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The Urban Dimension of Innovation Policy: Roxbury Innovation Center

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Original
The Urban Dimension of Innovation Policy: Roxbury Innovation Center / Bevilacqua, C., Maione, C., Parisi, L., Borrello, V.. - (2017), pp. 1040-1053. (13TH INTERNATIONAL POSTGRADUATE RESEARCH CONFERENCE 2017 University of Salford Manchester 14-15 September 2017) [10.5281/zenodo.1451518].

Availability:
This version is available at: https://hdl.handle.net/20.500.12318/12807 since: 2020-12-11T20:03:08Z

Published
DOI: http://doi.org/10.5281/zenodo.1451518
The final published version is available online at:http://usir.salford.ac.uk/id/eprint/43913/1/13th IPGRC

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THE URBAN DIMENSION OF INNOVATION POLICY: ROXBURY INNOVATION CENTER

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Abstract: The paper intends to explore a new paradigm of urban development process driven by the increasing demand of innovation. The aim is to demonstrate how innovation has become part of the urban settlement dynamics towards regeneration processes. Spurring innovation through knowledge-based economy has been driving the design of public development policies. Knowledge generates economic growth by stimulating the potential of entrepreneurship and innovation. In this context, cities are emerging as knowledge hubs, able to attract high-skilled workers, generate creativity and innovation and provide advanced services and infrastructures connected through formal and informal network systems. Findings from the MAPS-LED project (Horizon-2020) show how in specific urban areas the knowledge dynamics in activating the concentration of innovation generate spillover effects, which supported by urban planning tools, allow the expansion of innovation and the generation of physical transformations. Among the case studies of the MAPS-LED project, the Roxbury Innovation Center (Boston, MA) has been investigated as an emblematic case of public initiative to spur economic development and urban regeneration processes through innovation. The public authority of the city of Boston, trough the creation of this public Innovation Center is trying to generate a positive impact on the local community by providing the necessary tools, workspaces, connections and programs to enhance the development of the knowledge-based economy and support startups and entrepreneurs.

Keywords: Cities, Innovation Ecosystem, Innovation Space, MAPS-LED, Urban Regeneration.

1. INTRODUCTION

In response to the past and the ongoing economic crisis, the primary challenge for National and Regional Government, both in Europe and in the USA, is to promote policies and actions focused on fostering creativity and innovation aiming at repositioning cities in a competitive scenario. New geographical, political, economic dynamics generated by the global crisis have reformulated the significance of Innovation, which becomes a process able to intercept the market opportunities based on the exploitation of endogenous resources and potential local assets.

In 2007, the OECD (Organization for Economic Co-operation and Development) sustained that new strategies to reduce the degree of social exclusion and improve the economic growth in deprived contexts should focus on promoting innovation as the main engine to enhance competitiveness and foster social and economic development (OECD, 2007). A few years later, the World Bank recognized innovation as a key factor for socioeconomic progress, generating wealth and skilled jobs, promoting the development of the urban systems, and increasing the level of competitiveness between cities (The World Bank, 2010).

"In the global knowledge economy, knowledge-intensive industries and knowledge workers are extensively seen as the primary factors needed to improve the welfare and competitiveness of cities" (Yigitcanlar, 2011a, p.22).

In order to support these dynamics, the public strategies are promoting the discovery of niches of innovation and knowledge hubs, in which the entrepreneurial phenomena can evolve towards a specialized diversification, by producing competitive advantages in urban contexts (del Castillo Hermosa, Elorduy and Eguia, 2015). According to the emerging change within the development and innovation policies, Smart Specialisation has been introduced in 2006 by Foray as a new innovation policy framework designed to promote an effective use of public resources by investing in the local assets to foster innovation and create competitive advantages. The goal is to make European regions able to achieve economic growth and prosperity to compete in the globalization era.

In order to reduce the increasing gap between the EU and the U.S. in terms of producing and using innovation for economic growth, the Smart Specialisation Strategies (S3) have gained relevance within the EU2020 framework. The Regional Plan for S3 became an ex-ante conditionality in the new Programming Period 2014-2020 (Del Castillo, Paton and Barroeta, 2015) in order to invest structural funds towards innovation strengthening.

S3s are considered as key factors for enhancing place-based innovation policies. In the report "Implementing Smart Specialisation Strategies: A Handbook" (2016), the European Commission recognized the Entrepreneurial Discovery Process (EDP) as a key driver of Smart Specialisation Strategies, considered as an inclusive and interactive process where the 'entrepreneurial knowledge' is at the core of the innovation-based development. Therefore, the EDP can be interpreted also as a learning process for regions. The involvement of entrepreneurs in the design and implementation of Smart Specialisation Strategies is crucial to recognize the competitive advantages of cities (Pinna, 2016).

In this context, cities have emerged as knowledge hubs (center of knowledge creation), since they are able to attract high-skilled workers, generate creativity and innovation and provide advanced services and infrastructures connected through formal and informal networking systems (Penco, 2011).

Cities stimulate innovation through the creation of favorable ecosystems, which boost competitiveness, foster knowledge production, innovation and socioeconomic development (Spinosa, Schlemm and Reis, 2015), being also able to revitalize urban distressed areas. In some cases, these ecosystems develop spontaneously thanks to existing conditions, such as the presence of strong anchor institutions and the proximity to infrastructures, while in some other cases they need a consistent push from the public or private sector.

The challenge for cities in today's knowledge economy lies in creating and supporting innovation ecosystems, that consist of a set of complex relationships among different actors, entities, and intangible resources "whose functional goal is to enable technology development and innovation" (Jackson, 2011, p.2).

In order to understand how cities are facing this challenge, the MAPS-LED project (a Marie Sklodowska-Curie RISE research project funded by the European Union's HORIZON 2020 program) has observed how innovation-oriented policy initiatives may affect the knowledge concentration process, considering also the exogenous dynamics acting on the specific

neighborhoods. For this purpose, the research activities focused on the investigation of different case studies in the cities of Boston and Cambridge (MA), identified by overlapping urban regeneration initiatives with the innovation-oriented policy initiatives, including the occurrence of the geographic concentration of interconnected firms (according to the definition of clusters by Porter, 1998). The innovation spaces have been investigated as physical facilities that provide workspaces, equipment and business services to innovators, hosting networking events, training and mentoring programs to increase workers' skills and facilitate connections between the different actors involved in the innovation process.

The paper aims at pointing out how, in specific urban areas, innovation spaces stimulate knowledge dynamics in order to favor the concentration of innovation in generating spillover effects due to the implementation of specific urban planning tools. The phenomenon of innovation concentration in particular places characterized by the presence of mutual factors (anchor institutions, startupper centers, physical transformations towards the demand of innovation) has created a regeneration process in backward urban areas, by triggering a process that can be called 'expansion of innovation'.

This contribution is articulated into three main sections: the first explores the role of the Innovation spaces as an expression of knowledge dynamics; the second investigates the main innovation policies spurring regeneration processes at the city level in the U.S.; the last section presents the results of the case study of the Roxbury Innovation Center, a public innovation space considered as an engine for the socioeconomic and urban growth of Roxbury, a deprived neighborhood of the city of Boston (MA). The paper further investigates the policy initiatives and tools implemented by the public authorities to support the creation of an innovation ecosystem.

The Roxbury Innovation Center represents an emblematic case study, since it is among the new generation of urban planning tools and initiatives focused on innovation that has been promoted to spur urban regeneration processes. The innovation center has helped to realize the willingness of the Local Administration to revitalize, economically and socially, the multi-ethnic and disadvantaged neighborhood of Roxbury. The public authority through the creation of this innovation facility aims to generate a ripple effect on the creation of jobs and the development of an innovation ecosystem that will spur the growth of the local economy.

The emphasis on Innovation Spaces, that is becoming common both in the European and the U.S. cities, highlights the need to focus on supporting interaction, cooperation and knowledge flows even with the support of urban planning tools and economic development measures. This approach could be crucial for the urban and economic growth and the development of the knowledge economy, especially where the innovation community is just beginning to evolve.

2. THE ROLE OF INNOVATION SPACES AS AN EXPRESSION OF KNOWLEDGE DYNAMICS

In the literature, from Alfred Marshall (1920) to Robert Park (1925), cities have been considered as melting pots of diversity and sources of creativity and innovation (Florida, 2003). Jane Jacobs (1969) has long pointed to the role of the urban environment as an incubator for creativity, innovation and entrepreneurship. Her theoretical approach, together with the one of Joseph Schumpeter (1934) about on the relevance of innovation and

entrepreneurship for cities, today stands again at the heart of the scientific and political debate.
Urban areas, in fact, by offering proximity to services, density, variety, knowledge institutions and specialized labor force, facilitate the networking process (Athey, Nathan, Webber and Mahroum, 2008) and create the right atmosphere for spurring the knowledge dynamics, that involve higher research institutions, local organizations and communities, comprehending both entrepreneurs and citizens.

Both in Europe and America, cities are implementing a new urban innovation-oriented development paradigm, characterized by the creation of innovation ecosystems, supported by the urban policies and the spatial planning. The combination of the two has the potential to economically regenerate specific urban areas, promoting the existing local assets (material and immaterial) and identifying the new ones.

In this context, innovation spaces (innovation centers, co-working, research labs, accelerators, etc..) are emerging as important instruments to enhance local development and support the creation of innovation ecosystems by encouraging exchanges of knowledge between different actors, assisting entrepreneurs, and promoting cross-fertilization of ideas and cross-sectoral collaborations. They accomplish these missions by providing affordable offices, business services, networking events, training and mentoring programs for local startups, entrepreneurs and innovators.

Innovation spaces are attracting entrepreneurs, startups, innovators and investors in cities, generating new knowledge dynamics and spurring urban and economic development.
They represent an emerging factor of the new demand of innovation-oriented physical transformations that recall the specific requirement of the Entrepreneurial Discovery Process about catalyzing the entrepreneurial knowledge dynamics.

In recent years, policymakers recognized the potential of these spaces as enablers of innovation and they are supporting them by stimulating a favorable environment for innovation (Rodriguez, Congdon and Ampelas, 2015).

3. THE PUBLIC POLICY EFFORT TO ENHANCE THE ECONOMIC DEVELOPMENT THROUGH INNOVATION

The City of Boston is actively enhancing the socioeconomic development by exploiting the potential of innovation. As a matter of fact, over the past years, different innovation initiatives have been implemented to generate urban transformation processes able to trigger the territorial growth. Together with the urban planning, they have acted in a complementary way for supporting the knowledge dynamics and the regeneration of the local economy. A sample of these innovation-oriented policy initiatives are illustrated in Table 1.

Table 1: Innovation-oriented policy initiatives in Boston
Source: Authors' elaboration, data from City of Boston (2013, 2015a) and Boston Redevelopment Authority (2013a).

Geographical level	Innovation-oriented policy initiative	Main objective	Start Year
City of Boston	LifeTech Boston	Foster the growth of Boston's life sciences and high technology sectors, support existing LifeTech companies and attract national and international businesses to join the main cluster areas in the City.	2004
	Boston Innovation District	Transform the South Boston waterfront area in an urban environment that fosters innovation, collaboration, and entrepreneurship.	2010
	Neighborhood Innovation District	Support neighborhood residents, existing business and startups in the creation of innovations by providing information, training, connections and physical locations for innovators and entrepreneurs.	2014

In 2010, the City of Boston together with the Boston Redevelopment Authority has promoted the renovation of a former industrial, underutilized area close to the city center, namely the Seaport District, launching the so-called Boston Innovation District initiative aimed at creating "an ecosystem of innovation and entrepreneurship" (Rodriguez et al., 2015, p.6). The Public entity supported the project by implementing the infrastructures and creating a gathering spot to attract the community of innovators, including both consolidated and emerging companies. Over the past years, the Boston Innovation District has created over 4,000 new jobs and attracted 200 new companies (City of Boston, 2013), catalyzing investments and new partnerships that boosted the transformation of the area.

"Building on the successes and lessons learned from the Seaport Innovation District" (City of Boston, 2015a, para.1), the City explored the possibility to push the innovation dynamics spurring the development of either deprived or underdeveloped neighborhoods.

For this purpose, it launched the Neighborhood Innovation District initiative to "help create new jobs, support existing business owners and well-established businesses, and encourage new investments" (City of Boston, 2015a, para.6).

The initiative aims to create different Innovation Districts across the city, which should promote an inclusive growth, invest on people (through training and mentoring programs) and provide the necessary infrastructures (e.g. affordable gathering spaces for innovators, access to public transportation, affordable housing, high-speed internet) to create a hub of creativity and innovation for enhancing the local entrepreneurship (City of Boston, 2015a).

Nevertheless, Neighborhood Innovation Districts are different from Innovation Districts, since they specifically target the local residents "from both a human capital perspective as well as a product perspective" (Maher, 2015).

4. THE CASE STUDY: ROXBURY INNOVATION CENTER

The pilot project of the Neighborhood Innovation District has been launched in 2014, focused on the neighborhood of Roxbury, located just 3 miles South West from downtown Boston. Roxbury is one of the poorest and most densely populated neighborhoods of the city, where the percentage of population below the poverty level is about 33%, compared to the 21% of Boston (City-data, 2013), while the unemployment level is 17% versus 10% of the whole city (Boston Redevelopment Authority, 2014).

It is a multiethnic neighborhood, representing the nucleus of the Afro-American community in Boston (The Boston Indicators Project, 2010, e.g. see Figure 1). The median household income ranged from $18,000 to $44,000 between 2009 and 2013, compared to the $53,601 of the city average (Hartman and Zhu, 2013).

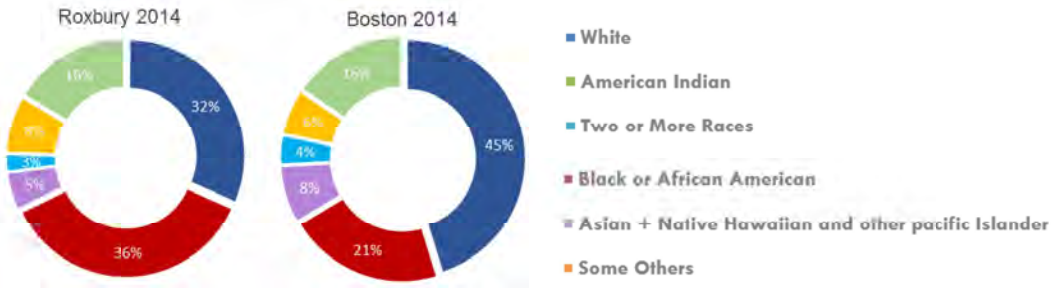

Figure 1: Population Breakdown by Race.
Source: Authors' elaboration. Data from U.S. Census Bureau, 2016.

The Dudley Square area (e.g. see Figure 2), belonging to the neighborhood of Roxbury, has been selected as the preferred location for the implementation of the pilot project "due to its economic vitality and the opportunity to use the infrastructure already established to create a hub of innovation and entrepreneurship" (City of Boston, 2015 a, para.8).

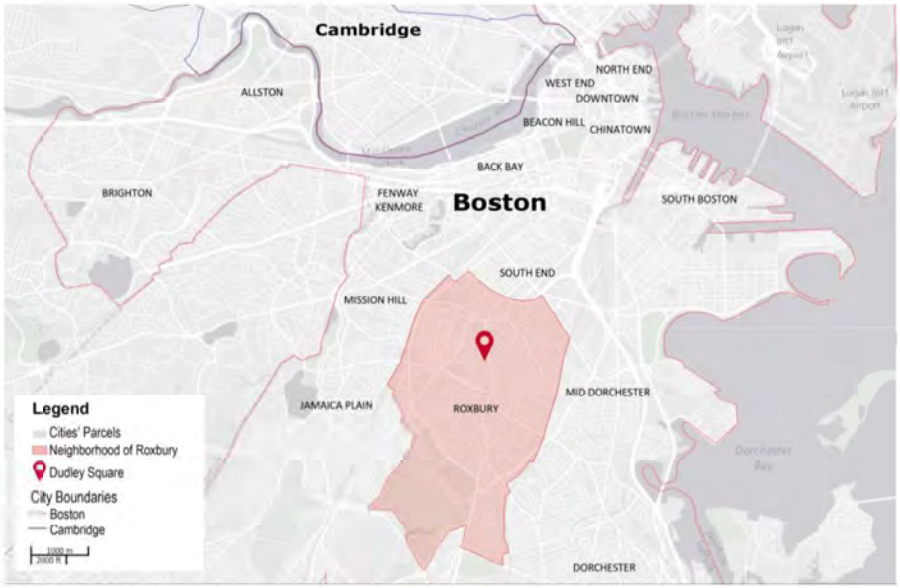

Figure 2: Dudley Square area. Source: Authors' elaboration.

Since the 2000s, Dudley Square has been the focus of several urban regeneration initiatives, aiming at providing new housing, commercial facilities and public services, including the enhancement of the transportation system. The following table shows the main urban planning initiatives that have been implemented in the last years to revitalize the area.

Table 2: Dudley Square Planning Initiatives
Source: Authors' elaboration, data from the Boston Redevelopment Authority (2017a).

Target area	Planning Initiative	Planning Type	Description	Start Year
Dudley Square, Roxbury	Dudley Square Transportation & Air Quality Study	Transportation Planning	The Dudley Square Transportation & Air Quality Study provides a set of recommendations upon transportation network, environment and quality of life in Dudley Square outlining development options supported by the community.	2001
	Dudley Square Vision	Economic Development	The planning initiative includes: real estate development; creation of a comprehensive Retail Strategy to enhance the commercial district; traffic improvements.	2007
	Dudley Square Municipal Office Facility	Economic Development	Redevelopment of an historic municipal facility located in the hearth of Dudley Square. It will be the new Boston Public Schools headquarters, and will include retail and office spaces.	2012
	Plan: Dudley Square	Community Planning	The planning initiative will revisit the recommendations presented in the 'Dudley Square Vision' to align them with current community goals.	2016

In relation to the urban planning initiatives activated in the area, a gradual change in the explanatory variables of regenerative effects is observed: increases in the number of inhabitants, housing values and the number of adults with college degree (e.g. see Figures 3, 4, 5).

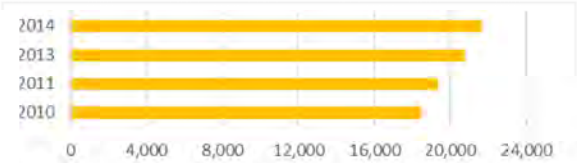

Figure 3: Population. Source: Authors' elaboration. Data from U.S. Census Bureau,

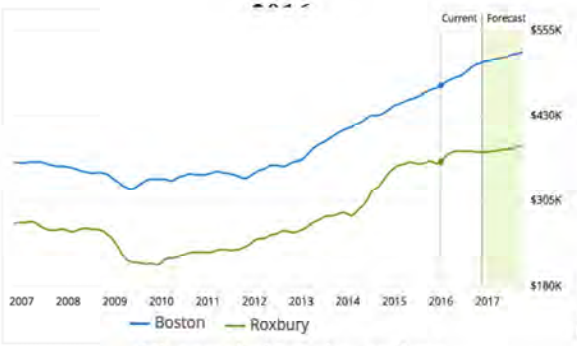

Figure 4: Housing values. Source: Zillow (2016).

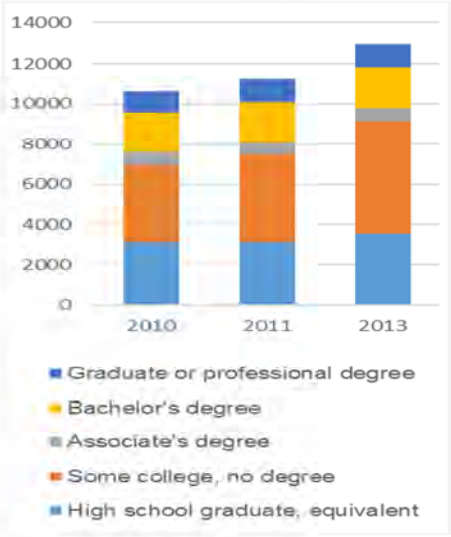

Figure 5: Level of education attainment. Source: Authors' elaboration. Data from U.S. Census Bureau, 2016.

The engine of the Neighborhood Innovation District initiative has been the creation of the Roxbury Innovation Center (RIC), a civic innovation space which opened in 2015, providing business services, working spaces, networking opportunities and educational programs to the local community. This physical facility, located in the hearth of Dudley Square, will represent "a catalyst for economic development" and will lift "the entire community", as stated by Martin J. Walsh, Mayor of Boston (City of Boston, 2015 b, para.2).

The case study of the Roxbury Innovation Center has been investigated through a mixed methodology, comprehending both qualitative and quantitative approaches, in order to examine the link between innovation spaces, urban regeneration processes and local development. The research has been grounded on both on-desk and on-field analysis. In particular, the socioeconomic data have been collected for the years 2009-2014 from different official sources, while several exploratory visits and different targeted interviews to key informants have been carried out between April and July 2016. The main tools used to investigate the case study were the interview form and the survey form. The interview form allowed to gather information about the issues of governance, management and organization, territorial network and mission of the Roxbury Innovation Center. A specific Survey Form has further been developed in order to investigate in depth the social, economic and physical aspects of the area surrounding the case study. It focused, in particular, on: infrastructures, services, public and innovation-related facilities. The main sources considered for the on-desk data are: the City-data official website and the U.S. Census Bureau, which data have been used to perform a preliminary analysis of the local context and the websites of the City of Boston and the Boston Redevelopment Authority, useful for extrapolating the urban planning initiatives and tools investigated in this study.

In order to create the Roxbury Innovation Center and to seek out an operator of the facility, in 2014, a Request for Interest, Ideas and Innovation (RFI) and, subsequently, a Request for Proposals (RFP) have been launched by the Public Authority (City of Boston, 2014).

The City of Boston selected The Venture Café Foundation (VCF) to operate the Innovation Center as a "mission-driven not-for-profit gathering and event space to connect the innovation community, expand the definition of innovation, and build a more inclusive innovation economy" (Roxbury Innovation Center, 2015, para.1).

The Venture Café, besides running the space, organizes free networking events, mentoring and training programs for both adults and young people, and educational initiatives together with Public, Private and no-profit organizations to provide community-driven activities (Roxbury Innovation Center, 2015). As a matter of fact, the VCF is also focused on avoiding people's displacement and maximizing the benefits of the local community. Private and public actors have been involved in the development of the space, demonstrating the willingness to create an ecosystem of innovation (and not simply a facility) that will enhance innovation and economic growth in this deprived area. The RIC will represent the anchor institution of this ecosystem. In particular, the Massachusetts Technology Collaborative (MassTech), a State-funded Agency supporting cluster development, has provided $150,000 grant funding to support the management and programming of the Innovation Center (City of Boston, 2014).

The 3,000 square feet of the RIC, offer free co-working areas, affordable private office spaces, flexible conferences and event rooms available for renting. In particular, the physical capital provided consists of: the Think Space (a large multi-purpose event room), the Learn Lab (medium-sized room for classes and workshops), the Team Room (a small room for meetings of 4/8 people). In addition to those renting spaces, RIC is equipped with a digital Fabrication Laboratory (FabLab) and an open co-working area, which are available to the local community. The Roxbury Innovation Center is a dynamic, interactive space, where innovators, investors, students, entrepreneurs and startups from different sectors (not just technology) can run into each other, share ideas and learn.

The Innovation Center is housed inside the Bruce C. Bolling Municipal Building, that hosts also the headquarters of the Boston Public Schools (BPS). The BPS and the Venture Cafè Foundation work together to support and connect people "so that every person with an idea can build it, grow it, [and] become a successful entrepreneur" (City of Boston, 2014, para.5).

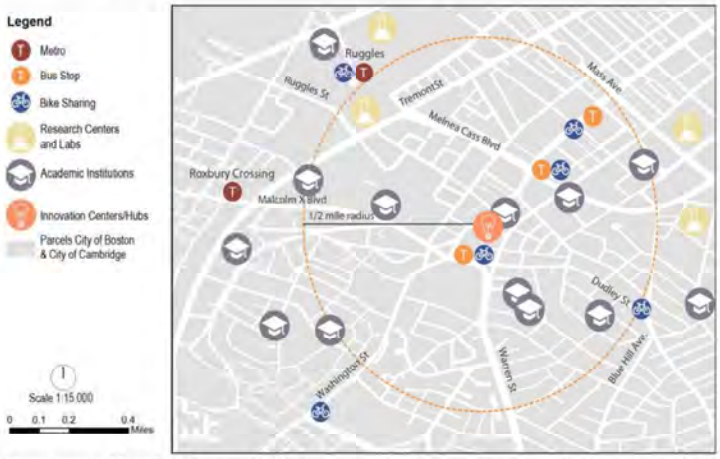

Figure 6: Development Projects and Transportation system of the area. Source: Authors' elaboration.

The building is near several innovation centers and education facilities (such as the Northeastern University) and close to two subway stations and the Dudley Square transportation hub (e.g. see Figure 6). This proximity helps to enhance the connection between entrepreneurs, students, graduates and academia, and encourages the access to the Innovation Center. The following maps illustrate respectively the transportation system with the main completed and planned development projects implemented by the Boston Redevelopment Authority (BRA) in the area (e.g. see Figure 6) and its built environment, including the research centers and labs, the academic institutions and the innovation centers (e.g. see Figure 7), detectable within half-mile radius (about 800m) of the Innovation Center.

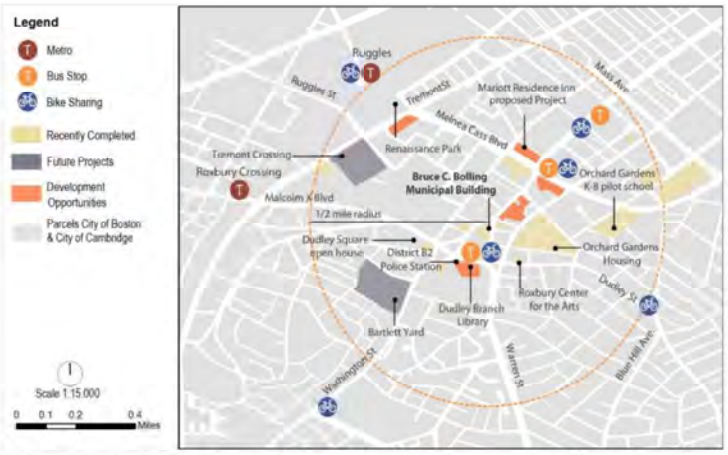

Figure 7: Map of the Built Environment. Source: Authors' elaboration.

The above-mentioned development projects are implemented through specific regulatory actions that are hierarchically organized as follows:

- Metropolitan Area Planning, which promotes Smart Growth and Regional Collaboration. The Metropolitan Area Planning Council (MAPC), the regional planning agency that is responsible for the Metropolitan plan of Boston, works towards "sound municipal management, sustainable land use, protection of natural resources, efficient and affordable transportation, a diverse housing stock, public safety, economic development, clean energy, healthy communities, an informed public, and equity and opportunity among people of all backgrounds" (MAPC, 2014);
- City Comprehensive Plan, that implements "ordinances, such as Zoning or subdivision" within the urban contexts (American Planning Association, 2017);
- Downtown districts, neighborhood districts, Harborpark District and Special Purpuse Overlay Zoning Districts, among others (Boston Redevelopment Authority, 2017b).

Within the Roxbury Neighborhood District, the Article 50 of the Boston Zoning Code has established a specific Economic Development Area (EDA) in Dudley Square, called "Dudley Square EDA", to encourage economic development and commercial activities, with a specific focus on the interests of the community (Boston Redevelopment Authority, 2013b). A particular attention is given to the promotion of innovation by requiring a certain amount of research and development uses in the area, intended the same way as the usual urban land use category of the zoning.

As a matter of fact, the amount of space dedicated to innovation acquires a sort of "service" implication, becoming a requirement of the zoning, like the spaces for commercial facilities, residential areas, education, etc.
According to the Article 50, the 30% of the gross floor area of any new development plan proposed within the area must be dedicated, or must support the following uses:

- "Research, development, and production of pharmaceutical and biomedical products;
- The design, development, fabricating, and testing of instruments for engineering, medical, dental, scientific, optical, or other similar professional use;
- Other scientific Research and Development Uses, including laboratories and facilities for theoretical, basic, and applied research, product development and testing, prototype fabrication, or production of experimental products" (Boston Redevelopment Authority, 2013b).

These spaces of innovation can be managed by either private, public, or governmental entities (Boston Redevelopment Authority, 2013b). The city of Boston is trying to push innovation through the above-mentioned tools and planning initiatives in Dudley Square, among which the Roxbury Innovation Center represents an interesting case. This facility, as a pilot project of the Neighborhood Innovation Initiative, aims to create a positive impact on the local community by providing the necessary skills, tools, workspaces, connections and programs to enhance the development of innovation and support new entrepreneurs to start and grow new companies. This, in turn, acts towards bridging the existing gap between the disadvantaged neighborhood of Roxbury and the rest of the city, by strengthening and expanding the innovation economy (Pagones, 2015). This is one of the most difficult challenges that the Boston administration is called to face, for bucking the trend of the traditional urban strategies, disrupting the patterns of inequality.

5. CONCLUSIONS

Quoted Yigitcanlar (2011b), in the emerging role of intensive-knowledge economy, cities produce various development strategies. Such strategising is an important development mechanism for cities to complete their transformation into knowledge cities. The case study of Roxbury Innovation Center is an example of how innovation policy supports urban innovation-led initiative to attract companies, research institution, startups, accelerators in creating a dense community of innovators, in other words to contribute in building an innovation ecosystem. Alongside the emerging rise of innovation districts across the U.S. and EU with a specific and recognizable connotation, the urban regeneration initiatives encompass also those planning activities that include innovation as a characterization of the area under zoning rules. More in particular, the case study is paradigmatic in the way in which innovation turns on urban regeneration planning initiative to transform a backward urban area into a vibrant neighborhood. The phenomenon of innovation concentration in particular places of Boston characyerized by the presence of mutual factors (anchor institutions, startupper centers, physical transformations towards the demand of innovation) has created a regeneration process in backward urban areas, like Roxbury, by triggering a process that can be called "expansion of innovation".

"There has been a huge plan to connect Roxbury to the rest of the city. The Administration hopes that the neighborhood will be the next Innovation District, making sure that people go back there with their families attracted by the new opportunities that will arise" (personal

communication, June 30, 2016). Differently from the other innovation spaces spread all over the city, the Roxbury Innovation Center is more locally focused and represents a great opportunity for the specific deprived neighborhood to change its path (personal communication, June 25, 2016). As the Director of the Roxbury Innovation Center Alessandra Brown stated "we are hoping to assist the growth of entrepreneurship and helping people really to sustain themselves and their small businesses . . . We are giving them the ability to choose to stay in the community" (2016). One of the main aim of the Innovation Center is to provide a gathering point for people, providing them several local community outreach activities, so that "people can come in and feel engaged in very productive programs" (personal communication, June 25, 2016). The Boston Planning Authority contributed to the implementation of this innovation space in Roxbury by providing new public services and including specific requirements within the zoning code of the area to support local innovation, that, in turn, can spur the Urban Regeneration processes across the city. This public effort, sustained by specific planning tools, can be considered a good practice of how to trigger these processes and augment innovation also in the most lagging regions of Europe, bridging the existing "innovation gap". As a matter of fact, Europe still presents deep differences: on the one hand, there are regions that are able to compete in the globalized market by focusing mainly on the high tech sectors (Borrás, 2011) and, on the other hand, regions with unsolved structural economic weaknesses. In these last ones, in fact, there are several barriers to innovation linked to the shortage of high-skilled workers, innovators, research and technological infrastructures, the poor cooperation between businesses, universities, and research centers, as well as the lack of support to startups and entrepreneurs. As in the case of Roxbury, one of the measures implemented by the Public Authorities to overcome these deficiencies and enhance innovation and competitiveness, is the creation of Innovation Spaces that can emerge as promoters of urban and economic growth, supporting the local communities to express their potential. At the city level, they are conceived to stimulate the knowledge convergence by endorsing the local organizations. It is interesting to observe how the urban policies supporting these initiatives, can be considered the input of these Knowledge concentration processes, which, in turn, trigger the Entrepreneurial Discovery Process (EDP), important for the implementation of the innovation ecosystem and the coordination of the efforts of different actors (public administrations, research institutions, entrepreneurs, communities). These measures can support the enhancement of the Smart Specialization Strategy (S3) for designing the changes of the Cohesion Policy 2014-2020, which aim is to reduce the disparities among the European regions (Barca, 2009). The S3 process needs to be translated into Regional Plans (RIS3), that can contribute to understand where innovation occurs and how to boost it in order to reach a smart, inclusive and sustainable growth. The major challenge for an effective RIS3 implementation is the territorialisation of the urban redevelopment strategies. Thus, the place-based approach allows to build virtuous regeneration projects, spurring the potential of the "territorial DNA" for identifying, recovering and increasing the values of the local specificities. For this purpose, the planning process has the potential to become a key-driver for enhancing innovation. The case study of the Roxbury Innovation Center emphasizes the importance of these factors that should be comprised within the public policies in order to foster the S3 in lagging regions, where the creation of an ecosystem of innovation can trigger the EDP, by overcoming the conventional barriers to growth.

6. AKNOWLEDGEMENTS

The MAPS-LED project has received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 645651.

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Generously supported by:

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ISBN 978-1-912337-05-7