



RIETI Discussion Paper Series 25-E-078

# Learning and Spillovers in Place-Based Policy Making

**KONDO, Keisuke**

RIETI

**OKUBO, Toshihiro**

RIETI



Research Institute of Economy, Trade & Industry, IAA

The Research Institute of Economy, Trade and Industry

<https://www.rieti.go.jp/en/>

# Learning and Spillovers in Place-Based Policy Making\*

Keisuke Kondo<sup>†</sup>

RIETI & Kobe University

Toshihiro Okubo<sup>‡</sup>

Keio University

## Abstract

This study focuses on “Location Rationalization Plans,” which is one of the place-based policies initiated by the Ministry of Land, Infrastructure, Transport and Tourism of Japan. In accordance with the “Amended Act on Special Measures concerning Urban Reconstruction,” which took effect in August 2014, each local government is diligently engaged in formulating “Location Normalization Plans” to propel compact community development in preparation for a future society grappling with a declining population. As of March 31, 2024, 568 local governments had successfully formulated and published their plans. However, the formulation of plans remains in progress in some local governments. Reasons for the inability of some municipalities to formulate their plans early, while others are still in the process of doing so, have not yet been fully clarified. This study aims to elucidate which local governments have successfully completed their urban planning in a timely manner. Creating an original municipal dataset, this study finds that learning and spillovers are factors that contribute to the policy-making process. Specifically, learning exerts a substantial influence on the decision-making process regarding initiation and the swift development of analogous ongoing policies.

*JEL classification:* D78, D83, R14, R38, R58

*Keywords:* Policy Making, Place-Based Policy, Learning, Spillover, Regional Development

The RIETI Discussion Paper Series aims at widely disseminating research results in the form of professional papers, with the goal of stimulating lively discussion. The views expressed in the papers are solely those of the author(s), and neither represent those of the organization(s) to which the author(s) belong(s) nor the Research Institute of Economy, Trade and Industry.

---

\* We would like to thank Nobuaki Hamaguchi, Arata Ito, Eichi Tomiura and the participants of the RIETI DP Seminar for their helpful comments and suggestions. Any remaining errors are our own. This study is an outcome of the research conducted under the project “Evidence-Based Policy Making for Regional Revitalization.” This study was supported by JSPS KAKENHI Grant Numbers 21K01497.

<sup>†</sup> Corresponding author. Research Institute of Economy, Trade and Industry (RIETI). 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo, 100-8901, Japan. (e-mail: kondo-keisuke@rieti.go.jp).

<sup>‡</sup> Faculty of Economics, Keio University. 2-15-45 Mita, Minato-ku, Tokyo, 108-8345, Japan. (e-mail: okubo@econ.keio.ac.jp).

# 1. Introduction

The formulation of policy constitutes a pivotal element for the enhancement of societal well-being. In order to promote economic growth and address the expanding disparities among individuals, regions, and enterprises, government intervention ought to be meticulously regulated and substantiated by empirical evidence. However, empirical research on effective policy making processes is lacking. This study aims to address this gap by examining the policy making process of place-based policies in Japan.

In the context of regional development, place-based policies have garnered the attention of urban and regional policymakers. (Moretti 2024).<sup>1</sup> In Japan, facing the population decline, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) proposed the “Compact plus Network” concept in 2014 (Ministry of Land, Infrastructure, Transport and Tourism 2015). In accordance with the “Amended Act on Special Measures concerning Urban Reconstruction,” which took effect in August 2014, each local government is diligently engaged in formulating “Location Rationalization Plans (LRPs)” to propel compact community development for a future society grappling with a declining population.<sup>2</sup>

The objective of this study is to elucidate which local governments have successfully completed their urban planning in a timely manner. As of December 31, 2021, 405 local governments had successfully formulated and published their plans, and as of March 31, 2024, 568 local governments had done so. However, the formulation of plans remains in progress in some local governments. The reasons underlying the observed differences in the timeliness of plan formulation among municipalities remain to be fully elucidated.

This study attempts to disentangle the policy making process in terms of learning and spillover. Our approach aligns with that of Thornton and Thompson (2001), who investigated learning spillovers in World War II shipbuilding. Their novel approach involves distinguishing between learning from experience and learning from others. Their findings indicate that learning from experience exerts a substantial influence on productivity growth, while learning from others has a small impact. The present study employs a similar conceptual framework to analyze the policy making process, thereby offering valuable insights for the design of effective policy interventions.

This study makes an important contribution to the existing literature by considering two types of spillovers. Firstly, geographical spillovers involve the interaction of policies among neighboring municipalities, with proximity being a pivotal factor in influencing municipal policy making. Secondly, organizational spillovers refer to the interaction of policies between local and national governments.

---

<sup>1</sup> See also Neumark and Simpson (2015), Duranton and Venables (2018), Ehrlich and Overman (2020), Neumark (2020), McCann (2023), Suedekum (2025) for details of place-based policy.

<sup>2</sup> See also OECD (2012), Ahfeldt and Pietrostefani (2017), Harari (2020) for details of compact city policy.

Personnel exchange between these two levels of government was initiated in 1999. Local governments often find themselves influenced by the acceptance of national government executives. This study specifically focuses on the number of MLIT executives accepted by local governments, offering a detailed analysis of this phenomenon.

Our contribution is also related to the literature of political science. The policy transfer and policy diffusion attract the interest of researchers (Dolowitz and Marsh 1996; Shaw and Robinson 1998; Blom-Hansen 1999; Evans and Davies 1999; Bloch and Zenginobuz 2007; Stone 1999; Shipan and Volden 2008; Marsh and Sharman 2009; Marsden and Stead 2011; Gilardi and Wasserfallen 2019; Wang and Yang 2025). For example, (Blom-Hansen 1999) discusses the patterns of central government control and local government discretion and considers the interaction of three types of actors: expenditure advocates, expenditure guardians, and topocrats. The case of local governments formulating the LRP is related to expenditure advocates, which generates a source of organizational spillovers between central and local governments. Focusing on the antispeaking policy in the US, Shipan and Volden (2008) discuss four mechanisms of policy diffusion: learning from earlier adopters, economic competition among proximate cities, imitation of larger cities, and coercion by state governments, which is highly related with learning from past experience in making analogous policies and geographical and organizational spillovers among local governments.

Our baseline estimation results show that both learning and spillover play a key role in the formulation of LRP by local governments. In particular, learning exerts a significant impact on the initiation and speed of their plans. Before the initiation of the LRP in 2014, the national government implemented the City Center Revitalization (CCR) policy. Our empirical analysis finds that the experience with CCR planning has a substantial impact on the formulation of analogous policies. Furthermore, the geographical spillovers also promote the formulation of LRP to neighboring municipalities, but increase the duration of the policy making process, suggesting that if neighboring municipalities have already formulated LRPs, it may take time to coordinate and review the plans in light of their contents. The impact of organization spillovers is also non-negligible; local governments that have deep personal exchange with the MLIT tend to formulate LRP and complete it faster. However, there is a possibility that regions engaging in deep personnel exchanges with the MLIT originally possess high-potential regions that necessitate the development of LRPs.

The remainder of this study is organized as follows: Section 2 provides a brief review of LRP. Section 3 describes the measurement of learning and spillovers and explains the empirical strategy. Section 4 summarizes the municipal dataset. Section 5 discusses the estimation results. Finally, the conclusions are presented in Section 6.



## 2. Location Rationalization Plan

This section provides a brief review of the LRP by the MLIT. Many regional cities in Japan have experienced suburban development in tandem with population growth, resulting in the expansion of urban areas. However, they are facing an imminent and substantial decline in population, accompanied by an aging population in the future. This population decline poses significant challenges for regional cities in terms of the difficulty of providing essential services such as medical care, commerce, and other lifestyle services that require a certain population density to function effectively. Sustainably managing the city may also become challenging. Consequently, future urban planning initiatives must prioritize the creation of liveable and sustainable environments that are conducive to the needs of both elderly individuals and families with children.

To impede the further expansion of suburban areas, the Japanese government implemented three legislative acts about urban renewal during the 1990s and 2000s. The first of these is the Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment, enacted in 2000. This act stipulates that developments must be assessed for their impact on the neighborhood environment, including factors such as noise and traffic congestion. The second act is the City Planning Act, which was first passed in 1968 and has undergone several revisions (in 2006) which allows local governments to prohibit the development of commercial facilities with a total floor space of 10,000 square meters or more in suburban areas; and the Act on Vitalization in City Center (in effect from 1998; revised in 2006 and 2014), which aims to reinvigorate the geographical core of cities where urban (public) facilities, including commercial facilities, are concentrated. However, it is pointed out that the impact of these policies has been limited.<sup>3</sup>

Developing the compact city policy in the 2000s, the MLIT started to emphasize the necessity of reviewing the urban structure, encompassing welfare and transportation, with the objective of promoting the “Compact plus Network” concept in 2014 (Ministry of Land, Infrastructure, Transport and Tourism 2015). This concept involves the concentration of medical and welfare facilities, commercial establishments, and residential areas in proximity, ensuring accessibility for daily needs by public transportation for all residents, including the elderly.<sup>4</sup>

The “Amended Act on Special Measures concerning Urban Reconstruction” was enacted in August 2014 to promote compact city planning through the collaborative efforts of the government, residents, and private

---

<sup>3</sup> There are some empirical studies that evaluate the impact of City Center Revitalization (Iwata and Kondo 2021).

<sup>4</sup> Location Rationalization Plan led by the MLIT stems from the original concept of Compact City Policy developed by the Toyama City government. (Wang and Yang 2025) discuss this type of policy learning, in which the central government learns from the experiences of local governments, and demonstrate policy learning spillover between central and local governments in China.

businesses. In accordance with the provisions of Article 81 of the aforementioned act, municipalities are now permitted to formulate “Location Rationalization Plans.”

Figure 1 shows the guided areas in the Location Rationalization Plan for four cities. There are two types of areas. Yellow colored area represents the guided urban facility zone, which is an area into which livelihood services are guided, along with the facilities to be guided into that area. Red colored area represents the guided dwelling zone, which is an area into which dwelling is guided to maintain a given population density. Finally, local governments publish the documents of LRP.<sup>5</sup>

Figure 2 shows the concept of LRP in Toyama city (Toyama City 2023). Place-based policy literature often discusses displacement effects as a negative side effect of place-based policy in terms of the whole economy (Ehrlich and Overman 2020). However, LRP is designed to intentionally induce relocation from outside the guided area to inside the guided area.

Figure 3 shows the maps of the LRP across municipalities. There are 568 municipalities that have released the Location Rationalization Plans. There are 1173 municipalities that have not released the Location Rationalization Plan yet as of March 31, 2024. Note that the creation of LRP is not mandatory, so some local governments have decided not to create plans if they deem them unnecessary, such as Funabashi city, Kanagawa Prefecture (Funabashi City 2025).

[Figures 1–3]

### 3. Empirical Approach

In this section, we explain two key factors of learning and spillovers in the policy making process. Then, we examine two testable hypotheses. The first analysis uncovers which local governments could complete the policy making of LRP. The second analysis evaluates the speed at which municipalities can complete the policy making process among those that have released the LRP.

#### 3.1. Measuring Learning

A first mechanism of policy making is the learning hypothesis, meaning that past experiences of policy making facilitate making similar policies. Policies are not independent over the years, but they are implemented while continuously developing. Therefore, the experience of making similar policies helps policymakers make new related policies. This learning hypothesis captures a vertical development within the same local governments.

The LRP is highly related to the Act on Vitalization in City Center, which took effect in 2006 and was

---

<sup>5</sup> MLIT provides the shapefiles online (Ministry of Land, Infrastructure, Transport and Tourism 2025).

revised in 2006 and 2014. In 2006, the central government promulgated an Amended Act on Vitalization in City Center, which introduced a “Selection and Concentration” objective. In accordance with this objective, and to qualify for subsidies from the central government, each local government is obligated to formulate a Basic Plan for City Center Revitalization.

This plan must include measures to invigorate the city center, such as fostering a vibrant atmosphere, promoting residential development, enhancing economic vitality, and upgrading public transportation. Subsequent to its formulation, the plan must undergo certification. As of June 29, 2021, the Cabinet Office had certified 257 Basic Plans for 151 of Japan's 1,741 municipalities.

A learning mechanism is measured by the dummy variable for the certification of the Basic Plan for City Center Revitalization, which takes the value of 1 if the municipality has formulated the Basic Plan and 0 otherwise. Furthermore, this dummy variable is decomposed into two: before and after the initiation of the LRP in 2014.

Figure 4 shows the maps of municipalities that had Basic Plans of the City Center Revitalization before the LRP took effect in August 2014. There are 114 municipalities that have both the Basic Plan of City Center Revitalization and LRPs. There are 29 municipalities that have a Basic Plan of City Center Revitalization but do not have LRPs. There are 456 municipalities that have LRPs but do not have a Basic Plan of City Center Revitalization. There are 1144 municipalities that have not tackled the Basic Plan of City Center Revitalization and LRP.

[Figure 4]

### 3.2. Measuring Spillovers

A second mechanism of policy making is the spillover hypothesis, which is further decomposed into two types of spillovers: geographical and organizational spillovers. First, geographical spillovers capture a horizontal policy development between local governments. Since proximity plays a key role in affecting municipal policy making, this study measures the number of neighboring municipalities that have released the LRP based on the bilateral distance between municipalities. The bilateral distance is calculated as the great circle distance using the latitude and longitude of the centroid of each municipal polygon. The `spgen` command in Stata was used to construct this variable (Kondo 2017).

Figure 5 shows the number of neighboring municipalities within 15 km that have released LRP by December 2019. It is clear that local governments that have formulated and published LRPs are geographically concentrated.

Second, organizational spillovers capture a horizontal policy development between central and local governments. In Japan, the “Local Government Decentralization Promotion Plan” was approved by the

Japanese Cabinet on May 29, 1998, and personnel exchange started between both governments. The MIC and Cabinet Secretariat have announced the achievement status of personnel exchanges between the central and local governments every year since 1999 for the transparency purposes as “Status of implementation of Personnel Exchanges between National and Local Governments” (Ministry of Internal Affairs and Communications 2025; Cabinet Secretariat 2025a). An organizational spillover mechanism is measured by the cumulative number of MLIT executives accepted by local governments until the “Amended Act on Special Measures concerning Urban Reconstruction” took effect in August 2014. Furthermore, this study also compares the cumulative number of other ministry executives accepted by local governments. This study covers the period from 2006 (after the Compact City Policy) to 2013 (before the LRP).<sup>6</sup>

Figure 6 shows a map of the number of MLIT executives accepted in local governments between 2006 and 2013, before the “Amended Act on Special Measures concerning Urban Reconstruction,” which took effect in August 2014. This variable counts the annual number of personnel exchanges, so even if the same person has a term of several years, they are counted for each year. The higher the number of cases, the more likely it is that executive positions in local government are reserved for personnel seconded from central government ministries.

Figure 7 shows the relationship between the number of ministry executives accepted by local governments and the administrative size in each municipality. As a general trend, municipalities with a large number of personnel seconded from central government ministries tend to be larger in size. When broken down by ministry, this trend is particularly pronounced for the MLIT and the MIC, whereas no positive correlation was observed between the size of municipalities and the number of seconded personnel from the METI.

[Figures 5-7]

### 3.3. Evaluating Decision for Place-Based Policy Making

The first analysis evaluates the initiation of policy making to evaluate which local governments decided to make the LRP. The policy initiation probability model is estimated as follows:

$$\begin{aligned} \Pr(\text{Policy}_{ip} = 1 | \mathbf{X}_i, \boldsymbol{\theta}) \\ = \Phi(\alpha \text{Learning}_i + \beta \text{GeoSpillover}_i + \gamma \text{OrgSpillover}_i + \eta \log(\text{Size}_i) + \lambda_v + \phi_p), \end{aligned} \quad (1)$$

where  $\text{Policy}_{ip}$  is the dummy variable that takes the value 1 if municipality  $i$  released the LRP and 0

---

<sup>6</sup> (Yunoue 2005) highlights the connection of fiscal transfers from the central government to local governments within a bureaucratic structure, particularly when the prefectural governor was a retired ministry official responsible for fiscal transfers. (Nakazawa 2024) focuses on the impact of personal exchanges from central to local governments on improving fiscal discipline.

otherwise,  $\text{Learning}_i$  is the dummy variable of the experience of the city center revitalization,  $\text{GeoSpillover}_i$  is the geographical spillover variable,  $\text{OrgSpillover}_i$  is the organizational spillover variable,  $\log(\text{Size}_i)$  is the number of administrative workers in municipality  $i$  in 2014,  $\lambda_v$  is the dummy variable that takes the value of 1 if the municipality  $i$  is classified as town and village, and  $\phi_p$  is the prefecture fixed effect. In addition,  $\mathbf{X}_i$  is the set of explanatory variables, and  $\boldsymbol{\theta}$  is the set of parameters.

The parameters of our interest are  $\alpha$ ,  $\beta$ , and  $\gamma$  that capture the impact of learning and spillovers on the initiation of the LRP. The baseline estimation considers the specification without the number of administrative workers in the municipality. For a robustness check, this study controls for differences in administrative workers.

### 3.4. Evaluating the Process of Place-Based Policy Making

The second analysis evaluates how fast municipalities can complete policy making process among municipalities that have released the LRP. The following linear regression model is estimated:

$$\text{Duration}_{ip} = \alpha \text{Learning}_i + \beta \text{GeoSpillover}_i + \gamma \text{OrgSpillover}_i + \eta \log(\text{Size}_i) + \lambda_v + \phi_p + u_{ip}, \quad (2)$$

where  $\text{Duration}_{ip}$  is the number of months passed since August 2014, and other variables are the same as in Equation (1). Note that the sample in this analysis is limited to local governments that have released the LRP.

The parameters of interest are  $\alpha$ ,  $\beta$ , and  $\gamma$  that capture the impact of learning and spillover on the duration of policy making process. If the parameter estimates take negative values, learning and spillover help policymakers make the LRP faster. As before, the baseline estimation considers the specification without the number of administrative workers in the municipality. For a robustness check, this study controls for differences in administrative workers.

## 4. Data

This study constructs a unique municipal dataset of Japan. The unit of observation is the municipality as of March 31, 2024, and thus the number of observations is 1741. The dataset is based on the cross-section as a snapshot on March 31, 2024.

Table 1 presents the descriptive statistics for the variables used in the first analysis that evaluates the initiation of policy making to evaluate which local governments decided to make the LRP. The municipalities with an ongoing plan for LRP and 23 wards of Tokyo are excluded from the sample, and thus the sample size is reduced to 1,540.

Table 2 presents the descriptive statistics for the variables used in the second analysis, which evaluates the speed at which municipalities complete the policy making process among those that have released the LRP. The sample includes only the municipalities that had released LRP, and thus, the sample size is reduced to 568.

The information on the learning variable is taken from the web page of the Cabinet Office (2025), where the municipality list is publicly available. The information on organization spillover is taken from the web page of the Ministry of Internal Affairs and Communications (2025) and Cabinet Secretariat (2025b). This study counts the number of ministry executives accepted by local governments in the period 2006–2013.

Figures 8 and 9 show the geographical distribution and histogram of the dependent variable in the second analysis,  $\text{Duration}_{ivp}$ , which is the number of months passed until local governments released the LRP since August 2014. There is considerable variation in the time taken to prepare and publish LRPs. Within five years of the enforcement of the “Amended Act on Special Measures concerning Urban Reconstruction” in August 2014, 268 of 568 local governments were able to create and publish their plans.

[Tables 1–2; Figures 8–9]

## 5. Estimation Results

### 5.1. Baseline Estimation Results

Table 3 presents the Probit estimation results for the initiation of policy making, and the average marginal effects are presented. Columns (1)–(5) of Table 3 deal with different models of organizational spillovers. First, the experience of planning City Center Revitalization before 2014 has a significant positive impact on the initiation of the LRP. The average marginal effect ranges from 0.18 to 0.21, and its magnitude is also substantial. Comparing the period around 2014, local governments that began receiving certification of Basic Plans of City Center Revitalization after 2014 find it slightly easier to formulate and publish LRPs. Note that the experience of CCR planning after 2014 has a larger impact than that before 2014, suggesting that the recent experience in planning analogous policies has led to the formulation of LRPs.

Regarding the spillover phenomenon, geographical spillovers are found to be statistically significant, suggesting that a tendency toward spatial similarity can be observed in the creation and publication of location optimization plans. Organizational spillovers from MLIT executives are found to exert a statistically significant positive influence on the initiation of the LRP. The findings of this study indicate that learning and spillovers are pivotal in the initiation of analogous subsequent policy.

Table 4 presents OLS estimation results for the duration of the policy making process. The coefficient of the dummy of CCR planning experience before 2014 ranges from -10.4 to -12.6, indicating that

municipalities with CCR planning experience were able to release the LRP more than 10 months earlier than municipalities without CCR planning experience. Note that the coefficient of the dummy of CCR planning experience after 2014 is not statistically significant, suggesting that long-term experience is becoming more important.

Concerning spillover effects, both geographical and organizational spillovers were found to be statistically significant. The geographical spillovers show a statistically significant, but positive impact on the duration of the policy-making process, suggesting that if neighboring municipalities have already formulated LRPs, it may take time to coordinate and review the plans in light of their contents. Regarding the organizational spillovers, it is noteworthy that if local governments had accepted a greater number of MLIT executives before 2014, the spillover effect would have been more significant in terms of accelerating the formulation of the LRP. The coefficient in Column (5) of Table 4 is -1.4, indicating that a municipality that has consistently accepted one MLIT executive annually for a period of five years can potentially reduce a significant amount of policy making processes, amounting to 7 months.

[Tables 3–4]

## 5.2. Robustness Check

Tables 5 and 6 present the robustness check results of Tables 3 and 4, respectively. The only difference is that the administrative size is controlled for. Additional control largely reduces the magnitude of learning and spillovers, suggesting that local governments with many administrative workers are likely to have strong policy-making capabilities.

In Table 5, the learning effects remain significantly positive at the 5% level, but the magnitude is approximately 30% to 50% smaller than that in the baseline estimation. The average marginal effects of CCR planning experience before and after 2014 are approximately 0.10 and 0.16 in Column (5) of Table 5. The geographical spillovers remain significantly positive at the 5 % level, and their magnitude is approximately 0.019. Organizational spillovers from MLIT become statistically insignificant because large municipalities are likely to accept MLIT executives. This high correlation makes it difficult to identify a causal relationship on organization spillovers in the robustness check.

In Table 6, the learning effects remain significantly positive at the 5 % level, but the magnitude is approximately 40% smaller than that in the baseline estimation. The coefficient of the dummy of CCR planning experience before 2014 ranges from -6.0 in Column (5) of Table 6, indicating that municipalities with CCR planning experience were able to release the LRP more than 6 months earlier than municipalities without CCR planning experience. The geographical spillovers remain significantly positive at the 5% level and yield similar estimates. Organizational spillovers from MLIT become statistically insignificant.

Compared to Table 4, the organizational spillovers from MIC become significantly positive in Columns (3) and (5) of Table 6. As before, large municipalities are likely to accept MLIT and MIC executives, and this high correlation makes it difficult to identify a causal relationship.

[Tables 5–6]

## 6. Conclusion

This study examined learning and spillover effects in the policy making process, with a particular focus on the urban compact policy in Japan. It is important to note that policies are not independent entities; rather, they are implemented in conjunction with ongoing development. Consequently, the experience of formulating analogous policies facilitates the development of novel related policies by policymakers. Mutual interactions also influence the policy making processes of neighboring municipalities. Given the central government's role in formulating policy, the relationship between local governments and the ministry responsible for implementation serves as a conduit for policy spillovers.

Focusing on the policy making process of the “Location Rationalization Plan” in Japan, this study found that learning and spillovers are key mediators in the policy making process of local governments. In particular, the learning process exerts a substantial influence on policy initiation and the speed of planning. Geographical spillovers have been demonstrated to play an important role in the formulation of similar policies across neighboring municipalities. The phenomenon of organizational spillovers has been demonstrated to be a positive indicator of the impact of the policy making process in the baseline, although caution remains regarding interpretation as a causal effect.

This study provides important implications for local governments. It is important to gain experience in policy planning. In promoting EBPM, local governments lacking experience in formulating related policies require appropriate assistance. Local governments need to accumulate long-term experience in policy making to develop policies that are appropriate to local circumstances. In recent years, there has been an increase in cases where policy making tasks are outsourced to external contractors such as consultants. While this may be due to structural issues such as a shortage of personnel in local governments, there is concern that sufficient experience may not be accumulated within local governments themselves. Furthermore, personal exchanges between local governments and the ministry in charge might be effective at an early stage of drafting the proposals as a result of the knowledge spillover, while considering the elimination of the adverse effects that arise from the long-term fixation of exchange posts and ensuring transparency in personnel exchanges.

The empirical results reported herein should be considered in the context of certain methodological limitations. Given that our interpretation is founded on inferences derived from statistical correlations, there



is still a possibility that bias remains in our estimates. Further research is necessary to examine the magnitude of these factors based on the causal inference.

## References

- Ahlfeldt, G. M., & Pietrostefani, E. (2017). The compact city in empirical research: A quantitative literature review. *SERC Discussion Papers, (SERCDP0215)*.
- Bloch, F., & Zenginobuz, U. (2007). The effect of spillovers on the provision of local public goods. *Review of Economic Design, 11*(3), 199–216. <https://doi.org/10.1007/s10058-006-0016-x>
- Blom-Hansen, J. (1999). Policy-Making in Central-Local Government Relations: Balancing Local Autonomy, Macroeconomic Control, and Sectoral Policy Goals. *Journal of Public Policy, 19*(3), 237–264. <https://doi.org/10.1017/S0143814X99000690>
- Cabinet Office. (2025). City Center Revitalization. *Regional Revitalization*. <https://www.chisou.go.jp/tiiki/chukatu/index.html> (accessed on Jan 27, 2025)
- Cabinet Secretariat. (2025a). Status of implementation of Personnel Exchanges between National and Local Governments. [https://www.cas.go.jp/jp/gaiyou/jimu/jinjikyoku/jinji\\_fl.html](https://www.cas.go.jp/jp/gaiyou/jimu/jinjikyoku/jinji_fl.html) (accessed on Jan 27, 2025)
- Cabinet Secretariat. (2025b). Personnel Exchange. *Cabinet Secretariat*. [https://www.cas.go.jp/jp/gaiyou/jimu/jinjikyoku/jinji\\_f.html](https://www.cas.go.jp/jp/gaiyou/jimu/jinjikyoku/jinji_f.html) (accessed on Jan 27, 2025)
- Dolowitz, D., & Marsh, D. (1996). Who learns what from whom: a review of the policy transfer literature. *Political Studies, 44*(2), 343–357. <https://doi.org/10.1111/j.1467-9248.1996.tb00334.x>
- Duranton, G., & Venables, A. J. (2018). Place-Based Policies for Development. *National Bureau of Economic Research Working Paper Series, No. 24562*. <https://doi.org/10.3386/w24562>
- Ehrlich, M. v., & Overman, H. G. (2020). Place-Based Policies and Spatial Disparities across European Cities. *Journal of Economic Perspectives, 34*(3), 128–49. <https://doi.org/10.1257/jep.34.3.128>
- Evans, M., & Davies, J. (1999). Understanding policy transfer: a multi-level, multi-disciplinary perspective. *Public Administration, 77*(2), 361–385. <https://doi.org/10.1111/1467-9299.00158>
- Funabashi City. (2025). Funabashi Location Rationalization Plan (Postponement of Formulation). <https://www.city.funabashi.lg.jp/machi/keikan/001/p065799.html> (accessed July 11, 2025)
- Gilardi, F., & Wasserfallen, F. (2019). The politics of policy diffusion. *European Journal of Political Research, 58*(4), 1245–1256. <https://doi.org/10.1111/1475-6765.12326>
- Harari, M. (2020). Cities in Bad Shape: Urban Geometry in India. *American Economic Review, 110*(8), 2377–2421. <https://doi.org/10.1257/aer.20171673>
- Iwata, S., & Kondo, K. (2021). The spillover effects of compact city policy on incumbent retailers: Evidence

- from Toyama city. *RIETI Discussion Paper*, 21-E-085.
- Kondo, K. (2017). SPGEN: Stata module to generate spatially lagged variables. *Boston College Statistical Software Components*, s458105. <https://ideas.repec.org/c/boc/bocode/s458105.html>
- Marsden, G., & Stead, D. (2011). Policy transfer and learning in the field of transport: A review of concepts and evidence. *Transferability of urban transport policy*, 18(3), 492–500.  
<https://doi.org/10.1016/j.tranpol.2010.10.007>
- Marsh, D., & Sharman, J. C. (2009). Policy diffusion and policy transfer. *Policy Studies*, 30(3), 269–288.  
<https://doi.org/10.1080/01442870902863851>
- McCann, P. (2023). Place-Based Policies for the Future: How Have Place-Based Policies Evolved to Date and What Are They For Now? *OECD Regional Development Papers*, 78.  
<https://doi.org/10.1787/9b0b0107-en>
- Ministry of Internal Affairs and Communications. (2025). Status of implementation of Personnel Exchanges between National and Local Governments. [https://www.soumu.go.jp/menu\\_news/s-news/index.html](https://www.soumu.go.jp/menu_news/s-news/index.html) (accessed on Jan 27, 2025)
- Ministry of Land, Infrastructure, Transport and Tourism. (2015). *White Paper on Land, Infrastructure, Transport and Tourism in Japan*.
- Ministry of Land, Infrastructure, Transport and Tourism. (2025). National Land Information. <https://nlftp.mlit.go.jp/ksj/> (accessed on Jan 27, 2025)
- Moretti, E. (2024). Place-based policies and geographical inequalities. *Oxford Open Economics*, 3(Supplement\_1), i625–i633. <https://doi.org/10.1093/oec/odad049>
- Nakazawa, N. (2024). Do mentoring and oversight matter? The effects of allocating central administrators to local government units: evidence from Japan. *The Journal of Law, Economics, and Organization*, 40(2), 338–361. <https://doi.org/10.1093/jleo/ewac018>
- Neumark, D., & Simpson, H. (2015). Chapter 18 - Place-Based Policies. In G. Duranton, J. V. Henderson, & W. C. Strange (Eds.), *Handbook of Regional and Urban Economics* (Vol. 5, pp. 1197–1287). Elsevier.  
<https://doi.org/10.1016/B978-0-444-59531-7.00018-1>
- OECD. (2012). Compact City Policies: A Comparative Assessment. *OECD Green Growth Studies*.  
<https://doi.org/10.1787/9789264167865-en>
- Shaw, K., & Robinson, F. (1998). Learning from experience? Reflections on two decades of British urban policy. *Town Planning Review*, 69(1), 49. <https://doi.org/10.3828/tpr.69.1.a2n80n0827g10612>
- Shipan, C. R., & Volden, C. (2008). The Mechanisms of Policy Diffusion. *American Journal of Political Science*, 52(4), 840–857. <https://doi.org/10.1111/j.1540-5907.2008.00346.x>
- Stone, D. (1999). Learning lessons and transferring policy across time, space and disciplines. *Politics*, 19(1),

- 51–59. <https://doi.org/10.1111/1467-9256.00086>
- Suedekum, J. (2025). Place-based policies – How to do them and why. *Global Challenges & Regional Science*, 1, 100003. <https://doi.org/10.1016/j.gcrs.2024.100003>
- Thornton, R. A., & Thompson, P. (2001). Learning from Experience and Learning from Others: An Exploration of Learning and Spillovers in Wartime Shipbuilding. *American Economic Review*, 91(5), 1350–1368. <https://doi.org/10.1257/aer.91.5.1350>
- Toyama City. (2023). Toyama Urban Facility Location Plan. *Toyama City*.  
[https://www.city.toyama.lg.jp/\\_res/projects/default\\_project/\\_page\\_/001/006/115/2023toyamasiritteki.pdf](https://www.city.toyama.lg.jp/_res/projects/default_project/_page_/001/006/115/2023toyamasiritteki.pdf) (accessed Jan 27, 2025)
- Wang, S., & Yang, D. Y. (2025). Policy Experimentation in China: The Political Economy of Policy Learning. *Journal of Political Economy*, 133(7), 2180–2228. <https://doi.org/10.1086/734873>
- Yunoue, H. (2005). Influences of Bureaucrats on Special Local Allocation Tax Grants. *Public Choice Review*, 45, 24–44. [https://doi.org/10.11228/pcs1981.2005.45\\_24](https://doi.org/10.11228/pcs1981.2005.45_24)

**Table 1.** Descriptive Statistics for Decision Model of Place-Based Policy Making

Variable	Obs.	Mean	S.D.	Min	Median	Max
Dummy of Municipalities that Have Released LRP	1,540	0.369	0.483	0.000	0.000	1.000
Dummy of CCR Planning Experience before 2014	1,540	0.053	0.225	0.000	0.000	1.000
Dummy of CCR Planning Experience after 2014	1,540	0.025	0.157	0.000	0.000	1.000
Number of Neighboring Municipalities with LRP Experience	1,540	0.831	1.582	0.000	0.000	12.000
Cumulative Number of Executives of Total Ministries, 2006–2013	1,540	0.644	2.447	0.000	0.000	31.000
Cumulative Number of MLIT Executives, 2006–2013	1,540	0.284	1.308	0.000	0.000	18.000
Cumulative Number of METI Executives, 2006–2013	1,540	0.045	0.383	0.000	0.000	6.000
Cumulative Number of MIC Executives, 2006–2013	1,540	0.216	1.169	0.000	0.000	18.000
Cumulative Number of Executives of Other Ministries, 2006–2013	1,540	0.099	0.617	0.000	0.000	9.000
Dummy of Town and Village Municipality	1,540	0.560	0.497	0.000	1.000	1.000
Log(Number of Administrative Workers in Municipality)	1,540	4.679	1.000	2.197	4.570	8.872

Note: CCR represents the City Center Revitalization. LRP represents the Location Rationalization Plan. MLIT represents the Ministry of Land, Infrastructure, Transport and Tourism. METI represents the Ministry of Economy, Trade and Industry. MIC represents the Ministry of Internal Affairs and Communications. The municipalities with ongoing plan for LRP and 23 wards of Tokyo are excluded from the sample.

**Table 2.** Descriptive Statistics for Process Model of Place-Based Policy Making

Variable	Obs.	Mean	S.D.	Min	Median	Max
Dummy of Municipalities that Have Released LRP	568	67.662	26.333	18.000	67.000	118.000
Dummy of CCR Planning Experience before 2014	568	0.127	0.333	0.000	0.000	1.000
Dummy of CCR Planning Experience after 2014	568	0.055	0.227	0.000	0.000	1.000
Number of Neighboring Municipalities with LRP Experience	568	0.974	1.637	0.000	0.000	12.000
Cumulative Number of Executives of Total Ministries, 2006–2013	568	1.415	3.590	0.000	0.000	31.000
Cumulative Number of MLIT Executives, 2006–2013	568	0.648	1.876	0.000	0.000	13.000
Cumulative Number of METI Executives, 2006–2013	568	0.100	0.572	0.000	0.000	6.000
Cumulative Number of MIC Executives, 2006–2013	568	0.474	1.787	0.000	0.000	18.000
Cumulative Number of Executives of Other Ministries, 2006–2013	568	0.194	0.899	0.000	0.000	9.000
Dummy of Town and Village Municipality	568	0.197	0.398	0.000	0.000	1.000
Log(Number of Administrative Workers in Municipality)	568	5.425	0.868	3.497	5.311	8.525

Note: CCR represents the City Center Revitalization. LRP represents the Location Rationalization Plan. MLIT represents the Ministry of Land, Infrastructure, Transport and Tourism. METI represents the Ministry of Economy, Trade and Industry. MIC represents the Ministry of Internal Affairs and Communications. The sample includes only the municipalities that had released LRP.

**Table 3.** Probit Estimation Results for Evaluating Decision for Place-Based Policy Making

Explanatory Variables	Dependent Variable: Dummy of Municipalities that Have Released LRP				
	(1)	(2)	(3)	(4)	(5)
Dummy of CCR Planning Experience before 2014	0.1871*** (0.0480)	0.2071*** (0.0468)	0.2008*** (0.0475)	0.2030*** (0.0468)	0.1824*** (0.0478)
Dummy of CCR Planning Experience after 2014	0.2206*** (0.0634)	0.2211*** (0.0638)	0.2150*** (0.0636)	0.2225*** (0.0635)	0.2174*** (0.0635)
Number of Neighboring Municipalities with LRP Experience	0.0244*** (0.0078)	0.0245*** (0.0079)	0.0243*** (0.0079)	0.0244*** (0.0078)	0.0248*** (0.0078)
Cumulative Number of MLIT Executives for Municipality	0.0231** (0.0110)				0.0204** (0.0111)
Cumulative Number of METI Executives for Municipality		0.0406 (0.0378)			0.0266 (0.0342)
Cumulative Number of MIC Executives for Municipality			0.0135** (0.0079)		0.0027 (0.0083)
Cumulative Number of Other Ministry Executives for Municipality				0.0285 (0.0174)	0.0250 (0.0182)
Dummy of Town and Village Municipality	-0.3593*** (0.0149)	-0.3676*** (0.0144)	-0.3658*** (0.0145)	-0.3672*** (0.0144)	-0.3543*** (0.0152)
Prefecture Dummy	Yes	Yes	Yes	Yes	Yes
Number of Observations	1,540	1,540	1,540	1,540	1,540
Pseudo $R^2$	0.3777	0.3743	0.3742	0.3746	0.3795

Notes: Heteroskedasticity-consistent standard errors are in parentheses. \* denotes statistical significance at the 10 % level, \*\* at the 5 % level, and \*\*\* at the 1 % level. Marginal Effects are shown in Probit estimation results. The municipalities with ongoing plan for LRP and 23 wards of Tokyo are excluded from the sample.

**Table 4.** OLS Estimation Results for Evaluating the Process of Place-Based Policy Making

Explanatory Variables	Dependent Variable: Number of Months Passed Until Local Governments Released the LRP Since August 2014				
	(1)	(2)	(3)	(4)	(5)
Dummy of CCR Planning Experience before 2014	-10.3291*** (3.0279)	-12.6323*** (2.8073)	-11.8436*** (2.9682)	-12.4340*** (2.9066)	-10.3684*** (3.0205)
Dummy of CCR Planning Experience after 2014	1.5043 (4.1220)	0.5280 (4.1533)	0.9272 (4.1417)	0.7447 (4.1405)	1.3884 (4.1583)
Number of Neighboring Municipalities with LRP Experience	6.5758*** (0.6406)	6.6608*** (0.6371)	6.6056*** (0.6385)	6.6513*** (0.6371)	6.5772*** (0.6419)
Cumulative Number of MLJT Executives for Municipality	-1.3284*** (0.4570)				-1.4364*** (0.5234)
Cumulative Number of METI Executives for Municipality		1.6446 (2.1573)			2.2541 (2.0446)
Cumulative Number of MIC Executives for Municipality			-0.5923 (0.4543)		-0.1536 (0.5371)
Cumulative Number of Other Ministry Executives for Municipality				-0.1805 (1.2433)	0.6080 (1.2989)
Dummy of Town and Village Municipality	6.8565*** (2.5902)	7.3095*** (2.6013)	7.0409*** (2.6026)	7.1889*** (2.5947)	6.9663*** (2.6068)
Prefecture Dummy	Yes	Yes	Yes	Yes	Yes
Number of Observations	568	568	568	568	568
Adjusted $R^2$	0.2747	0.268	0.2683	0.2668	0.2732

Notes: Heteroskedasticity-consistent standard errors are in parentheses. \* denotes statistical significance at the 10 % level, \*\* at the 5 % level, and \*\*\* at the 1 % level. The sample includes only the municipalities that had released LRP.

**Table 5.** Robustness Check for Decision Model of Place-Based Policy Making

Explanatory Variables	Dependent Variable: Dummy of Municipalities that Have Released LRP				
	(1)	(2)	(3)	(4)	(5)
Dummy of CCR Planning Experience before 2014	0.1040** (0.0486)	0.1041** (0.0482)	0.1053** (0.0481)	0.1042** (0.0480)	0.1049** (0.0484)
Dummy of CCR Planning Experience after 2014	0.1566** (0.0630)	0.1554** (0.0634)	0.1600** (0.0621)	0.1569** (0.0630)	0.1606** (0.0624)
Number of Neighboring Municipalities with LRP Experience	0.0189** (0.0077)	0.0191** (0.0077)	0.0187** (0.0077)	0.0189** (0.0077)	0.0189** (0.0076)
Cumulative Number of MLIT Executives for Municipality	-0.0000 (0.0117)				0.0028 (0.0110)
Cumulative Number of METI Executives for Municipality		0.0157 (0.0302)			0.0153 (0.0309)
Cumulative Number of MIC Executives for Municipality			-0.0121 (0.0092)		-0.0134 (0.0088)
Cumulative Number of Other Ministry Executives for Municipality				0.0028 (0.0191)	0.0036 (0.0186)
Dummy of Town and Village Municipality	-0.1723*** (0.0351)	-0.1727*** (0.0349)	-0.1675*** (0.0357)	-0.1727*** (0.0342)	-0.1697*** (0.0355)
Log(Number of Administrative Workers in Municipality)	0.1440*** (0.0247)	0.1428*** (0.0239)	0.1505*** (0.0251)	0.1434*** (0.0229)	0.1469*** (0.0249)
Prefecture Dummy	Yes	Yes	Yes	Yes	Yes
Number of Observations	1,540	1,540	1,540	1,540	1,540
Pseudo $R^2$	0.4084	0.4086	0.4092	0.4084	0.4095

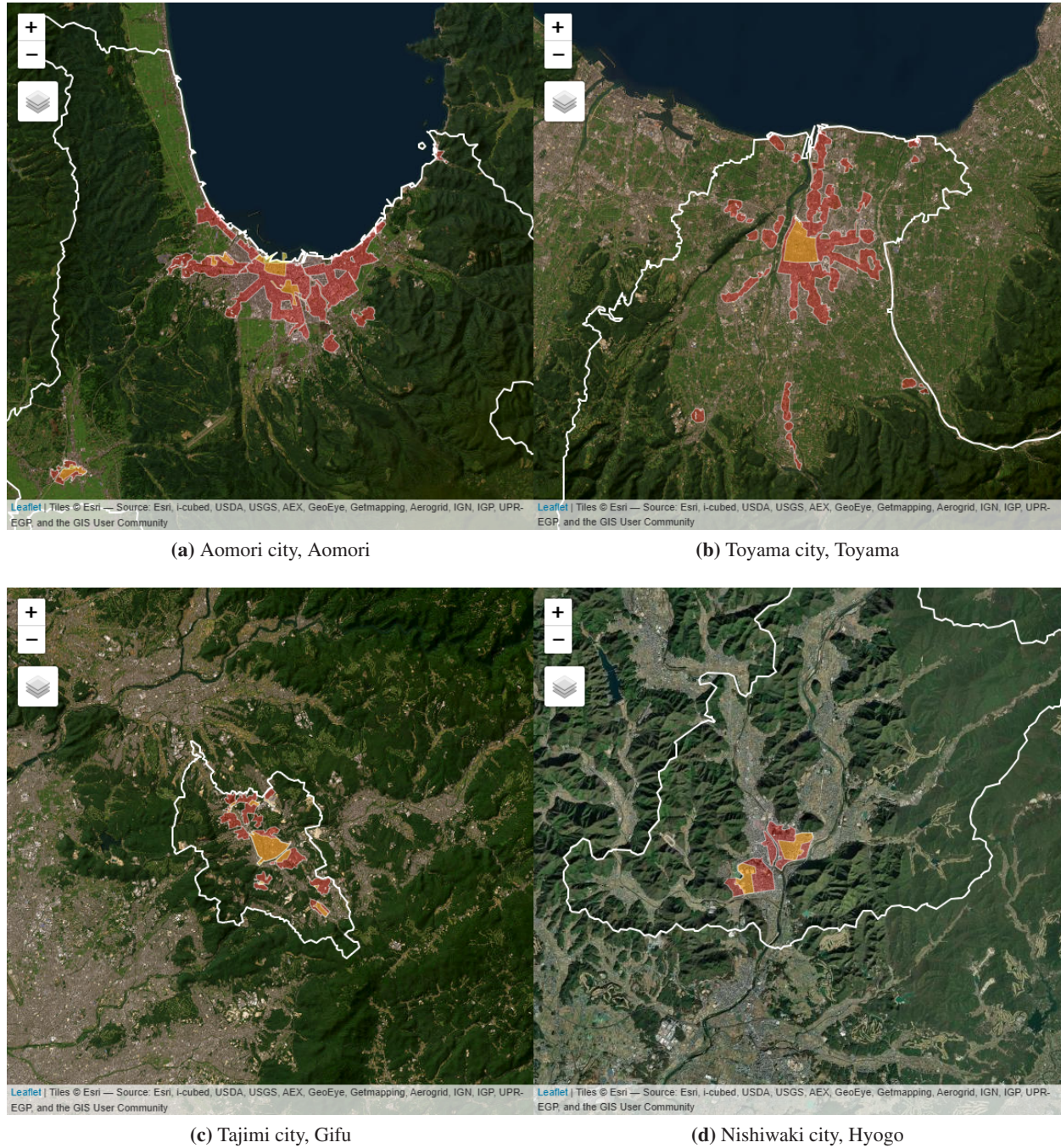
Notes: Heteroskedasticity-consistent standard errors are in parentheses. \* denotes statistical significance at the 10 % level, \*\* at the 5 % level, and \*\*\* at the 1 % level. Marginal Effects are shown in Probit estimation results. The municipalities with ongoing plan for LRP and 23 wards of Tokyo are excluded from the sample.



**Table 6.** Robustness Check for the Process Model of Place-Based Policy Making

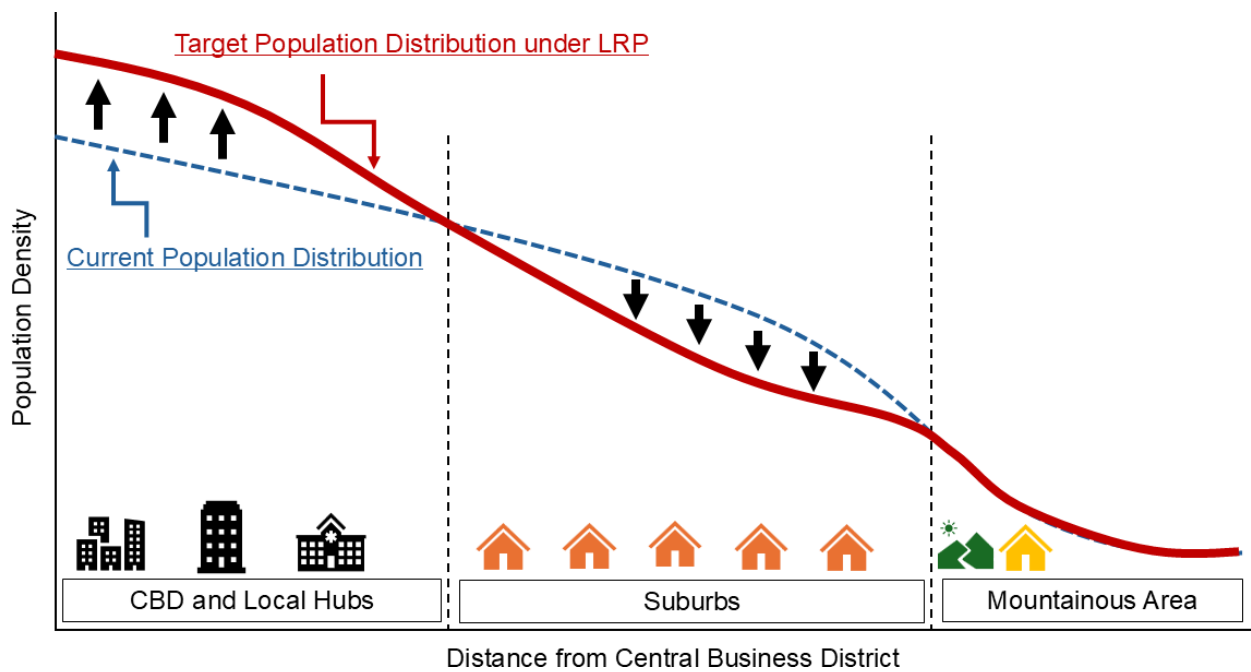
Explanatory Variables	Dependent Variable: Number of Months Passed Until Local Governments Released the LRP Since August 2014				
	(1)	(2)	(3)	(4)	(5)
Dummy of CCR Planning Experience before 2014	-6.2013** (3.1938)	-6.4561** (3.0978)	-6.4831** (3.1220)	-6.5558** (3.1389)	-5.9656** (3.1406)
Dummy of CCR Planning Experience after 2014	3.3198 (3.9820)	2.9420 (3.9931)	3.4361 (3.9668)	3.4580 (3.9784)	3.4338 (4.0029)
Number of Neighboring Municipalities with LRP Experience	7.1052*** (0.6220)	7.1151*** (0.6212)	7.1476*** (0.6181)	7.1195*** (0.6199)	7.1410*** (0.6239)
Cumulative Number of MLJT Executives for Municipality	-0.4238 (0.4838)				-0.7785 (0.5204)
Cumulative Number of METI Executives for Municipality		2.7276 (2.0232)			3.0240 (2.0080)
Cumulative Number of MIC Executives for Municipality			0.7764** (0.4600)		0.9273** (0.5196)
Cumulative Number of Other Ministry Executives for Municipality				0.6113 (1.2600)	0.6136 (1.3407)
Dummy of Town and Village Municipality	-0.9592 (3.0729)	-1.6099 (3.0494)	-2.4222 (3.0429)	-1.5697 (3.0374)	-2.1623 (3.0968)
Log(Number of Administrative Workers in Municipality)	-6.7130*** (1.6648)	-7.5321*** (1.5516)	-8.2441*** (1.6824)	-7.3525*** (1.5311)	-8.0823*** (1.7588)
Prefecture Dummy	Yes	Yes	Yes	Yes	Yes
Number of Observations	568	568	568	568	568
Adjusted $R^2$	0.3135	0.3162	0.3149	0.3132	0.3167

Notes: Heteroskedasticity-consistent standard errors are in parentheses. \* denotes statistical significance at the 10 % level, \*\* at the 5 % level, and \*\*\* at the 1 % level. The sample includes only the municipalities that had released LRP.



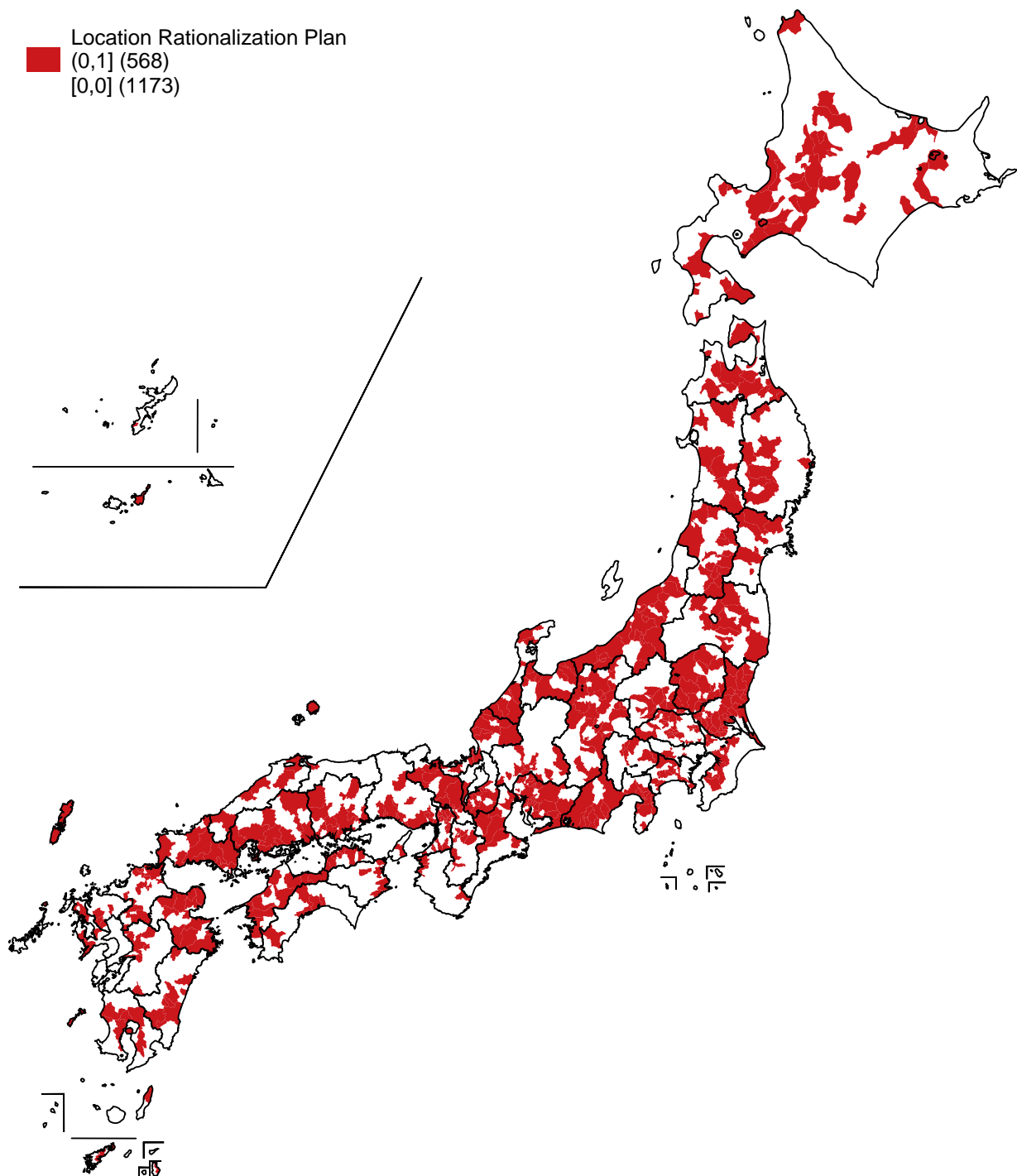
**Figure 1.** Targeting Zones in Location Rationalization Plan

Note: Authors' creation using the LRP shapefiles provided by the Ministry of Land, Infrastructure, Transport and Tourism, (2025). Yellow colored area represents the guided urban facility zone, which is an area into which livelihood services are guided, along with the facilities to be guided into that area. Red colored area represents the guided dwelling zone, which is an area into which dwelling is guided to maintain a given population density.



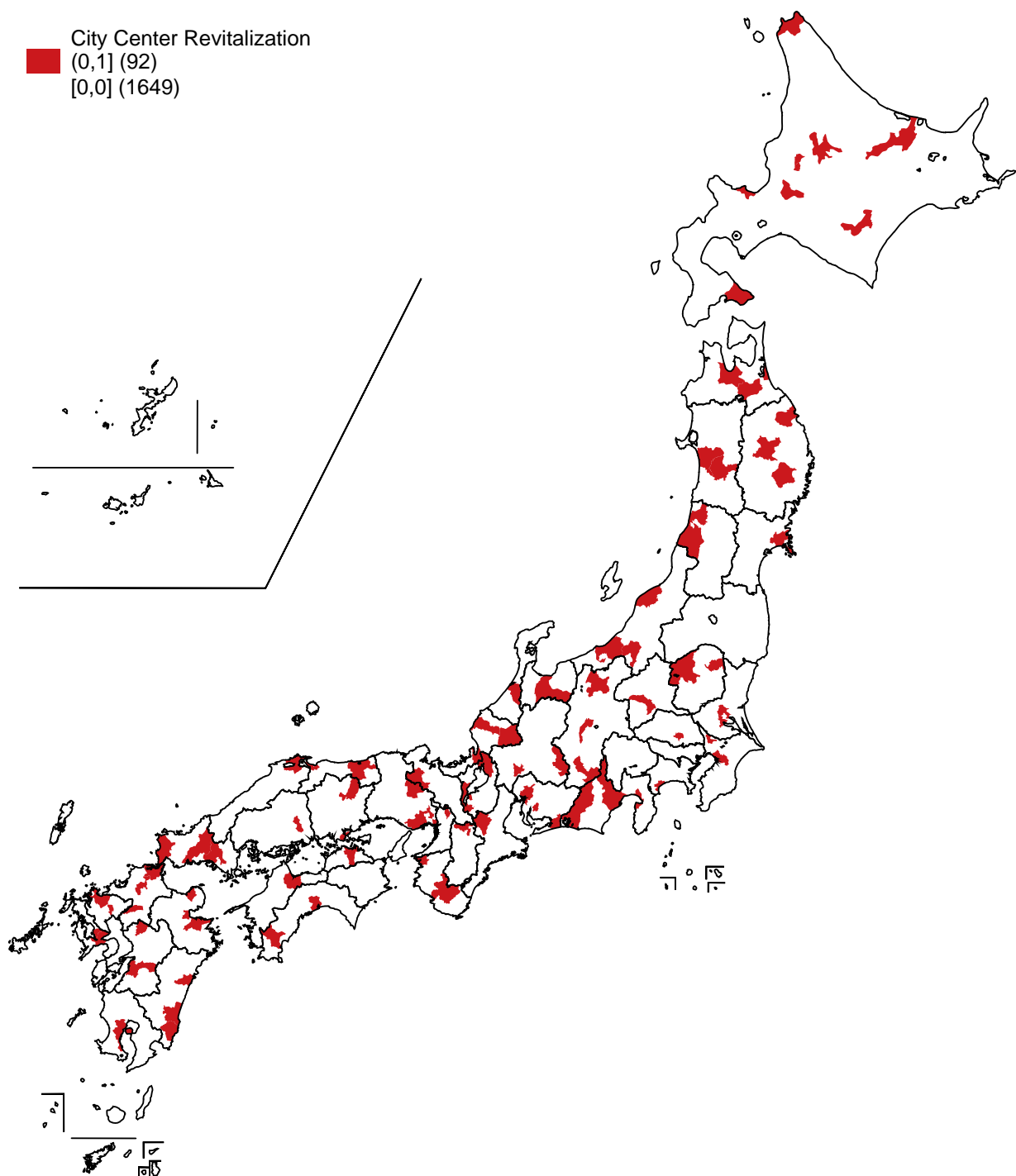
**Figure 2.** Concept in Location Rationalization Plan in Toyama city

Note: Authors' creation based on Location Rationalization Plan of Toyama city (2023, p. 20). Location Rationalization Plan in Toyama city expects displacement effects of population distribution across urban cores and suburbs.



**Figure 3.** Map on Location Rationalization Plan across Municipalities

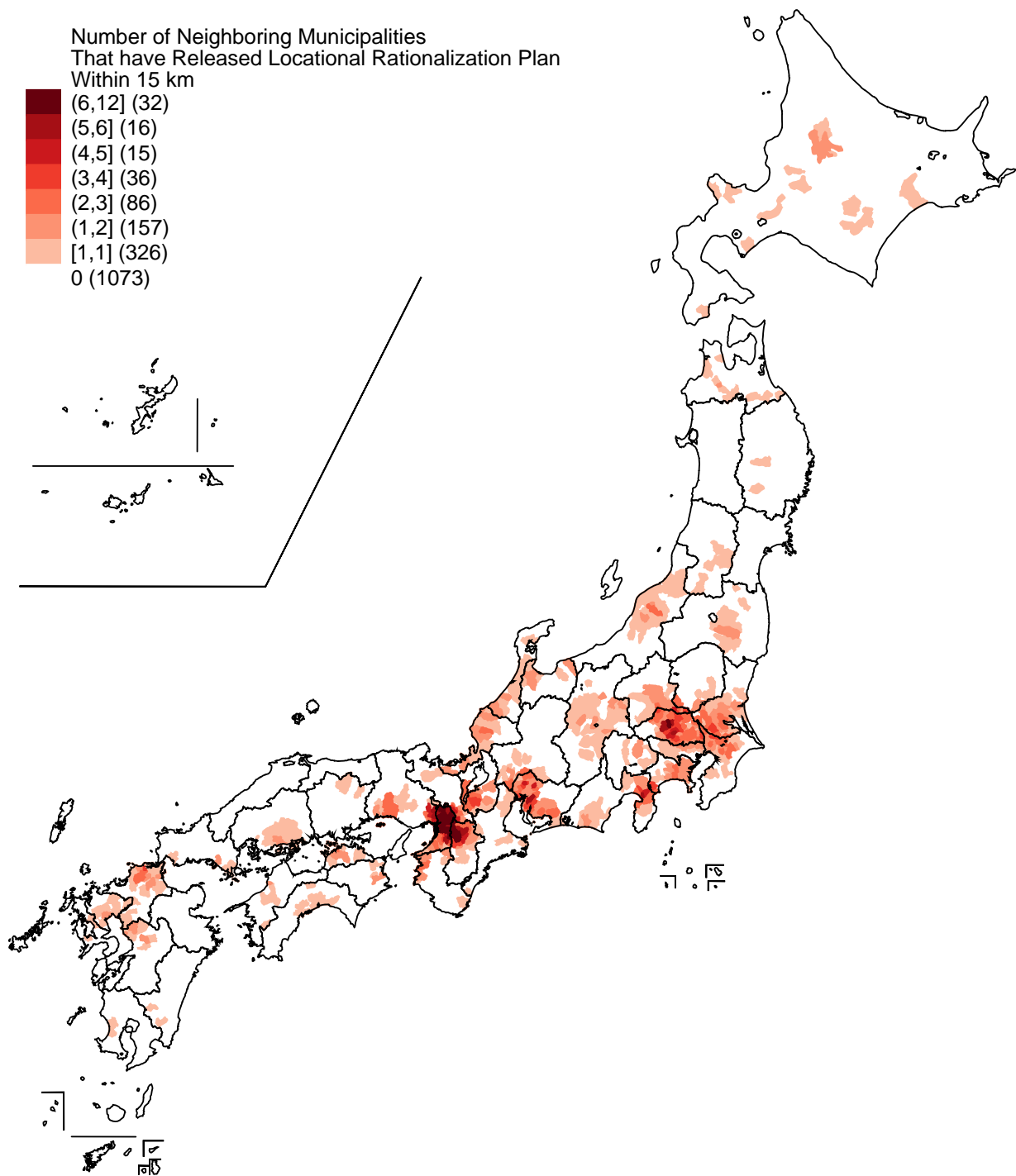
Note: Authors' creation. Red colored municipalities represent municipalities that have released the Location Rationalization Plans as of March 31, 2024.



**Figure 4.** Map on City Center Revitalization Policy before August 2014

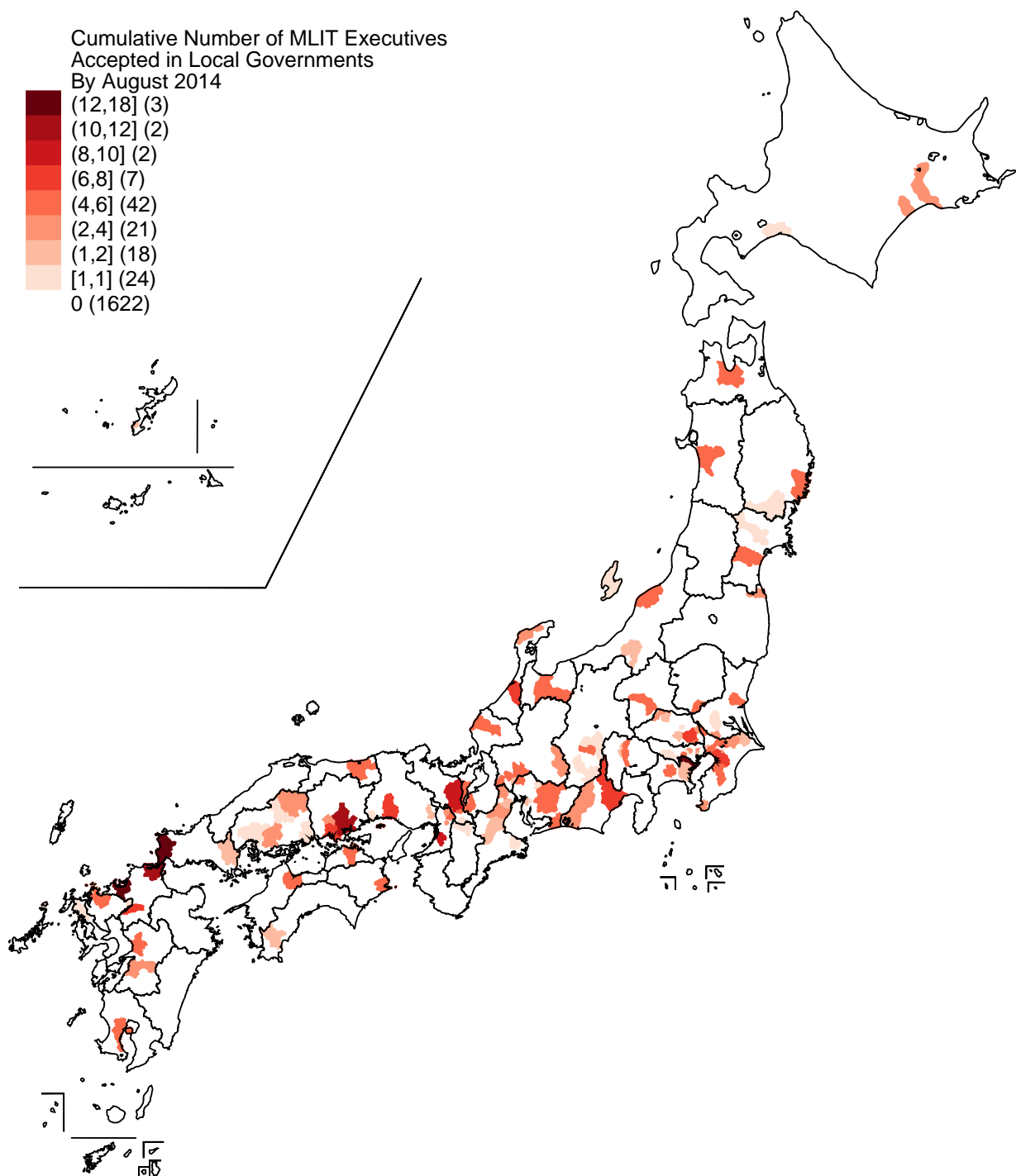
Note: Authors' creation. Red colored municipalities represent municipalities that have the City Center Revitalization Basic Plans.





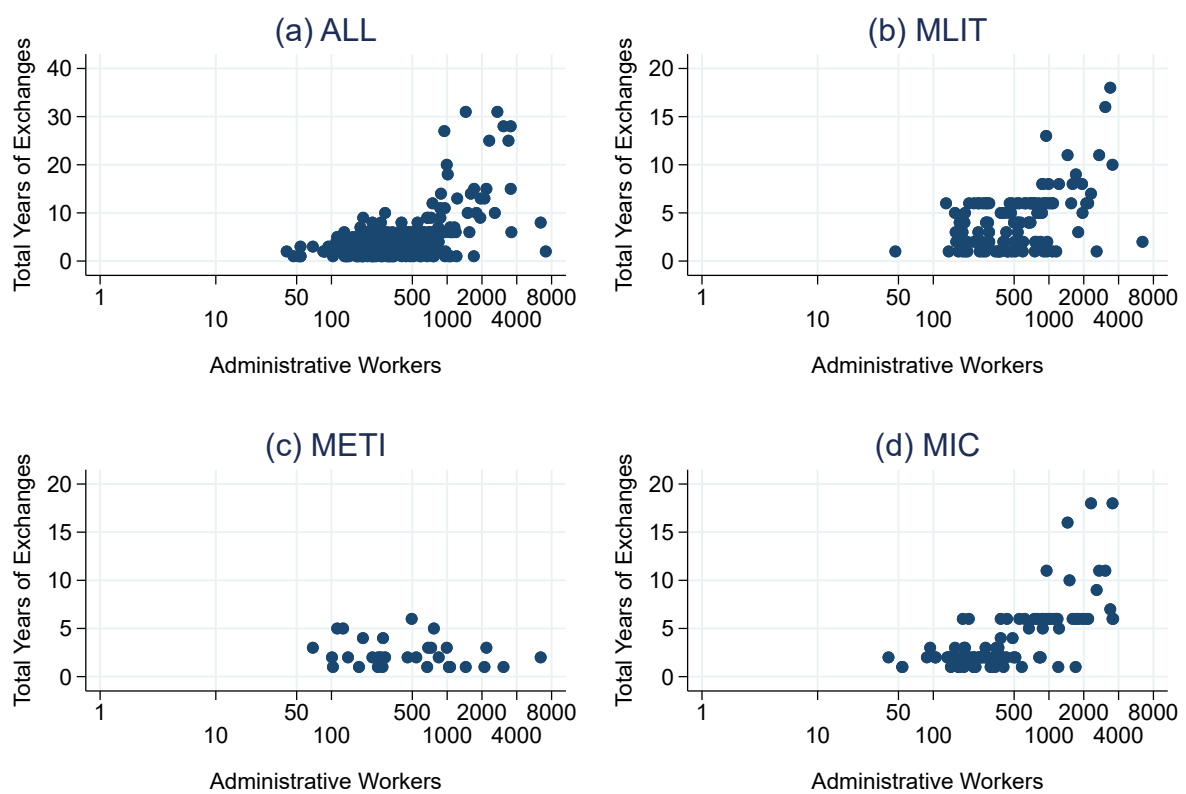
**Figure 5.** Map on Number of Neighboring Municipalities That Had Released LRP by December 2019

Note: Authors' creation. Neighboring municipalities are based on the municipalities located within 15 km.



**Figure 6.** Map on Number of MLIT Executives Accepted in Local Governments between 2006–2013

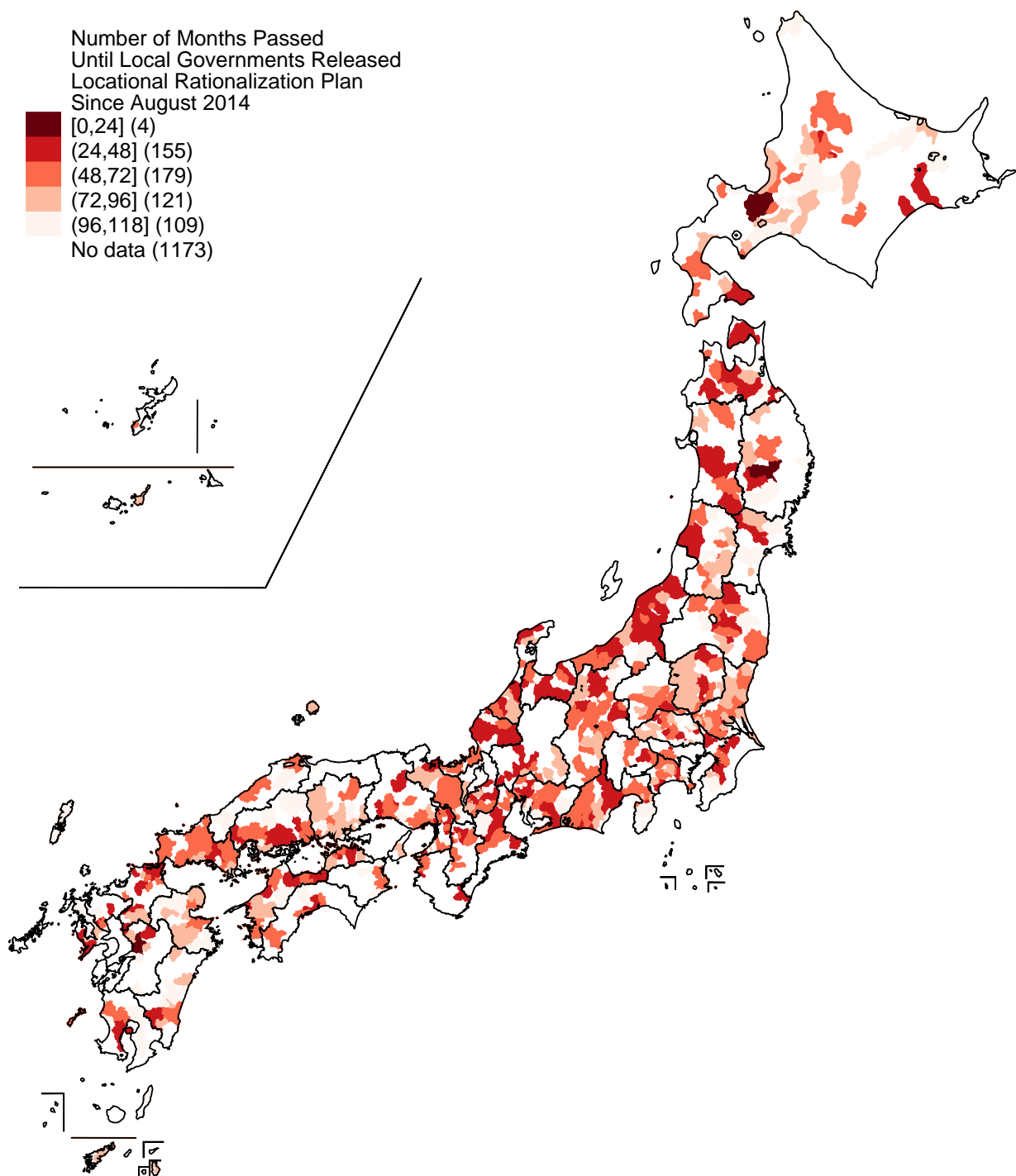
Note: Authors' creation.



**Figure 7.** Relationship between Ministry Executives Accepted by Municipalities and Municipal Size

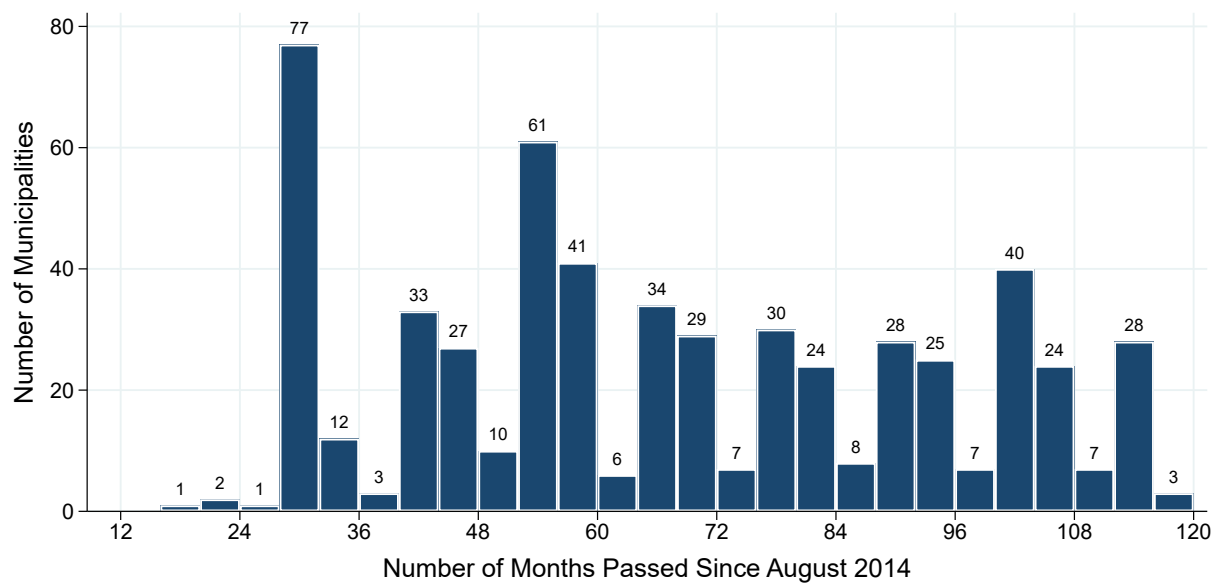
Note: Authors' creation. The cumulative number of Ministry Executives Accepted by Municipalities are counted between 2006 and 2013 since the Act for Revitalization of the Town Center enacted in 1998 was amended in 2006.





**Figure 8.** Map on Number of Months Necessary to Release Location Rationalization Plans since August 2014

Note: Authors' creation.



**Figure 9.** Number of Months Necessary to Release Location Rationalization Plans

Note: Authors' creation.