

An Estimate of Land Take in Municipal Planning of the Campania Region

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Abstract. The issue of land take is characterized by analytical complexity and legislative effectiveness. So, in dealing with this question, several aspects have to be evaluated.

This project aims at a quantitative assessment of the municipal urban planning in terms of land take, in the context of the Campania region. To make this, the Master Plans of many municipalities are examined. Therefore, the housing needs outlined in the municipal Plans are compared with the trends in population growth. Through this analysis, the municipalities are classified into three groups: virtuous municipalities, growing municipalities e uncontrolled municipalities. Moreover, a quantitative analysis of urban planning standards is taken into account. Then, by describing the obtained results, this work tries to define a synoptic view of municipal planning in Campania region, its critical points and the contrasting actions that can be implemented in regional and national legislations.

Keywords: Land take · Demographic changes · Municipal plans · Housing needs · Large-area administration

1 Object of the Analysis

The aim of this work is to provide a quantitative measurement of the housing needs defined in the Municipal Urban Plans (PUC) of the Campania region.

For this purpose, a list of 118 municipalities, whose Master Plan is submitted to the Strategic Environmental Assessment (SEA) procedure, has been extracted from the website of the Campania Region¹ dedicated to the consultation of the approving results. So, two conditions have been verified for each of them:

1. if the documentation of the Plan and in particular the Technical Report (or the General Report) were published on the official website of the Municipality.
2. if a quantification of the housing needs resulted from published documents, when the first hypothesis was verified.

The 118 investigated municipalities are well distributed among the classes by population size [1]. There are no large towns or cities, lacking Naples in the analysis.

¹ The web page from which the list of municipalities has been extracted is: <http://viavas.re-gione.campania.it/opencms/opencms/VIAS/VAS>.

Six of 18 medium-sized towns of the Region (33%), 17 of the 63 small towns (27%), 30 of the 134 minor small towns (22%), 57 of the 270 villages (21%) and 8 of the 65 small villages (12%) are included. Therefore, the sample of the detected municipalities is well-representative of all classes of cities, as it appears in Table 1.

Table 1. Distribution classes of 118 municipalities by population size.

Class	Population class (inhabitants)	Investigated Municipalities	Municipalities of the Region	Percent
Big cities or Metropolises	>500,001	0	1	0%
Middle-sized towns	100,001–500,000	0	2	33%
	50,001–100,000	6	16	
Small-sized towns	15,001–50,000	17	63	27%
	5,001–15,000	30	134	22%
Village	2,001–5,000	26	150	17%
	1,001–2,000	31	120	26%
Small village	501–1,000	7	55	13%
	≤ 500	1	10	10%
Totale		118	551	21%

Similarly, the sample appears sufficiently representative in its spatial articulation. In fact, we can find 28 municipalities belonging to the province of Avellino, 19 to Benevento, 20 to Caserta, 21 to Naples and 30 to Salerno².

It turned out that, among the 118 municipalities for which the SEA procedure was published on the regional website³ between 2008 and 2015 (in particular between 06/02/2008 and 15/12/2015), only 67 of them (56%) had available information about the planning on own website. In addition, 40 of them (34%) provided documents with accurate information on the housing needs and only 26 (22%) showed an assessment on planning standard (according to D.M. 1444/68). Therefore, the quantitative analysis just focused on the group of 40 municipalities.

The so poor attention to the publication of the planning documents is a first point on which to focus. In fact, the presence or absence of information does not appear a matter of time, because it's not connected to the starting date of the SEA procedure. Therefore, it represents a lack of administrative capacity to complete the Plan process at the right time⁴ or a municipal transparency deficit towards their citizens.

² The sample represents 21.2% of the 551 municipalities in the Campania Region.

³ It refers to 115 requests for PUC evaluation and 3 cases related to PRG variant. So, all the others procedures related to different type of plan and program have been excluded.

⁴ For some of these municipalities, the PUC resulted not yet approved or approved only in preliminary form.

2 Land Take: From Analytical Problems to Contrasting Policies

In Italy, the issues of land take and urban sprawl have for years been the focus of policy makers, scientific community and research institutes [2–16]. Nevertheless, there is no scholarly consensus on these questions which is still dealt with heterogeneous interpretations and perspectives [1].

The problem of quantification can be traced back to two key issues. The first is related to the complexity of the measuring of land use and the difficulty of identifying homogeneous and comparable measurement methods: see the European project Corine Land Cover (CLC), the Land and Ecosystem Accounts (LEAC) or the methodologies applied in Italy by ISPRA or by ISTAT. The second, more important, is related to the definition of the drivers that move the land take, the most appropriate analytical scale and, then, the most effective contrasting actions [1, 3, 4].

Recent studies [17], have shown that, for each new inhabitant, the phenomenon of land take in the villages and small villages is significantly higher than in the cities or middle towns, and the real estate overvaluation has generated a *decoupled land take* not proportional to the real housing or the productive demand. This occurs because the purchase of the house is still a haven investment [18–20] and because there is a significant imbalance between public and private operators in the redistribution of the increase in the ground rent that urban transformation provides [21, 22].

Previous works of the Autor [3–5] showed how some Italian cities tend to occupy new spaces and draw new residential and industrial areas in the absence of a demographic evidence that justifies such choices, analyzing them both at the urban scale and at territorial system scale.

Therefore, in this work the ways that lead to this excessive quantification of housing needs were investigated, taking into account the planning instruments of the Municipalities in the Campania Region. Through this detailed analysis, we want to highlight how the directives that contrast the land use are evaded and the oversizing of housing needs is defined.

3 Population Dynamics in Campania Region

This analysis moves in the context of the Campania region, of which the demographic dynamics will be here represented. The change in population, from 1981 until 2011, of the about 550 municipalities in the Region is analyzed through four ISTAT statistics surveys (Table 2), and through the construction of three changing maps that well represent the demographic dynamics in the reference area (Fig. 1).

Campania region is characterized by a strong polarization around its capital, Naples [23], and by a strong population growth during the decade 1981–1991 (Table 2). This increase, which mainly concerned the metropolitan areas of Naples and Salerno [24], is a clearly consequence of the Fordist industrialization phase, due to the investments of

Table 2. Change in population in the five provinces of the Campania Region

Province of	Pop 1981	Pop 2011	Δ Pop 81-91	Δ Pop 91-01	Δ Pop 01-11
Caserta	755,628	904,921	+60,187	+37,057	+52,049
Benevento	289,143	284,900	+3,883	-5,984	-2,142
Napoli	2,970,563	3,054,956	+45,463	+43,170	-4,240
Avellino	434,021	429,157	+4,791	-9,634	-21
Salerno	1,013,779	1,092,876	+52,822	+7,042	+19,233
Campania Region	5,463,134	5,766,810	+167,146	+71,651	+64,879

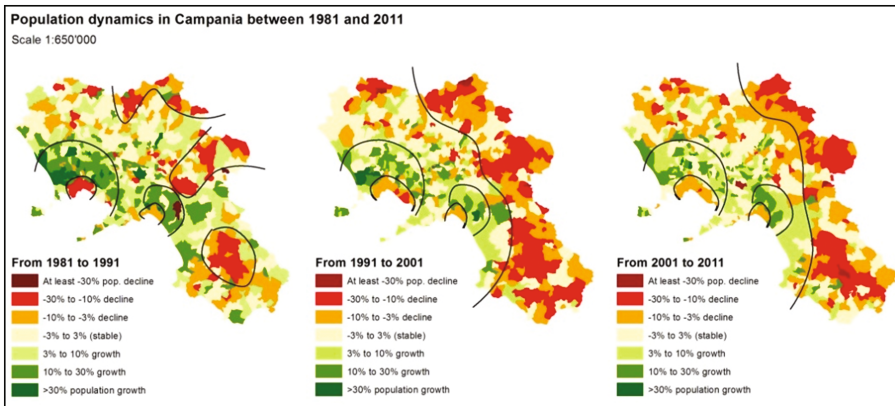


Fig. 1. Population dynamic in Campania between 1981 e 2011, in three steps: (a) 1981–1991; (b) 1991–2001; (c) 2001–2011 (Our elaboration)

the *Cassa del Mezzogiorno*⁵, especially for the city of Naples. After the thirty years of extraordinary intervention, Naples, strongly urbanized, enters into a full phase of suburbanization (well represented in Fig. 1a). Here, we can see the strong population growth of urban rings of Naples and Salerno, to the detriment of the core that are in demographic decline.

Alongside these urban dynamics, in the decade 1981–1991, there has been a limited demographic decline of the inner areas, in particular in the Samnite areas of Upper Tammaro and Fortore, in the Upper Irpinia, in the Alburni Mountains and Upper Calore of Salerno.

Overall, in the decade, the region has increased by more than 160 thousand inhabitants, revealing that the attractiveness of urban areas of Naples and Salerno has gone far beyond the regional context and has spread to other regions of southern Italy.

The suburbanization in the metropolitan areas of Salerno and Naples continues up to date (as shown in Fig. 1b and c), but in a more and more rarefied way.

⁵ It was a Government Agency for extraordinary public investments in Southern Italy from 1950 to 1984. It will be replaced until 1992 by an Agency for the promotion and development of the South.

Instead, over the past two decades, from 1991 to 2011, a stronger depopulation phenomenon has had in the inland areas, up to involve the two provincial capitals of Benevento and Avellino. The population decline has been very strong in the decade 1991–2001, investing the areas of Matese, of Ufita, Terminio, Upper Sele, Tanagro and the totality of the inner areas of Cilento, as well as the Diano and Bussento valleys, in addition to the areas already affected by depopulation.

In the following decade, the decline is smaller but equally significant. Overall, the regional demographic balance remained positive because the depopulation of inland areas is associated with the growth of the Domitian coast and the main axes of Salerno along the Irno and the Sele.

Therefore, the scenario is a region in two demographic dynamic speeds: a thirty-year population decline that runs through all internal areas and a growth in the rings of the urban areas of Naples and Salerno. So, if the construction of new residential volumes cannot be justified in all inner areas of the region, policies for containment of sprawl are particularly urgent and necessary in the suburbs of Naples and Salerno, in order to contain the unsustainable housing development.

4 The Sample of 40 Municipalities Under Analysis

Henceforth, the quantitative analysis will be carried out on the second smaller sample, represented by the already mentioned 40 municipalities that provide accurate information on the housing needs. Like the previous sample (Table 1), also this group of 40 is sufficiently distributed among the classes by population size (Table 3). Here, there are: 2 middle-sized towns, 6 small towns, 12 minor small town, 18 villages and 2 small villages.

Table 3. Distribution classes of the 40 municipalities under analysis by population size

Class	Sample under analysis	Municipalities with a PUC	Percent	M. in the Region	Percent
Big cities or Metropolises	0	0	0%	1	0%
Middle-sized towns	0	0	0%	2	11%
	2	6	33%	16	
Small-sized towns	6	17	35%	63	10%
	12	30	40%	134	9%
Village	11	26	42%	150	7%
	7	31	23%	120	6%
Small village	2	7	29%	55	4%
	0	1	0%	10	0%
Totale	40	118	34%	551	7%

5 The Municipal Planning Assessment

For an efficacy analysis of the planning, the PUC of 40 municipalities will be here examined according to three variables: (a) the number of newly identified housing needs; (b) the change in the population into 2001–2011 decade; (c) the square meters allocated to the equipment for urban standards.

Referring to the first two variables, 3 classes of municipalities can be identified:

1. the municipalities for which no new housing needs are provided ($F_a = 0$); they will be here defined *virtuous municipalities*.
2. those for which new housing needs are expected, consistently with a population growth in the last decade ($F_a > 0$; $\Delta P > 0$): here defined *growing municipalities*.
3. those in which new housing needs are provided in front of a decrease of the population in the last decade ($F_a > 0$; $\Delta P < 0$): here defined *uncontrolled municipalities*.

where F_a is the housing needs and ΔP the change in the population into 2001-2011 decade. Moreover, an analysis of the third variable, that is the deficit of planning standards, is added (Y when the deficit is quantified, N when the standards are enough, and *not det.* when the information is not detectable). The determined scenario is shown in the following Table 4.

Table 4. Summary table of the municipal planning assessments.

Class of municipalities	Number	Planning standard deficit
Virtuous municipalities ($F_a = 0$)	4	3 Y
		1 not det.
Growing municipalities ($F_a > 0$; $\Delta P > 0$)	19	13 Y
		6 not det.
Uncontrolled municipalities ($F_a > 0$; $\Delta P < 0$)	17	10 Y
		6 not det.
		1 N

5.1 Virtuous Municipalities

In this category, only four municipalities are present: one of these is Amalfi, coastal municipality in the province of Salerno; the other three municipalities belong Neapolitan hinterland. Among all, the only municipality of Ottaviano sets do not need any new housing even if with a positive population growth. For the others, the population decline, between -4% and -5.4% , appears a strong deterrent to the new building (Table 5 below).

Regarding **Amalfi**, the planning requirements are not derived from the Provincial Plan (PTCP) but from the Territorial Master Plan (PUT) of Sorrento-Amalfi Peninsula, approved as a regional law (Campania Regional Law no. 35/1987) and still effective. This legislation is binding on the Municipality. The only area where the PUT admits additive transformations is a very small portion on the municipal boundary.

Table 5. The virtuous municipalities

Municipality	Housing needs	Pop 2001	Pop 2011	Δ pop	Δ pop (%)
Amalfi	0	5,428	5,163	-265	-4.9%
Casoria	0	81,888	78,647	-3,241	-4.0%
Massa di Somma	0	5,908	5,587	-321	-5.4%
Ottaviano	0	22,670	23,543	+873	+3.9%

Then, according to Art. 9 of the same Act, the potential needs for new residences is derived from the sum of three components: (a) the need by population growth, (b) the needs for the reduction of the crowding index and (c) the need for the replacement of unhealthy and not reparable dwellings. So, having to operate on the share of not reparable dwellings, the Municipality of Amalfi approves the requalification of the unused former public factory Pansa, not creating any new volumes.

The choice of no new building areas lies in the geographical position of the other three municipalities (Casoria, Massa di Somma and Ottaviano), because they are included in the fully congested Neapolitan hinterland.

In fact, despite the presence of unhealthy housing, the PUC of **Casoria** indicates «that the strategy of the Plan can only be oriented to a recycling of existing buildings (also including non-residential volumes, often abandoned), avoiding additional taking of non-urbanized land (a rare resource in Casoria) and giving priority restructuring of existing buildings, mostly dating from the years 60 and 80 of the twentieth century».

The town of **Massa di Somma** has drawn a plan of requalifications, demolitions and of tourism development, referring to the indications of the Territorial Landscape Plan, where the will to make urban regeneration and renovation of the existing buildings is declared.

Finally, with reference to housing decompression program of Regional Law 21/2003, the municipality of **Ottaviano** recalls the not needing of new residential housing and foresees a re-functioning of residential buildings in favor of production activities, tourist accommodation, tertiary and public interest.

5.2 Growing Municipalities

To obtain an indirect estimate of the land take in each single PUC, all these municipalities are classified according to the ratio of new housing needs (F_a) and the change in the population into 2001–2011 decade (ΔP):

$$\text{Oversizing index} = \frac{F_a}{\Delta P} \quad (1)$$

This formula (1) assumes that the population trend of the last decade will repeat itself identically in the subsequent period. Accordingly, the majority of the municipalities amounted to a ratio of between 0.2 and 3.8 housing for each new inhabitant, but instead two have a significantly higher ratio, Melizzano (Bn) with 6.8 and Grottaminarda (Av) with 30.0, as shown in the following table (Table 6):

Table 6. More growing municipalities

Municipality	Housing needs	Pop 2001	Pop 2011	Δ pop	Δ pop(%)	Oversizing index
Melizzano	184	1,865	1,892	+27	+1.4%	6.8
Grottaminarda	691	8,274	8,297	+23	+0.3%	30.0

It is important to note that, according to the regional legislation⁶, each municipality calculates the housing needs in its two components:

- *previous needs*, due to the presence of unhealthy and not reparable dwellings and housing with high crowding index;
- *future needs*, connected to the demographic dynamics and new housing demand.

So, despite the choice of a very simplified demographic prediction, this procedure allows to have a comparative measurement, otherwise impossible, and highlights the municipalities with the most critical index.

To the share of new rooms due to the slight population increase (81), the municipality of **Melizzano** adds the needs due to non-domiciled residents (358), returning emigrants (58), for urban decentralization (100), industrialization (70), tourist attractiveness (100), coming to a need of 829 new rooms by 2020, corresponding to approximately 184 new apartments (considering the average ratio of 4.5 rooms per unit).

Likewise, the municipality of **Grottaminarda** arrives to predict the *monstre* sum of 691 apartments, against a growth of only 23 units in the last decade. This data is justified by the population growth, by an employment increase expected to 2021⁷ (capable of generating 608 new residents and then 234 apartments) as well as by the return of emigrants and the requirement resulting from overcrowded housing, cohabitations and improper housing.

The housing needs of other municipalities appear equally oversized: Casalnuovo di Napoli provides 1,101 new housing in the same fully congested area of Casoria and Ottaviano; Montecorvino Rovella, Campagna e Baronissi respectively predict 1,180, 1,207 and 2,373 housing needs, having a not so high growth trend (between 4% and 10%), and finally Sorrento which provides a need of 100 new apartments in an area of great environmental value.

5.3 Uncontrolled Municipalities

Lastly, the municipalities are defined uncontrolled when they declare a new housing need in their Master Plan despite a negative demographic balance in own territory.

⁶ In 2009, the Planning Department of Campania Region has issued a document entitled “*The estimate of housing needs and the definition of guidelines for the determination of settlement weights in Ptcp*”, to which an update note was followed in 2010 [25].

⁷ This employment increase would be given by the investments in the 2007–2013 European Social Fund (FSE), the 2007–2013 Rural Development Programme (PSR) of Campania Region, the Less developed regions Funds (FAS) and the Community Initiatives program (PIC) named Leader +.

Among the municipalities where a higher housing need results, we analyze: Vallo della Lucania, Guardia Lombardi, Caposele and Benevento (Table 7).

Table 7. More uncontrolled municipalities

Municipality	Housing needs	Pop 2001	Pop 2011	Δ pop	Δ pop (%)
Vallo della Lucania	617	8,818	8,680	-138	-1.6%
Guardia Lombardi	947	2,029	1,803	-226	-11.1%
Caposele	1,594	3,797	3,537	-260	-6.8%
Benevento	2,066	61,791	61,489	-302	-0.5%

The urban Plan of **Vallo della Lucania** is of 2013. The population trend is presented as «substantially constant» and similar to those of the entire province. In addition, the Plan notes that the number of households is growing due to the reduction in their average composition. Therefore, three scenarios are shown: (a) an increase in households of +411 to 2021, (b) an increase of +896, (c) an average increase between the previous two scenarios. The last option is adopted in the Plan

The municipality of **Caposele** has published an updated of Municipal Urban Plan in April 2010. While noting a steady and progressive decrease of the population, the PUC said that the forecast «can not ignore the factors related to the development of commercial, tourist and productive planned at the municipal level, and even less the factors related to regional planning and infrastructural upgrade of the whole province of Avellino and finally the tourist flows linked to the religious cult of San Gerardo».

In this way, it provides for a huge housing demand compared to the population size, due to the change in the average number of household members, to the employment increase determined by various development programs⁸ and to the policies for reducing the crowding index. Adding the effects of Regional Law 2/96 “Regional measures in favor of the Campania citizens living abroad”, the municipality defines a housing need *monstre* of 1,594 units.

Similarly, in the PUC of **Guardia Lombardi**, an employment increase is expected because of various development programs⁹. To these, the effects of initiatives aimed at the restoration and enhancement of historical centers and of environmental, architectural and touristic interest are added in the analysis. Lastly, combining the housing needs derives from the previously described employment increase, the needs resulting from the return of residents abroad and that deriving from policies for reducing

⁸ They are: the 2007–2013 European Regional Development Fund, the 2007–2013 European Social Fund (FSE), the 2007–2013 Rural Development Programme (PSR) of Campania Region, the integrated Projects of Monti Picentini and Sele-Tanagro Park, and the programming established in the Regional Finance Act 8/2004, art.6).

⁹ In particular: the 2007–2013 European Regional Development Fund, the 2007–2013 European Social Fund (FSE), the 2007–2013 Rural Development Programme (PSR) of Campania Region, the Community Initiatives program (PIC) named Leader +, the Integrated Project il P.I. “Tourist and Eno-gastronomic Chain”, the Territorial Pact of Baronia and the Baronia Contract Program for Business Development.

overcrowding in existing housing, the municipality estimates the overall figure of 947 new apartments, despite a substantial process of depopulation in place.

In the context of this analysis, the municipality of **Benevento** has the highest housing dimensioning, by drawing 2,066 new housing units, but with a very low average number of square meters (79 m²). This low figure is dictated precisely by the forecasts described in the Plan. Therein, it is explained that «to understand what might seem like a paradox, i.e. the increased needs», the fragmentation of families due to separations and divorces should be taken into account. For this purpose, the annual rate of change in household members is calculated, so as to give rise to a considerable increase in housing needs.

5.4 Planning Standards, Manufacturing and Commercial Surfaces

The dimensioning of an urban plan is the result of a complex of considerations that lead to the definition of strategic and operational decisions. To the analysis of the housing needs, the analysis on urban standards and the needs of new areas for production, trade and generally for the tertiary sector are always associated.

With regard to urban standards, the study found a significant and generalized shortcoming in surfaces. In complex of only 40 municipalities of the sample, a gap of about 2,050,000 m² is detected, thus equal the Principality of Monaco or about 300 football pitches.

The need is very variable. In fact, if on one hand the municipality congested of Ottaviano declares a deficit of about 300,000 m², on the other there are twelve municipalities that declare that current planning standards are satisfactory. Five of these belong to the province of Benevento. Instead, other municipalities such as San Prisco (Ce) and Cimitile (Na) declare needs respectively of 283,000 and 214,000 m².

This scenario of municipalities with a reduced endowment of public areas confirms the difficulties of the Local Authorities not only to identify free lands but also to carry out projects, because of the poor financial capacity often date from the non-payment of urbanization costs by citizens. The non-payment of urbanization costs weighs on the municipal budget and often leads to the failure to complete the secondary urbanization works planned in the planning stage.

With regard to production and commercial areas, only a few municipalities (such as Perito, Vallo della Lucania and Visciano) specifically highlight the need for non-residential surfaces.

In particular, the service sector is regulated by article 10 of the Regional Law 35/87, which stipulates that the areas to be allocated to private tertiary uses (like commercio, offices, leisure, tourism, etc.) may not exceed 3 m² per inhabitant. Often, this limit is already far exceeded by the existing surfaces, making it impossible to provide for new areas to commercial use. Specifically, this law is criticized in the PUC of Minori, defining it anachronistic. It points out that the existence of such a threshold involves problems in enhancement of services to households and businesses and in the expansion of tourism services, strategic sector for a town in the Amalfi Coast.

6 Open Issues

The work shows that the dimensioning are often the result of incorrect or excessive evaluations, for three reasons: the first concerns the estimation of the real housing needs, the second regards the overestimation of increasing employment, the third refers to the correct analytical scale where the population dynamics are observed.

Looking to the first aspect, according to the legislation of the Campania Region [25], the municipalities have to calculate the housing needs in its two components, for the programmatic provisions of Puc (Sect. 5.2): previous needs and future needs. The ratio of one lodging for each family is to be calculated on the effective presence and not on residential presence and considering the composition and social morphology of the family unit. In addition, it must consider the balance between existing and planned housing for the future needs.

According to the above, we have found that often the data concerning the actual presence is evaded and an improper correspondence between present and residents is established (as in the PUC of Baiano). Also, the reduction of the average composition of families, at times remarked (Sect. 5.3 Vallo della Lucania or Benevento), is not always sufficient condition for the definition of new needs, when many vacant rooms are present.

The lack of a formal monitoring of vacant rooms is an important issue. In fact, several civic initiatives go in this direction. We remember the campaign “Save the Landscape”, carried out in 2012 by the homonymous Forum and addressed to all Italian municipalities, which asked for making public the number of unused, abandoned or vacant homes and industrial buildings, or the campaign “We reuse Italy” promoted by the WWF and aiming at achieving a census of brownfield sites, susceptible to transformation. The key concept of these civil actions was centered on the involvement of local Communities, invited to identify sites and to suggest possible strategies for reuse.

In the same way, it would be important to fully implement what the Article 42 of the Italian Constitution, that states about the expropriation for reasons of general interest. In this way, many empty urban spaces could be reused [1].

As regards the second point, the municipalities overemphasize employment forecasts on the basis of development programs, whose impact on employment is uncertain and needs to be verified. (Sect. 5.2, Grottaminarda and Sect. 5.3, Caposele e Guardia Lombardi). So, the employment estimates should be placed under really reached agreements, rather than only on the hypothesis of development.

This is well done in a Norwegian study [26], where the housing forecasts of all the municipalities are related to the local labor markets with a closer quantitative relationship. In this study, the large urban areas are distinctly analyzed, classifying them according to the economic base, as well as analyzing the migration flows due to university study and the population structure. Therefore, housing needs are not left to the markets alone but are identified on the basis of a precise design of future regional demand.

Finally, with regard to the third reason, the present analysis shows that the planning limits should be imposed and checked at a different scale from the municipal one and, at the same time, the definition of a limit for each area (as happens in the PTCP) is insufficient if it is not accompanied by a serious development analysis of the same, by a detailed analysis of population trends, and then, of the real needs.

Previous studies have shown that the choice of a different analytical scale, such as the large area or the urban system, allows a deeper analysis, for example contextualizing the measurement of the urban evolution to a specific phase of the urban life cycle of van den Berg model [3–5].

In France, for example, as already analyzed by the same author [1], a legislation that stimulates large-scale studies has been introduced already since 2000. With the establishment of the *Solidarité et Renouveau Urbain*, the SCOTs (*Schémas de la Cohérence Territoriale*) are instituted, in order to coordinate the housing construction at an inter-municipal level [27]. Subsequently, the article L. 123-1-7 of the Urban Code (introduced by Law n. 2010-788 of 12 July 2010 on the national commitment to the environment called “Grenelle II” Law) provides for the possibility of developing a PLUi (Intermunicipal Local Urban Plan) with the effects of a SCOT¹⁰. So, since 2010, the Ministry of Territorial Equality and Housing has been offering € 50,000 grants to inter-municipal associations involved in developing a PLUi.

Afterwards, the legislature reinforced the article L. 122-2 (the principle of urbanization prohibition in the absence of SCOT) by Law n. 2014-366 of 24 March 2014, totally demanding the containment of land take at an over-municipal scale and focusing on the large-area administration, with the law of 7 August 2015 concerning the new territorial organization of the Republic.

So, in the SCOT of the Agglomeration of Lyon, we can observe a large area analysis¹¹ where a unique and homogeneous prediction of new inhabitants is carried out for all 59 municipalities of the agglomeration, based on a preventive economic analysis (Fig. 2).

The doing analysis at regional level (Fig. 3) shows how an extended depopulation of inland areas does not match with a proportional definition of housing needs, with the result that whole portions of these areas are unnecessarily cemented. The population growth only crosses a narrow intermediate strip of the region (Fig. 1), where sometimes the Plans do not allow new residential areas, because the territory is completely congested [29]. By contrast, the availability of free lands seems to be the major driver for the constructive speculation of internal peripheries and inland areas [4].

So, this study confirms that the decoupled land take in the inland areas is a very urgent problem, to be addressed with multiple and coordinated instruments.

¹⁰ See: <https://www.data.gouv.fr/en/datasets/plans-locaux-durbanisme-intercommunal-plui-valant-scot-en-franche-comte/>.

¹¹ See: SCOT 2030 Agglomération Lyonnaise at <https://www.scot-agglolyon.fr/lagglomeration-lyonnaise-coeur-de-laire-metropolitaine/>.

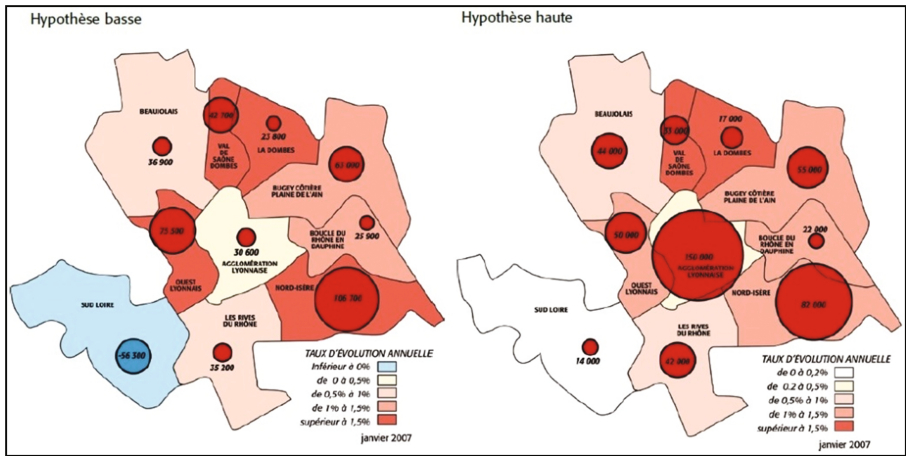


Fig. 2. Number of additional residents between 1999 and 2030 in the SCOT Agglomeration Lyon [28]. Source: <https://www.scot-agglolyon.fr/espace-documentaire/>

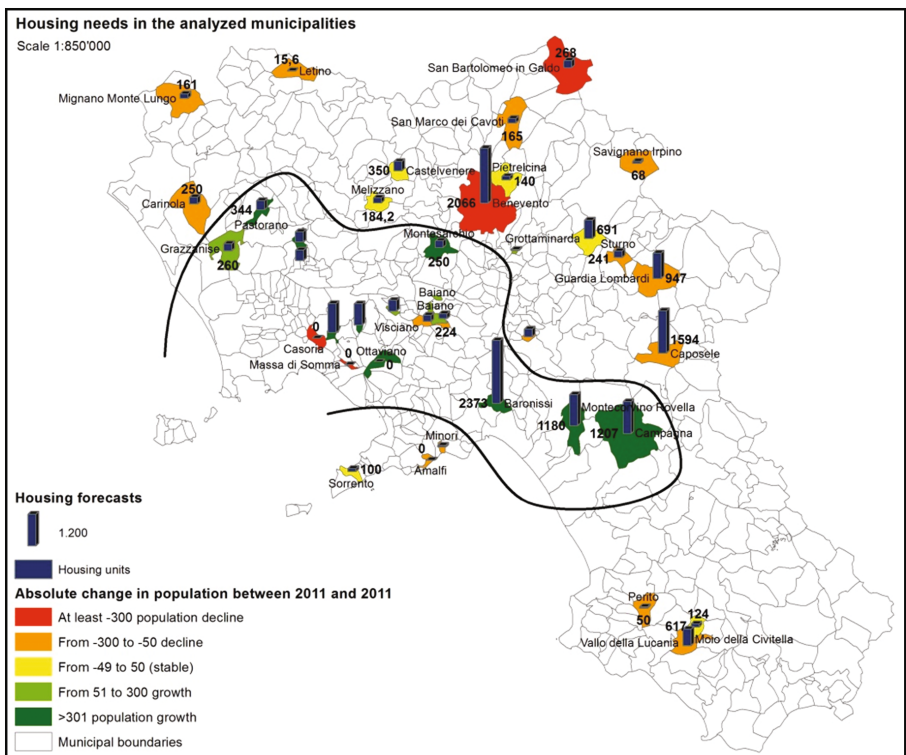


Fig. 3. Housing needs and population changes in the sample of 40 municipalities of Campania Region. (Our elaboration)

Finally, it is worth noting that the Regional Territorial Plan (PTR) of Campania [30] recognizes 9 regional districts: (1) Campania lowland, (2) Sorrento-Amalfi peninsula, (3) Agro sarnese-nocerino, (4) Salerno-Sele lowland, (5) Cilento and Vallo di Diano, (6) Avellino, (7) Sannio, (8) Volturno valley and (9) Garigliano valley (Fig. 4).

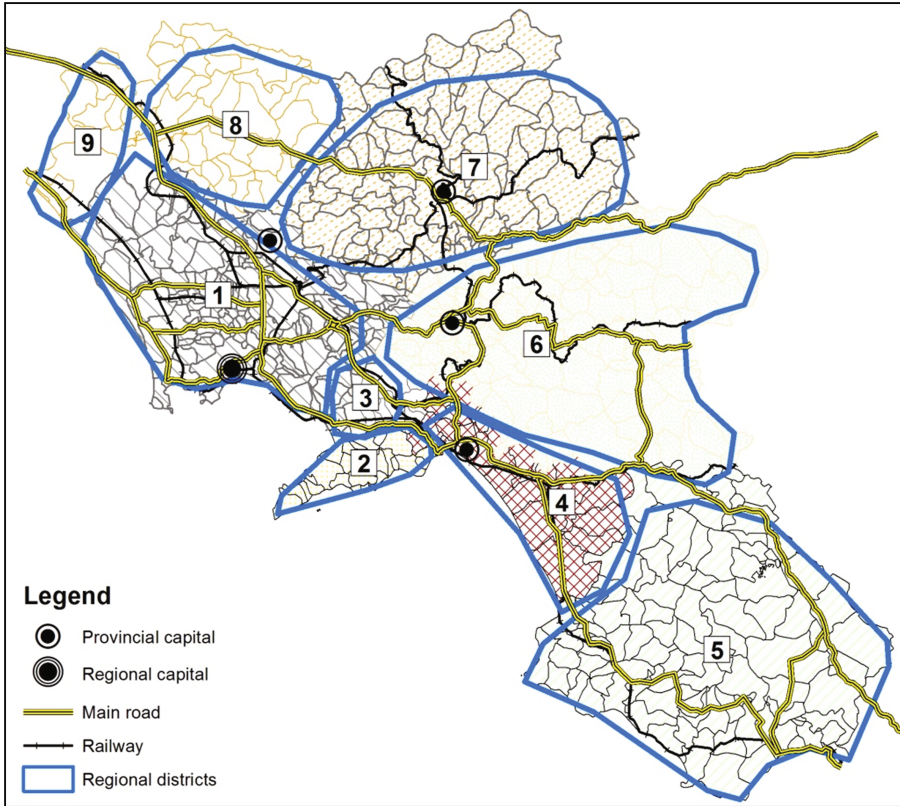


Fig. 4. The nine districts provided by the Regional Territorial Plan of Campania. (Our elaboration based on PTR mapping)

They are nothing more than a repositioning in the Plan of those homogeneous territories of analysis which were also envisioned by the 1942 National Urban Law but never fully implemented in Italy. Here, the lack of a reorganization of the administrative structure that gave rise to large and homogeneous territorial area for the analysis and the government (such as the French ones) has prevented the implementation of effective settlement and development policies. Therefore, future developments of the research will concern studies at the scale of the nine regional districts.

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