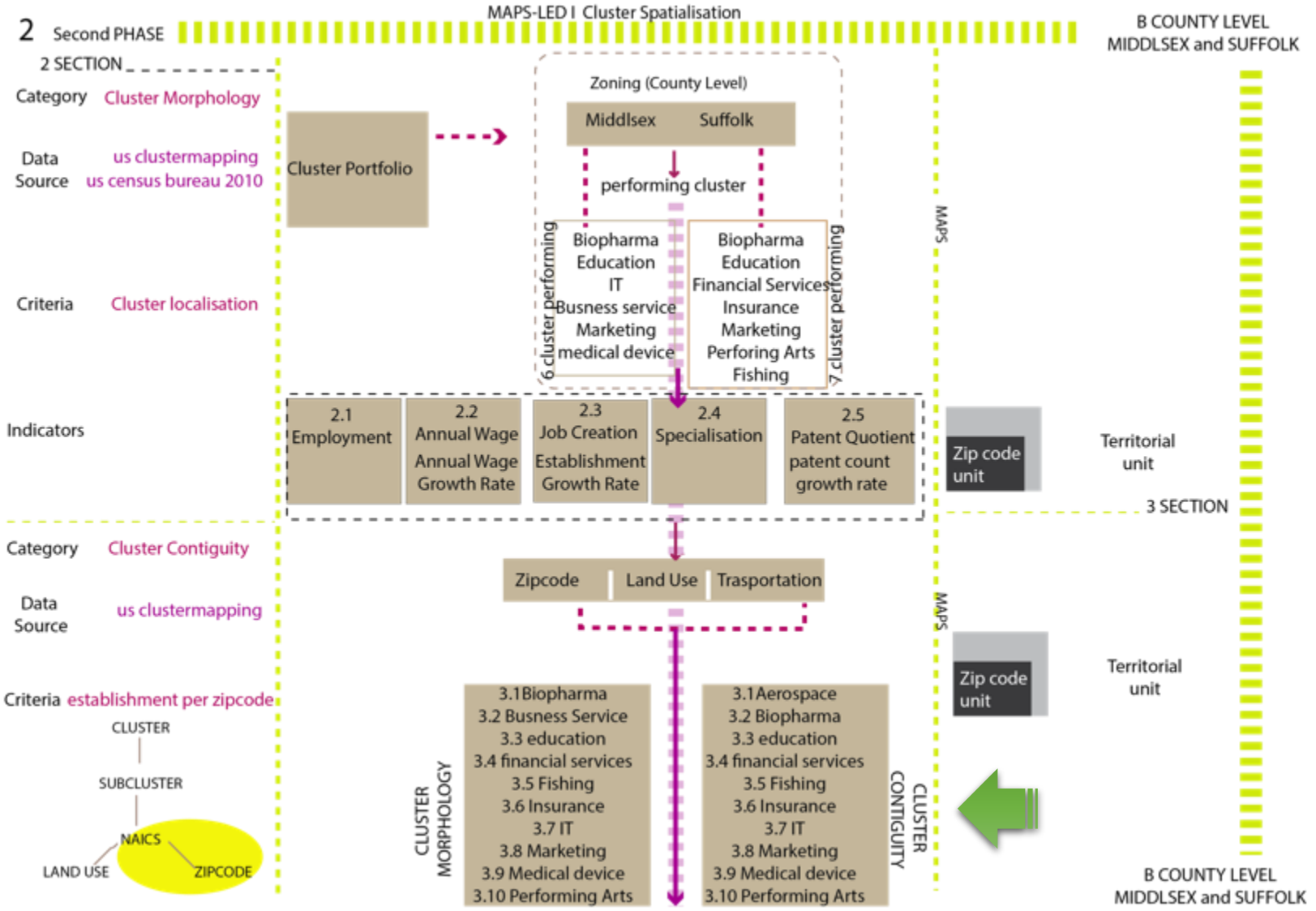
-Cluster Morphology at County Level: **PERFORMING ARTS** (No**. of Establishment per ZIPCODE)**





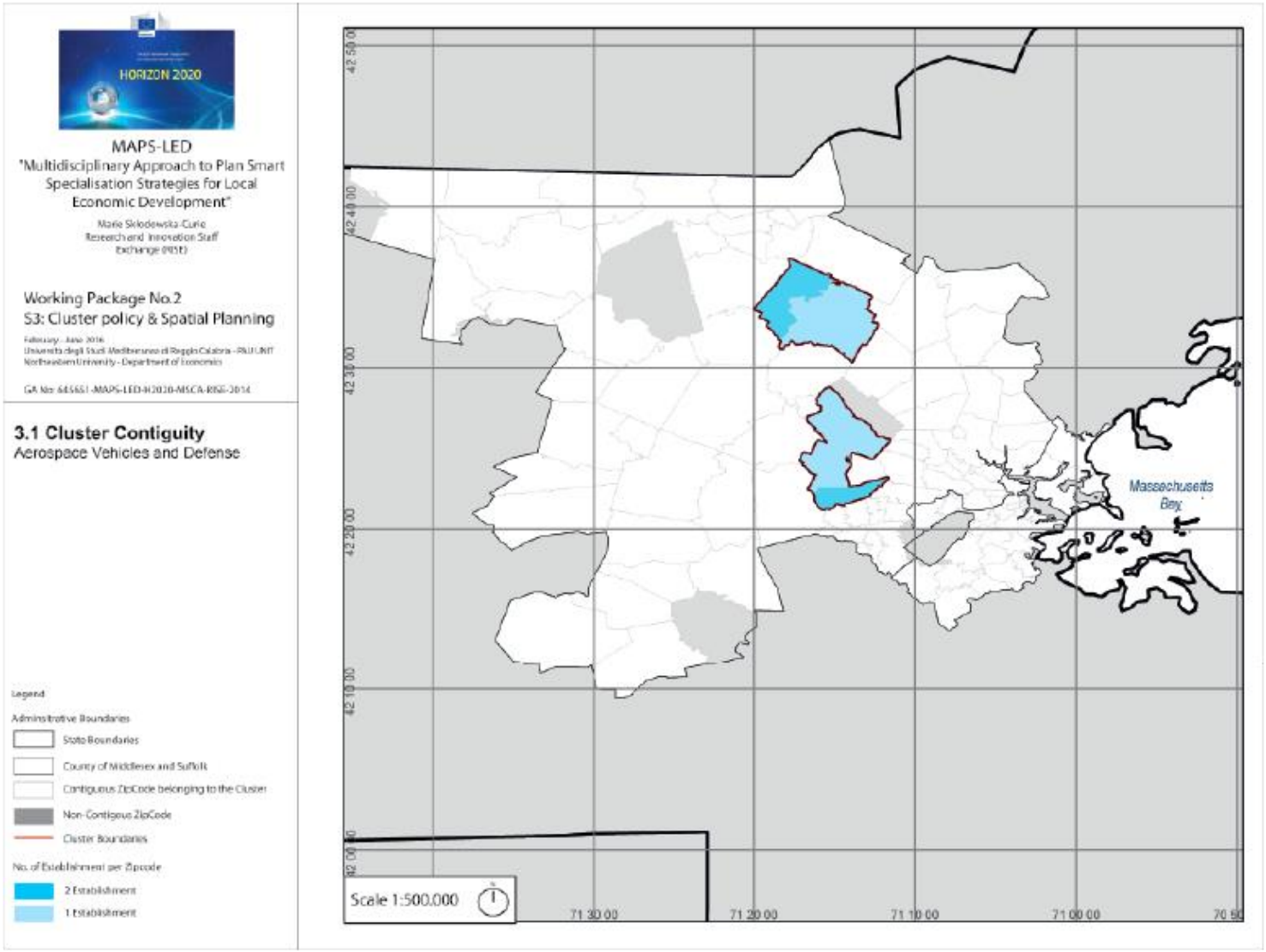
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

- A SPATIALLY ORIENTED PERSPECTIVE: Cluster Contiguity at County Level



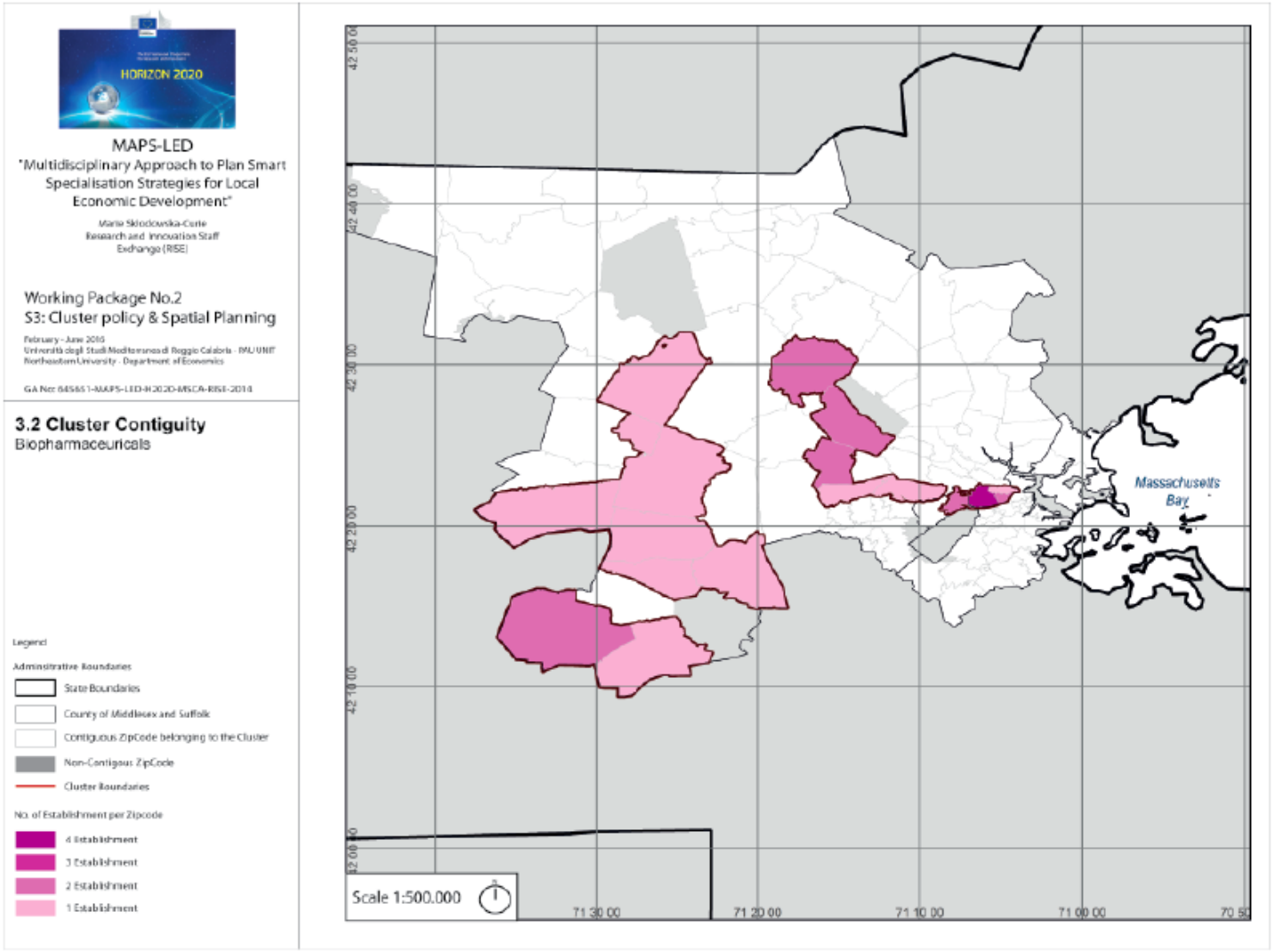
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: Aerospace Vehicles and Defense (No.of Establishment per zip code)



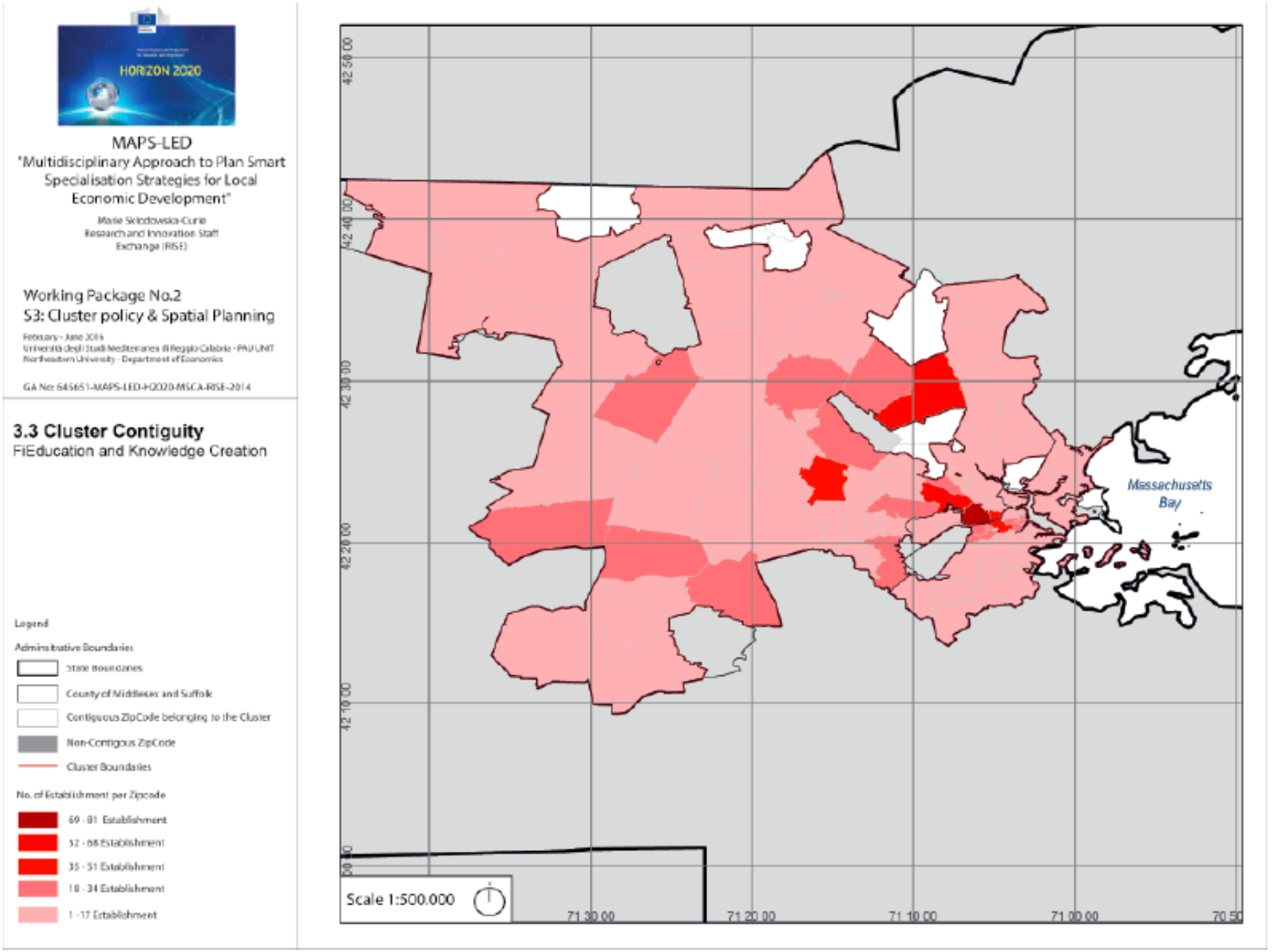
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: **BIOPHARMACEUTICALS** (No.of Establishment per zip code)



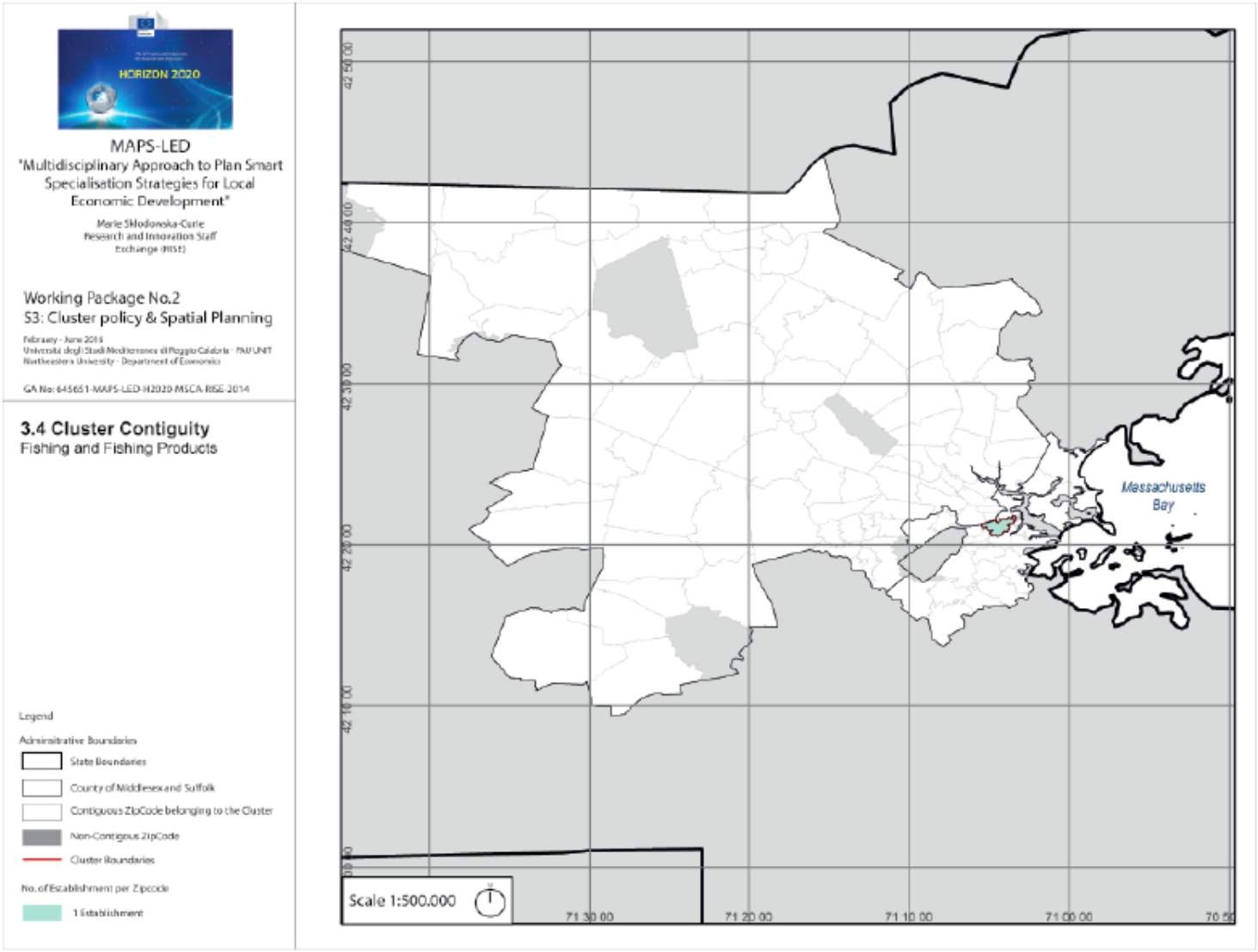
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: **EDUCATION and KNOWLEDGE CREATION**(No.of Establishment per zip co



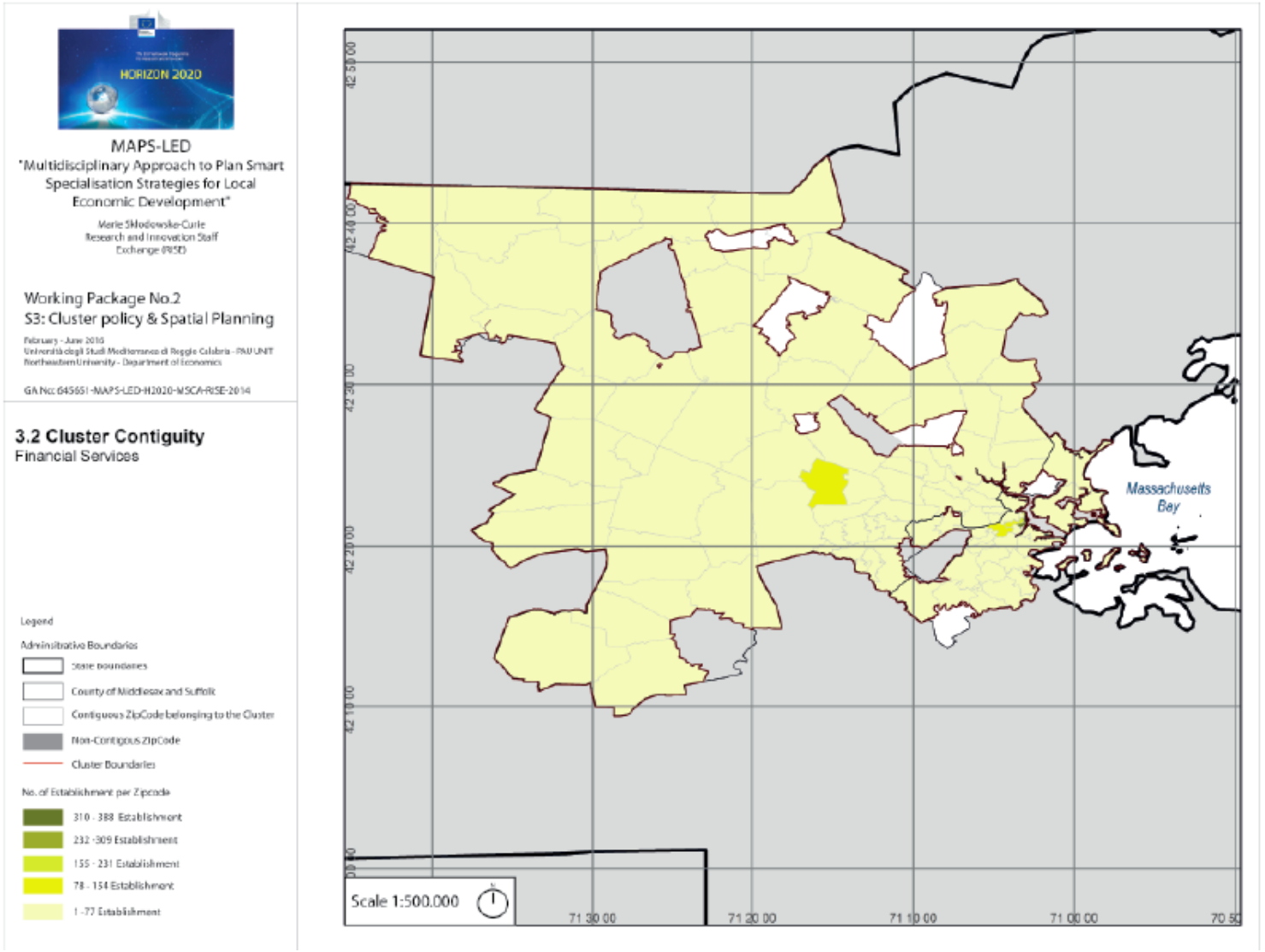
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: **FISHING** (No.of Establishment per zip code)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: **FINANCIAL SERVICES** (No.of Establishment per zip code)



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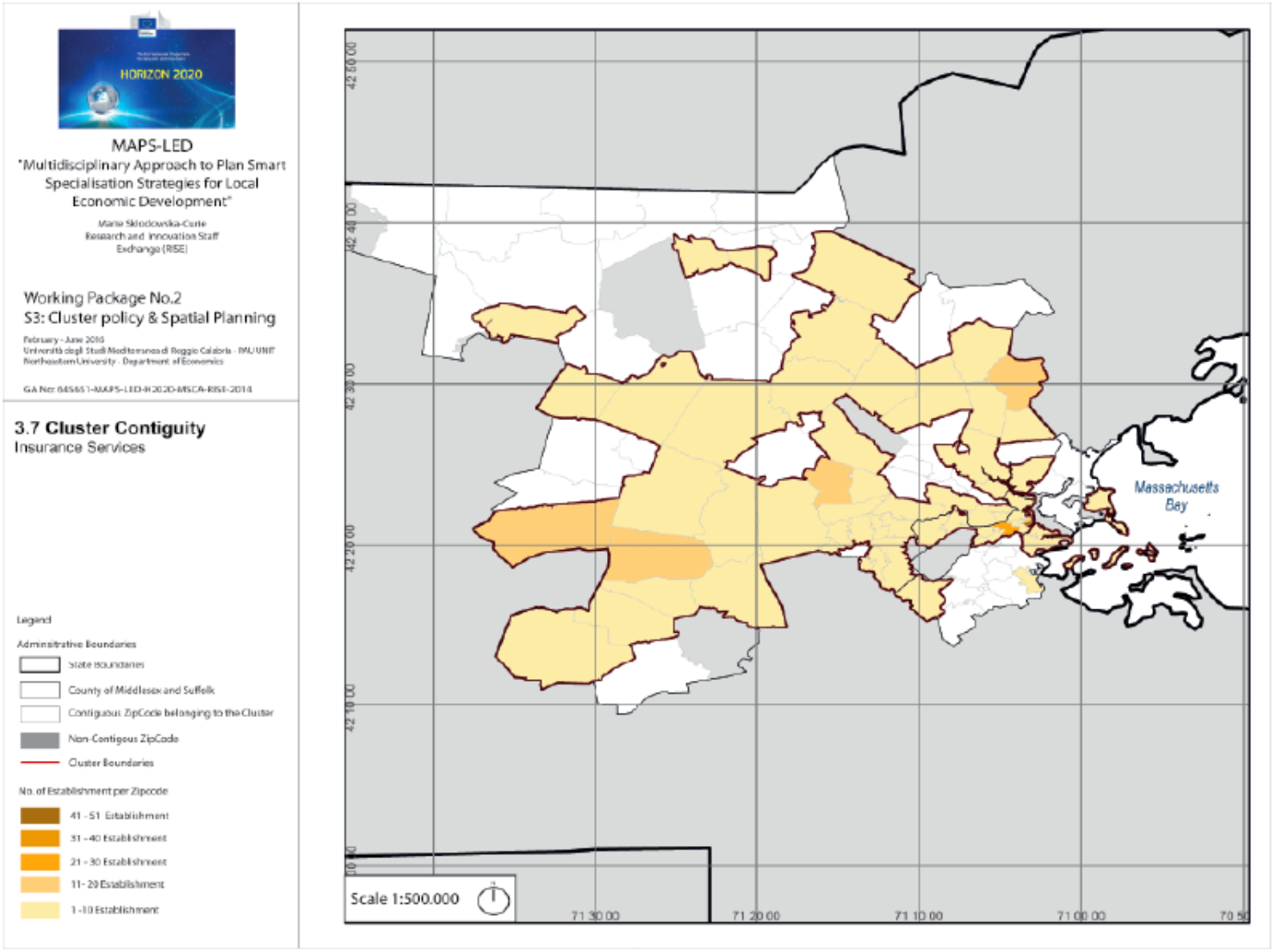
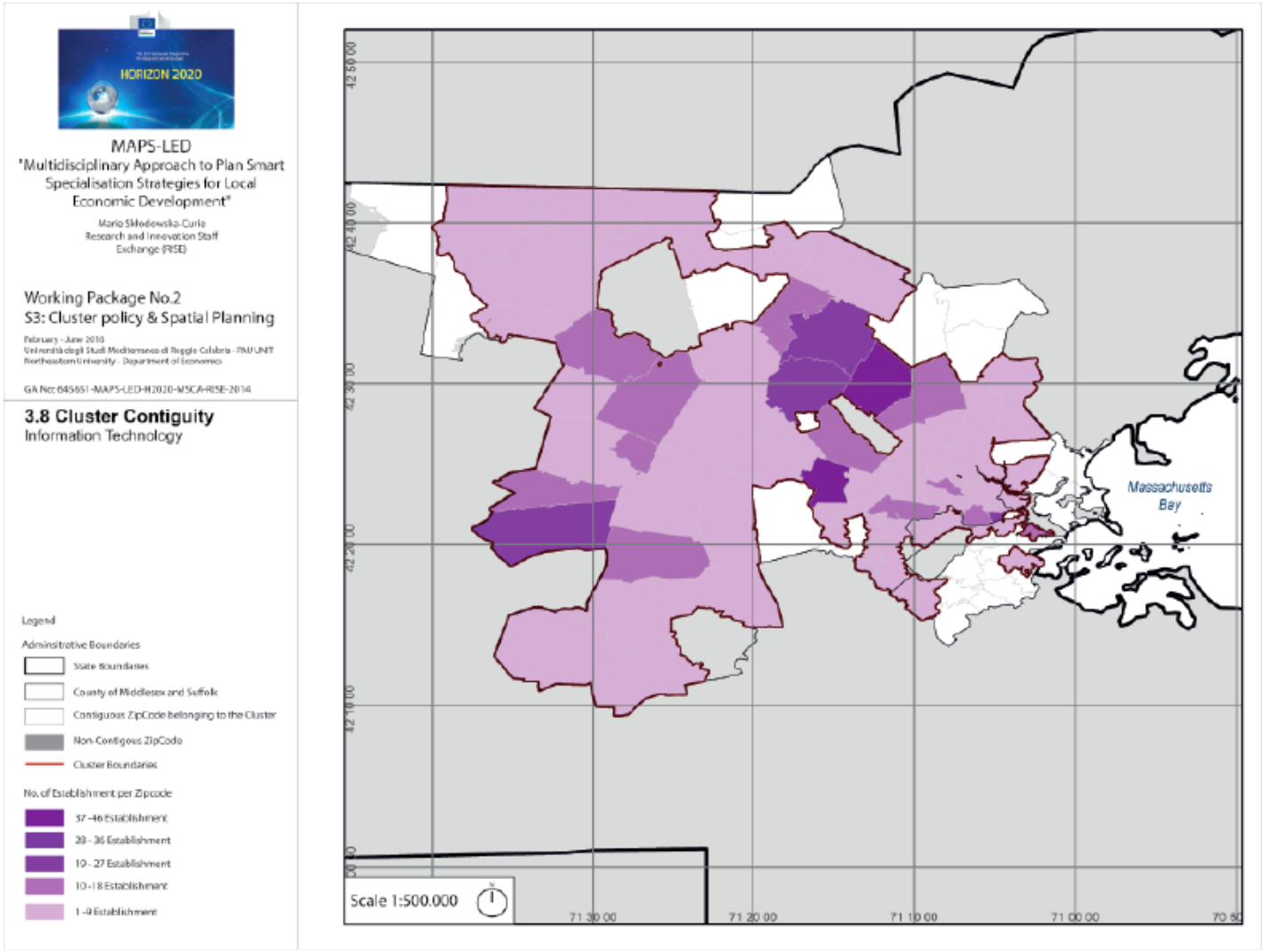
-Cluster Contiguity at County Level: INSURANCE SERVICES (No.of Establishment per zip code)



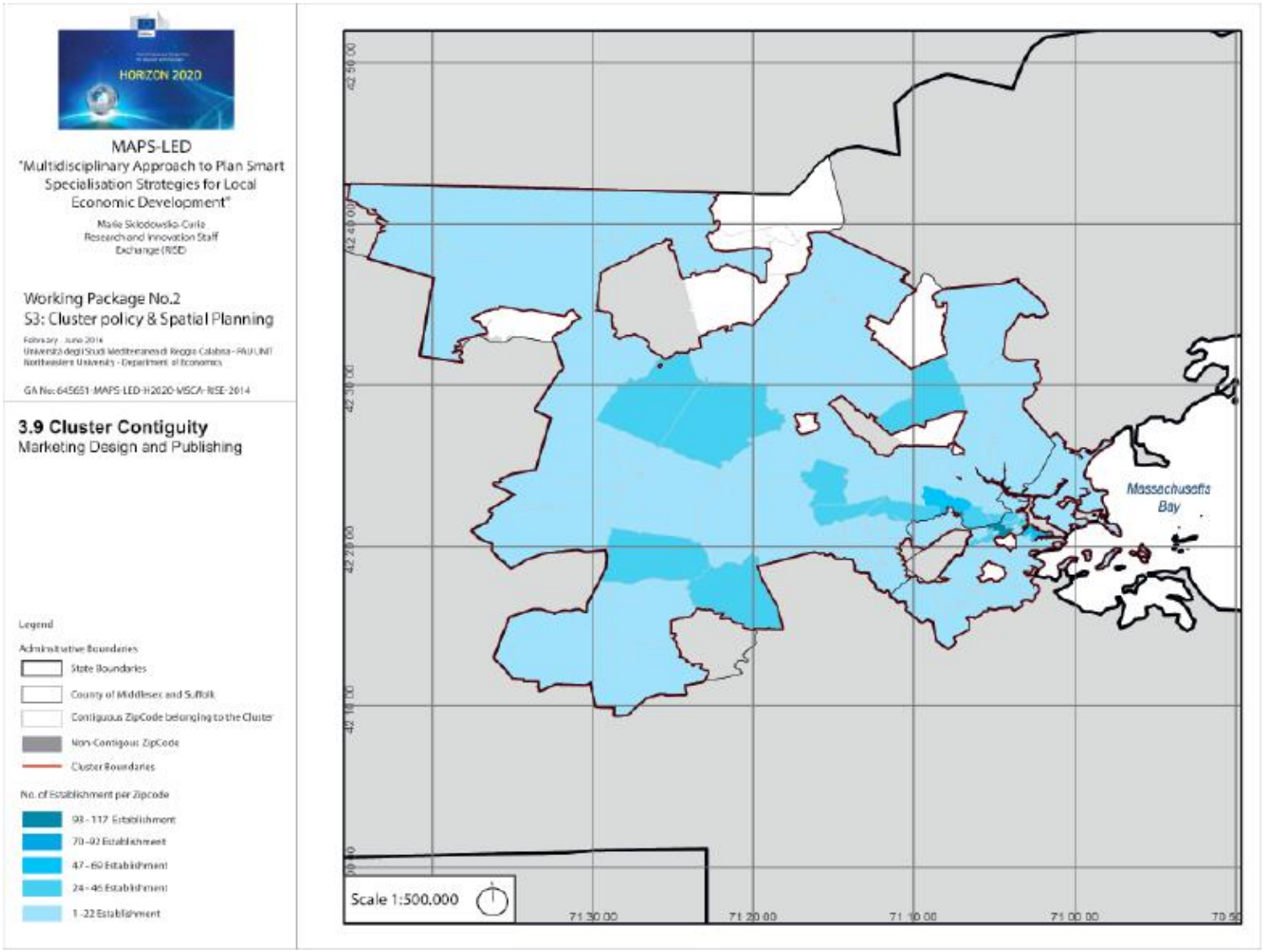
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: INFORMATION TECHNOLOGY (No.of Establishment per zip code)



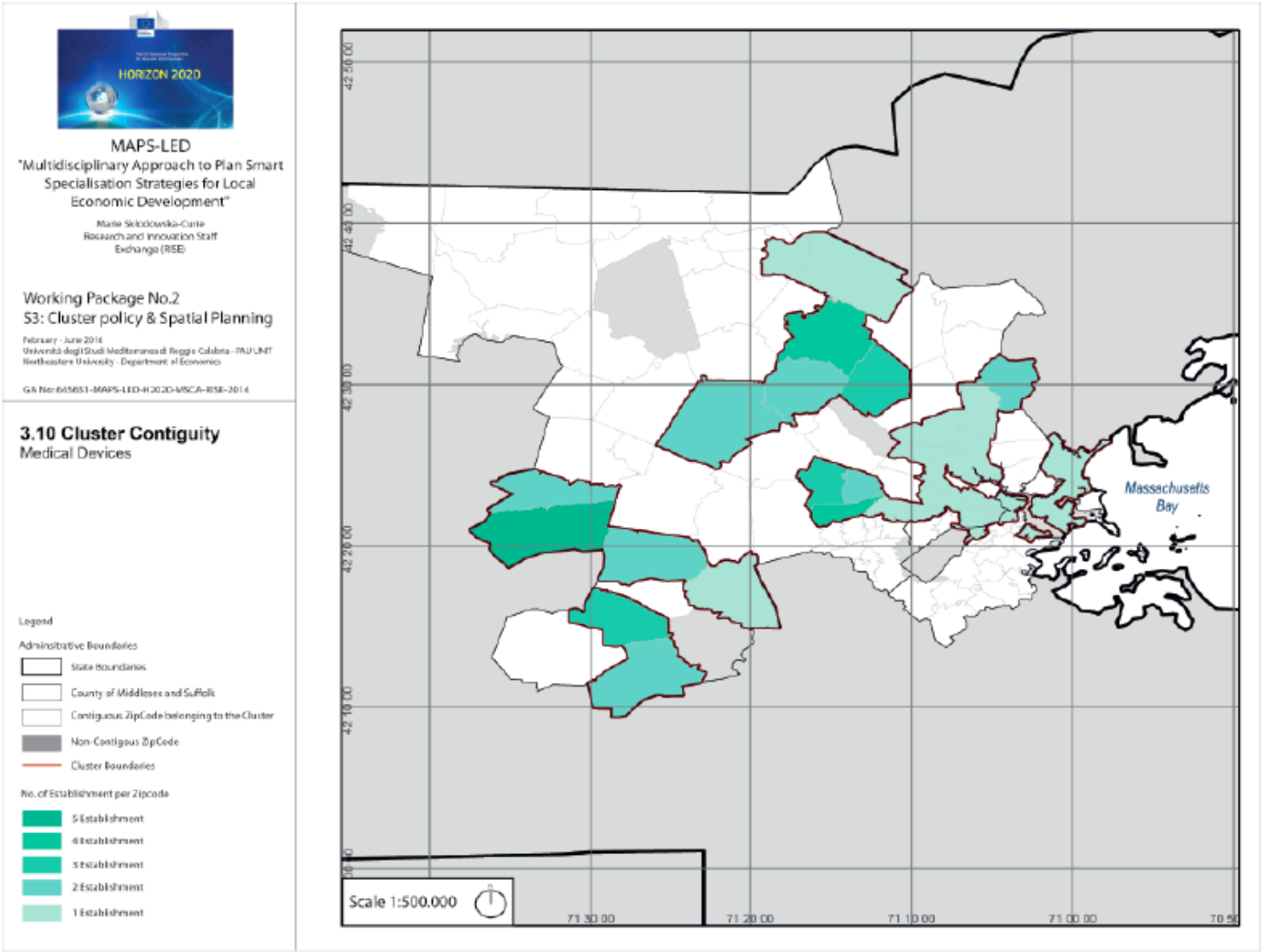
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: MARKETING DESIGN(No.of Establishment per zip code)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Contiguity at County Level: MEDICAL DEVICES (No.of Establishment per zip code)



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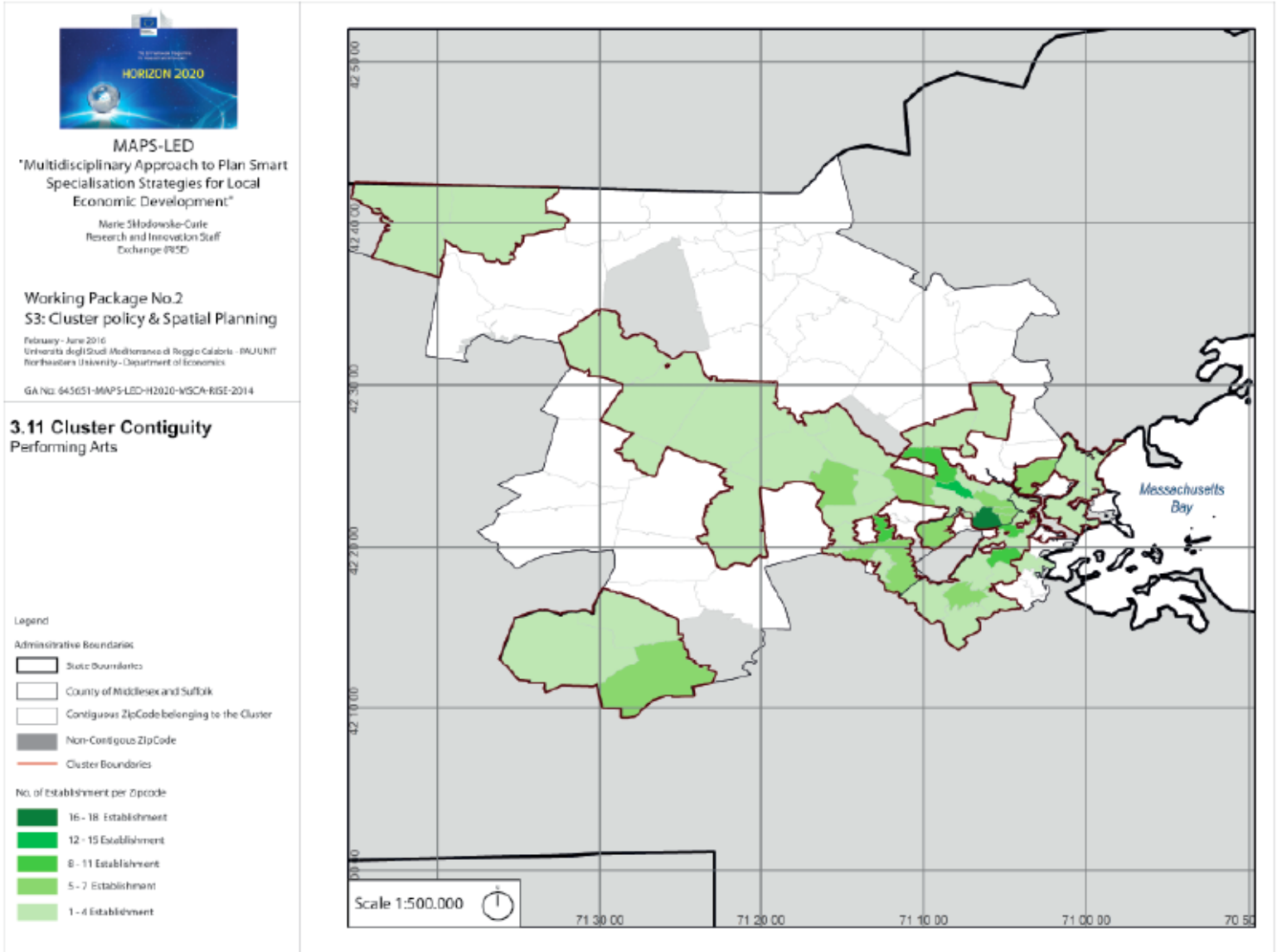
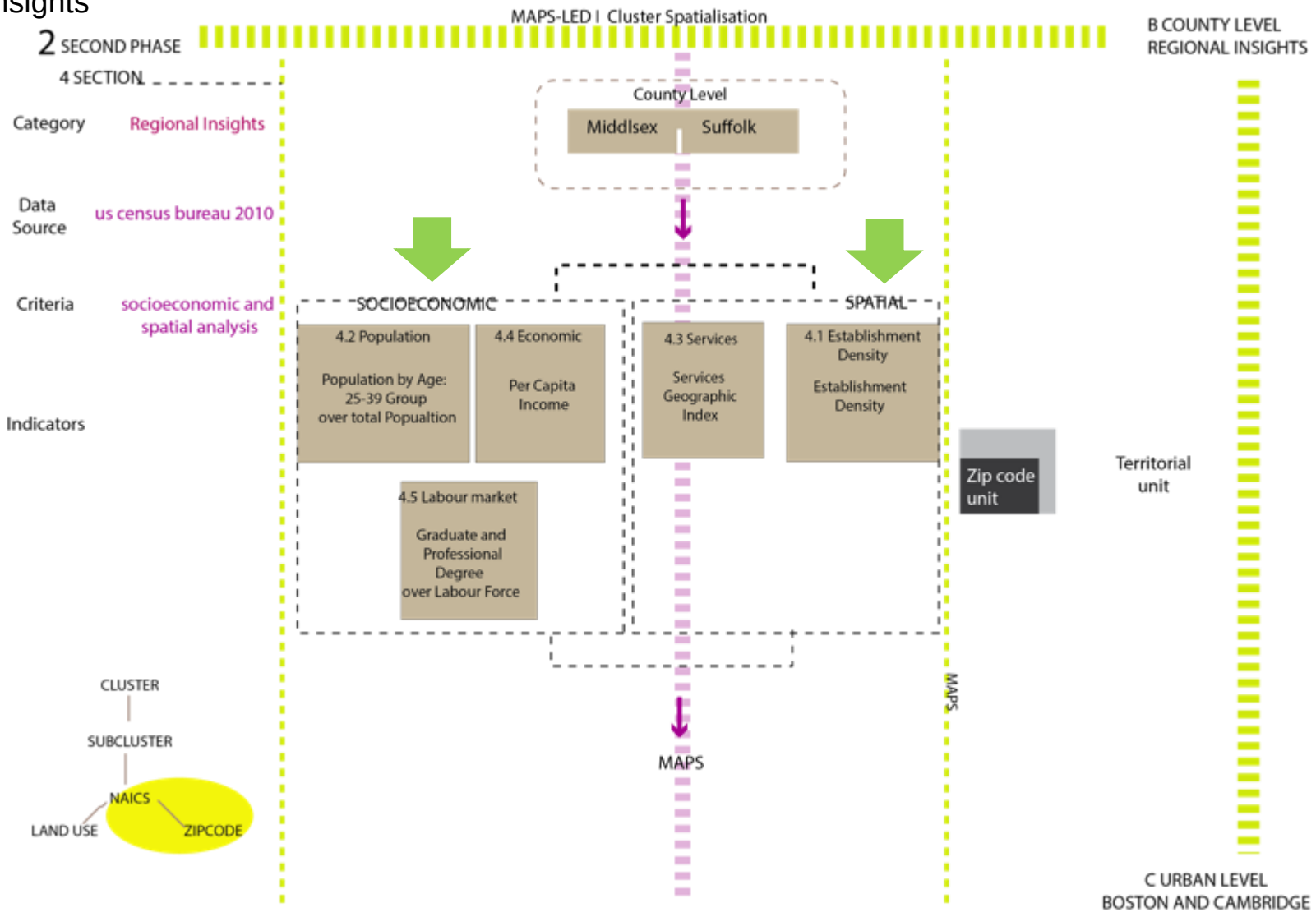
-Cluster Contiguity at County Level: PERFORMING ARTS (No. of Establishment per zip code)



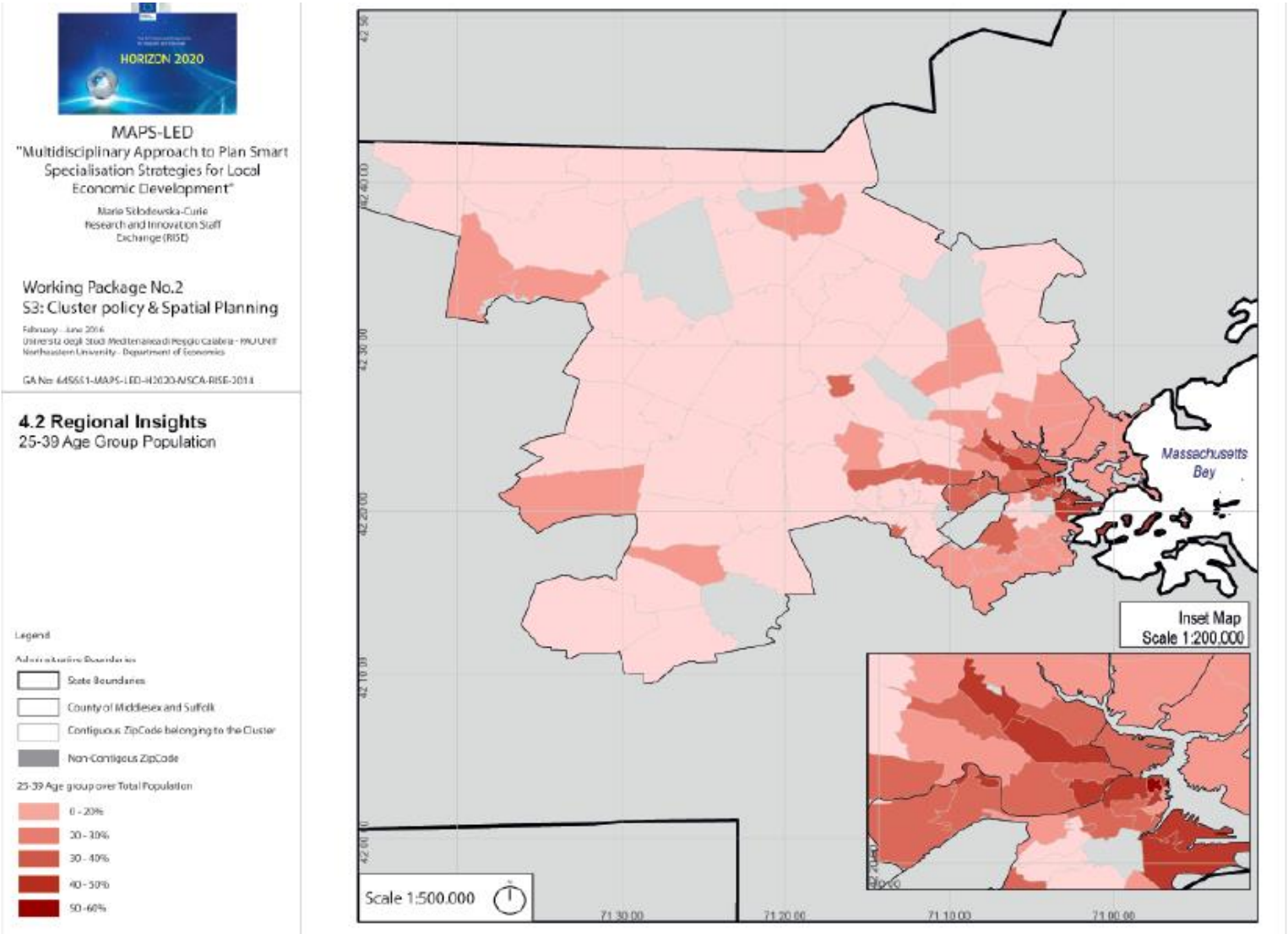
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Regional Insights



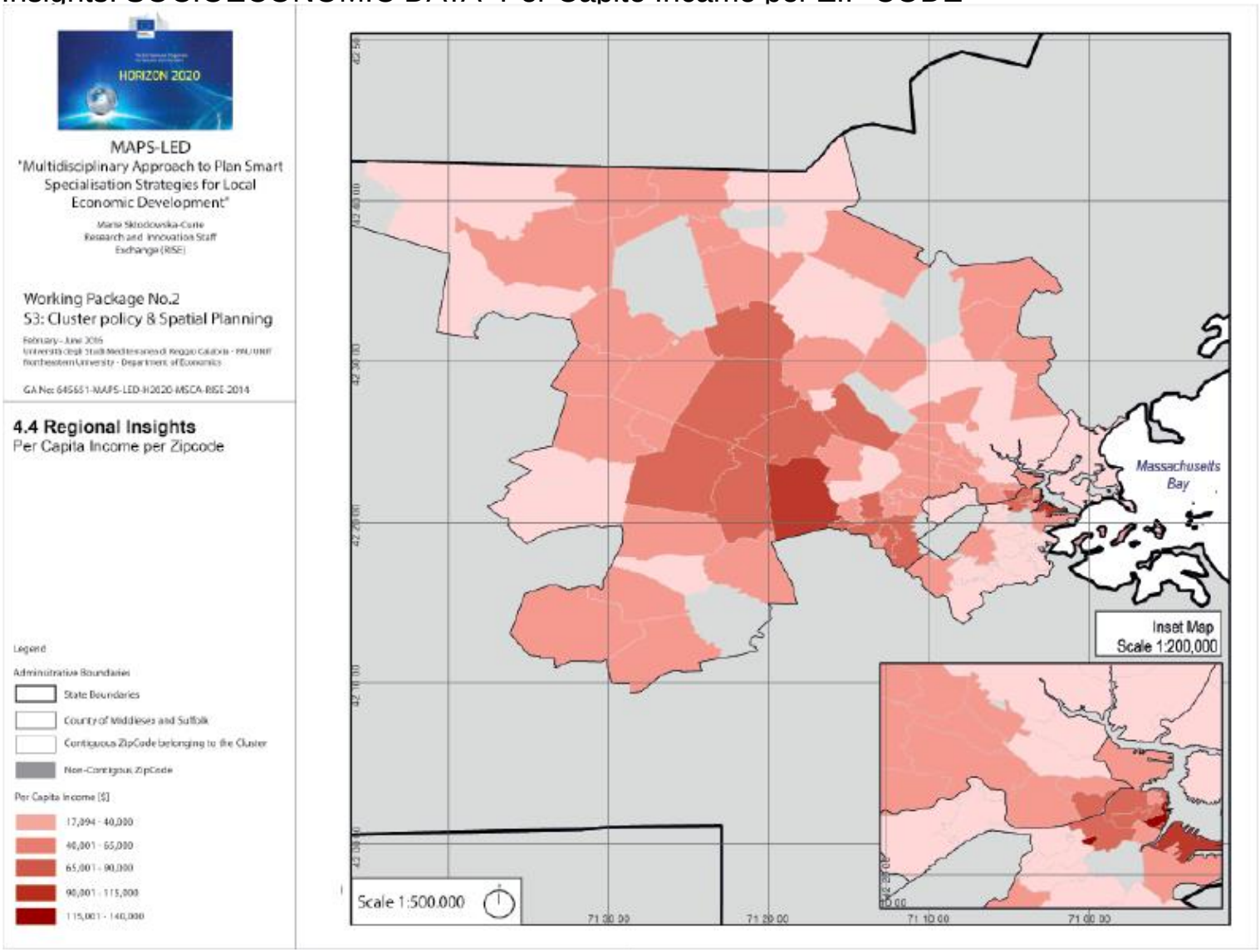
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Regional Insights: SOCIOECONOMIC DATA -Pop. by Age(25-39 age group Population)



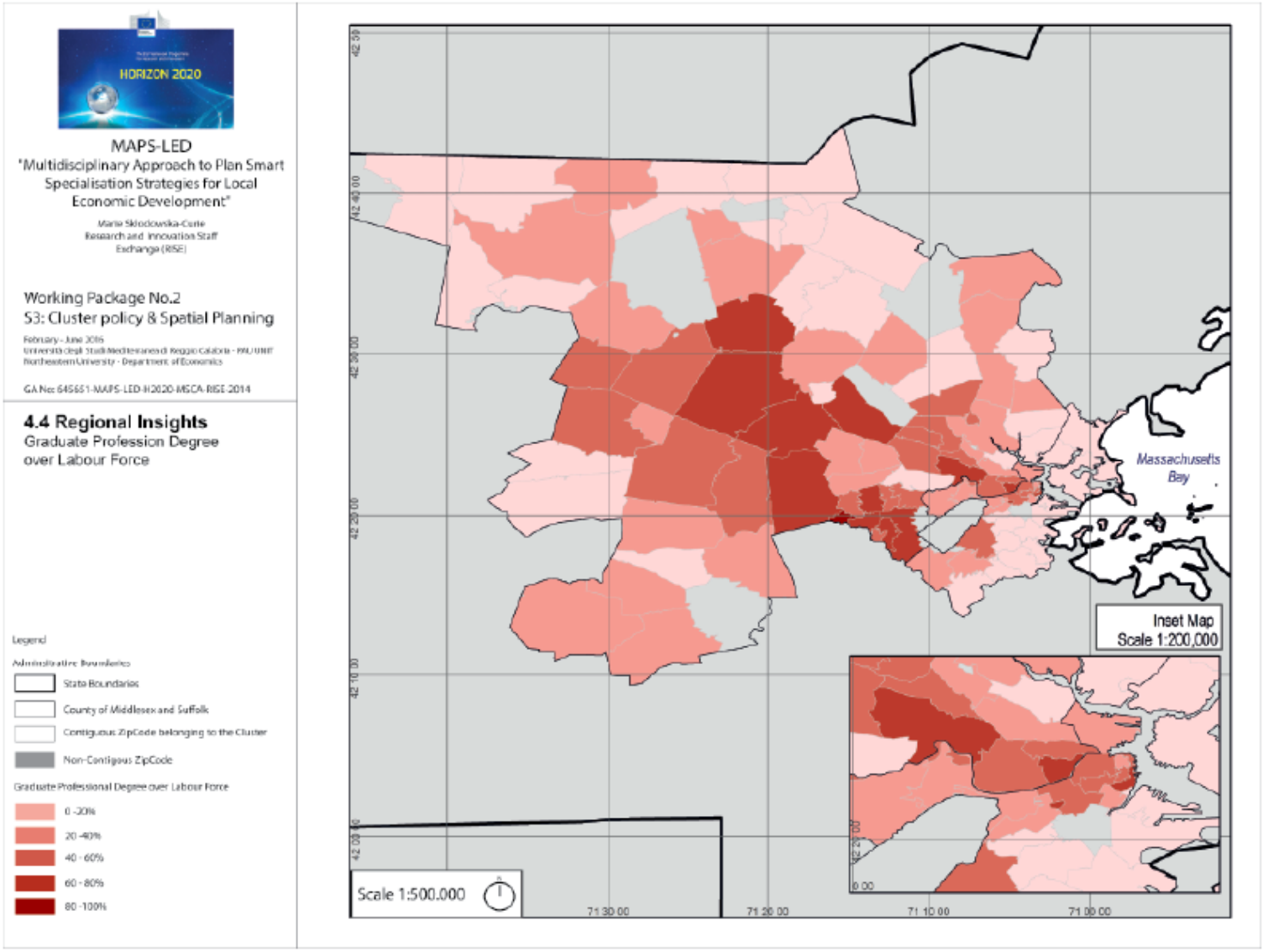
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Regional Insights: SOCIOECONOMIC DATA -Per Capite Incame per ZIP CODE



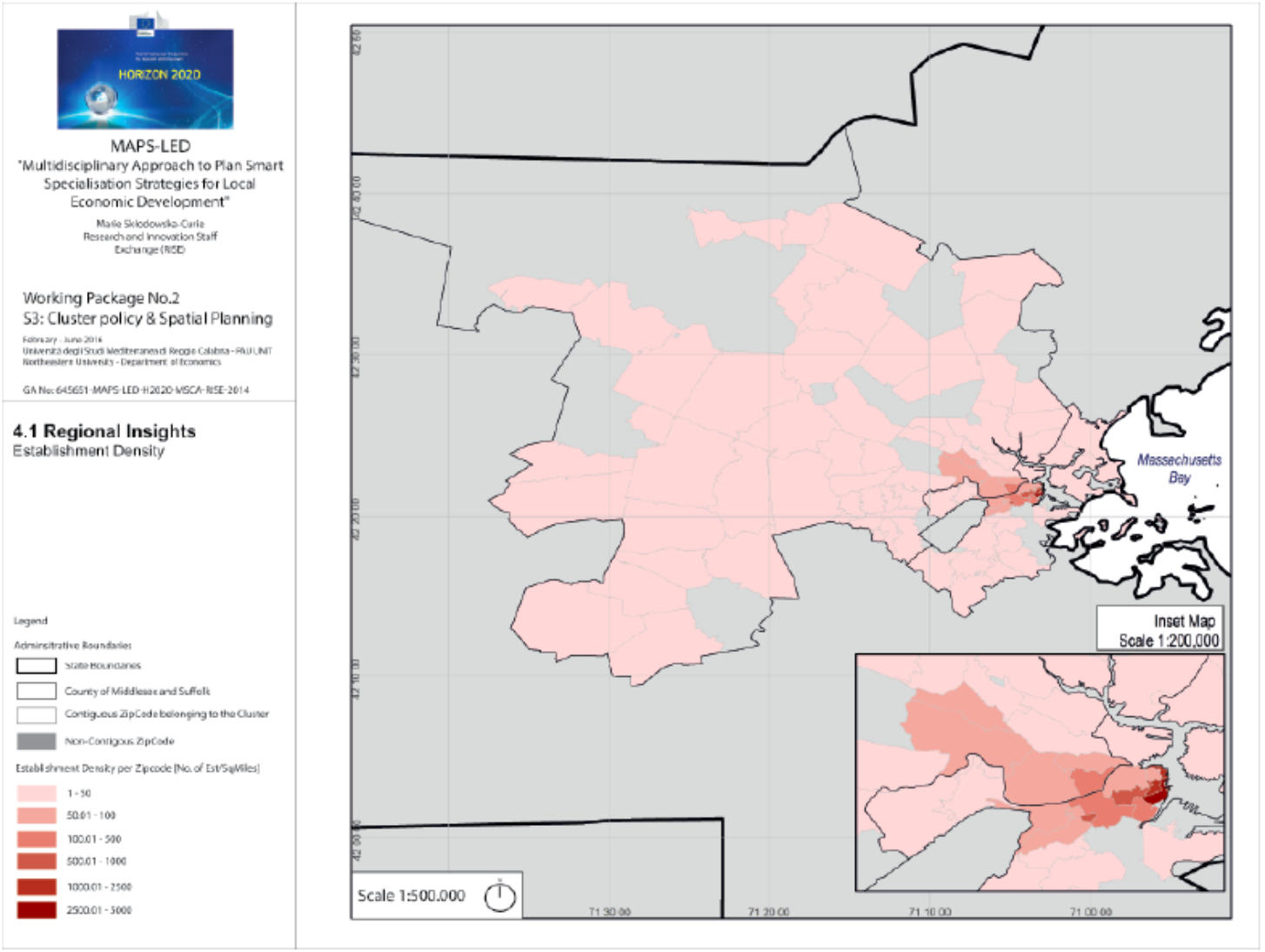
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Regional Insights: SOCIOECONOMIC DATA –Graduate Profession Degree over Labour Force



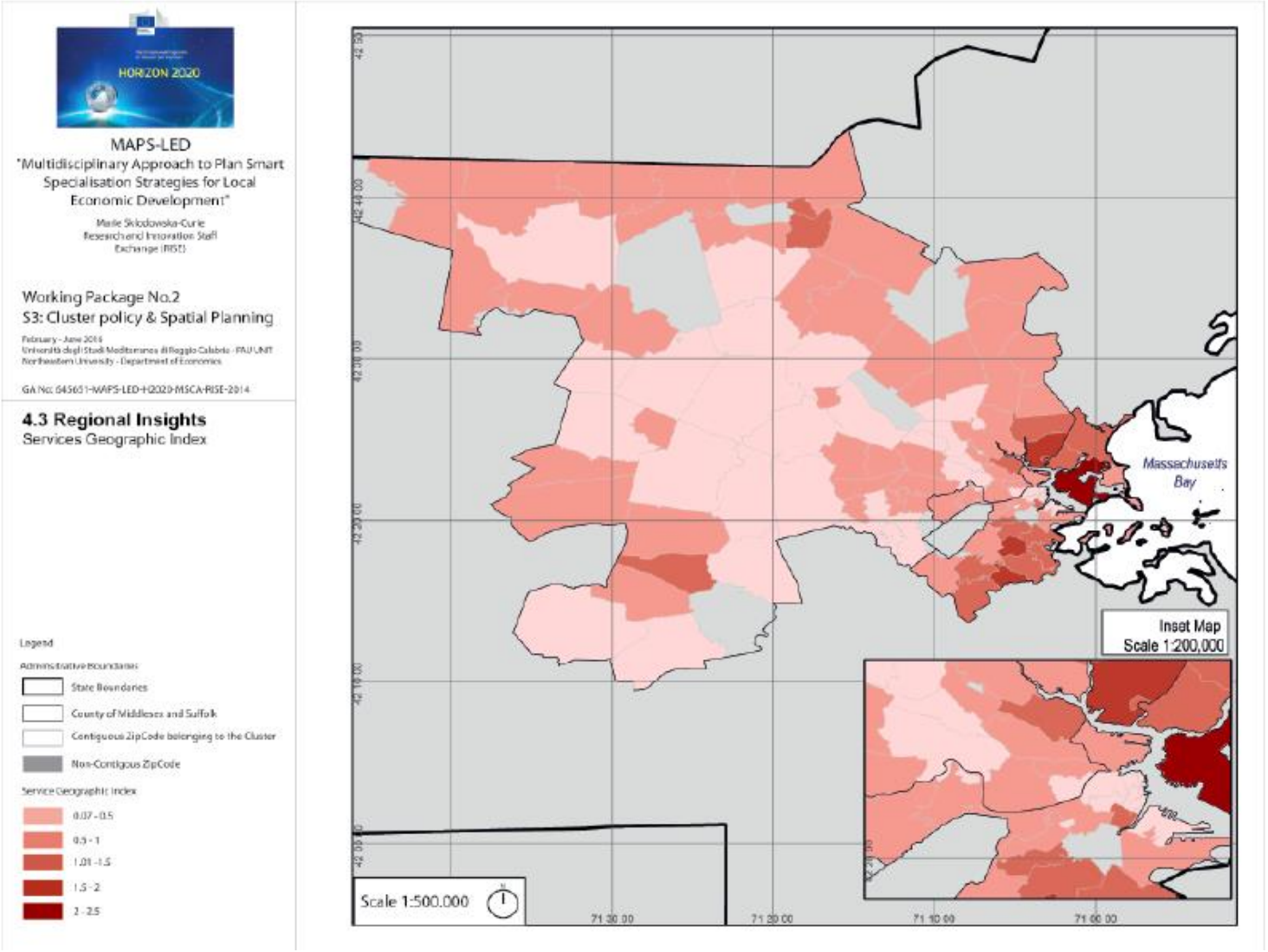
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Regional Insights: SPATIAL DATA-Establishment Density



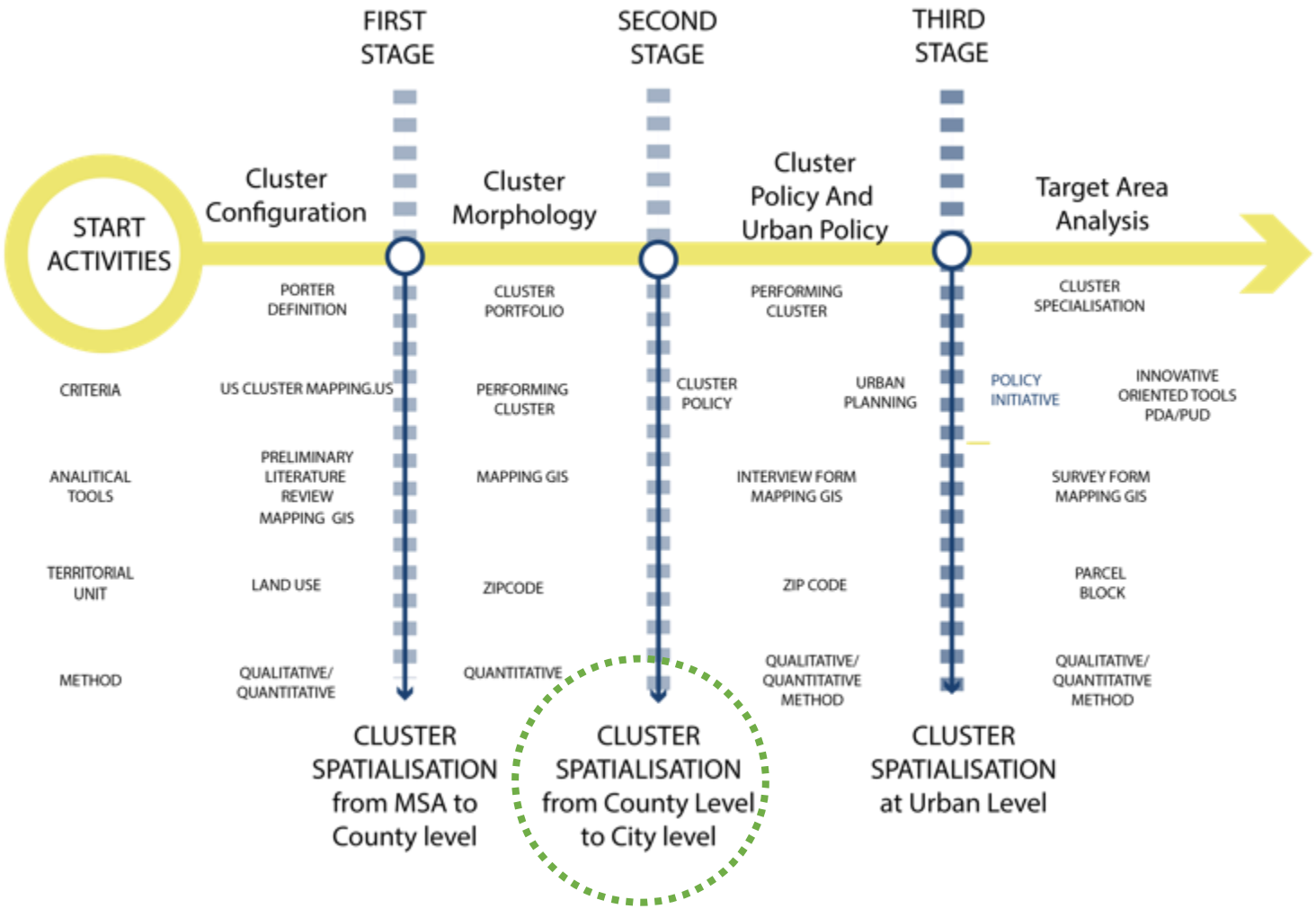
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Regional Insights: SPATIAL DATA-Services Geographic Index



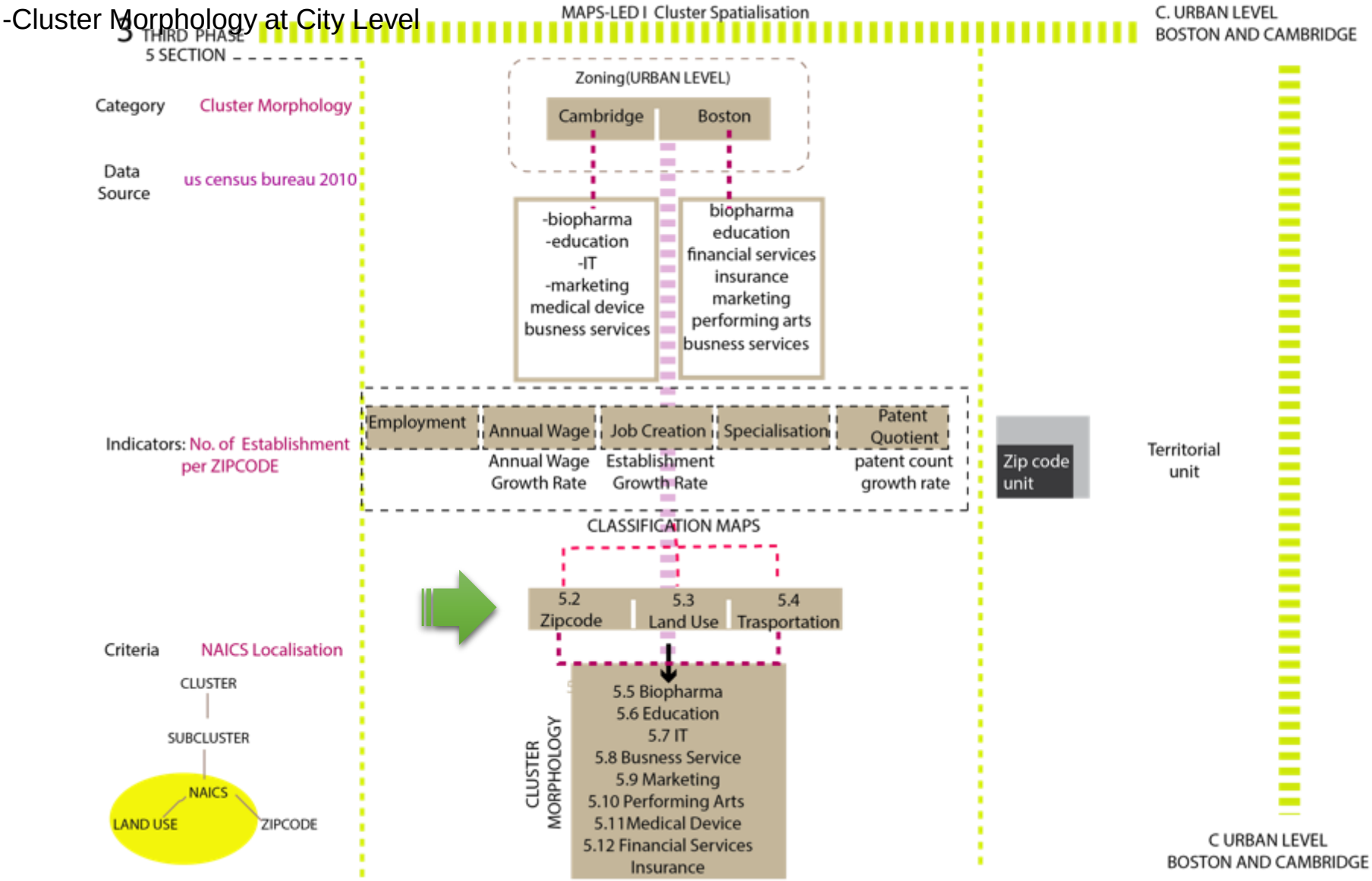
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at City Level



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at City Level



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: City of CAMBRIDGE and BOSTON

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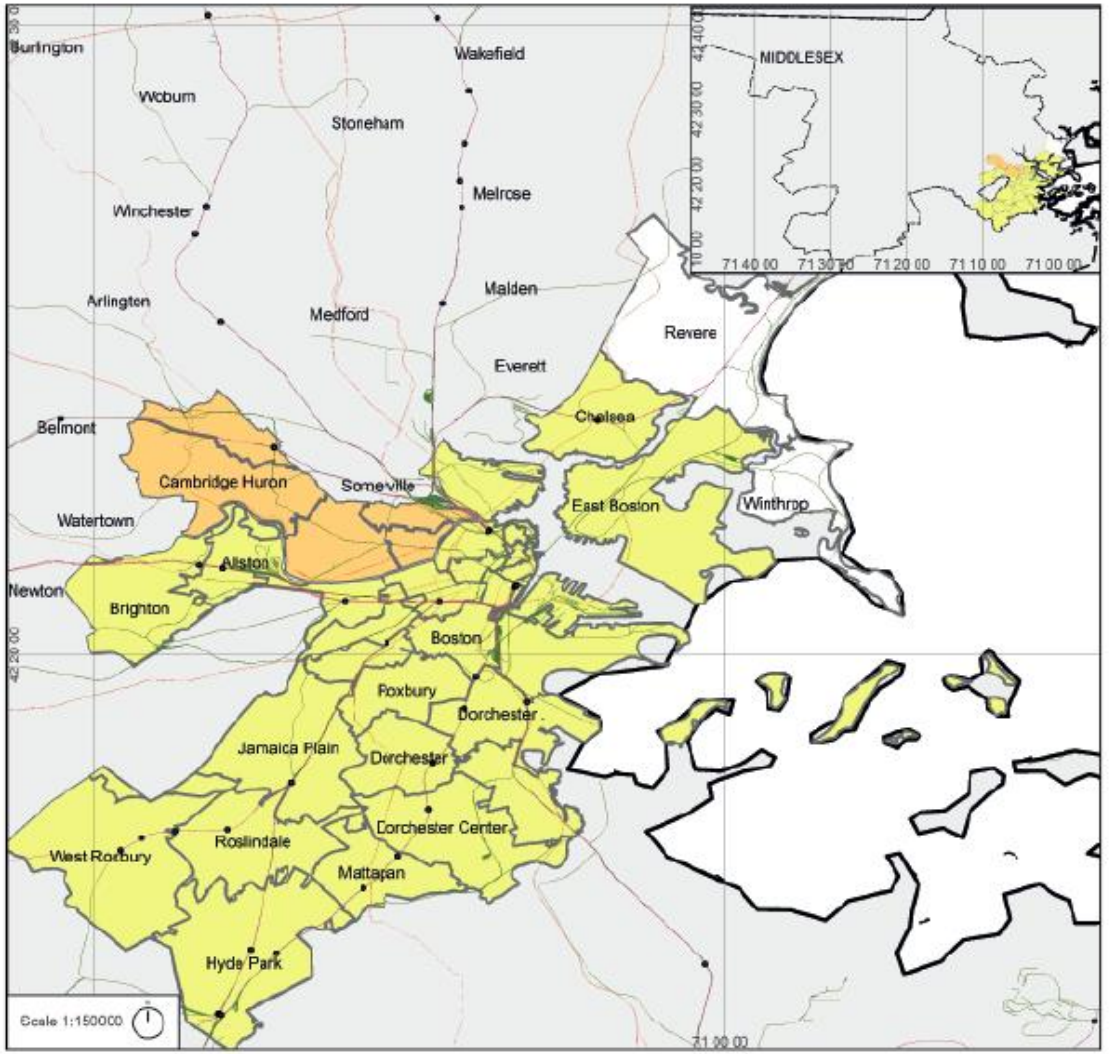
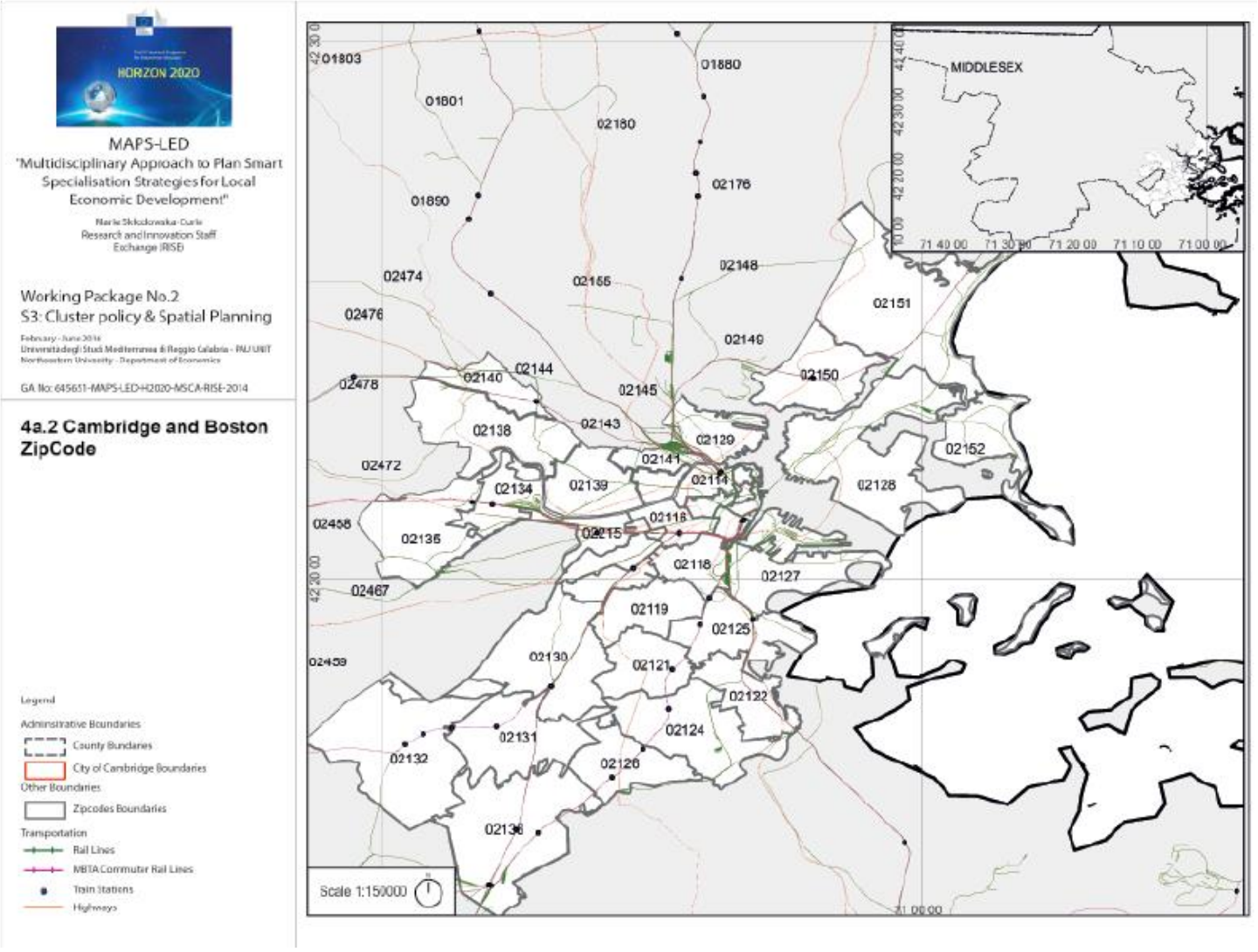
4a City of Cambridge, MA
City of Boston, MA



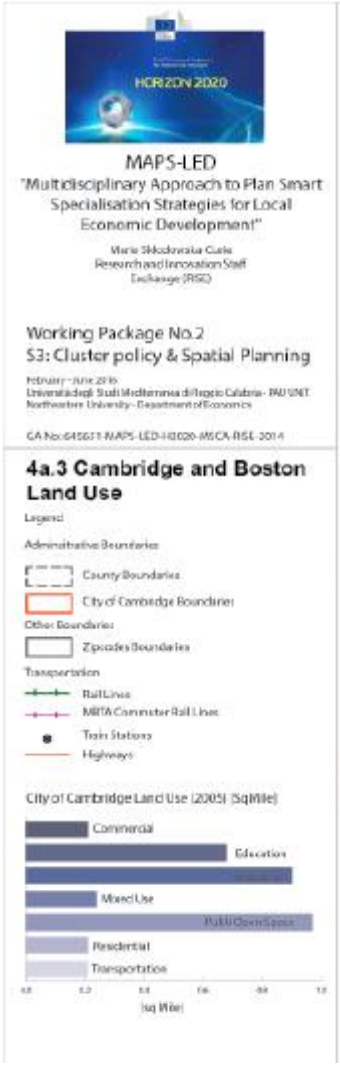
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

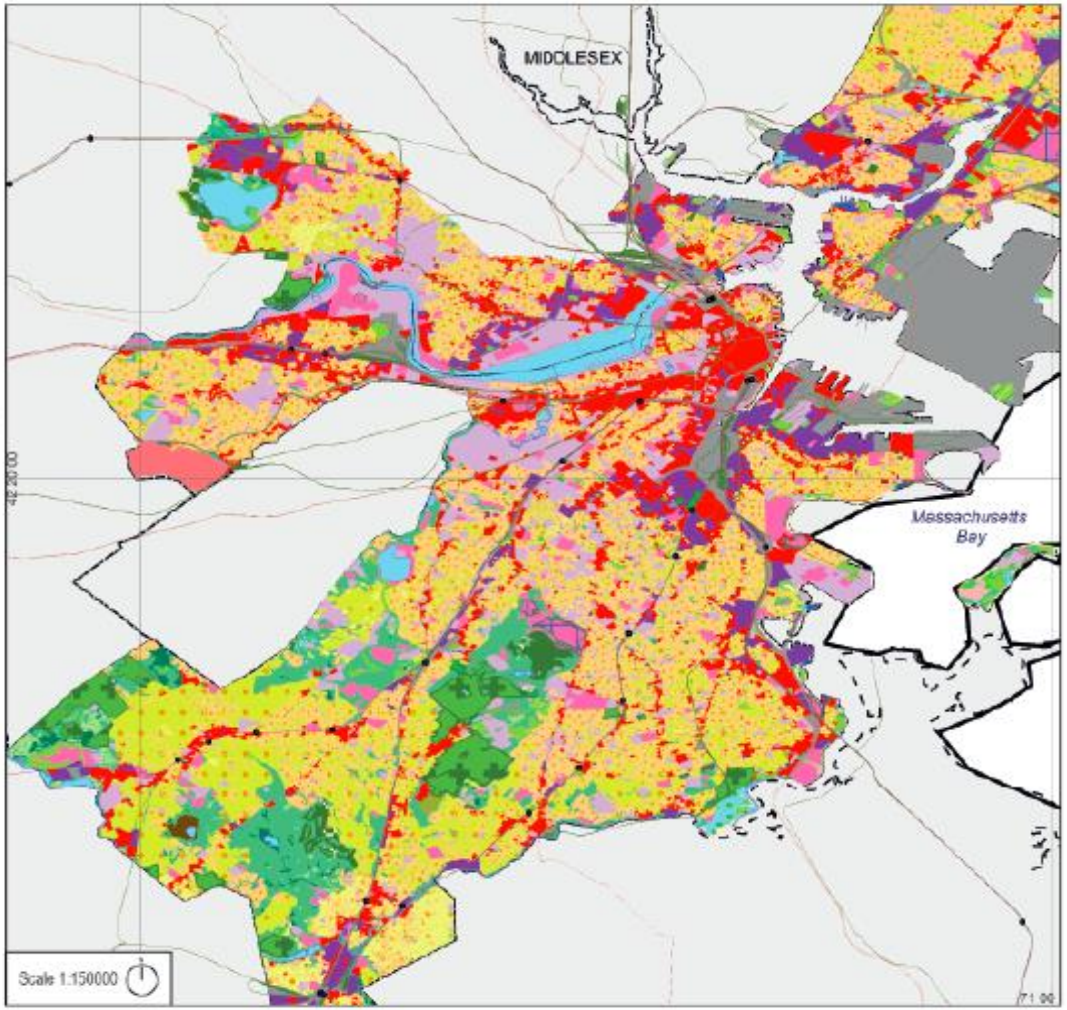
-CLUSTER MORPHOLOGY AT CITY LEVEL: CITY OF CAMBRIDGE and BOSTON –**ZIP CODE MAPS**



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: CITY OF CAMBRIDGE and BOSTON –**LAND USE MAPS**





I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: CITY OF CAMBRIDGE and BOSTON –**TRASPORTATION NETW**

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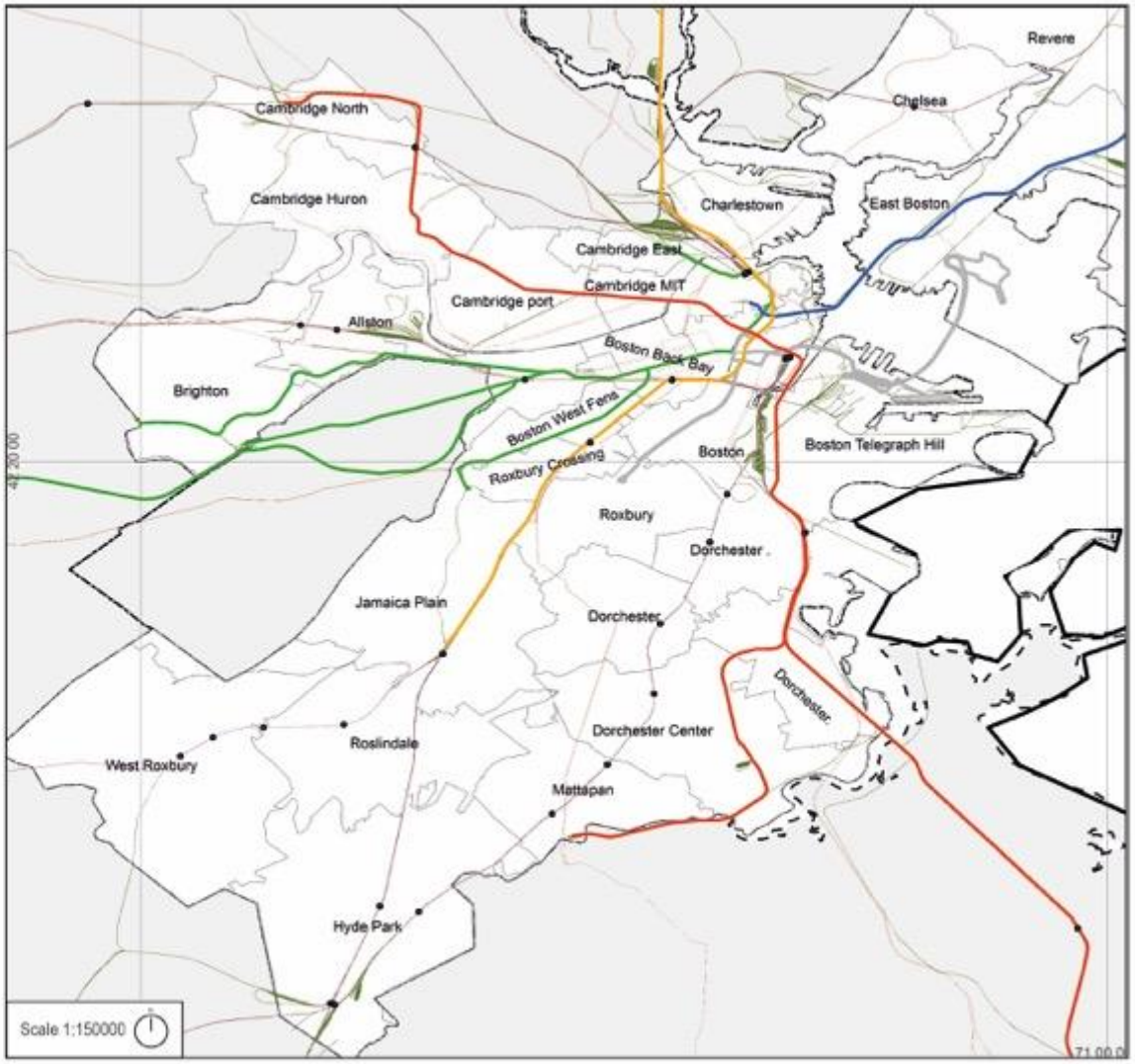
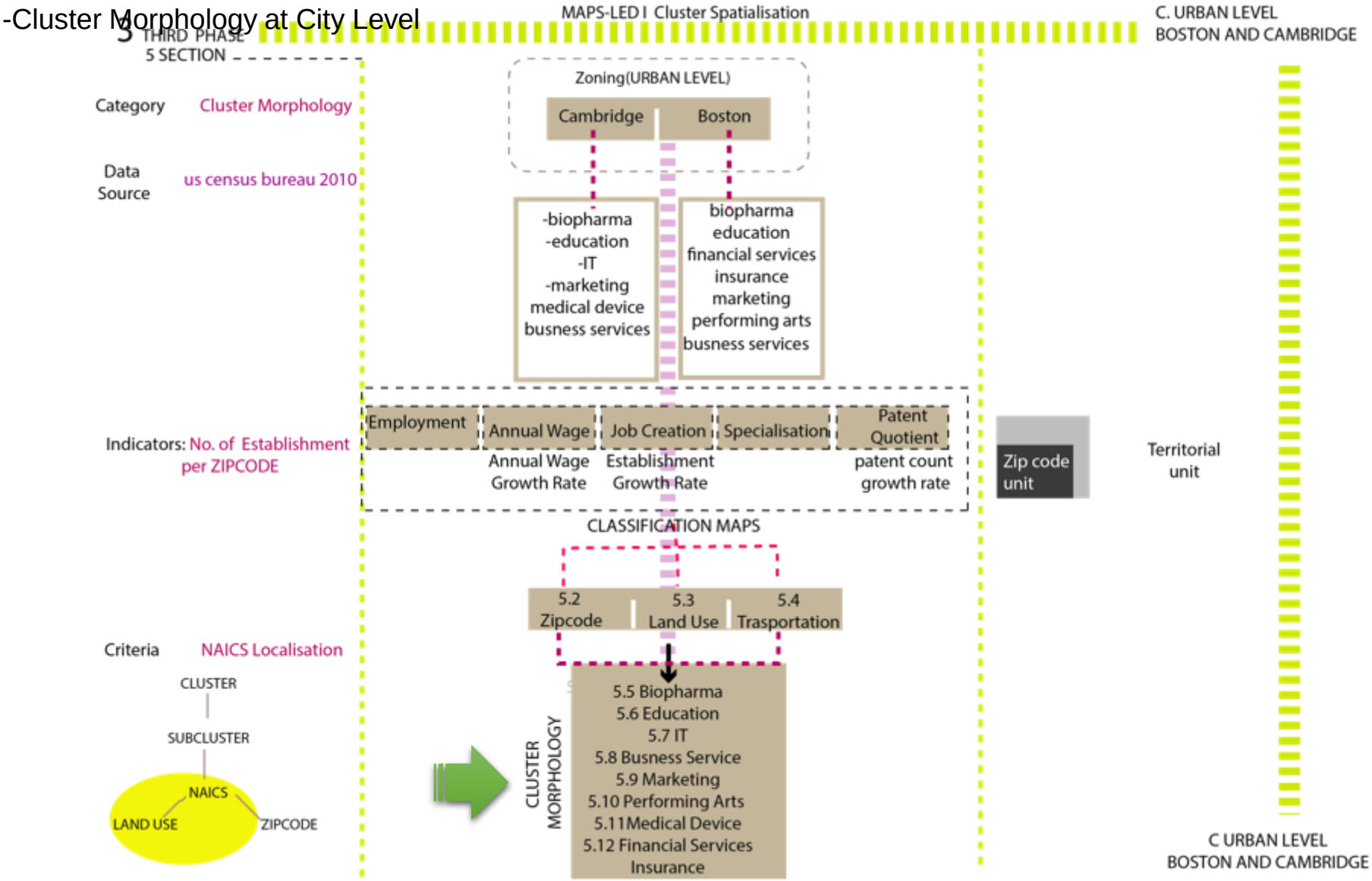
4a.4 Cambridge and Boston Transportation

Legend
Administrative Boundaries
County Boundaries
City of Cambridge Boundaries
Other Boundaries
Zipcodes Boundaries
Transportation
Rail Lines
MBTA Commuter Rail Lines
Train Stations
Highways
Local Transportation
Blue Line
Green Line
Orange Line
Red Line
Silver Line



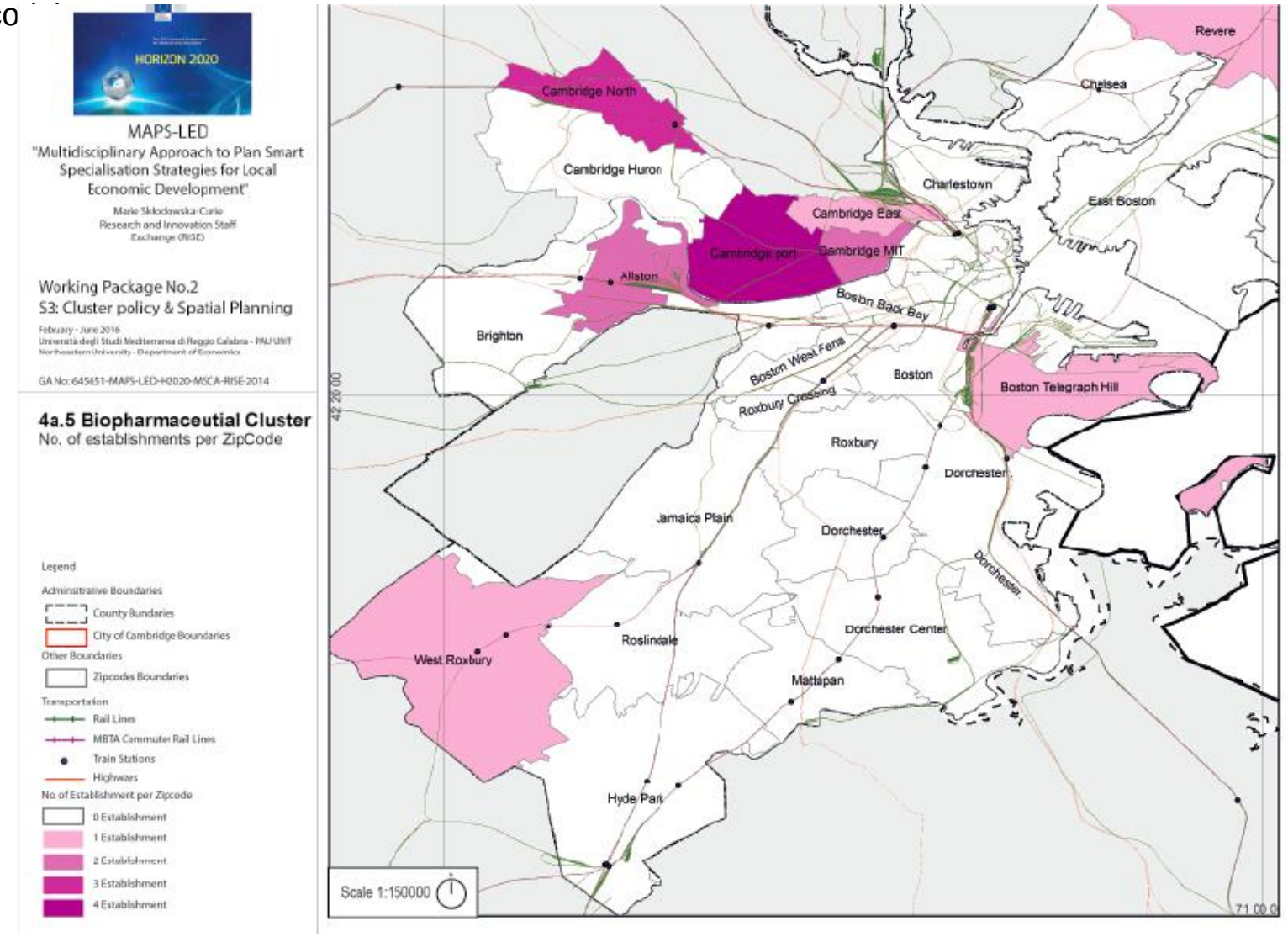
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster Morphology at City Level



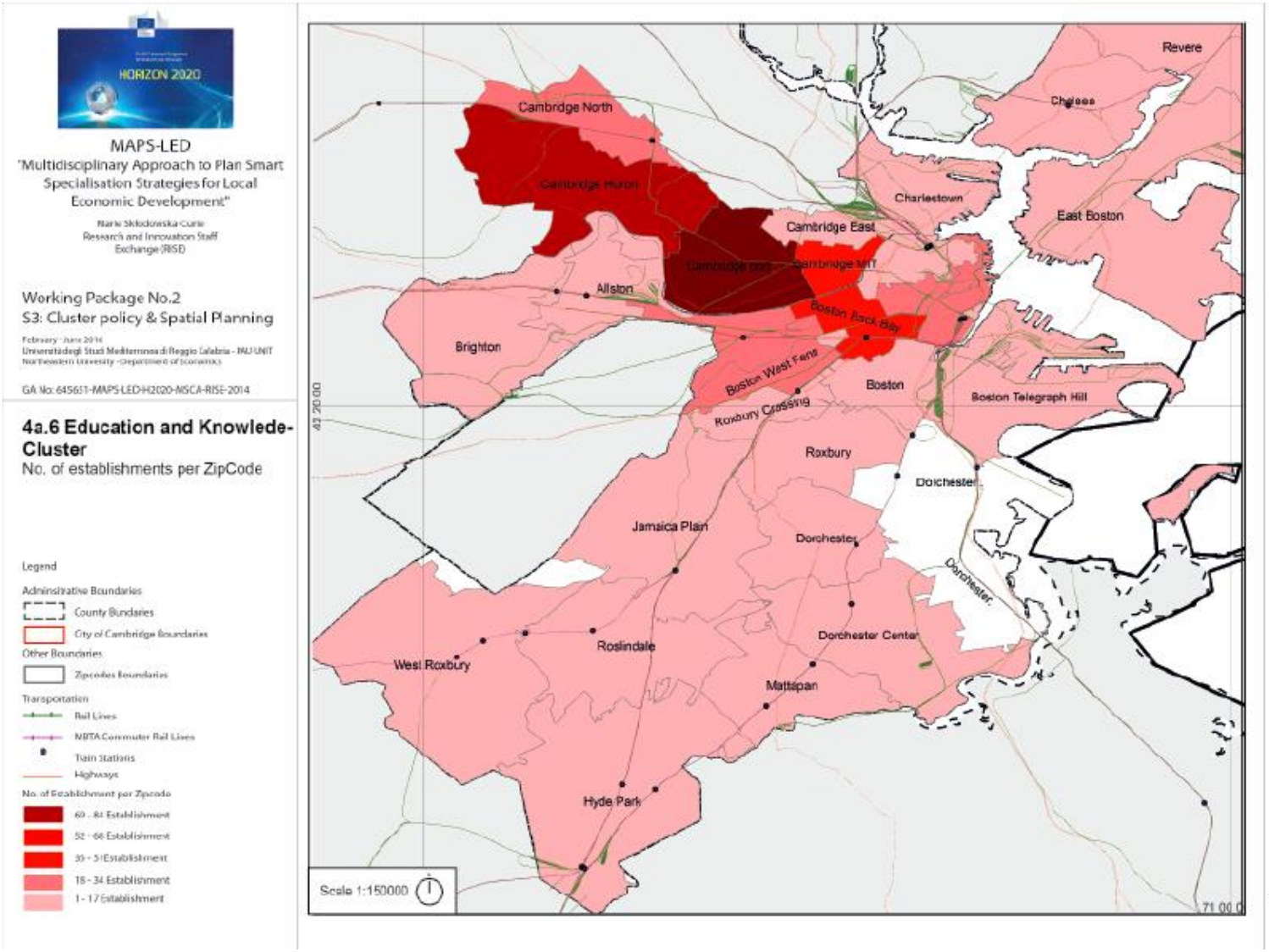
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: BIOPHARMACEUTICAL CLUSTER (No. of Establishment per Zipco



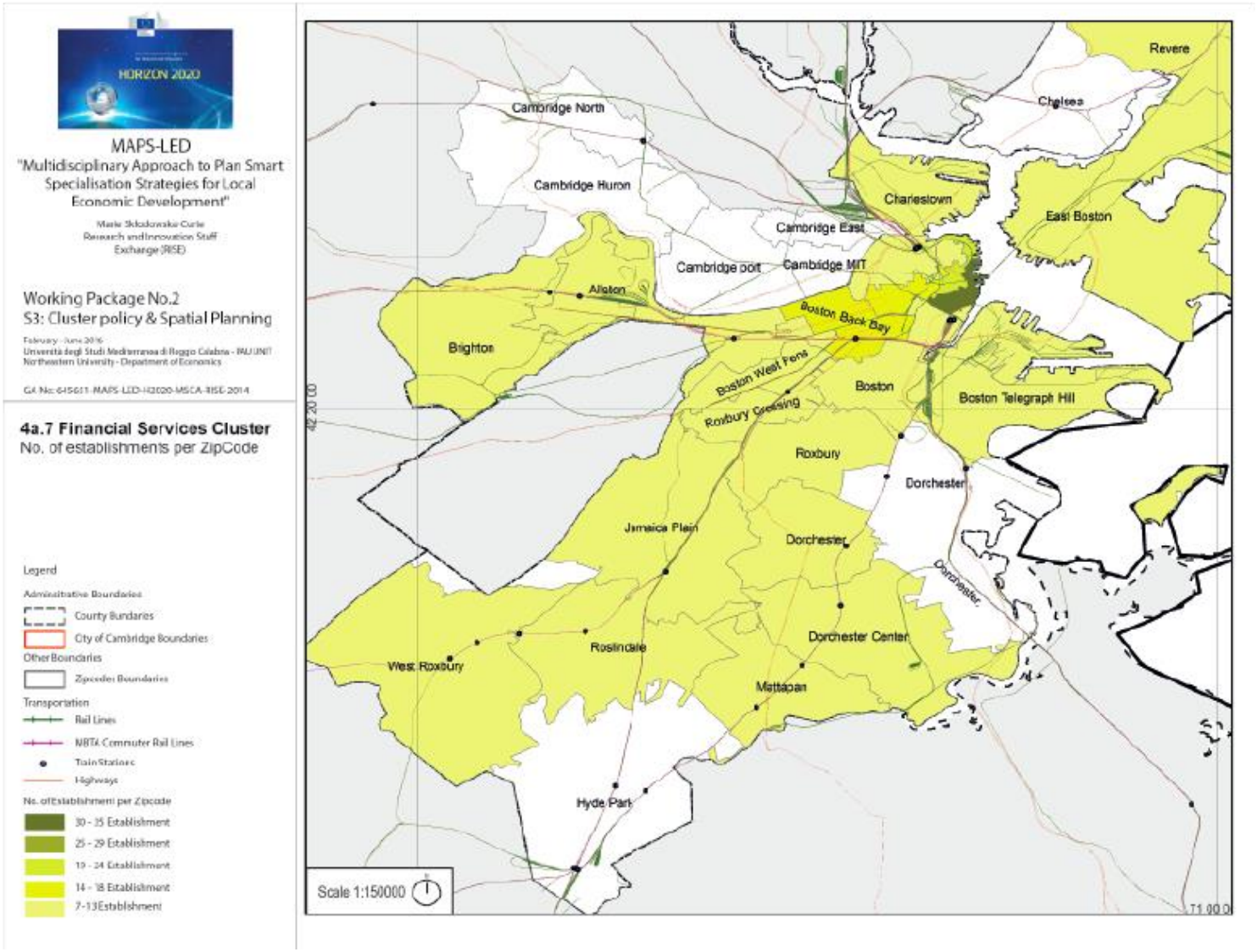
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: EDUCATION and KNOWLEDGE (No. of Establishment Per Zipcod



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: FINANCIAL SERVICES (No. of Establishment Per Zip Code)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: INSURANCE SERVICES (No. of Establishment Per Zipcode)

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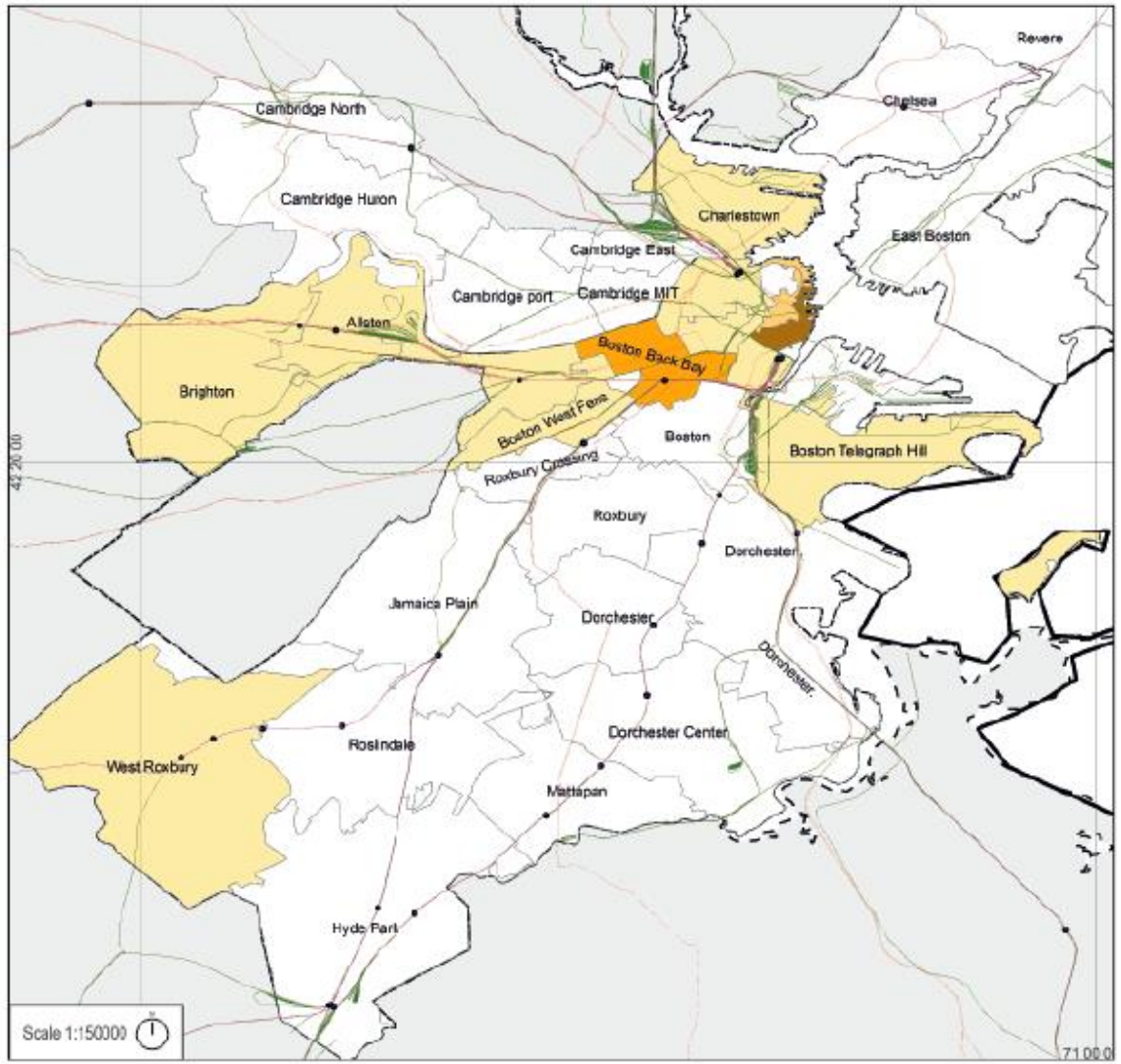
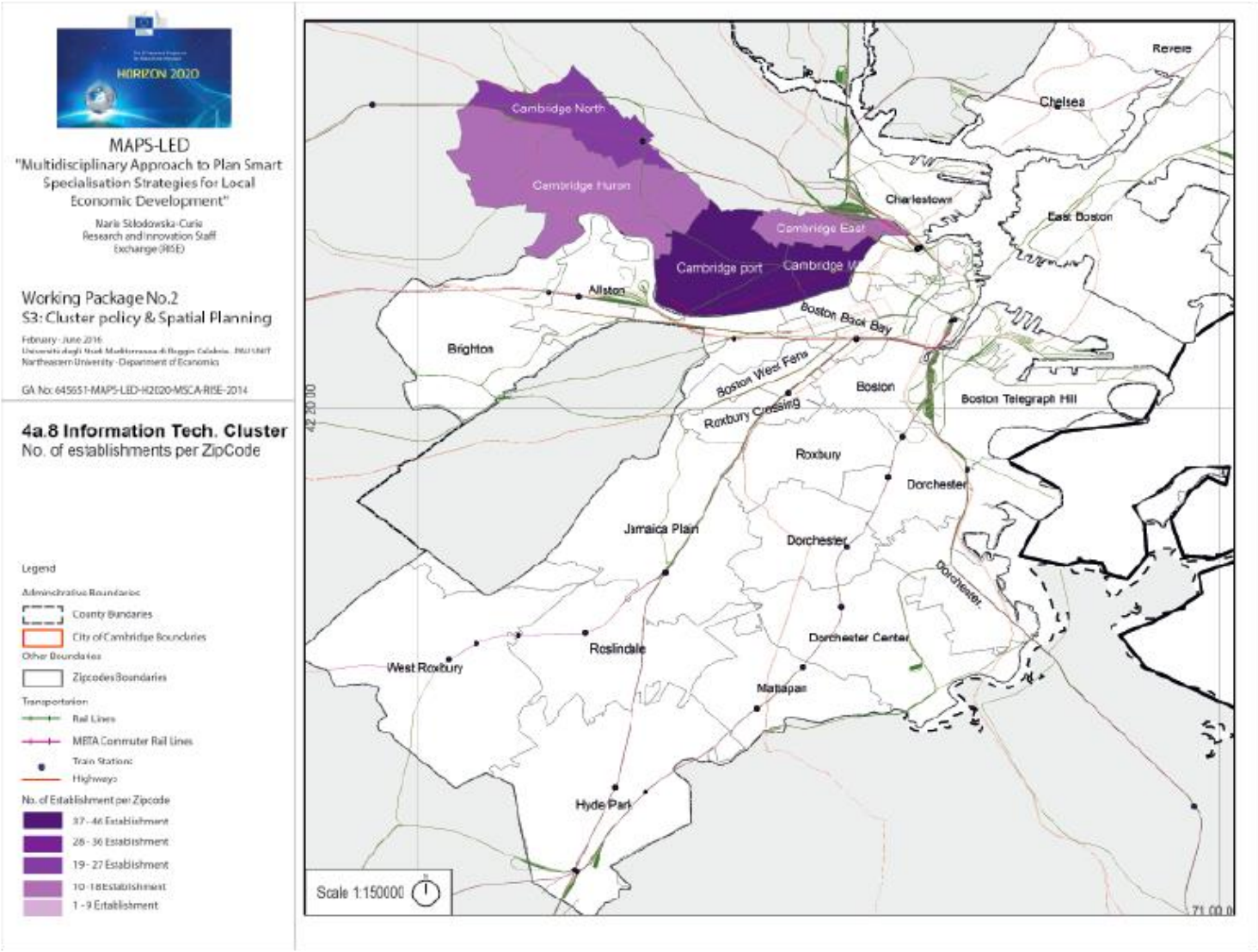
4a.9 Insurance Serv. Cluster
No. of establishments per ZipCode



Legend
Administrative Boundaries
County Bundaries
City of Cambridge Boundaries
Other Boundaries
Zipcodes Boundaries
Transportation
Rail Lines
MBTA Commuter Rail Lines
Train Stations
Highways
No. of Establishment per Zipcode
3 Establishment
2 Establishment
1 Establishment

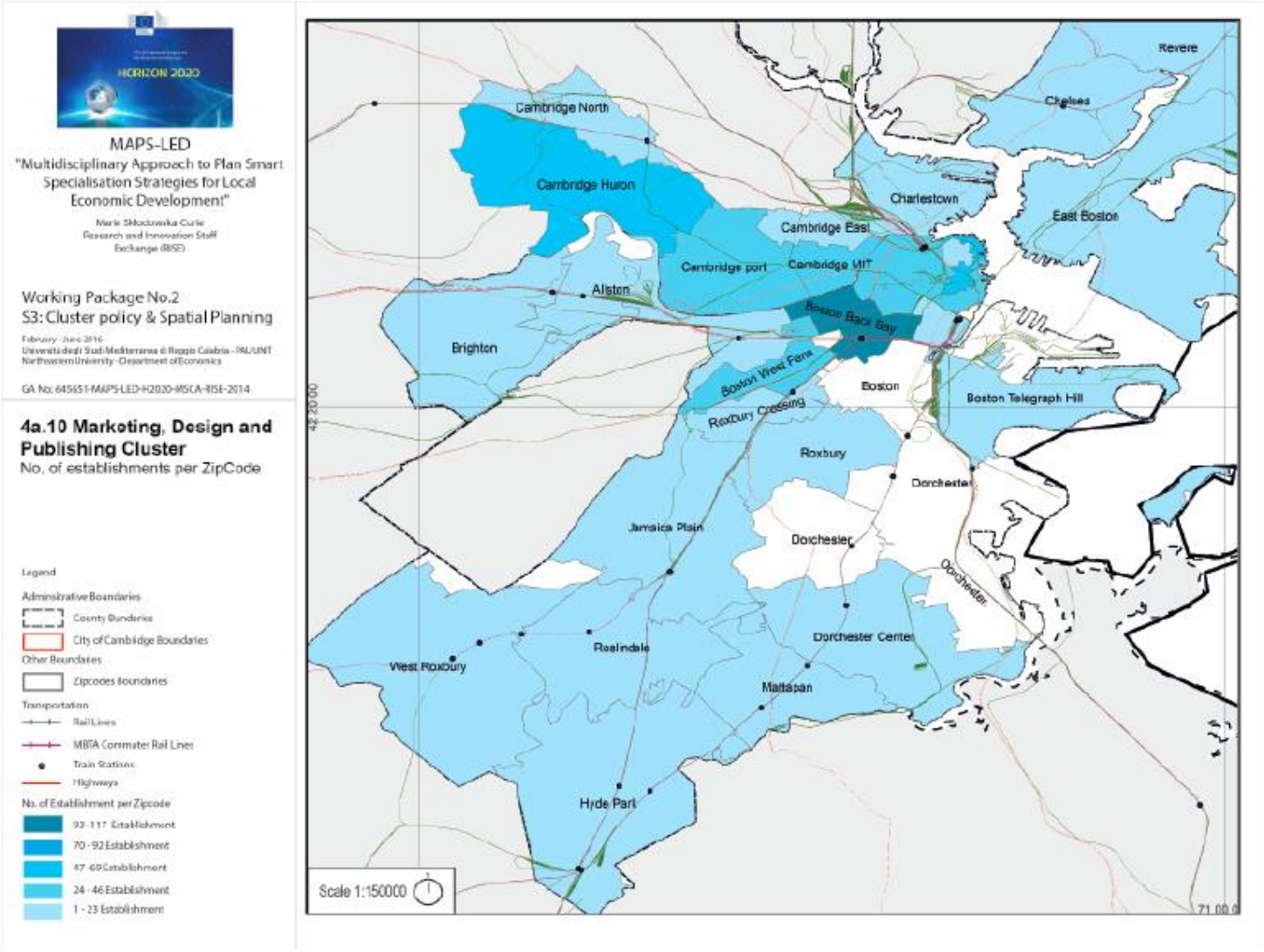
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: INFORMATION TECHNOLOGY (No. of Establishment Per Zipcode)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: MARKETING (No. of Establishment Per Zipcode)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: MEDICAL DEVICES (No. of Establishment Per Zipcode)

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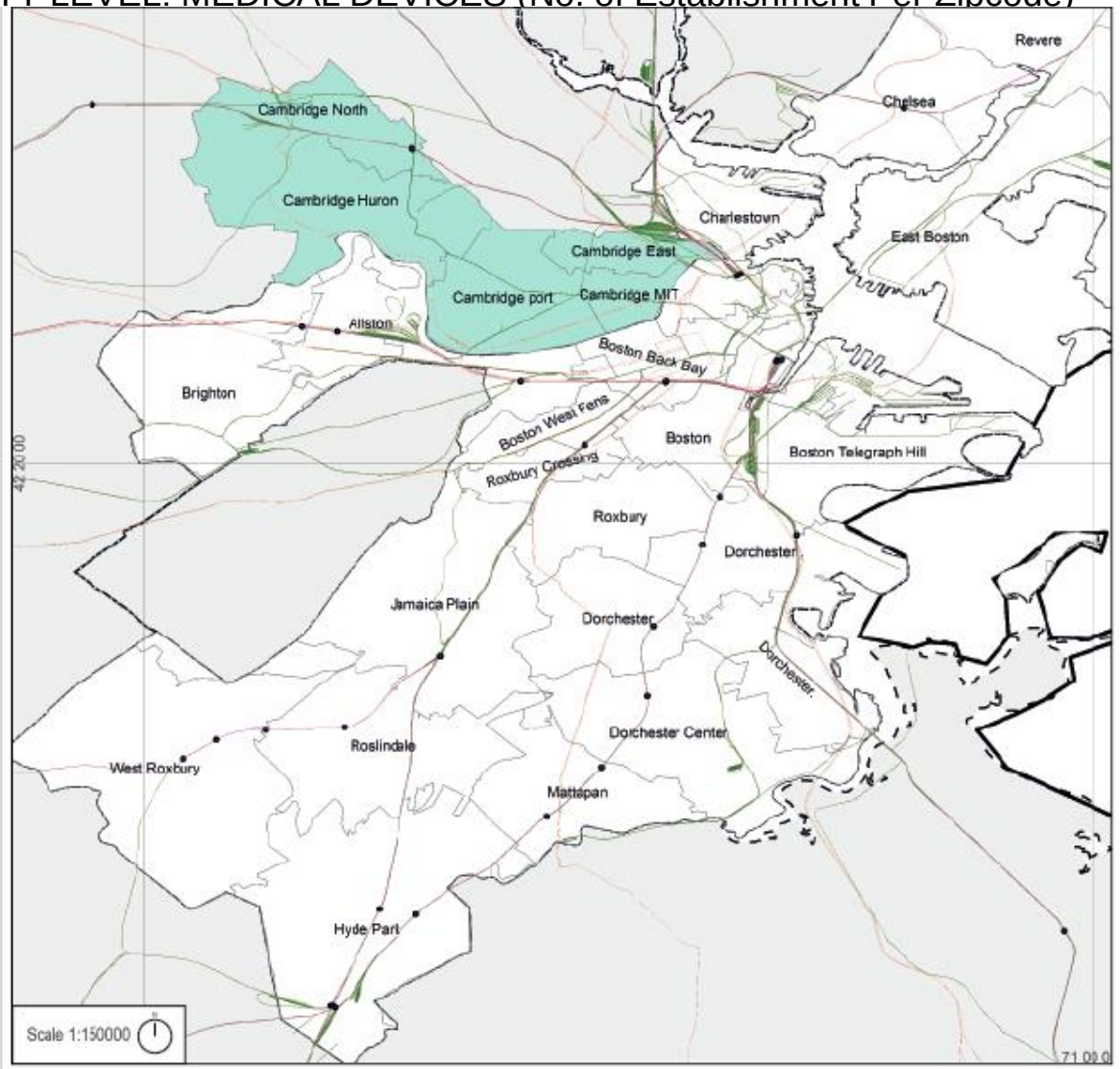
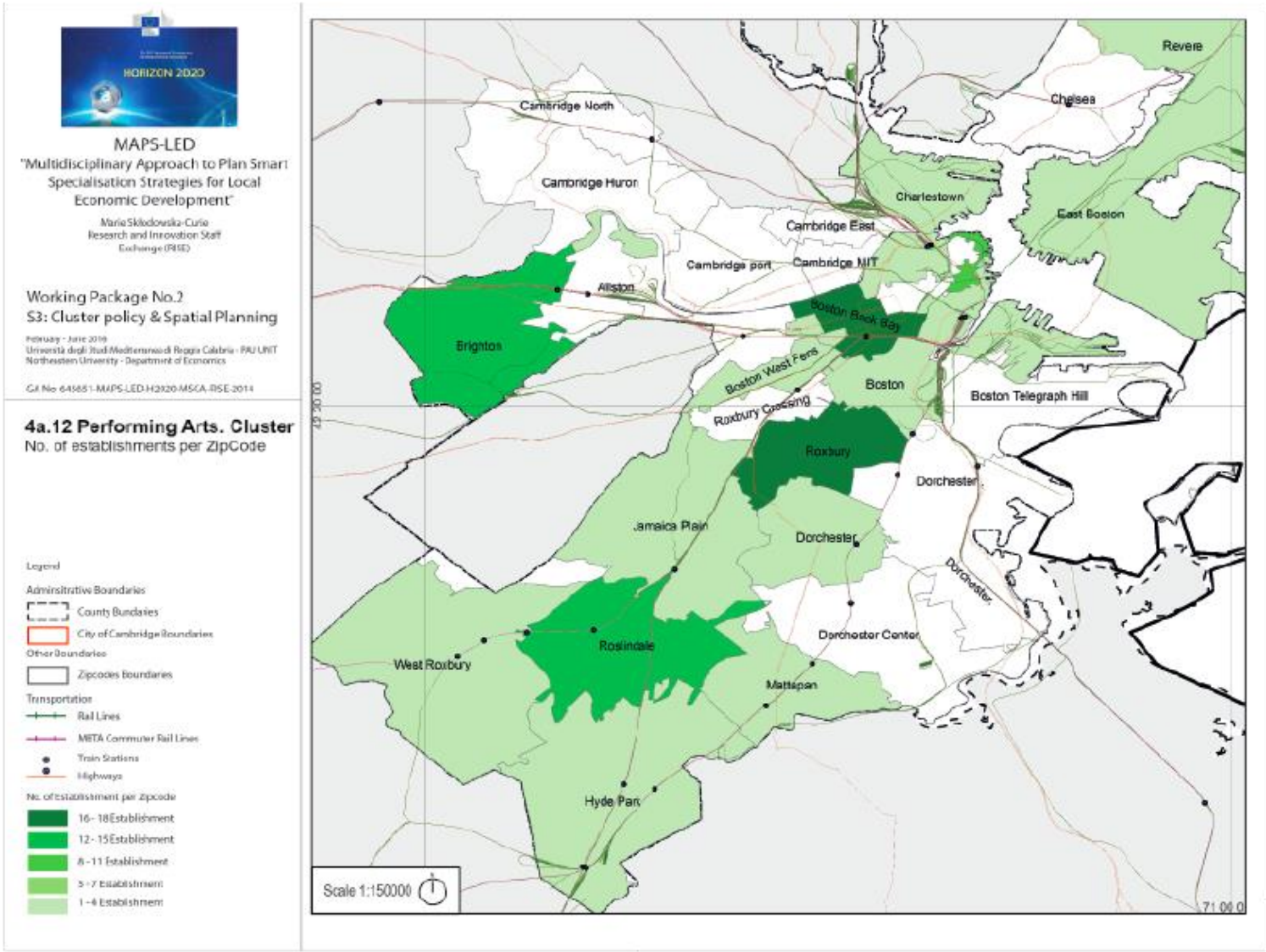
4a.11 Medical Devices Cluster
No. of establishments per ZipCode

Legend
Administrative Boundaries
County Bundaries
City of Cambridge Boundaries
Other Boundaries
Zipcodes Boundaries
Transportation
Rail Lines
MBTA Commuter Rail Lines
Train Stations
Highways
No.of Establishment per Zipcode
5 Establishment
4 Establishment
3 Establishment
2 Establishment
1 Establishment



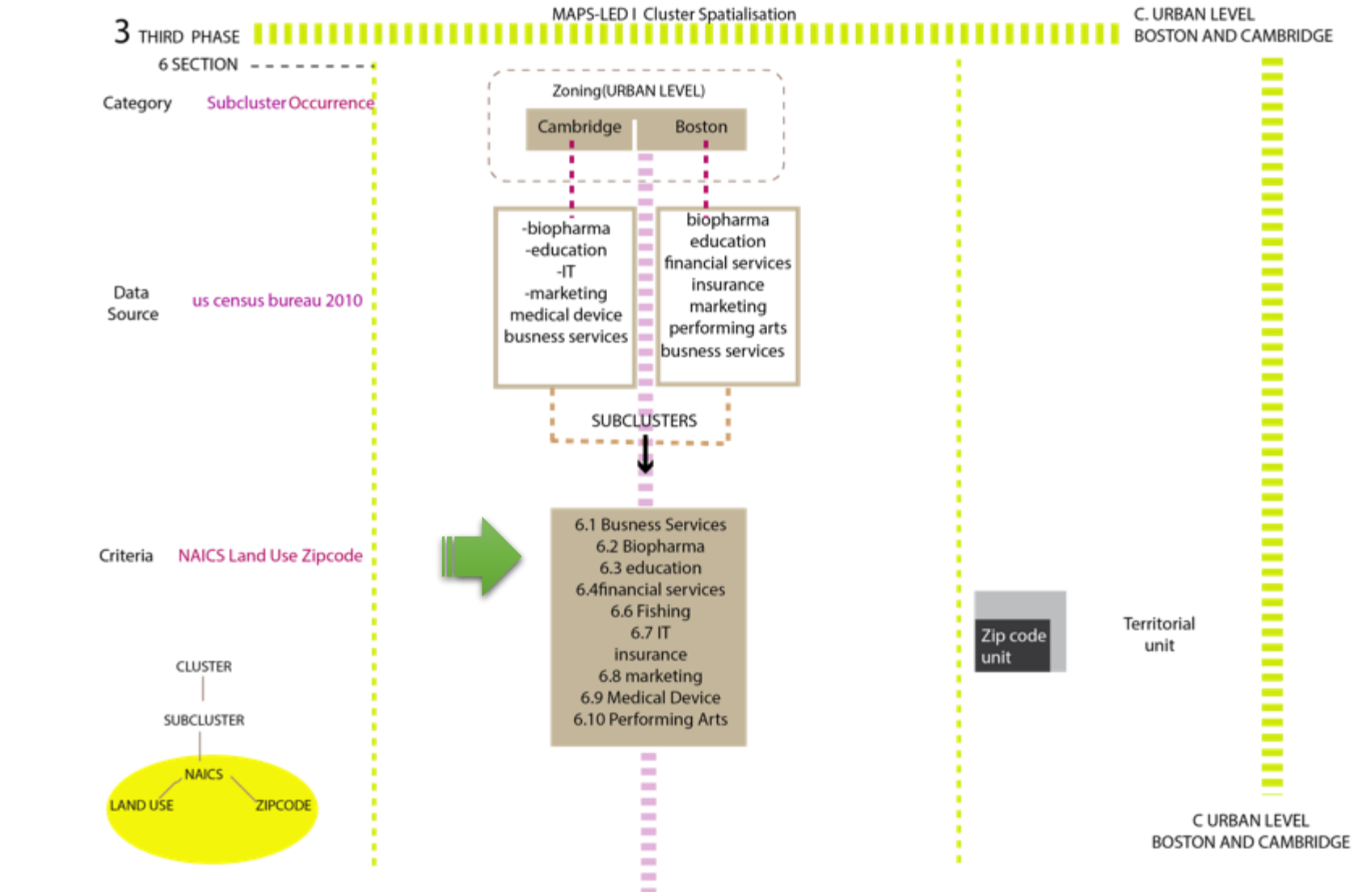
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER MORPHOLOGY AT CITY LEVEL: PERFORMING ARTS (No. of Establishment Per Zip code)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-CLUSTER DYNAMICS AT CITY LEVEL: Cluster and Subcluster Spatialisation



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: BUSNESS SERVICES(Cluster occurence per Zip code and Subcluster)

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6.1 Cluster Business Services
City of Cambridge and Boston (MA)
Cluster Occurrence ZipCode

Legend

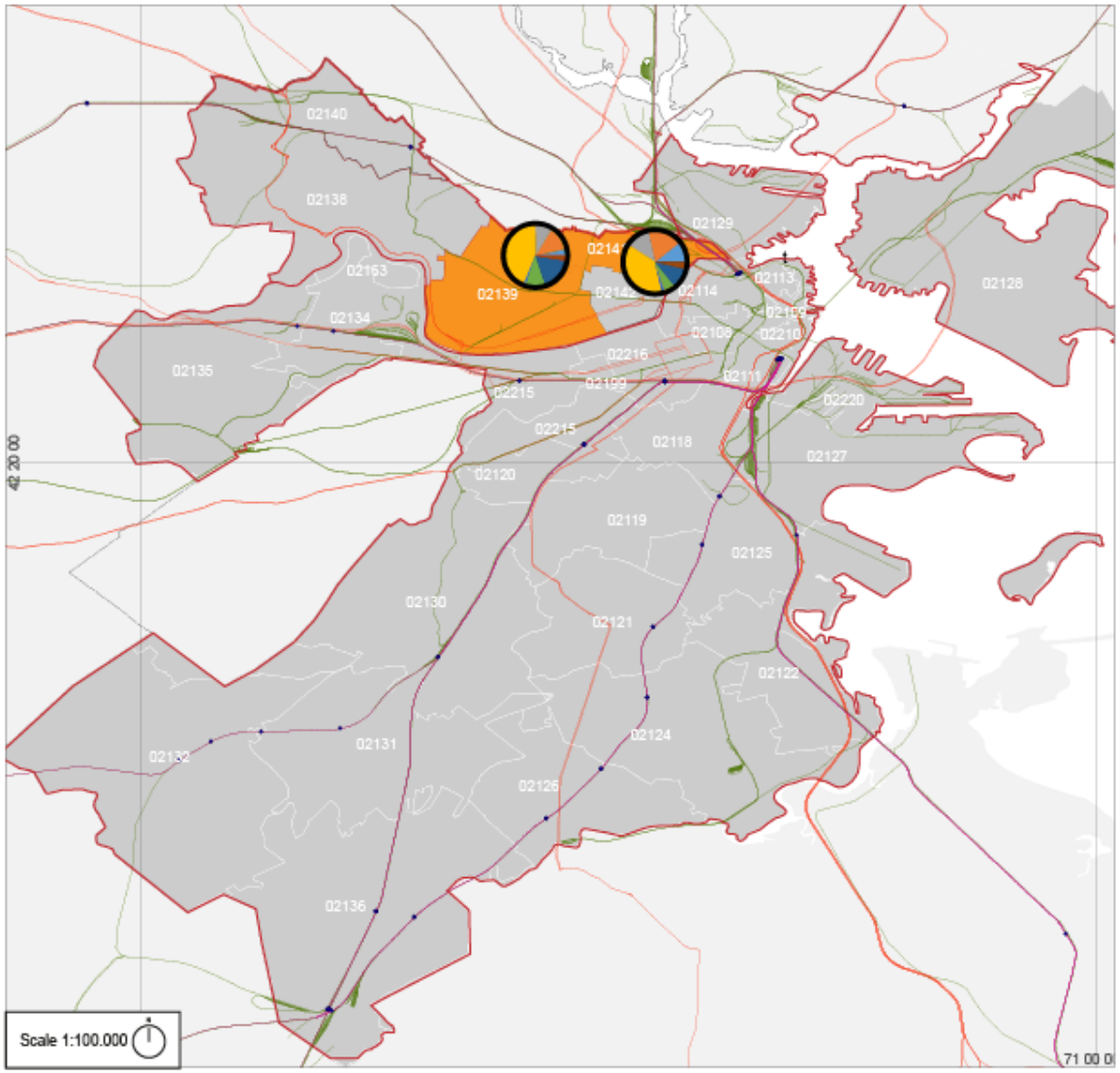
Administrative Boundaries
- Middlesex and Suffolk County Boundaries
- City of Cambridge Boundaries

Other Boundaries
- Case Study Area Zipcodes

Transportation
- Rail Lines
- MBTA Commuter Rail Lines
- Train Stations
- Highways

Cluster
- Cluster Occurancy per Zipcode

Sub Cluster
- Corporate Headquarters
- Consulting Services
- Business Support Services
- Computer Services
- Employment Placement Services
- Engineering Services
- Architectural and Drafting Services
- Ground Passenger Transportation



2008 Business Services
Cambridge (MA)

2011 Businesse Services
Cambridge (MA))

2008 Business Services
2013 Cambridge (MA)

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: BIOPHARMACEUTICAL(Cluster occurence per Zip code and S

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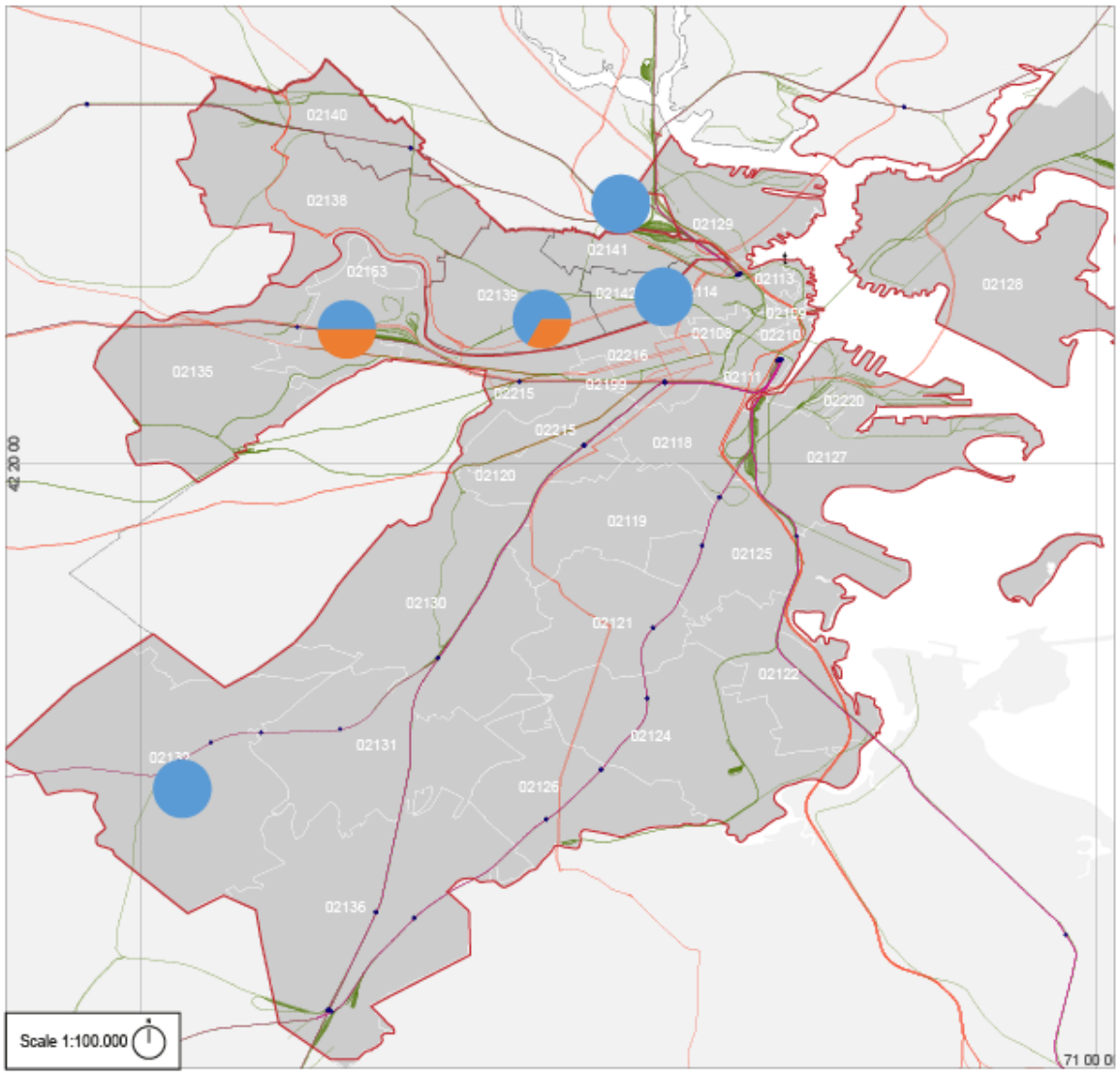
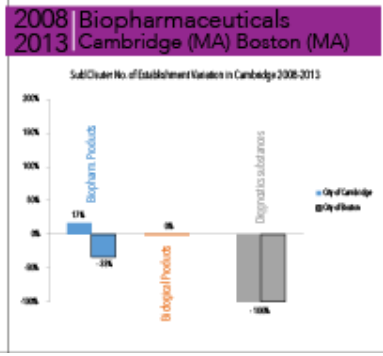
6.2 Cluster Biopharmaceutical
City of Cambridge and Boston (MA)
Cluster Occurrence ZipCode



Legend
Administrative Boundaries
Middlesex and Suffolk County Boundaries
City of Cambridge Boundaries
Other Boundaries
Case Study Area Zipcodes
Transportation
Rail Lines
MBTA Commuter Rail Lines
Train Stations
Highways
Cluster
Cluster Occurrency per Zipcode
Sub Cluster
Biopharmaceutical Products
Biological Products
Diagnostic Substance



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: EDUCATION(Cluster occurency per Zip code and Subcluster)

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6.3 Education and Knowledge
City of Cambridge and Boston (MA) SubCluster Occurrence and Dominant SubCluster per ZipCode

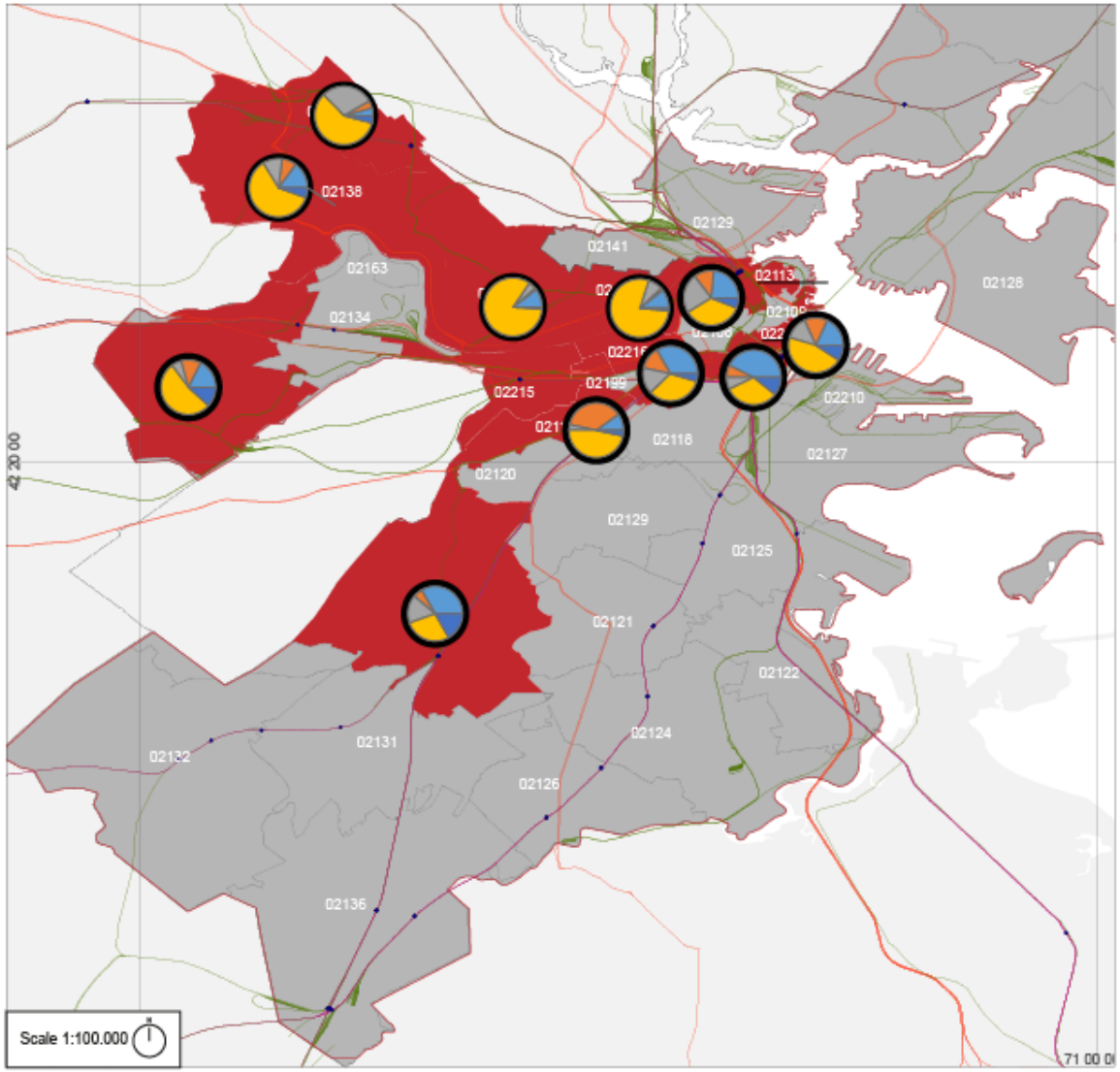
Legend
Administrative Boundaries
- Middlesex and Suffolk County Boundaries
- City of Cambridge Boundaries

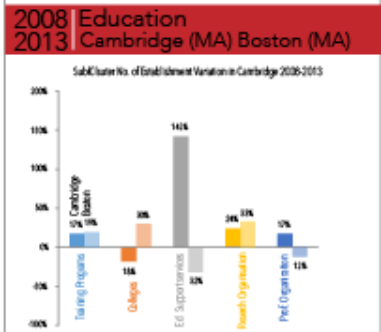
Other Boundaries
- Case Study Area Zipcodes

Transportation
- Rail Lines
- MBTA Commuter Rail Lines
- Train Stations
- Highways

Cluster
- Cluster Occurrency per Zipcode

Sub Cluster
- Training Programs
- Colleges
- Educational Support Services
- Research Organisations
- Professional Organisations





I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: FINANCIAL SERVICES (Cluster occurency per Zip code and S...

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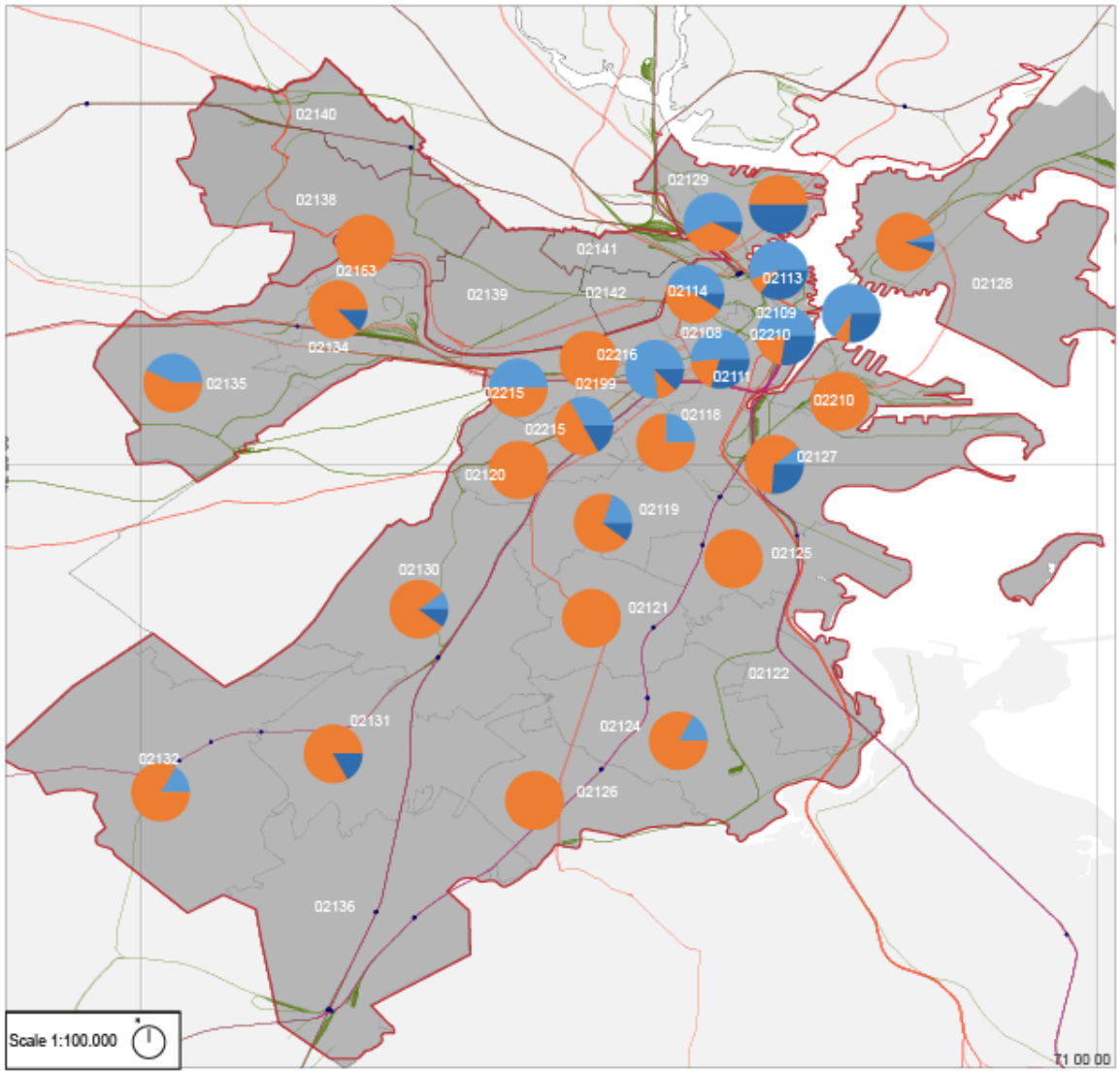
6.4 Financial Services
City of Boston (MA)
Cluster Occurrence per ZipCode



2008 Financial Services Boston (MA)

2011 Financial Services Cambridge (MA)

2008 2013 Financial Services Boston (MA)

Legend
Administrative Boundaries
- Middlesex and Suffolk County Boundaries
- City of Cambridge Boundaries

Other Boundaries
- Case Study Area Zipcodes

Transportation
- Rail Lines
- MBTA Commuter Rail Lines
- Train Stations
- Highways

Cluster
- Cluster Occurency per Zipcode

Sub Cluster
- Financial Investment Activities
- Credit Intermediation
- Credit Bureaus
- Monetary Authorities - Central Bank
- Security Brokers - Dealers and exchanges

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: FINANCIAL SERVICES (Cluster occurency per Zip code and Subcluster)

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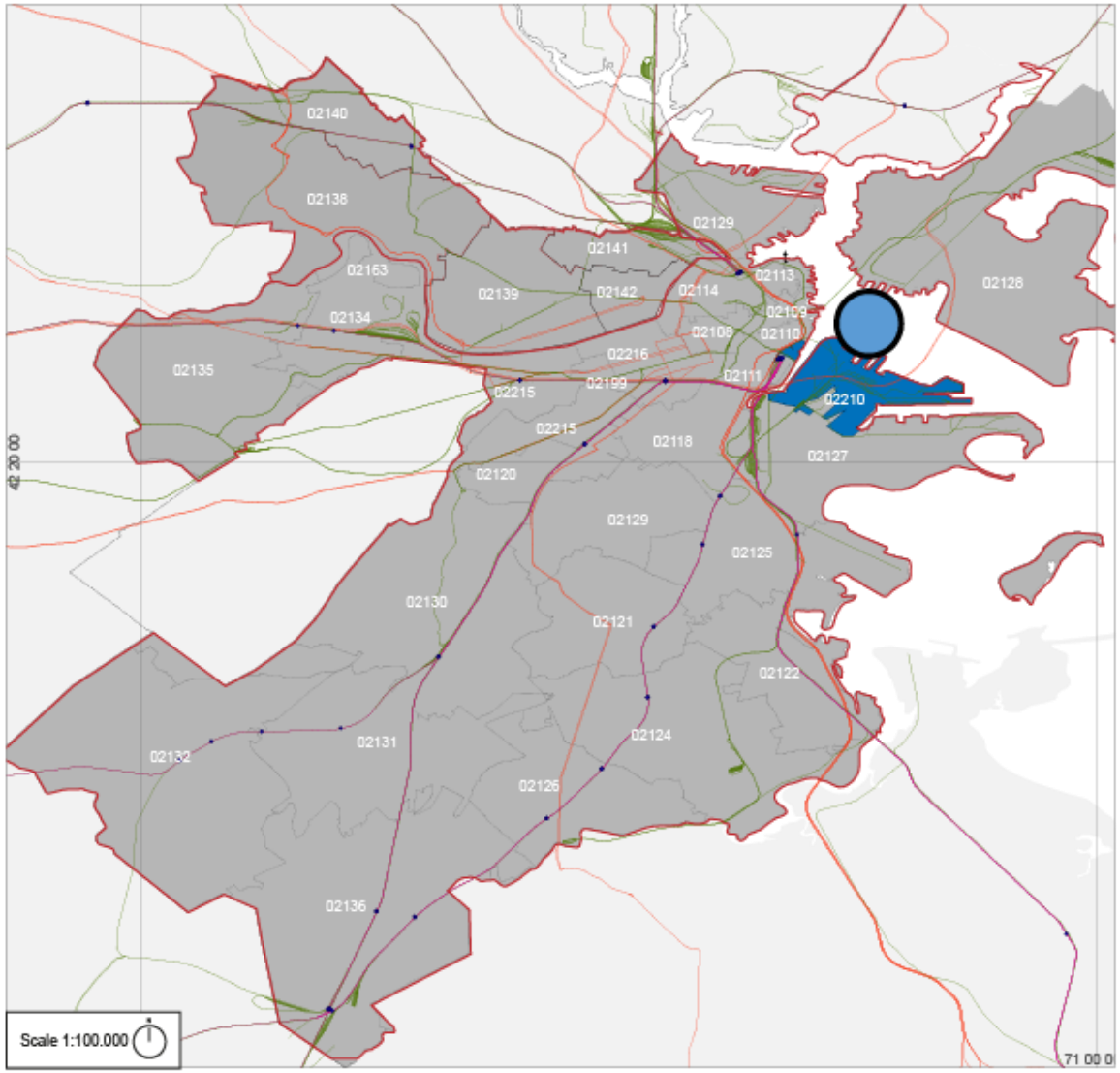
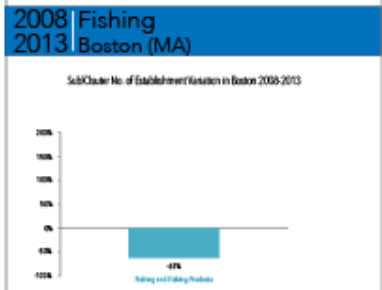
6.5 Fishing
City of Boston (MA)
Cluster Occurrence per ZipCode





Legend
Administrative Boundaries
Middlesex and Suffolk County Boundaries
City of Cambridge Boundaries
Other Boundaries
Case Study Area Zipcodes
Transportation
Rail Lines
MBTA Commuter Rail Lines
Train Stations
Highways
Cluster
Cluster Occurancy per Zipcode
Sub Cluster
Fishing and Fishing Products

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: FINANCIAL SERVICES (Cluster occurency per Zip code and

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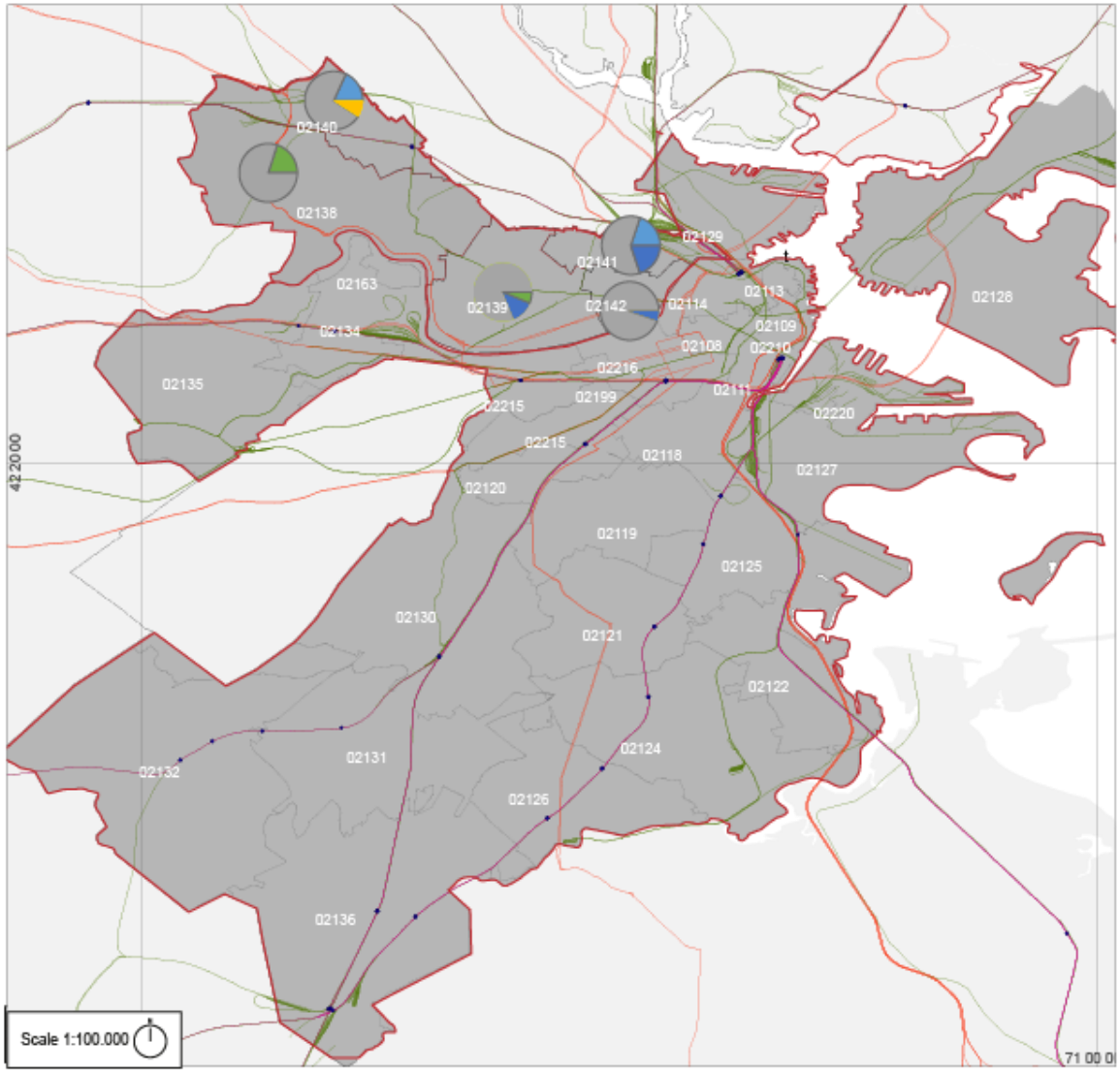
6.7 Information Technology
City of Cambridge (MA)
Cluster Occurrence per ZipCode

Legend
Administrative Boundaries
Middlesx and Suffolk County Boundaries
City of Cambridge Boundaries
Other Boundaries
Case Study Area Zipcodes
Transportation
Rail Lines
MBTA Commuter Rail Lines
Train Stations
Highways
Cluster
Cluster Occurency per Zipcode
Sub Cluster
Electronic Components
Computer and Peripherals
Semiconductors
Software Publishers
Software Reproducing
Process and Laboratory Instruments
Medical Apparatus
Audio and Video Equipment



2008 Information Tech Cambridge (MA)

2011 Information Tech Cambridge (MA)

2008 Information TEch
2013 Cambridge (MA)

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: MEDICAL DEVICES (Cluster occurency per Zip code and Subcluster)

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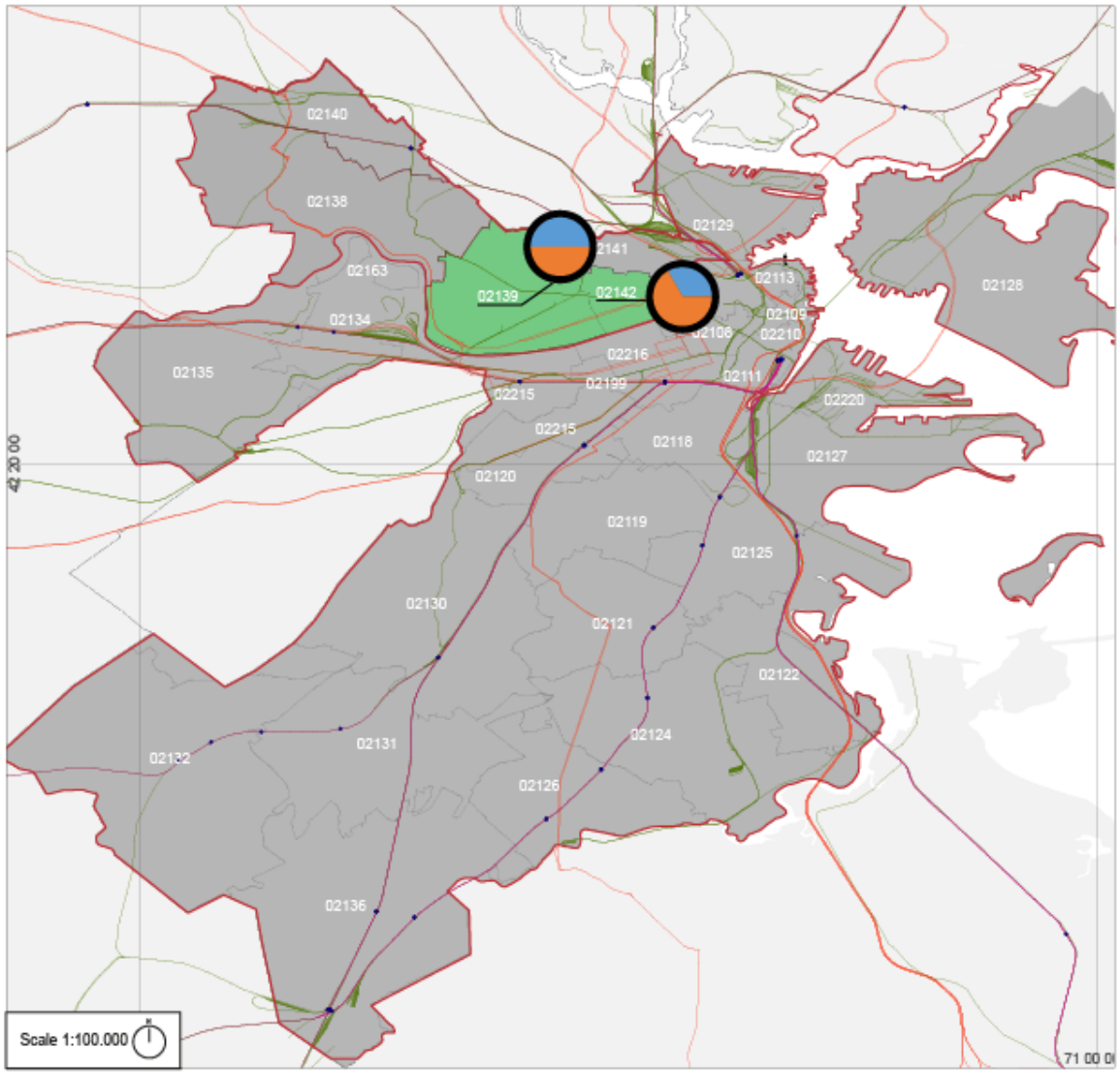
6.9 Medical Devices
City of Cambridge (MA)
Cluster Occurrence per ZipCode 2013



Legend
Administrative Boundaries
- Middlesx and Suffolk County Boundaries
- City of Cambridge Boundaries

Other Boundaries
- Case Study Area Zipcodes

Transportation
- Rail Lines
- MBTA Commuter Rail Lines
- Train Stations
- Highways

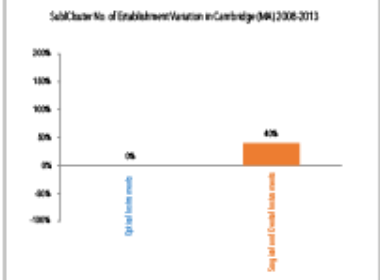
Cluster
- Cluster Occurrency per Zipcode

Sub Cluster
- Optical Instruments and Ophtalmic goods
- Surgical and Dental Instruments and Supplies

2008 Medical Devices Cambridge (MA)

2011 Medical Devices Cambridge (MA)

2008 2013 Medical Devices Cambridge (MA)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

CLUSTER DYNAMICS AT CITY LEVEL: PERFORMING ARTS (Cluster occurency per Zip code and Subcluster)

HORIZON 2020

MAPS-LED
"Multidisciplinary Approach to Plan Smart Specialisation Strategies for Local Economic Development"

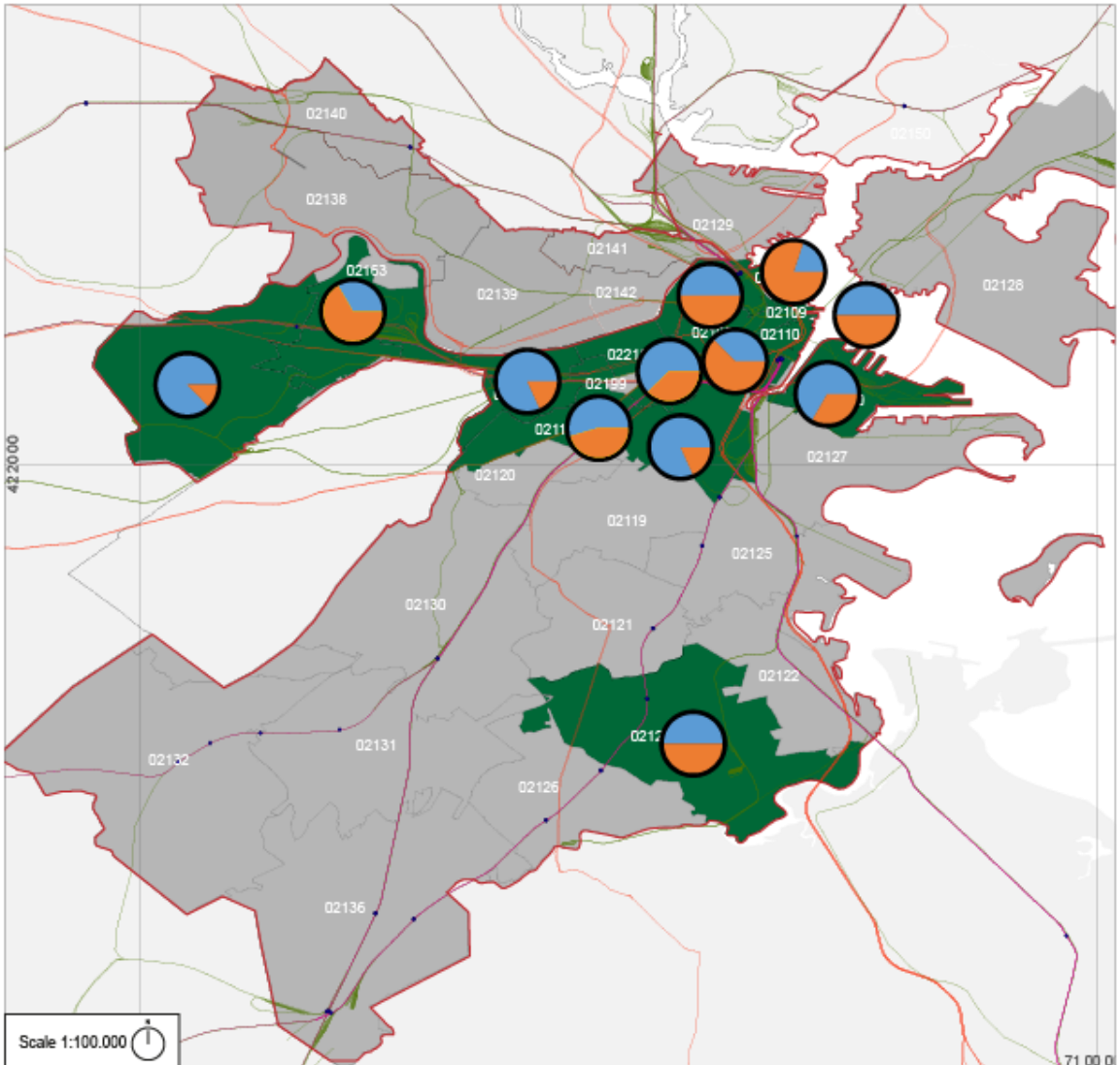
Marie Sklodowska-Curie
Research and Innovation Staff
Exchange (RISE)

Working Package No.2
S3: Cluster policy & Spatial Planning

February - June 2016
Università degli Studi Mediterranea di Reggio Calabria - PAU UNIT
Northeastern University - Department of Economics

GA No: 645651-MAPS-LED-H2020-MSCA-RISE-2014

6.10 Performing Arts
City of Boston (MA)
Cluster Occurrence per ZipCode



Legend
Administrative Boundaries
- Middlesex and Suffolk County Boundaries
- City of Cambridge Boundaries

Other Boundaries
- Case Study Area Zipcodes

Transportation
- Rail Lines
- MBTA Commuter Rail Lines
- Train Stations
- Highways

Cluster
- Cluster Occurancy per Zipcode

Sub Cluster
- Performing Artists
- Promoters and Managers

2008 Performing Arts Boston (MA)

2011 Performing Arts Boston (MA)

2008 2013 Performing Arts Boston (MA)

I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

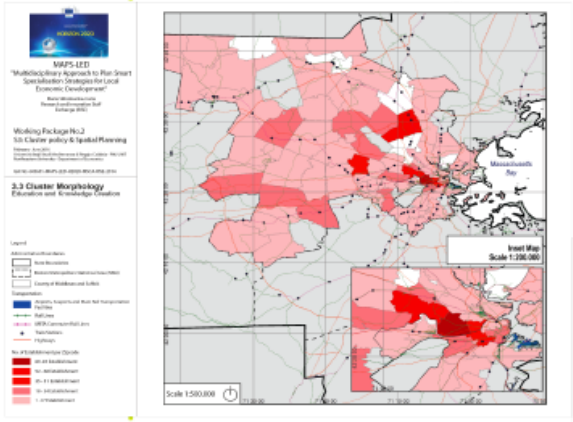
SYNTHESIS Cluster Education

COUNTY

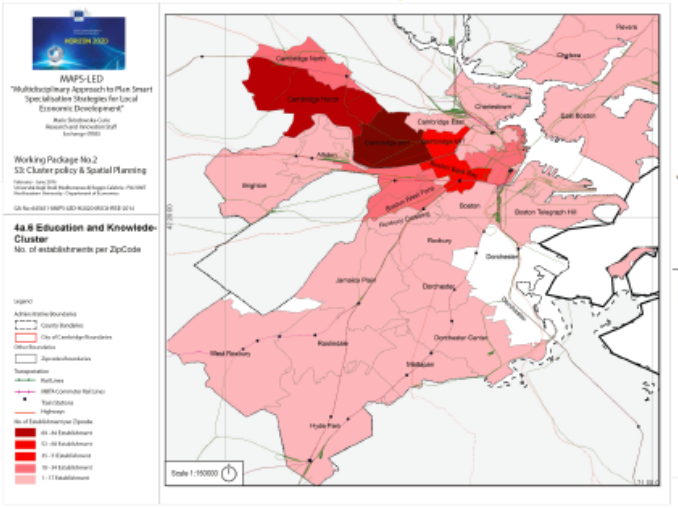
No. of establishment per cluster per zipcode

CITY

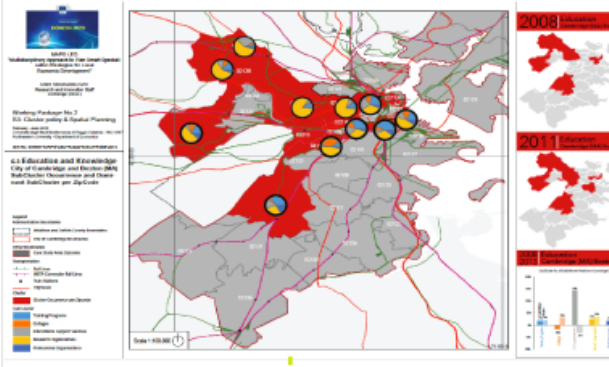
No. of establishment per cluste and Subcluster Occurrence



Top Performing Cluster
MIDDLSEX and SUFFOLK
Cluster Morphology
at regional dimension



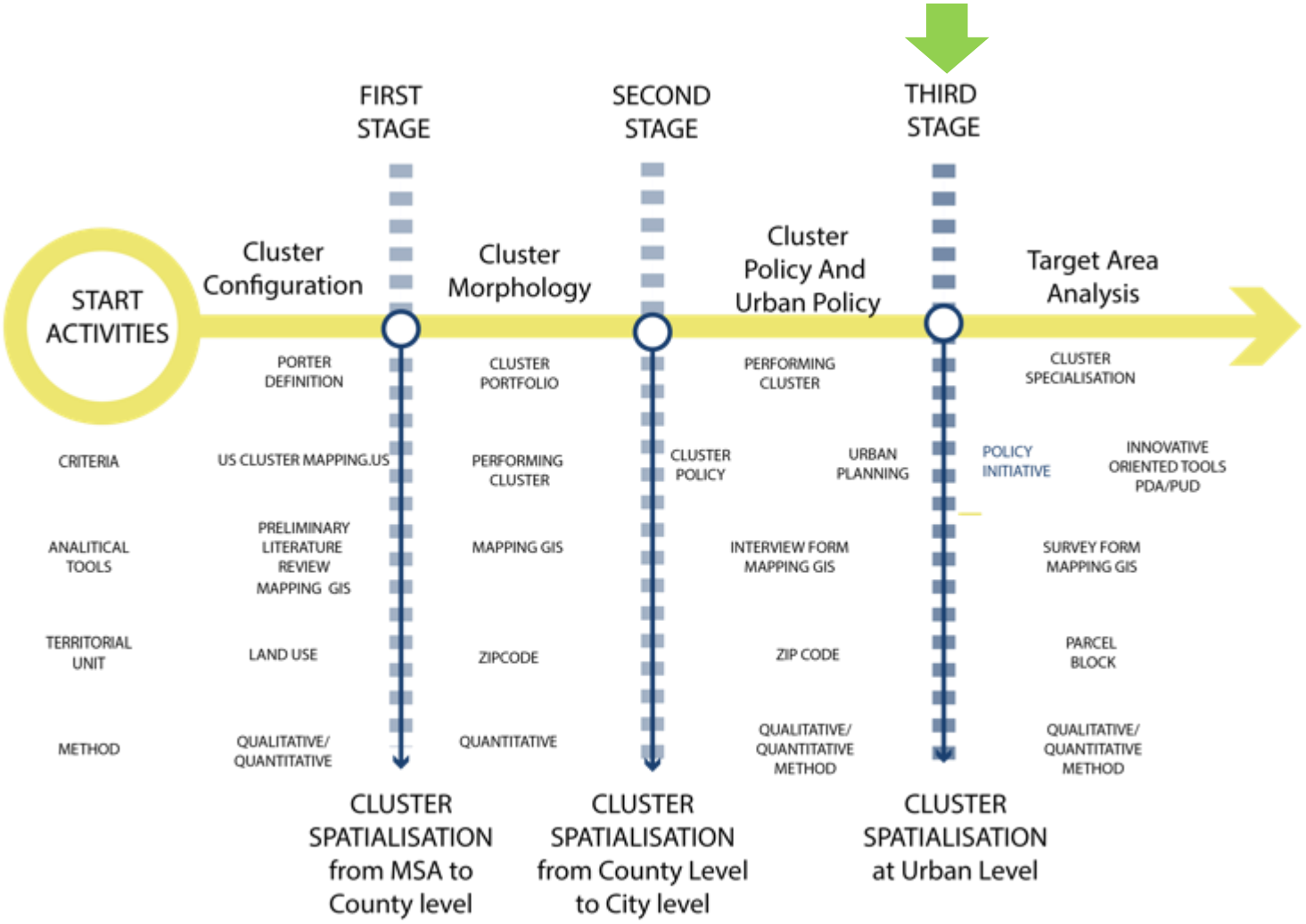
Top Performing Cluster
BOSTON-CAMBRIDGE
First spatialisation per No. of establishment



Cluster Dynamics: Cluster And Subcluster Spatialisation And Evolution

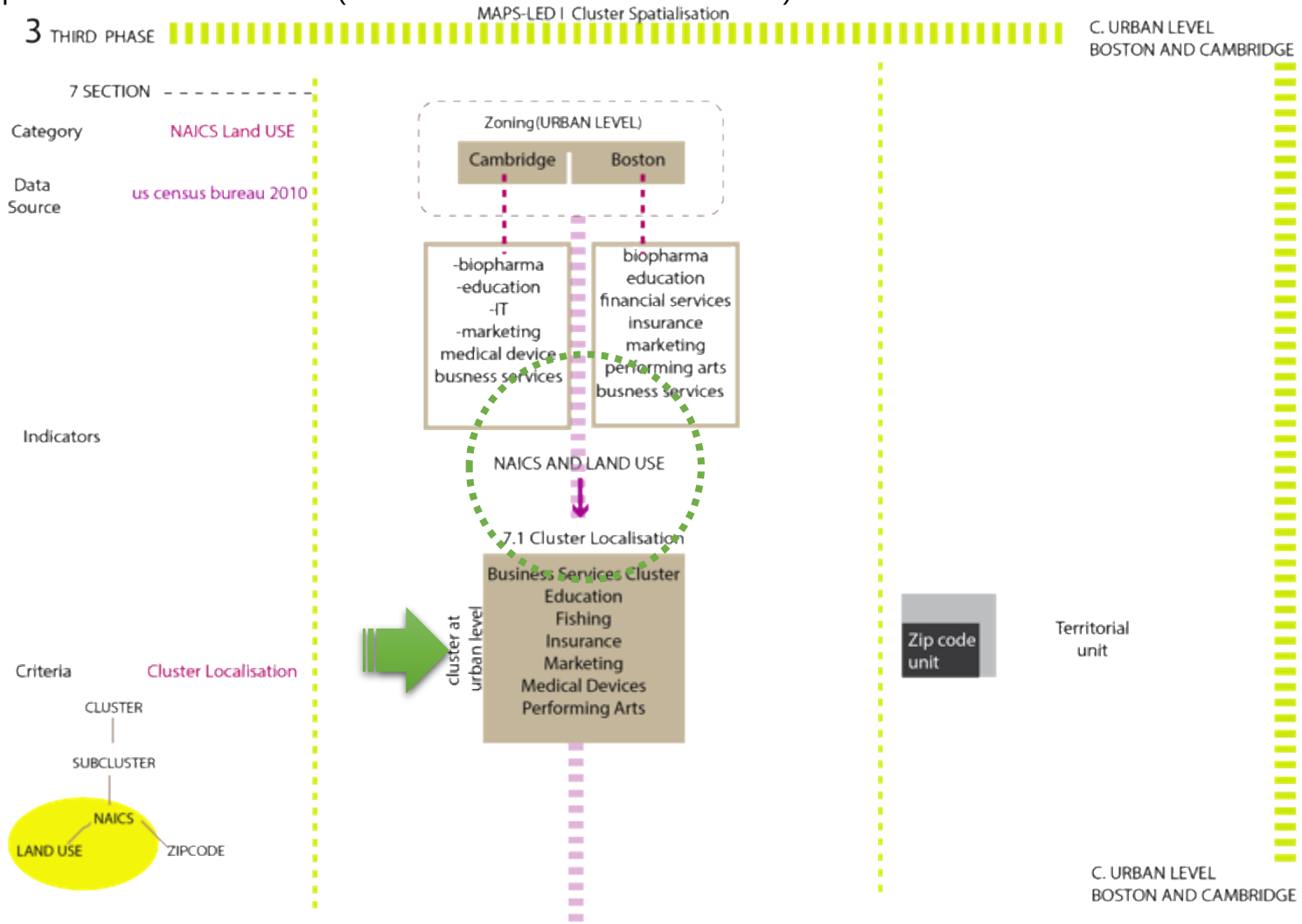
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster spatialisation at Urban level(NAICS and LAND USE Association)



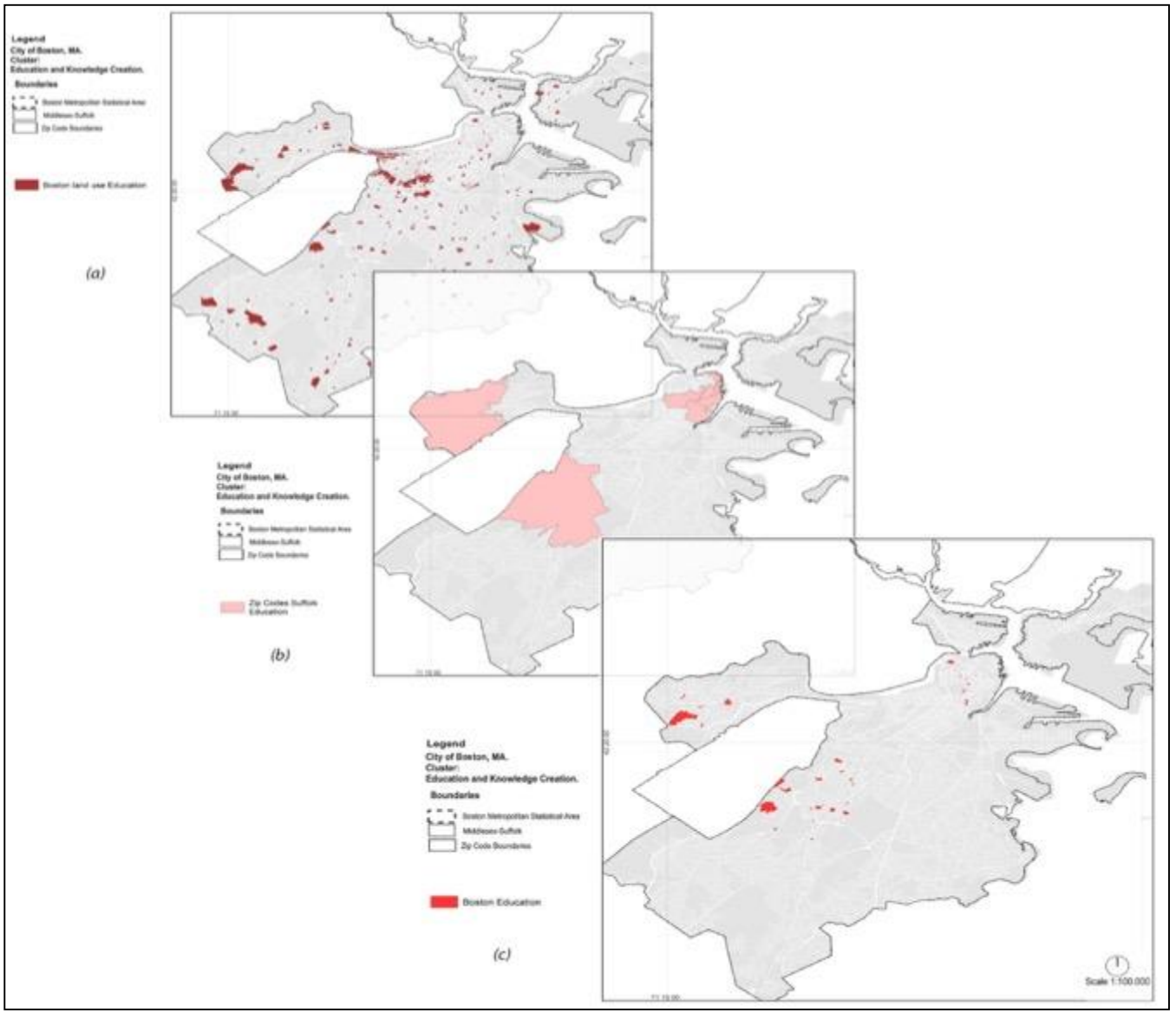
I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster spatialisation at Urban level (NAICS and LAND USE Association)



I.MAPS-LED GIS: Cluster Spatialisation from Regional to Urban dimension

-Cluster spatialisation at Urban level (NAICS and LAND USE Association)



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7.1
Urban Level Cluster Localisation
NAICS - Land Use Association
City of Cambridge and Boston (MA)
2013

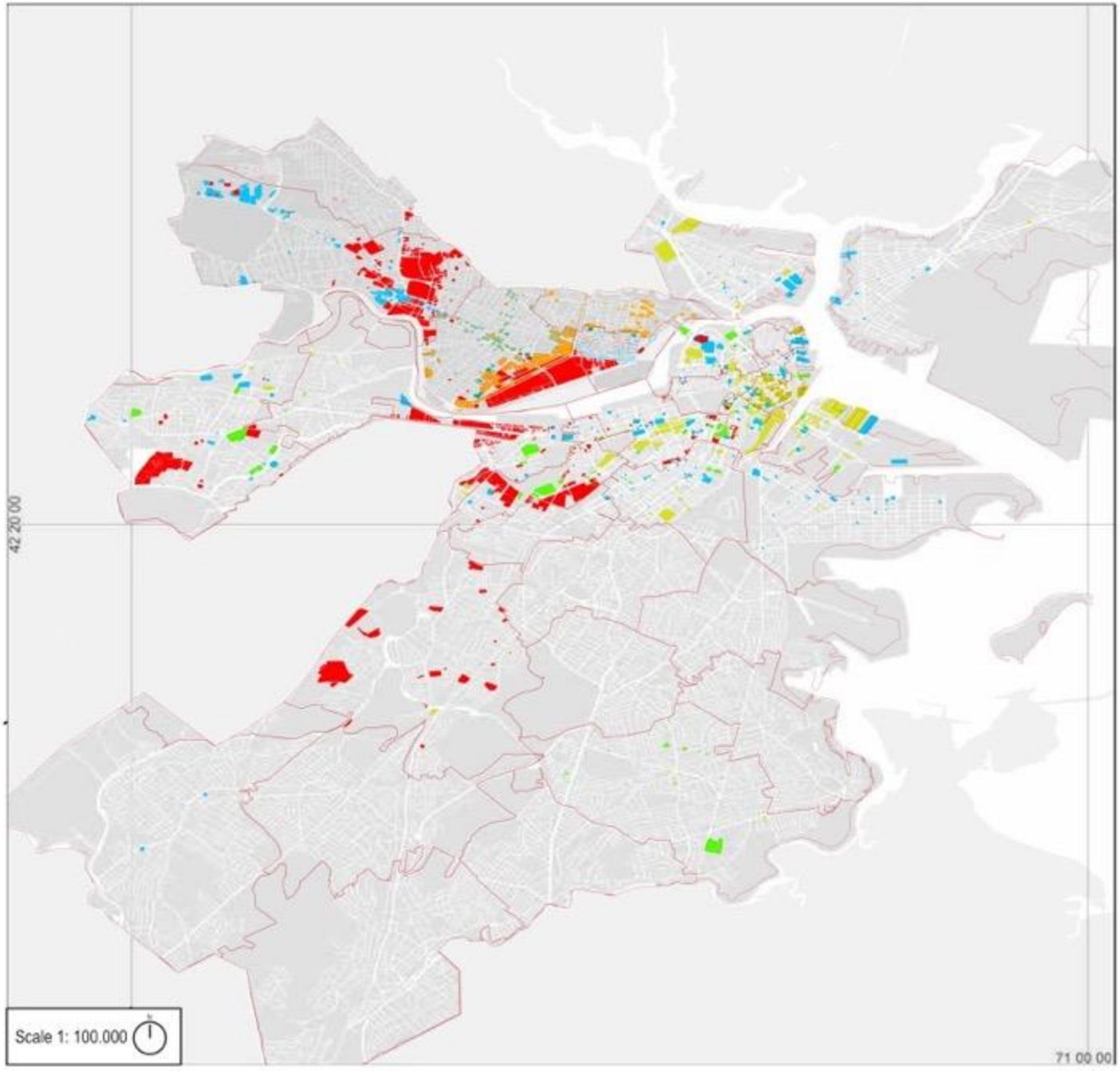
Legend

Administrative Boundaries
- City of Cambridge Boundaries

Other Boundaries
- Zipcodes Boundaries

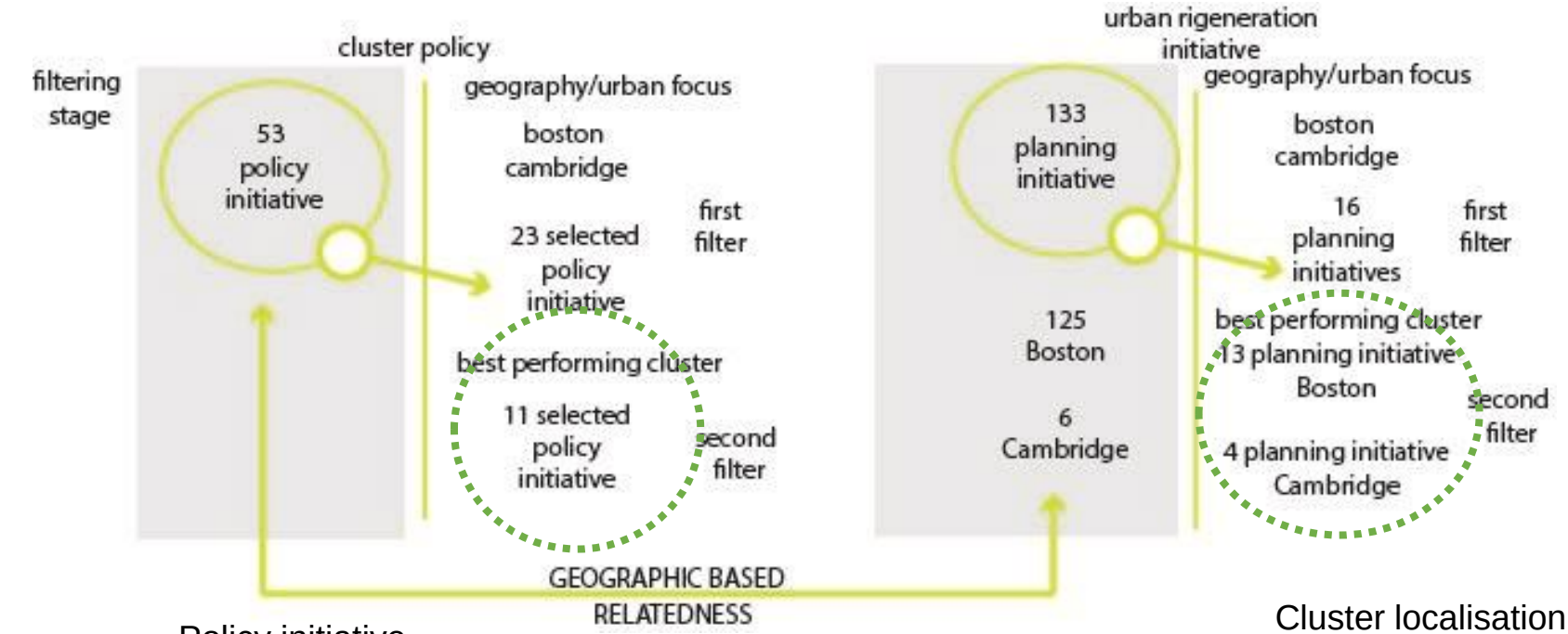
Transportation
- Rail Lines
- MBTA Commuter Rail Lines
- Train Stations
- Highways

Cluster
- Business Services Cluster
- Education
- Fishing
- Insurance
- Financial
- Marketing
- Medical Devices
- Performing Arts



II.Cluster policy and Spatial Planning at city level

-Cluster Oriented Policy initiatives and Urban Regeneration Linkages

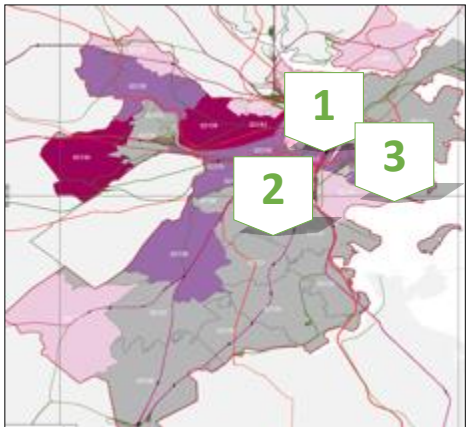


Policy initiative

1 **Cambridge Innovation Center**
1 Broadway Cambridge, MA 02142
Cluster Occurrence:
Education, Marketing and Medical Devices

2 **Venture Café Foundation**
2300 Washington St, Boston, MA 02119 (Hosted in the Bruce C. Bolling Municipal Building)
Cluster Occurrence: *none*

3 **BID**
75 Northern Ave, Boston, MA 02210
Cluster Occurrence: *Marketing, Performing Arts*

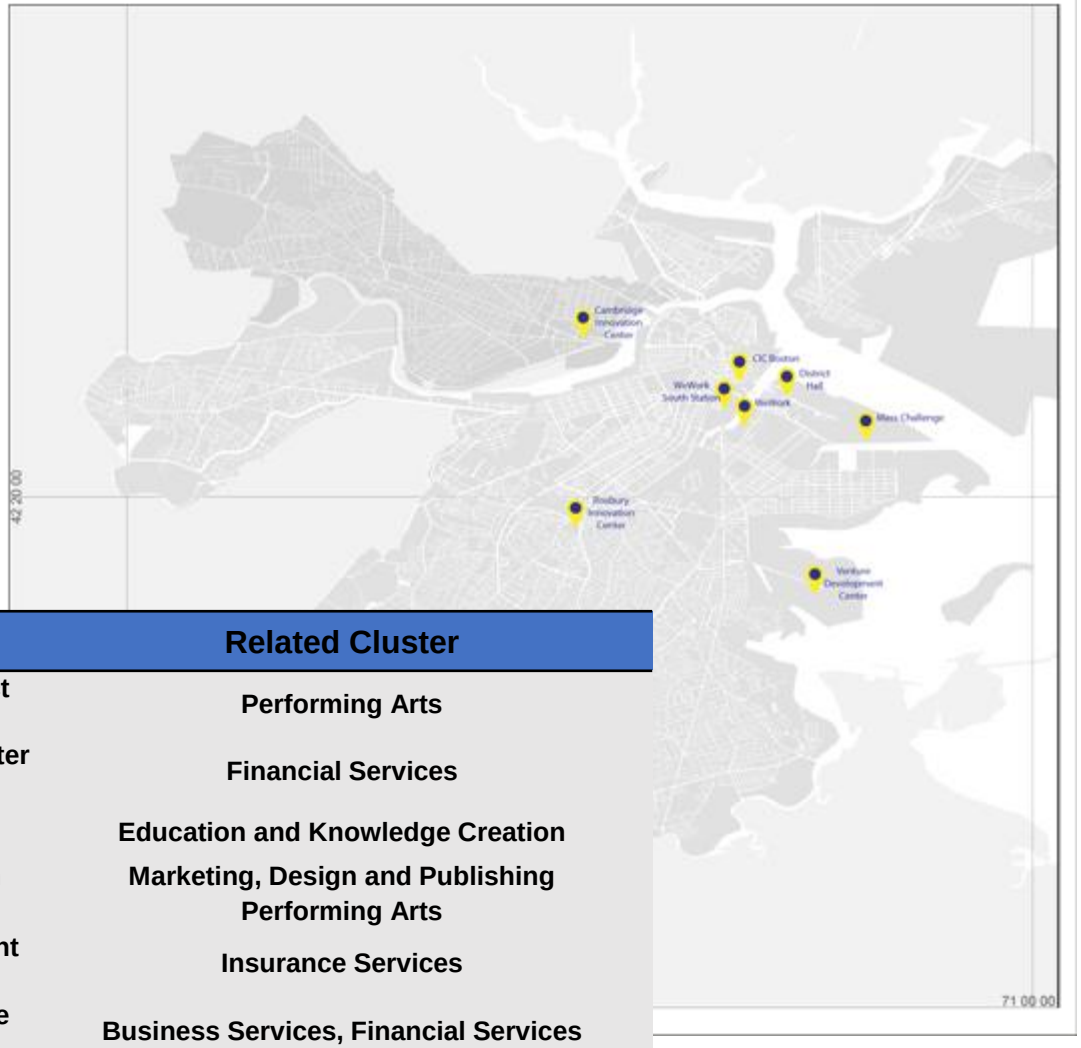


Policy Initiatives and Cluster mapping matching

Cluster localisation

II. Cluster policy and Spatial Planning at city level

-Cluster Oriented Policy initiatives and Urban Regeneration Linkages



Policy Initiative	Related Cluster
Boston Innovation District (BID)	Performing Arts
Cambridge Innovation Center (CIC)	Financial Services
Greentown Labs	Education and Knowledge Creation
Venture Café Foundation	Marketing, Design and Publishing
WeWork	Performing Arts
VDC - Venture development Center	Insurance Services
Initiative for a Competitive Inner City (ICIC)	Business Services, Financial Services
LifeTech Boston	Biopharma
Greentown Labs	Business Services

II. Cluster policy and Spatial Planning at city level

- Case Study, Planning Initiative And Masterplan Corrispondence

SECOND STEP:
Planning initiative analysis

FIRST STEP:
Case Study Analysis

Third step:
Masterplan Analysis

II. Second part_ Cluster policy and spatial planning

-Case Study, Planning Initiative And Masterplan Corrispondence

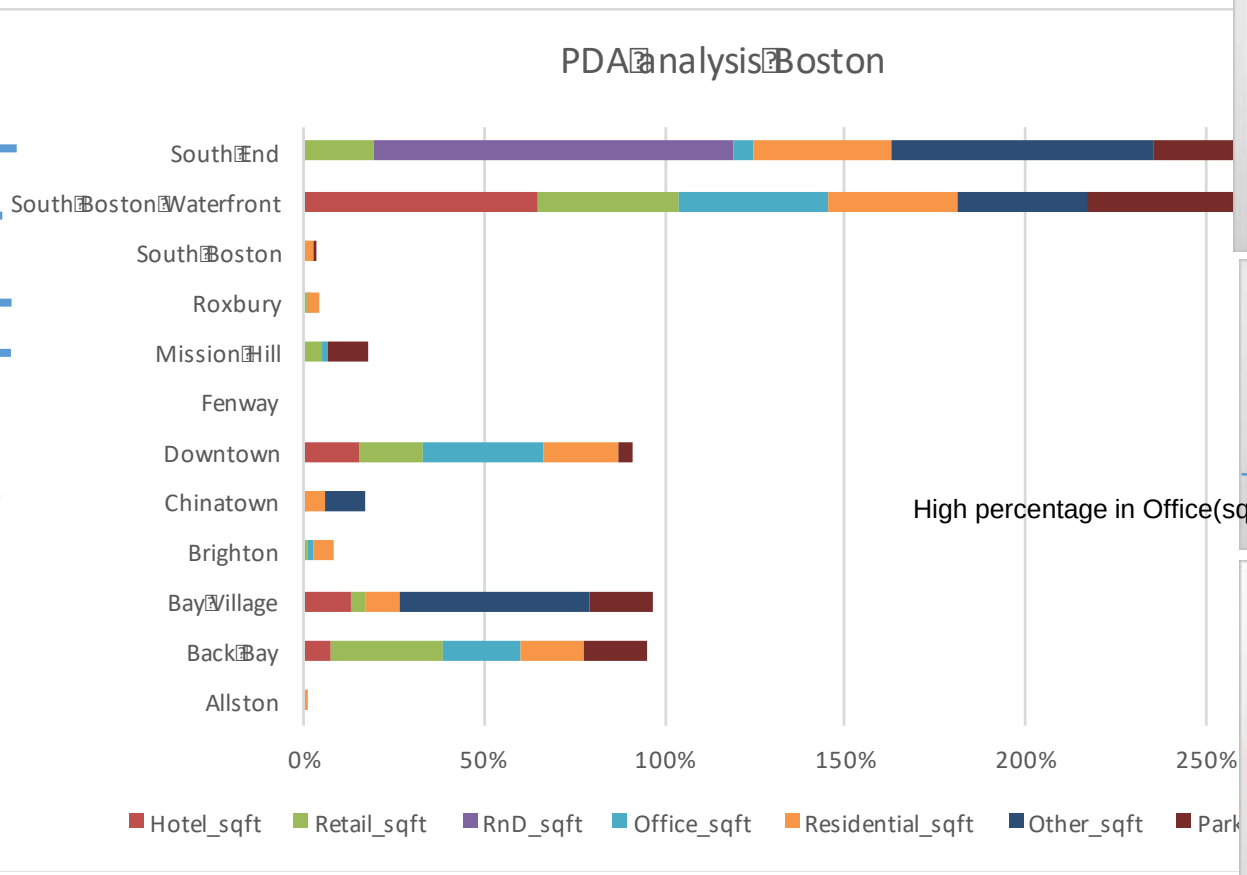
Case Study	Zoning District/subdistrict	Planning Initiative (s)	Year (s)	Maps	Target Area	Development Project	PUD / PDA Innovation Requirement
CIC Cambridge	Kendall Square PUD district (*)	EASTERN CAMBRIDGE PLANNING STUDY AND EASTERN CAMBRIDGE REZONING (ECAPS)	1999-2001		Cluster Busness Cluster Education	MIT Kendall Square: NoMa 1 Broadway (2016); MIT Kendall Square: SoMa 292 Main St (2016);	The PUD-5 requirement for innovation is 30,900 SF
		EASTERN CAMBRIDGE/KENDALL SQUARE OPEN SPACE STUDY	2015-2016				
		KENDALL SQUARE CENTRAL SQUARE (K2-C2) PLAN	2011-2013				
		ECODISTRICTS - KENDALL SQUARE ECO DISTRICT PILOT (****)	2013				

II. Second part_ Cluster policy and spatial planning

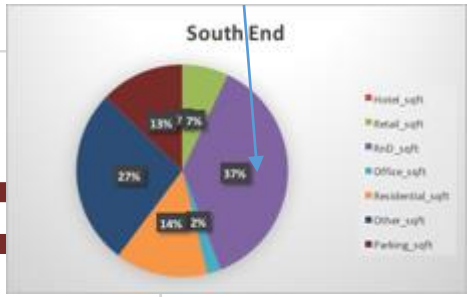
Innovative Oriented Urban Planning Tools: PDA ANALYSIS Boston

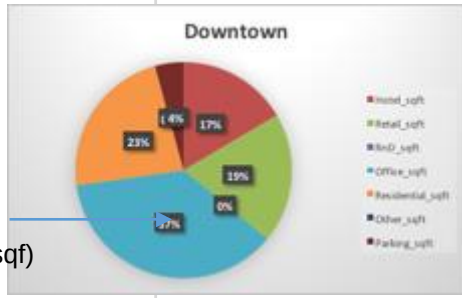
Start planned activities

2003
2003
2008
2003
2003
2006
2007
2004
2003
2016

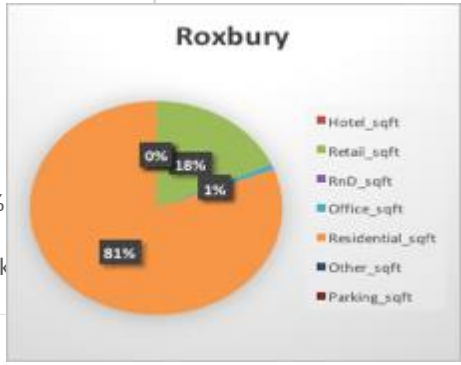


High percentage in R&D





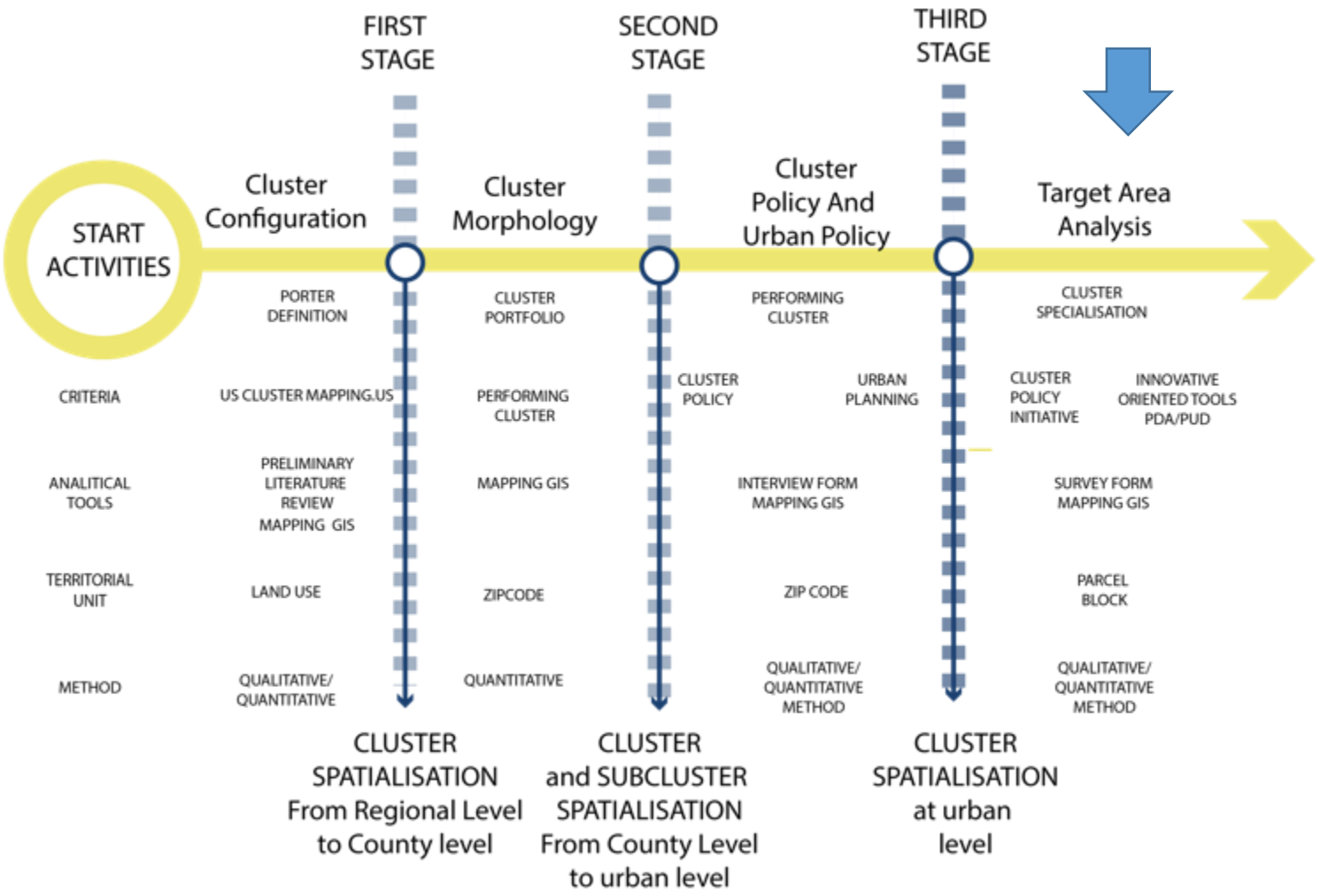
High percentage in Office(sqf)



High percentage in Residential(sqf)

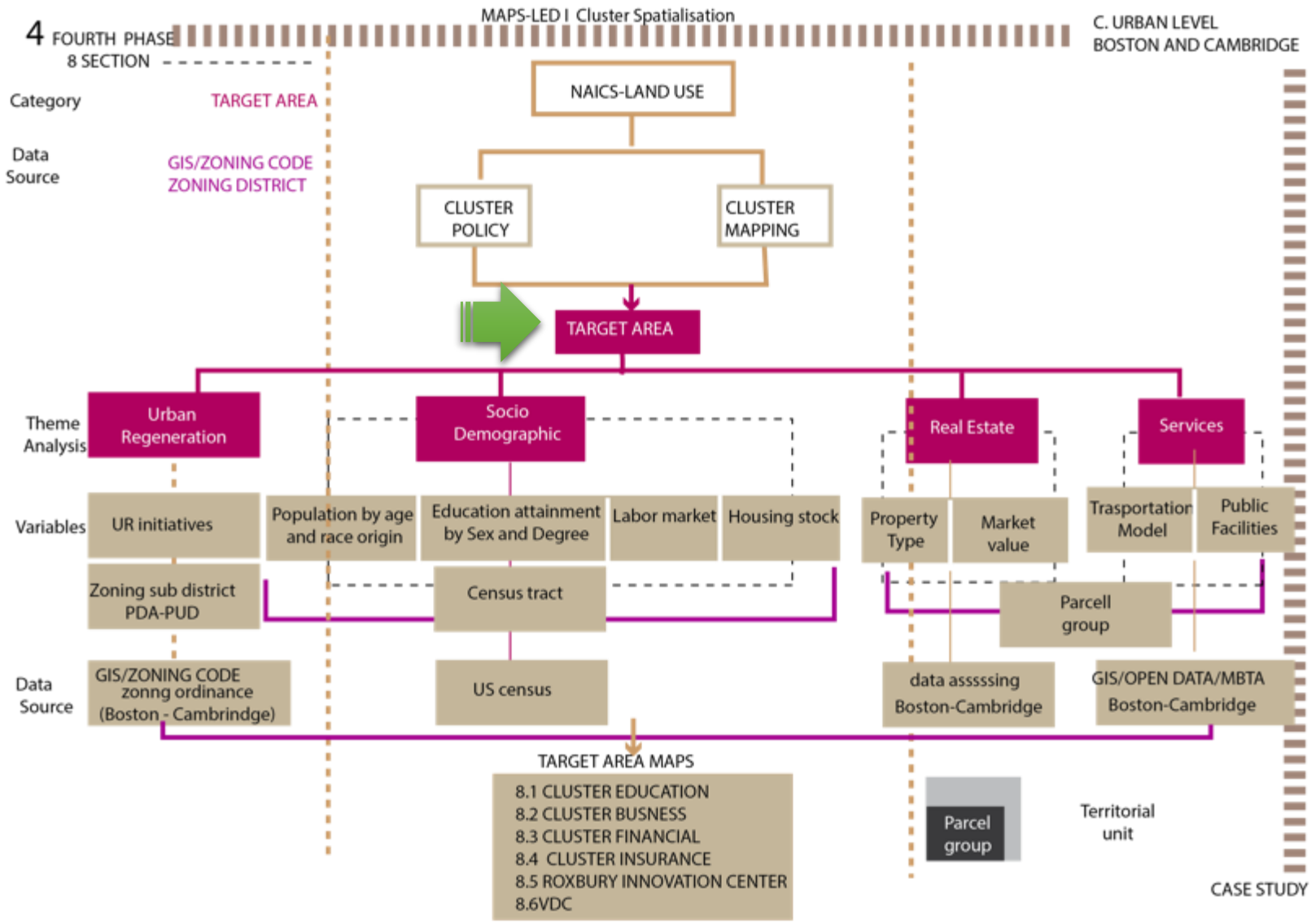
III. Third part_Target area identification

-Target Area Analysis (Socioeconomic, urban regeneration, real estate, services)



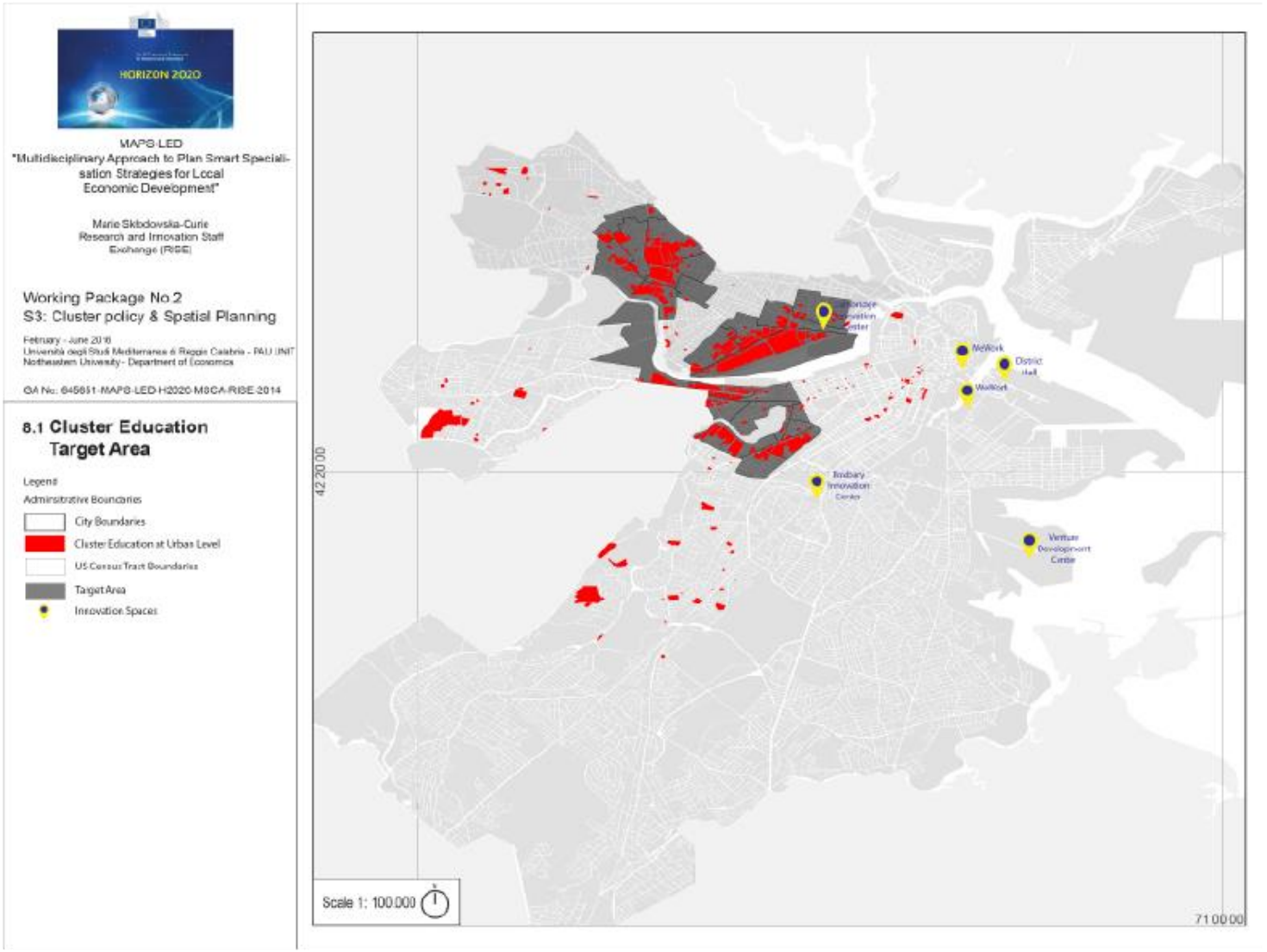
III.Target Area Analysis

-Target Area Analysis (Socioeconomic, urban regeneration, real estate, services)



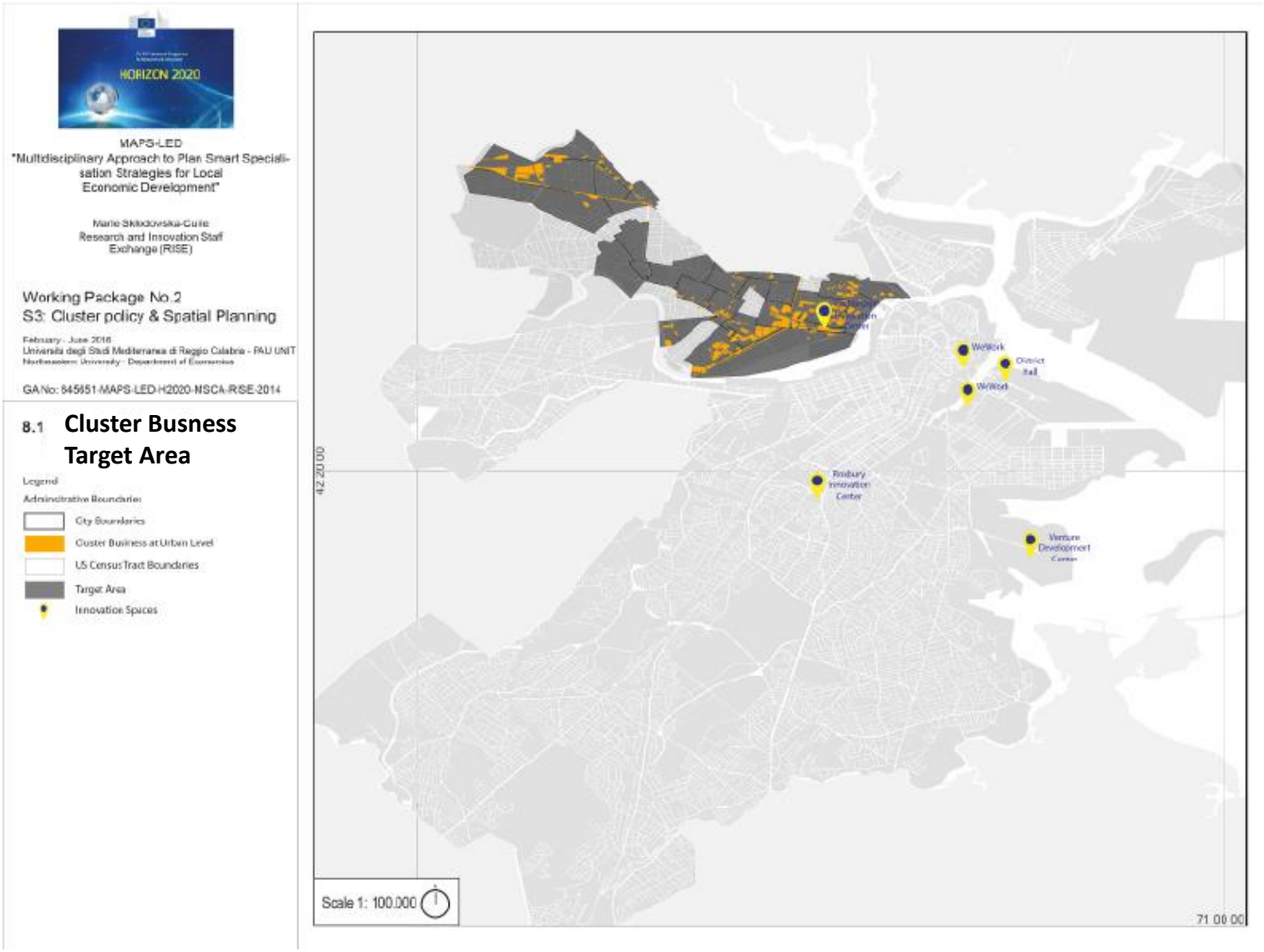
III.Target Area Analysis

-Target Area Analysis and Localisation By Parcell BLOCK-CLUSTER EDUCATION and TARGET AREA



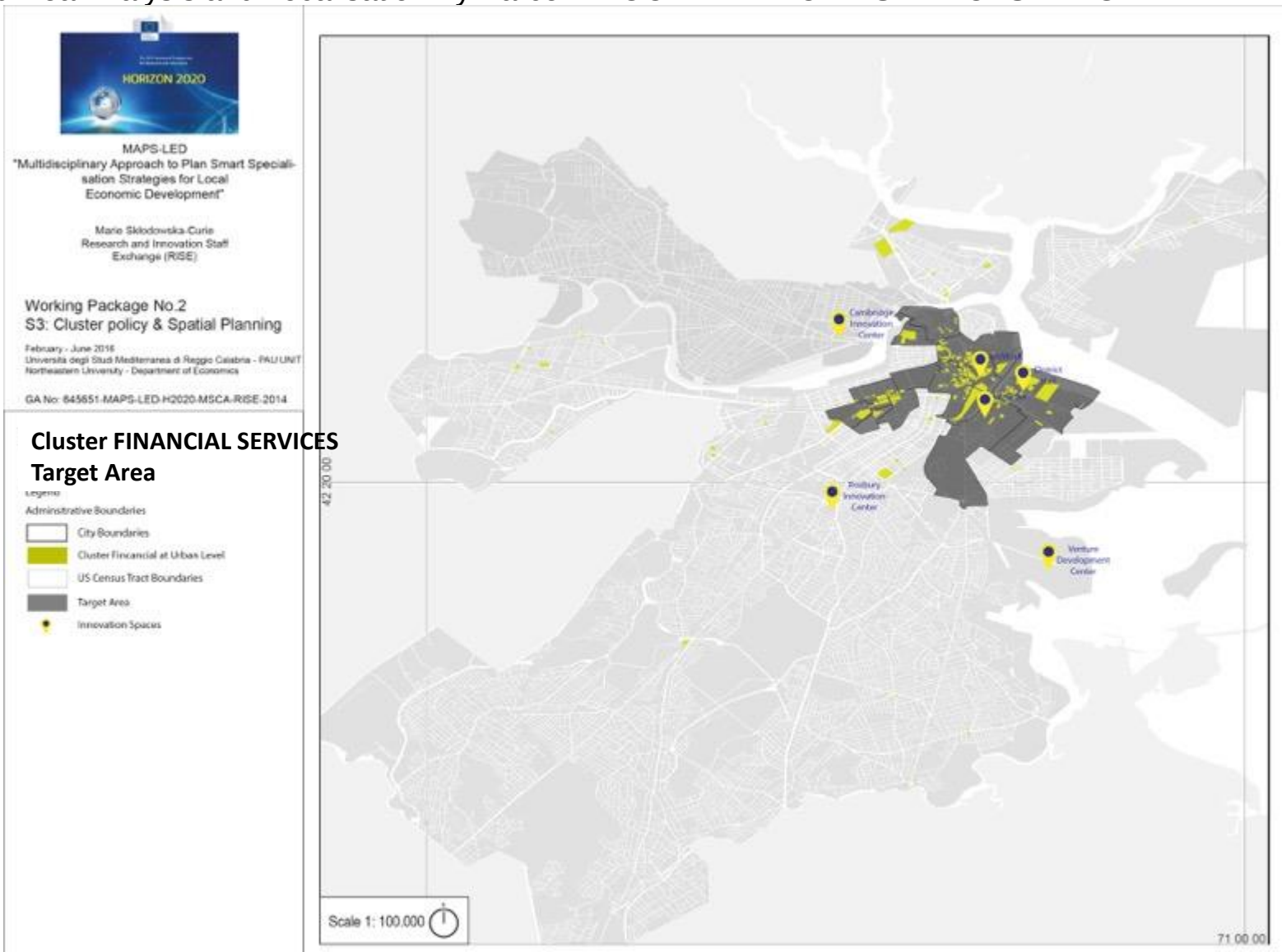
III.Target Area Analysis

-Target Area Analysis and Localisation By Parcell BLOCK-CLUSTER BUSNESS TARGET AREA



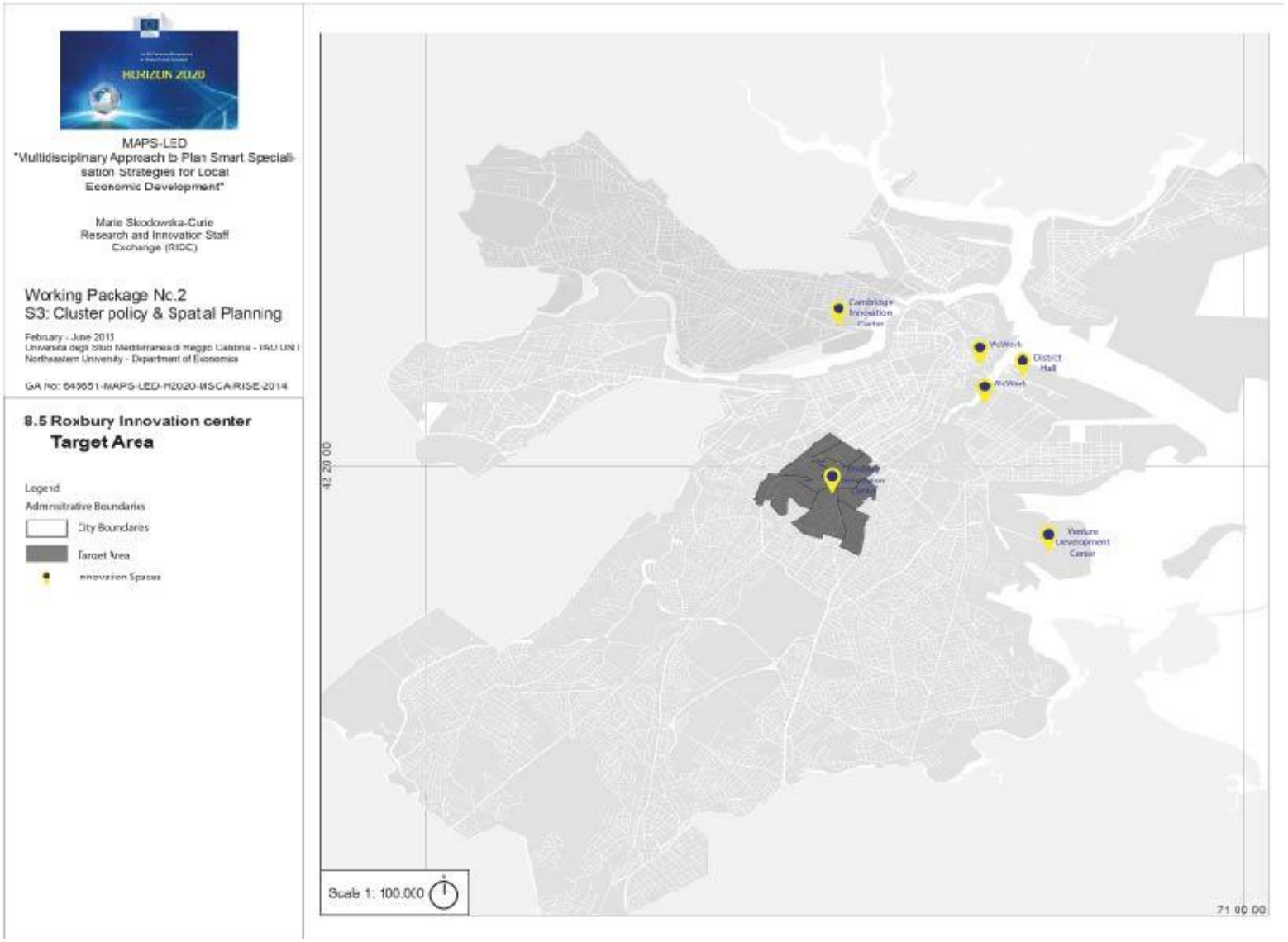
III.Target Area Analysis

-Target Area Analysis and Localisation By Parcell BLOCK- FINANCIAL SERVICES TARGET AREA



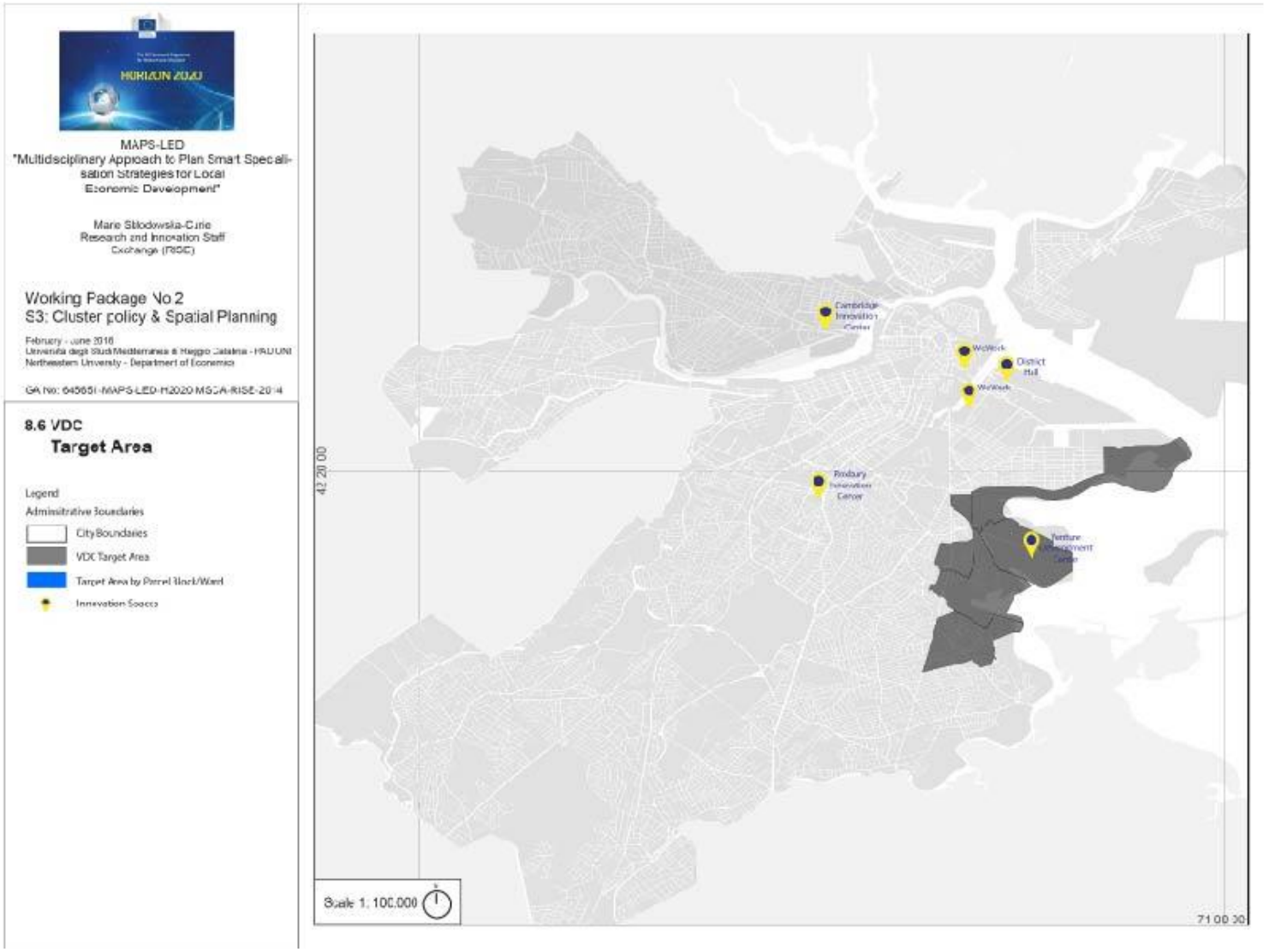
III.Target Area Analysis

-Target Area Analysis and Localisation By Parcell BLOCK- ROXBURY INNOVATION CENTER TARGET AREA



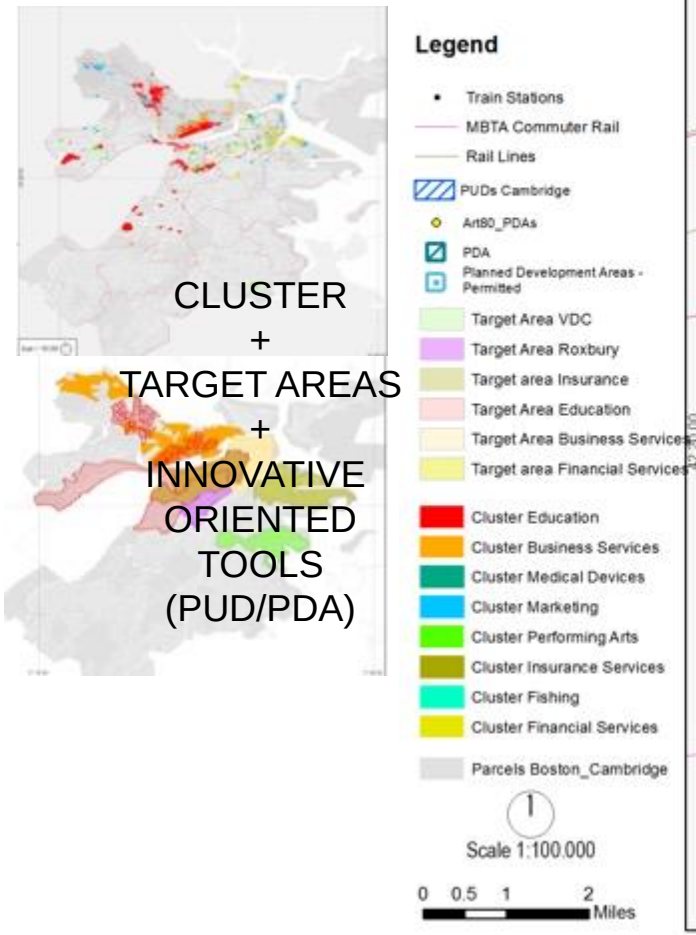
III.Target Area Analysis

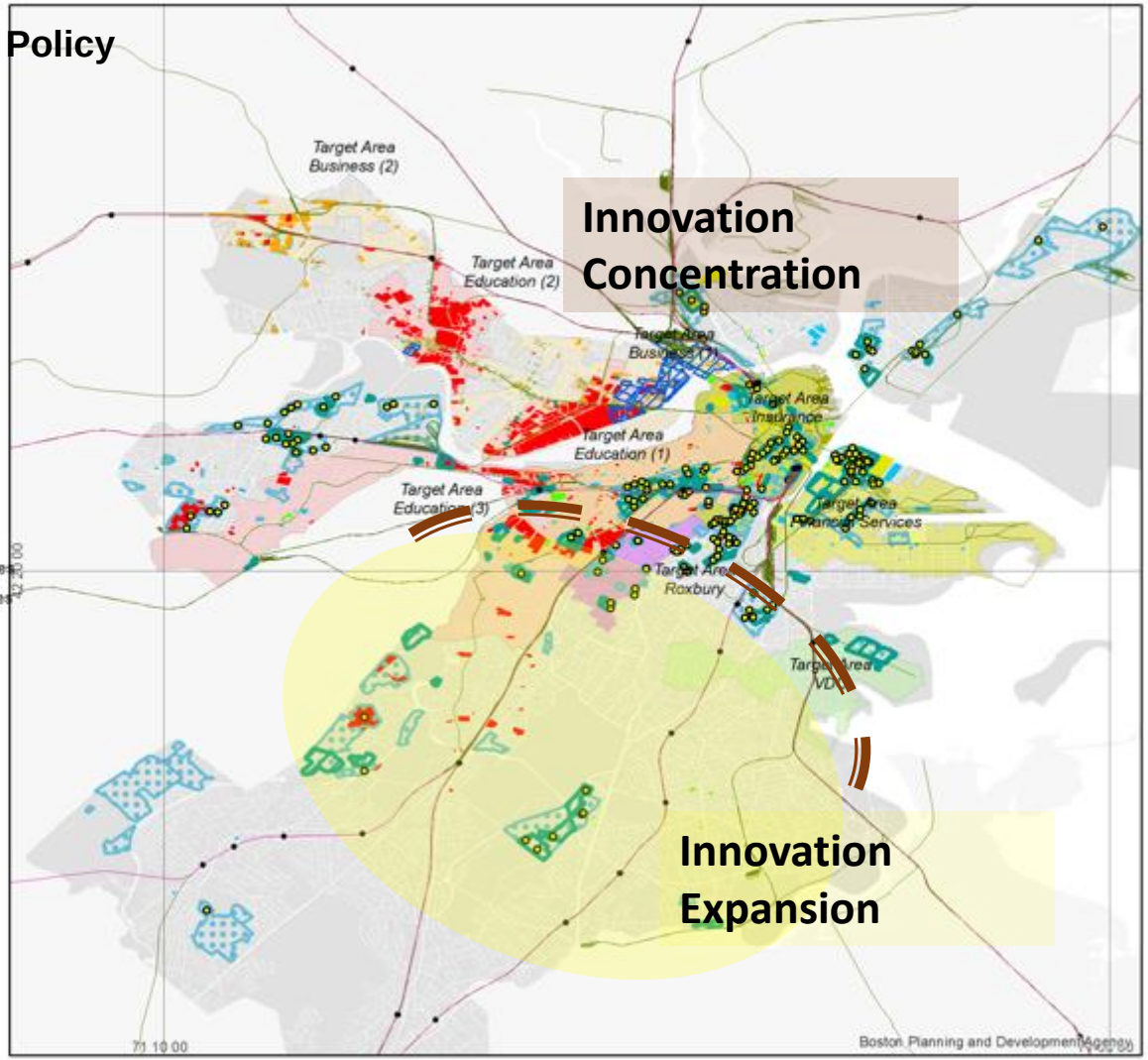
-Target Area Analysis and Localisation By Parcell BLOCK- VENTURE DEVELOPMENT CENTER TARGET AREA



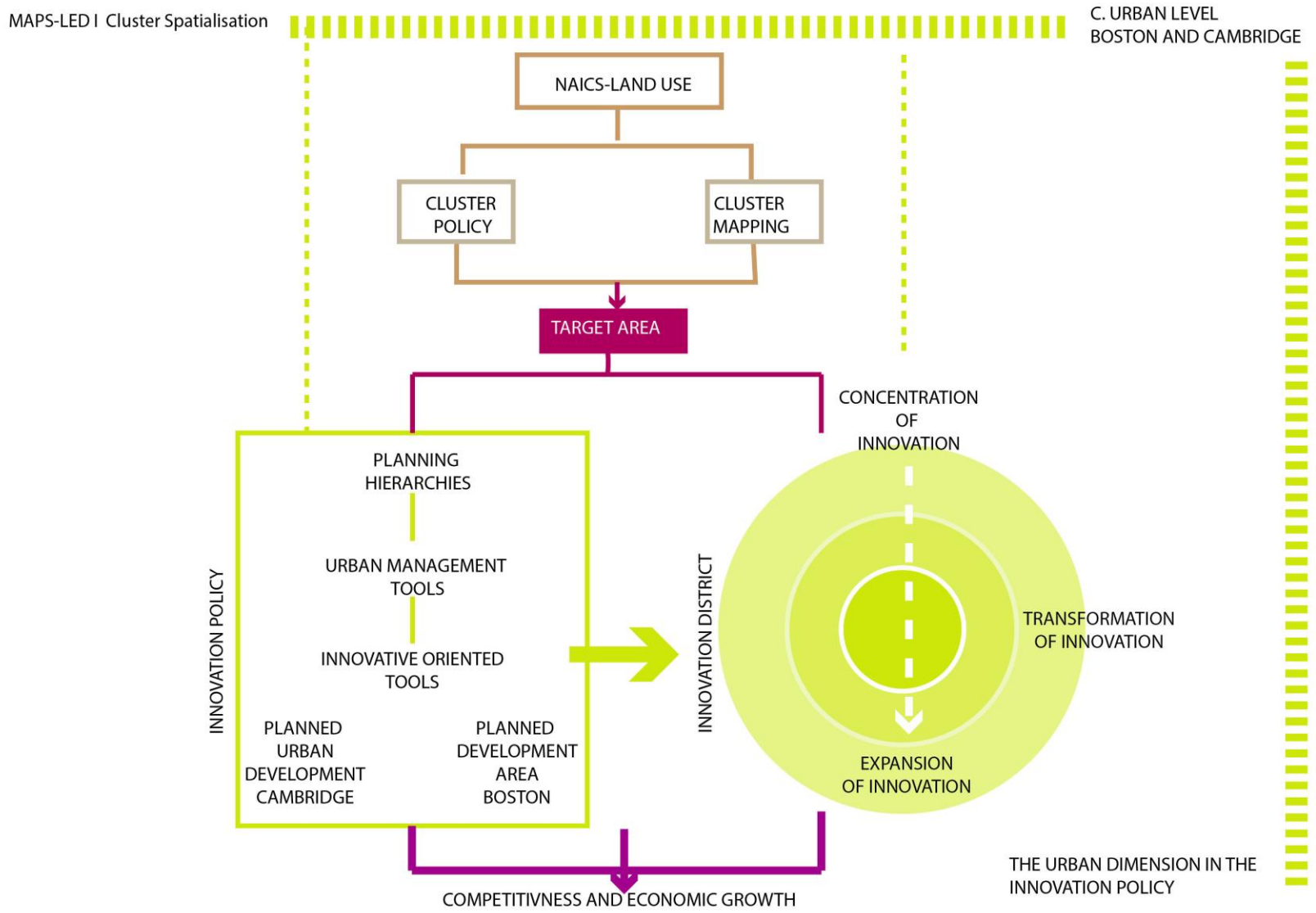
III.Target Area Analysis
-The Urban Dimension of Innovation Policy

CLUSTER
+
TARGET AREAS
+
INNOVATIVE ORIENTED TOOLS (PUD/PDA)





III. Target Area Analysis



THANK YOU!

Carmelina Bevilacqua (CLUDs LAB UNIRC)

Giada Anversa (Phd Student URED Doctorate UNIRC)
Virginia Borrello (Phd Student URED Doctorate UNIRC)
Giuseppe Cantafio (Phd Student URED Doctorate UNIRC)
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Pasquale Pizziminenti (PhD Student URED Doctorate UNIRC)

Andrea Porelli (Phd Student URED Doctorate UNIRC)
Gianmarco Cantafio (Phd Student URED Doctorate UNIRC)
Cesare Cascella (Phd Student URED Doctorate UNIRC)
Isra Hanafi (Phd Student URED Doctorate UNIRC)
Claudio Massimo Colombo (Phd Student URED Doctorate UNIRC)
Laura Biancuzzo (Phd Student URED Doctorate UNIRC)
Giuseppe Pronestì (Phd Student URED Doctorate UNIRC)