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Base de datos de la población municipal española (ESPOP) 1860-1930.

The Spanish municipal population database (ESPOP) 1860-1930.

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Resumen

En este trabajo se presenta ESPOP, una infraestructura de datos espaciales que recoge la población a nivel municipal para España desde 1860 hasta 1930. ESPOP ofrece la población local de facto para el universo de municipios (más de 9.000) tal y como se recoge en siete censos (1860, 1877, 1887, 1900, 1910, 1920 y 1930). Dada su naturaleza cambiante, una contribución relevante es que también proporciona la población local de facto para 9.130 municipios homogéneos, permitiendo así comparaciones inter-temporales consistentes. Además, los municipios están georreferenciados, lo que a su vez facilita la integración de otras infraestructuras de datos espaciales. ESPOP culmina así un largo proceso que se ha beneficiado del trabajo del Instituto Nacional de Estadística (INE) y de un buen número de investigadores.

Key words
Spain
Population
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Abstract

In this paper we introduce ESPOP, a spatial data infrastructure with municipal-level population for Spain from 1860 to 1930. ESPOP offers local de facto population for the universe of municipalities (over 9,000) as reported in seven censuses (1860, 1877, 1887, 1900, 1910, 1920 and 1930). Given their changing nature, a relevant contribution is that it also provides local de facto population for 9,130 homogenous municipalities thereby allowing for consistent intertemporal comparisons. Additionally, municipalities are georeferenced which in turn facilitates the integration of other spatial data infrastructures. ESPOP thus culminates a long process that has benefitted from the work of the Instituto Nacional de Estadística (INE) and a good number of researchers.

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INTRODUCTION[1]

A central dimension of socioeconomic development is space. The place of residence not only affects accessibility to services but also social interaction and therefore the transmission and generation of knowledge and values.[2] Yet, space is even more relevant when transport or communication technologies were not as developed as they are at present. In these scenarios, books, travelling or interacting with those who travel, were the ways to be exposed to foreign, and possibly distinct, ideas or values. In isolated places, for instance, development exclusively depended upon the existing local conditions.

Territorial socioeconomic disparities have long existed and are an integral part of the national economic development processes since the 19th century.[3] In Britain, Germany, France, or Spain, to mention just a few, industrialisation arose in specific territories which gives rise to a fundamental question, why there? Similarly, what occurs in one place might set in motion dynamics that affect the rest. Interregional migrations could reinforce disparities through agglomeration economies as well as labour inflows (outflows) may alter the structure of the labour markets and populations of the receiving (sending) territories.

The evidence that best illustrates the long-term socioeconomic dynamics of a territory is the evolution of its population. For this reason, the level (or size) of the Spanish population and its growth has been regularly studied.[4] In the early days, aggregate approaches prevailed (Nadal 1984).[5] Then, regional studies using provincial level data followed (Alcaide Inchausti et al. 2007; Ayuda et al. 2010a, 2010b). Provincial population was also fundamental in the historical reconstitution of macroeconomic aggregates (Díez-Minguela et al. 2018). Additionally, there are empirical studies using districts (*partidos judiciales*) as spatial unit of analysis (Beltrán Tapia et al. 2018). Other works have focused on large municipalities or cities to empirically assess urban growth and its repercussions (Reher 1994; Lanaspa et al. 2003; Cardesín and Mirás 2017; González-Val et al. 2017).[6]

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2 For Spain, Goerlich et al. (2021) have recently estimated accessibility to basic services such as health or education. For example, 90% of the Spanish population have access to a health centre within a 10-minute travel. Similarly, 86% of the upper-high secondary education have a school within a 20-minute travel. See also Alloza et al. (2021).

3 For the Spanish case, Galofré-Vilà and Gómez-León (2024) offer new insights on provincial health disparities, and Diez-Minguela et al. (2018) on income inequalities across provinces since 1860.

4 Demography has always been an integral element in the historical debates on the relative economic backwardness of the Spanish economy (Nadal 1975; Prados de la Escosura 2017). Even in the teaching of Spanish economic history, populations was one of the pillars. See the seminal textbook *Historia Económica de España* (Vicens Vives 1979/1959).

5 See also the works of Vicente Pérez Moreda or David S. Reher, among others. Reher and Valero Lobo (1995) and Nicolau (2005) offer a nice account of the main demographic resources. In a classic work, Livi-Bacci (1968) provides territorially differentiated view for 14 historical regions between 1787 and 1910.

6 The focus on cities as the unit of analysis has a long tradition (de Vries 1984; Bairoch et al. 1988).

However, with the pioneering work of Goerlich et al. (2006, 2015) consistent municipal-level population for the period 1900-2001 (later 1900-2011) became available. Franch-Auladell et al. (2013) extended this by including the 1877 and 1887 counts while Espinha da Silveira et al. (2013) integrated Spain and Portugal. Based on this, our understanding of the long-term dynamics of the Spanish population has been enhanced by studying the universe of all municipalities (Goerlich and Mas 2009; Martí-Henneberg et al. 2016; Beltrán Tapia et al. 2021).[7]

In recent years, and as data and tools (Geographic and Information Systems, GIS) permitted, significant advances have been made. In particular, this research avenue has been refined with the population grid where individuals are distributed in a more granular basis, grid-cells. For example, GEOSTAT 2011 distributes European population in 1-km^2 cells. Using this approach, Gutiérrez et al. (2023) have documented that Spain has the lowest density of settlements within Europe. Still, the use of a population grid is limited to the present and has some methodological issues (Goerlich and Cantarino 2017). In this regard, the digitization of the 1887 *nomenclátor*, a geographical directory of the inhabited entities within a municipality, opens up new research possibilities (Beltrán Tapia et al. 2022).[8]

Notwithstanding this, the historical study of the evolution of population across space is challenging. On the one hand, *micro* or local studies have shed light on the matter but, in most cases, they do not permit to carry out comparative analyses that assess general hypotheses. On the other hand, *macro* or aggregate studies hide local specificities and spatial effects.[9] With this in mind, we introduce ESPOP, a spatial data infrastructure that offers local *de facto* population from 1860 to 1930 for the universe of Spanish municipalities. In fact, this information is derived from the aggregation of micro-data collected at the household-level.[10] More specifically, ESPOP starts in 1860, once the liberal State had established a statistical office, and ends in 1930, just on the eve of the Civil War (1936-39) which is a major turning point (Betrán and Pons 2020). The dataset includes the whole territory at a granular level since the municipality is the unit of analysis.

Therefore, ESPOP covers a fundamental period in Spanish history. From the institutional point of view, these years recorded the deployment of the administrative structure of the liberal State (Burgueño, 2011). Besides, it also corresponds to the years of the

7 In parallell to the advances described in this paragraph, *Atlas de la industrialización de España, 1750-2000* (Nadal 2003); *El progreso económico de España (1850-2000)* (Prados de la Escosura 2003); and *Estadísticas Históricas de España. Siglos XIX y XX* (Carreras and Tafunell 2005) were published, offering solid quantitative evidence for the study of Spanish economic history.

8 The spatial data infrastructure presented in Beltrán Tapia et al. (2022) and developed in the context of the project ESPAREL can be accessed through the web page: www.esparel.com.

9 The optimal or first-best approach would thus be countrywide micro-data or individual-level data, but there are few historical resources (censuses) with such information and coverage. Moreover, these detailed records have not always been kept.

10 Micro-data have rarely been preserved. An exception, for example, is the 1860 Population Census for the province of Zaragoza (Beltrán Tapia and Marco-Gracia 2020) and other censuses and *padrones* from locations scattered across space (Gómez-i-Aznar 2019; Beltrán Tapia and Miguel Salanova 2021; Palacios-Mateo 2023; Pujadas-Mora et al. 2022).

beginning of the demographic transition (Nicolau, 2005), and from the economic perspective, it covers the years in which industrialisation unfolded and Spain began its path of long-term economic growth and development (Nadal, 1975; Prados de la Escosura, 2003).

However, the profound changes registered by Spanish society in these years were not distributed homogenously throughout the territory (Diez-Minguela et al. 2018). The opening of a wide gap between the most and least developed regions radically altered the existing spatial population dynamics by affecting, in an unequal manner, aspects relevant for the evolution of the natural growth of population as mortality or fertility (e. g. Delgado-Perez, 2022 details the differences in the decline of fecundity rates across provinces) or internal migratory flows (Silvestre, 2001). Consequently, the territorial approach to the evolution of the population that ESPOP offers is especially necessary to increase our knowledge of a period of profound transformation for the economy and society.

ESPOP presents nonetheless some limitations. Municipal alterations constitute a concern as several mergers and segregations occurred between 1860 and 1930.[11] Consequently, the number of municipalities varies across censuses. To address this issue and ensure intertemporal comparisons, ESPOP offers local *de facto* population for 9,130 homogenous or territorially consistent municipalities.[12] In doing so, we opt for creating pseudo-municipalities with 2 or more singular municipalities instead of partitions. All in all, the 9,365 municipalities reported between 1860 and 1930 become 9,130 with local *de facto* population for each count.

Additionally, and although municipalities are georeferenced, a second limitation arises regarding boundaries. In the case of Spain, the Cadastre, and the National Topographic Map 1:25.000 were completed relatively late.[13] Municipal boundaries, and hence surface or population density, are not known or cannot be calculated. A potential solution would be, as previous studies have done (Goerlich et al. 2006; Franch-Auladell et al. 2013), to convert the 1860-1930 municipalities into the current 8,131 (as for January 1, 2023). Yet, this implies discarding a vast amount of information. Given the heterogenous structure of the municipalities and that they were/are the lowest tier of the administration, we prefer to keep as many as possible in the dataset and use points (instead of polygons) to locate them geographically.

In the following sections, the sources and methodology used to build the ESPOP dataset are presented. We then offer some descriptive information and brief remarks on

11 In Spain, external borders did not change between 1860 and 1930 (except for the loss of colonies such as Cuba or the Philippines in 1898), unlike what happened in other European polities such as Germany, France, not to mention the Austro-Hungary or the Russian empires.

12 In a similar vein, see also, applied to the German case, Roesel (2022).

13 The first series of the National Topographic Map was Madrid nº 559, published in 1875, whereas the last one, corresponding to San Nicolás de Tolentino (Gran Canaria) nº 1.125 was published in 1968 (Mas Mayoral and González Matesanz 2017). See also Moreno Bueno (2008) for brief chronicle of the Cadastre in 20th century Spain.

its potential.

1. SOURCES

ESPOP was compiled from the Spanish population censuses which have been digitized by the National Statistical Office (*Instituto Nacional de Estadística*, INE).[14] In this regard, the publication of modern censuses goes back to mid-19th century. Prior to this, several efforts to "*enumerate the number of people*" had been undertaken.[15] These advances, however, came to a halt during the turbulent early decades of the 19th century. From 1822 to 1833, less sophisticated counts (or *imputaciones*) were carried out (Durán Herrera 2007). Then, and in parallel with the early days of the liberal State, more refined *imputaciones* were conducted. By 1856, a statistical office (*Comisión de Estadística General del Reino*) had been founded and a year later the first modern census was underway.[16]

The *Censo de la Población de España según el recuento verificado en 21 de mayo de 1857* was published in 1858. Although there has been debate on its scope and reliability, it must be stressed that this is the first count with the newly reformed territorial administration, stipulated in 1833.[17] Besides, nominal records aimed at the individual registration or *empadronamiento* were introduced (Melón Ruiz de Gordejuela 1951; Muro et al. 1996). Yet, the information collected was somewhat limited thereby calling for another count. In 1863, the *Censo de la Población de España según el recuento verificado en 25 de diciembre de 1860* was published. For this reason, ESPOP begins in 1860.

Budgetary restrictions and, above all, political instability marked the 1860s (Gozálvez-Pérez and Martín-Serrano 2016). The *Junta General de Estadística* that had replaced the *Comisión* did not carry out a census in 1870, as it was recommended. By 1870, the Geographic and Statistical Institute (*Instituto Geográfico y Estadístico*, IGE) took over, being responsible for the population counts since then and until the creation of INE in 1945.[18] That is to say, the 1877, 1887, 1897, 1900, 1910, 1920, 1930 and 1940

14 The volumes are available in PDF-format at INE's web.

15 In the second half of the 18th century, three countrywide censuses were published: the 1768 or *Aranda* census; the 1787 or *Floridablanca* census; and the 1797 or *Godoy* census.

16 The *Comisión de Estadística General del Reino* was responsible for the 1857 and 1860 censuses. For this, the *Comisión* established its headquarters in the capital-city of Madrid (Nadal et al. 1996). In line with the recently created territorial administration the data-collection was organised in provinces. Therefore, instructions were sent to provincial boards (or *juntas*) which in turn proceeded (Merediz Montero 2004).

17 In 1833, the peninsula and archipelagos were organized in 49 provinces. Besides, the Kingdom of Spain maintained territories in northern Africa (Ceuta, Melilla, Alhucemas, Chafarinas, Peñón de la Gomera).

18 For a detailed account see Nadal et al. (1996) and Moral Ruiz et al. (2007). The 1920 census was prepared by the *Dirección General de Estadística*, integrated in the Ministry of Labour, Trade, and Industry. Shortly after the proclamation of the 2nd Republic in 1931, the IGE became the Geographic, Cadastral and Statistical Institute (*Instituto Geográfico, Catastral y de Estadística*, IGCE). Lastly, the 1940 census was prepared by the *Dirección General de Estadística* which was integrated in the Ministry of Labour.

censuses. ESPOP includes this information except for the 1897 and 1940 counts.[19]

The data collection followed a 3-step procedure and started in 2016 with a project funded by the *Banco de España* ('*Inequality, human capital and regional economic growth in Spain, 1787-1930*'). Within this project, we first digitized (PDF → data) municipal information for the 1860, 1877, 1887, 1900, 1910, 1920 and 1930 censuses on the number of men, women, and the level of instruction.[20] In a second stage (1) typos were corrected and (2) municipalities renamed and codified following INE standards.[21] Finally, a key to ensure that municipalities were consistent over time was generated.

Before moving further, some considerations regarding the heterogenous structure of Spanish municipalities are worth mentioning. The territorial administration was radically altered during the 1830s. The liberal State was organised in three levels (Province; Judicial Districts; Municipalities). In line with the spirit of the Constitution of 1812, for the government of "*the towns there will be town councils (Ayuntamientos)*" (Art. 309) and that "*town councils will be established in those towns that do not have them and in those that are convenient to have them, and there will be town councils in those that by themselves or with their district reach a thousand souls...*" (Art. 310).

Therefore, the numerous settlements (*ciudad*, *villa*, *lugar*…) first became 11,292 municipalities as Table 1 illustrates.[22] Besides, and after the passing of the Law on the Organisation and Conferring of Town Councils (*Ley de Organización y Atribuciones de los Ayuntamientos*) in 1845, municipalities with less than "*30 vecinos"* (or households) were requested to "*merge with another or else gather together to form a new municipality*" (Art. 70). By 1860, the territory was organised in 9,365 municipalities. It is however worth noting that, although municipalities are the lowest political level, their internal structure is quite heterogenous across Spain.[23]

19 The 1897 census is excluded from ESPOP because the 1900 census is more complete.

20 For the digitization we benefitted from the excellent work of Eter Burduli, hired as a research assistant.

21 The toponymy was always expressed in Spanish-Castilian, while nowadays it could be in any of the official languages (Spanish-Castilian; Basque; Catalan; Galician) or in both (e.g., Donostia/San Sebastián).

22 As Table 1 suggests, the number of settlements or singular population entities was underreported in the 1787 and 1797 censuses. In northern Spain, for instance, the information was presented at the parish-level whereas a parish can be composed of several villages and hamlets.

23 Settlement patterns present indeed striking contrasts. Take for instance three municipalities that had a similar size in 1887 (around 15,000 inhabitants): Xàtiva (Valencia), Requena (Valencia) and Huércal-Overa (Almería). In Xàtiva, 93 per cent of the population lived in the main town and the rest was dispersed across 4 minor entities. Requena, on the other hand, had 51 per cent of the population living in the main town and the remaining population lived in 23 settlements. Huércal-Overa presents an even more extreme case since only 30 per cent of the population was living in the main town (the rest of the population was dispersed over 37 minor entities).

Table 1
Settlements and municipalities in Spain, 1787-1887.

	Census of 1787	*Census* of 1797[a]	*Imputación* of 1842	*Census* of 1860	*Census* of 1887[b]
Settlements					
Ciudad	147	148	-	-	221
Villa	7,370	4,716	-	-	4,695
Lugar	9,017	14,525	-	-	17,393
Aldeas	881	1,821	-	-	20,777
Otros	2,803	4,020	-	-	63,855
TOTAL	**20,218**	**25,230**	**-**	**-**	**106,941**
Municipalities	-	-	11,292	9,365	9,286

Notes: [a] The 1797 includes *Feligresías* with *Lugares*; [b] Includes information from *Nomenclátor* of 1887.
Sources: Censuses of 1787, 1797, 1860 and 1887; *Imputación* of 1842 and *Nomenclátor* of 1887.

Table 2 summarises the history of the Spanish modern censuses whereas Figure 1 illustrates the evolution of population since mid-19th century.[24] It is worth stating that there have been several efforts to build, based on census data, an annual time-series of population (Prados de la Escosura 2003, 2017; Maluquer de Motes 2008, 2020).[25] ES-POP, however, offers homogenous local *de facto* population for the period 1860-1930. In line with previous works, ESPOP guarantees territorial consistency thereby allowing for intertemporal comparisons. The pioneering work of Goerlich et al. (2006) provides local *de jure* population for 8,108 homogenous municipalities between 1900 and 2001. Goerlich et al. (2015) updated the dataset up to 2011 (8,124 municipalities) and maintained the territorial consistency of the earlier work.[26] Similarly, Franch-Auladell et al. (2013) expanded Goerlich et al. (2006) adding the *de jure* local population of the 1877, 1887 and 1897 counts. As a result, a dataset with 8,112 homogenous municipalities became available. In both cases, present (2001 or 2011) municipal boundaries were used to map or compute variables such as population density.

24 Since the early 18th century population estimates for the peninsular territories and archipelagos became available. Based on military and fiscal evidence, Jerónimo de Ustáriz guesstimated in his *Teoría y Práctica de Comercio y Marina* (1724) a figure or 1.140.013 *vecinos*, around 6-7 million. Then, more robust estimates were reported, such as the 9.3 million in the 1768-69 census or the 10.2 and 10.5 million in the 1787 and 1797 censuses.

25 See also Alcaide (2000a, 2000b). In a recent work, Prados de la Escosura, Álvarez Nogal and Santiago-Caballero (2022) offer historical population estimates dating back to the medieval period.

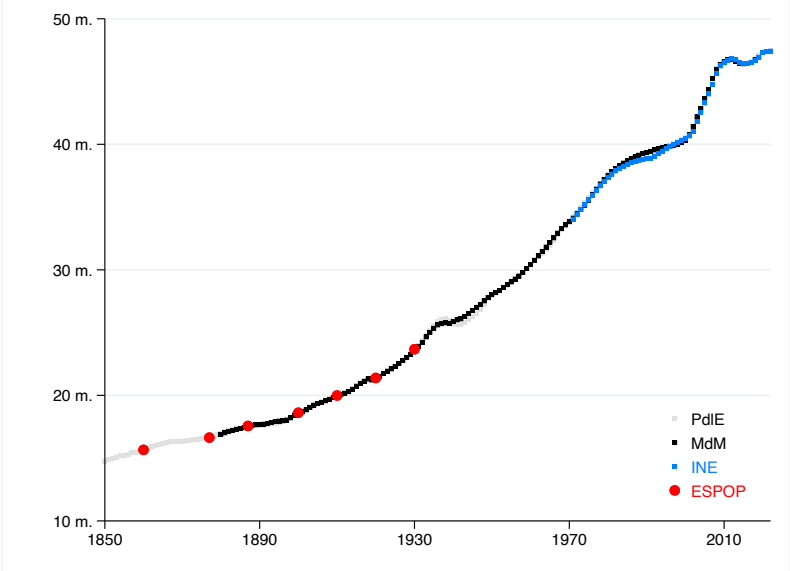
26 Goerlich et al. (2006, 2015) follows on García Fernández (1985, 1994).

Table 2.
Population censuses in Spain, 1857-2023.

Census	*Date*	*[A] Population de jure*	*[B] Population de facto*	*[C] ESPOP de facto*	*[B] – [C] Statistical Discrepancy*
1857	May 21	-	15,464,340	-	-
1860	December 25	-	15,655,467	15,658,531	-3,064
1877	December 31	16,754,600	16,634,337	16,634,065	272
1887	December 31	17,673,838	17,565,407	17,565,407	0
1897	December 31	18,224,981	18,087,050	-	-
1900	December 31	18,830,649	18,617,956	18,617,956	0
1910	December 31	20,360,306	19,992,451	19,992,455	-4
1920	December 31	22,012,663	21,389,589	21,389,589	0
1930	December 31	24,026,571	23,677,497	23,677,509	-12

Notes: Includes Ceuta, Melilla, and other territories in northern Africa.
Sources: [A] Maluquer de Motes (2008), based on INE (or census summaries)
[B] Maluquer de Motes (2008), based on INE (or census summaries)
[C] ESPOP, municipal population aggregated.

Figure 1
Population in Spain, 1850-2023.



Notes: PdlE refers to population time-series in Prados de la Escosura (2017); MdM refers to population time-series in Maluquer de Motes (2020); INE is the population time-series of INE. Anyhow, PdlE, MdM and ESPOP based in the Spanish population censuses (INE).
Sources: own text.

2. METHODOLOGY

Compared to previous works, ESPOP goes further back in time by offering local population since 1860. Moreover, it is more refined as fewer municipalities have been discarded. Table 3 shows how municipalities varied by census, from a maximum of 9,365 in 1860 to a minimum of 9,253 in 1920. After detecting and analysing the municipal alterations, the number of territorial consistent or homogenous municipalities reaches 9,130. In addition, ESPOP offers the latitude and longitude for each of them.

Table 3
Municipalities and population, 1860-1930.

	Years	*Municipalities*		*Population*	
Census	*Δ*	*Total*	*Homogenous*	*Total*	*Δ*
1860	-	9,365	9,130	15,645,017	-
1877	17	9,313	9,130	16,622,175	977,158
1887	10	9,286	9,130	17,549,608	927,433
1900	13	9,265	9,130	18,594,405	1,044,797
1910	10	9,260	9,130	19,927,154	1,332,749
1920	10	9,253	9,130	21,303,162	1,376,008
1930	10	9,260	9,130	23,563,879	2,260,717

Notes: Excludes Ceuta, Melilla, and other territories in northern Africa.
Sources: ESPOP.

To guarantee territorial consistency ESPOP follows on previous works: INE (2008) and Goerlich et al. (2006, 2015). As pointed, Goerlich et al. (2006) homogenise municipalities for the period 1900-2001. Using this early attempt and the *Alteraciones de los municipios en los Censos de Población desde 1842* (INE 2008 and web) we have developed a unique and novel key for the period 1860-1930. A fundamental objective was to keep territorial changes to a minimum. Then, and out of the universe of 9,547 municipalities with at least a record, a total of 8,812 (92.3%) appeared in all counts and they are therefore unaltered. However, the remaining 735 municipalities have been subject to some sort of alteration and eventually transformed into 318 pseudo-municipalities.

To ensure territorial consistency we follow a simple logic. Whenever municipalities merge (or segregate) we first evaluate which one is the *dominant*, understood as the largest and/or the one most frequently reported. In some cases, a city absorbs smaller neighbouring municipalities. The cities of Valencia, Barcelona, Zaragoza, or Bilbao are a good example (See Table A.1 below).

Therefore, we assign the absorbed municipalities that of the dominant which in turn becomes the head or capital of the newly created pseudo-municipality. In other cases, it is more complex.

Figure 2 illustrates some examples. The municipality of *Arrazua-Ubarrundia* was first reported in the 1930 census after *Arrazua* and *Ubarrundia* merged. *Valdegovia*, however, integrated *Villanañe* and part of *Lacozmonte* in 1930. The other part of *Lacozmonte* went into *Ribera Alta*, a municipality that also integrated *Subijana* in 1930. This is resolved by considering *Valdegovia* as the *dominant* and merging both. That is, when there is a partition such in the case of *Lacozmonte* we opt for creating a pseudo-municipality instead of allocating the population.[27] Another interesting case is *Villa de la Unión* that only appeared in the 1887 and 1900 censuses, but it came about from the merge of 2 municipalities, *Benifairó de les Valls* and *Faura*, that existed before (1860-1877) and after (1910-1930), as illustrates Figure 2c. For a complete description see Table A.1 in the appendix.[28]

Figure 2 a
A pseudo-municipality: Arrazua-Ubarrundia

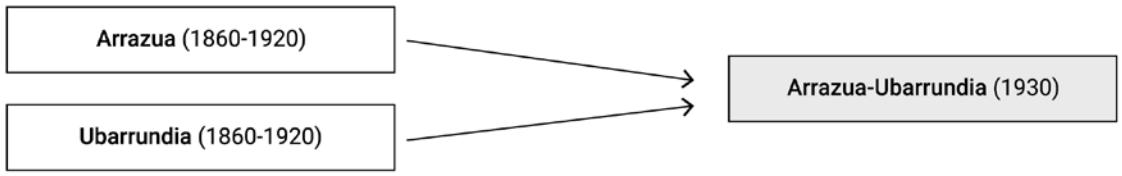
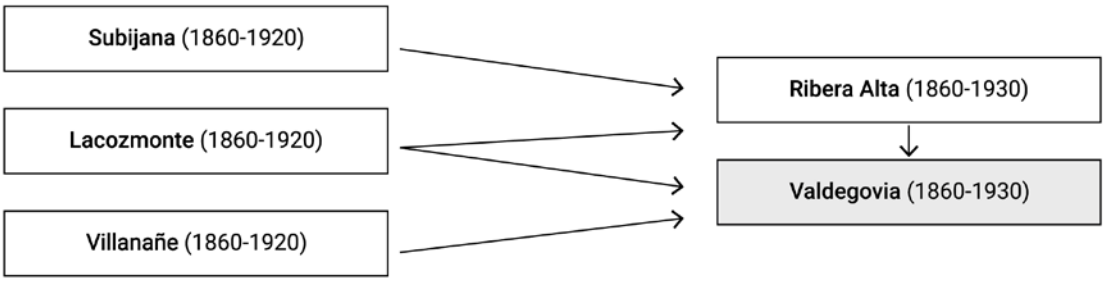


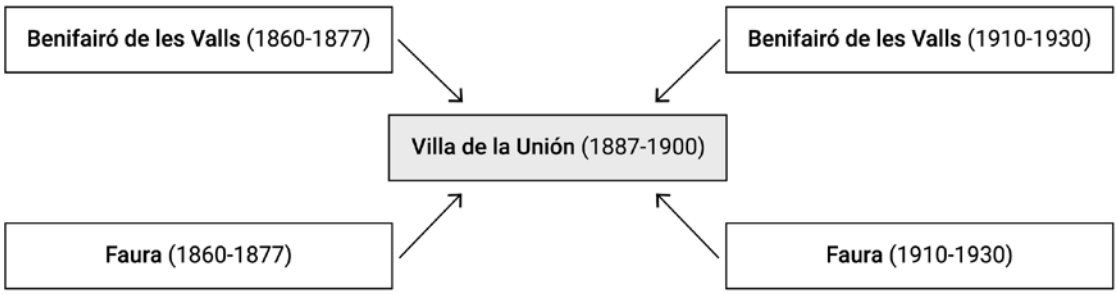
Figure 2 b
A pseudo-municipality: Valdegovia



27 In fact, there are 4 municipalities with data for all censuses that have been integrated into other ones for this reason: Ribera Alta (01046); Molins de Rei (08123); Sant Feliu de Llobregat (08211); and Junta de Trasloma (09189). In the latter case, Junta de Trasloma incorporated in 1887 part of Aforados de Losa (09500) whereas in the other case, Santa Cruz de Olorde (08521) was divided into Molins de Rei, Sant Feliu de Llobregat and Sarrià (08522) which integrated into Barcelona (08019).

28 For a detailed taxonomy of the types of alterations see Ruiz González and Goerlich (2015).

Figure 2 c
A pseudo-municipality: Villa de la Unión



The result, as has been pointed out, is 9,130 homogenous municipalities and the detail of the transformations, alterations, registered throughout the period, shown in Table A.1. and A.2. The alterations affect all Spanish provinces, Murcia being the only exception. The distribution of the changes does not seem to follow any specific geographical pattern. However, it seems that they occurred with great intensity in provinces with an important part of their territory located in mountainous areas of the Pyrenees (Lleida or Huesca) or of the Cantabrian mountains (Burgos, Palencia or Asturias). Besides, there are also significant changes related to the growth of large urban areas (Valencia absorbs 14 municipalities; Barcelona, 12; Bilbao and Zaragoza, 6. Madrid, however, only registers one municipal aggregation during the period and Seville, none).

3. CONTRIBUTION

As detailed above, ESPOP reconstructs the population for as many homogenous spatial units as possible. Table 5 provides some descriptive statistics that summarise this wealth of information and its evolution.

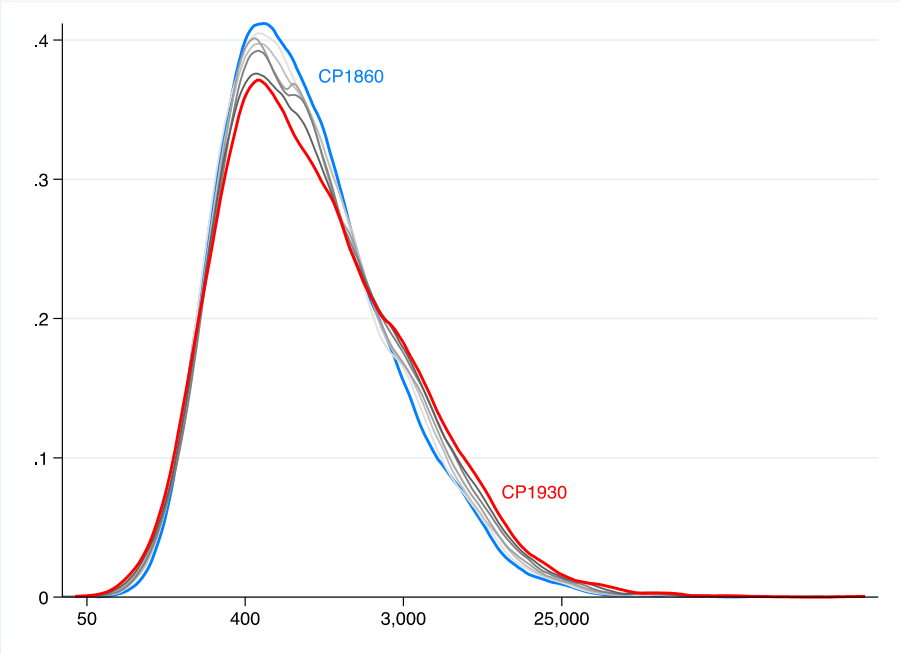
Spain was predominantly rural, a dimension that is clearly visible both in the size of its smallest municipalities (below 100 inhabitants) and the median population which increased from 742 to 822 during the 70 years covered. The existence of medium-size towns and cities (Madrid, Barcelona, Sevilla, or Valencia that hosted more than 100,000 inhabitants in 1860) nonetheless significantly pushes up the average size. The descriptive statistics also evidence how the Spanish population grew during the period. This is clearly illustrated in Figure 3 which shows the kernel densities for the population of the 9,130 municipalities in each of the census. As expected, the distribution shifts inwards and to the right-hand side following the rapid population growth of some of the towns and cities.

Table 5
ESPOP descriptive statistics, 1860-1930

Census	*Obs.*	*Mean*	*Median*	*Min.*	*Max.*
1860	9,130	1,713	742	62	298,638
1877	9,130	1,821	745	67	397,993
1887	9,130	1,922	773	77	470,283
1900	9,130	2,036	777	59	550,387
1910	9,130	2,183	803	40	602,911
1920	9,130	2,333	804	48	750,896
1930	9,130	2,581	822	47	1,018,183

Notes: Excludes Ceuta, Melilla, and other territories in northern Africa.
Sources: ESPOP.

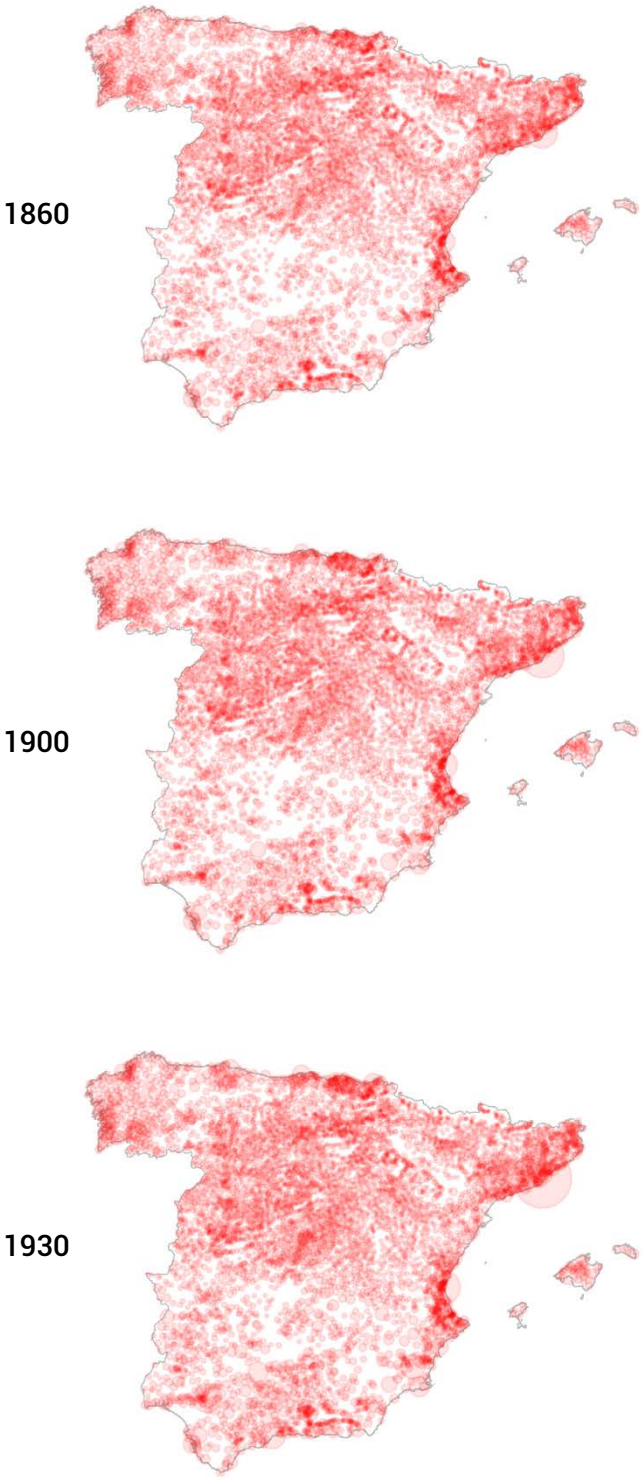
Figure 3
Population in Spain, 1860-1930



Notes: Municipal population in the x-axis is in logarithmic scale.
Sources: ESPOP.

The true scope of the information provided in ESPOP is however depicted in Figure 4 which shows the spatial distribution of municipal population in 1860, 1900 and 1930. It is also important to emphasize that this geo-referenced information not only places the size of the local population, but it also allows tracing other existing spatial patterns such as the dispersion or concentration of the population across the territory as the contrast between Northern and Southern Spain clearly illustrates.

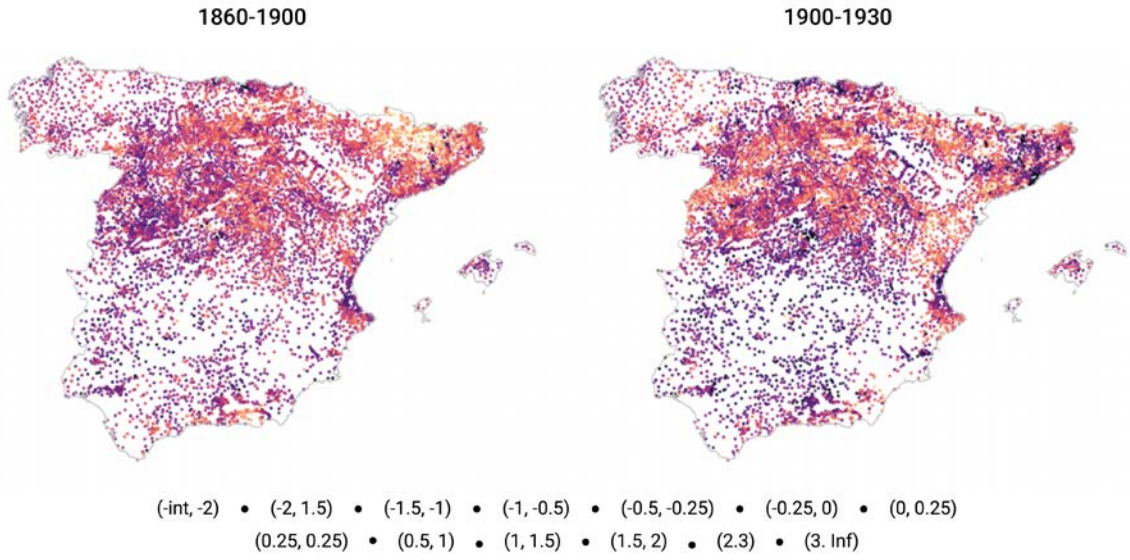
Figure 4
Municipal population in Spain, 1860, 1900 and 1930



Notes: The size of each bubble represents the local population. It varies proportionally from a minimum of 47 to a maximum of 1,018,183. For simplicity, Canarias has been excluded.
Sources: ESPOP.

This information, which is available for each of the seven censuses, opens the possibility of studying how spatial patterns evolved over time as migratory flows interacted with natural demographic growth at the local level (dimensions that are in turn influenced by both the local context in which these processes take place and the spatial interactions between locations; Beltrán Tapia et al. 2021). The results of a preliminary approximation to this evolution are shown in Figure 5, which provides information on population growth rates by municipality in the periods 1860-1900 and 1900-1930. The first notable characteristic of the evolution of the population in these two periods is the marked territorial heterogeneity. On the one hand, we can observe the beginning of the depopulation process (negative population growth rates) in a significant part of the territory, which today would make up the depopulated Spain. On the other, the differential growth of the territories that make up the current large metropolitan areas. Finally, we observe the relationship between this differential evolution and the number of alterations registered in the municipal administrative structure, which, not coincidentally, were concentrated in the depopulating mountainous regions and in the areas in which a growing volume of population is concentrated.

Figure 5
Municipal population growth rates in Spain, 1860-1900 and 1900-1930



Notes: Municipal homogenous population growth rates computed as logarithmic differences. For simplicity, Canarias has been excluded.
Sources: ESPOP.

Furthermore, the availability of this type of evidence makes it possible to establish a first identification, for Spain as a whole and on a municipal territorial aggregate scale, of the origin of the population that was to feed the major centres of attraction in this period (Barcelona, Madrid, and secondly Vizcaya, Valencia and Seville), providing a detailed vision of a process that had only been characterised so far on a provincial scale (Silvestre, 2001).

Therefore, the data infrastructure presented in this article lays the foundations for a global and highly detailed territorial analysis on the origins and factors explaining the depopulation of a significant part of the Spanish territory (Collantes and Pinilla, 2019). To this end, it will be essential to connect this information on the municipal population with other databases (many of them of recent or under construction) which present spatial evidence on aspects that contribute to the understanding of population dynamics. In this sense, those relating to the geographical characteristics of the territory (rainfall, altitude, ruggedness), the provision of transport and communications infrastructures (roads, railways, ports, post and telegraphs), the deployment and territorial structure of the State administration (location of administrative centres such as provincial capitals or judicial districts) and its relationship with the unequal access of the population to basic services such as sanitation, health or education stand out. In this sense, ESPOP is the key to connect this growing set of spatial data infrastructures that will surely improve the understanding aof the dynamics followed by the location of the population in the territory and its potential implications.

ESPOP is available upon request. The dataset is presented as an EXCEL file which includes the *de facto* municipal population as reported in the censuses and a key to convert the unbalanced panel into a balanced one with 9,130 homogenous municipalities. The preferred citation is this publication. The contact address to request the dataset is: ehvalencia@uv.es Questions, comments, or suggestions regarding the dataset can be addressed to this email too.

Table 5
Variables (ESPOP, 1860-1930)

Variable	*Description*
ine0	Municipal code
mun	Denomination
cpro	Provincial code
lat	Latitude
lon	Longitude
cap6030	1 if head or capital of territorially consistent municipality, 0 otherwise
ine6030	Territorially consistent municipal code
year	Year (1860...1930)
pop	Population

Table 5 summarises the main variables. ESPOP is presented in panel format. Therefore, to attain homogenous or territorial consistent municipalities local *de facto* population should be first summed across *ine6030*. Then, maintain only municipalities with *cap6030=1*. That is, ESPOP offers the unbalanced (as reported in censuses) and balanced panel with the local *de facto* population for the period 1860-1930.

CONCLUSION

In this study we have introduced ESPOP, a dataset that contains *de facto* population for 9,130 homogenous municipalities thereby allowing for consistent intertemporal comparisons between the 1860, 1877, 1887, 1900, 1910, 1920 and 1930 censuses. Additionally, municipalities are georeferenced which in turn facilitates the integration of other spatial data infrastructures. ESPOP thus culminates a long process that has benefitted from the work of the *Instituto Nacional de Estadística* (INE) and a good number of researchers.

ESPOP is, as mentioned above, a first step that will allow studying in more depth several compelling issues. To mention just a few, ESPOP is a spatial data infrastructure that can easily integrate municipal data and layers such as schools, hospitals, paved roads, or railroads. Therefore, the disposal of this new spatial data infrastructure will contribute to explore the unequal access of population to services (health, education), transport or communication networks. In the end, not all territories benefitted equally from technological advances thereby altering the territorial dynamics. ESPOP also permits to dig deeper on the roots of the spatial distribution of population and the depopulation process since local population growth rates can be calculated between 1860 and 1930. Likewise, *de facto* and *de jure* local populations for the period 1877-1930 can be compared which can offer further insight on residence and mobility. In addition, and since the 1787 census is digitized too, local population development can be traced back to the Old Regime (Beltrán Tapia et al. 2022). Last by not least, ESPOP can also be used to examine the administrative structure introduced by the liberal State which replaced that existing in the Old Regime.

Nonetheless, there are some limitations and caveats. The lack of historical municipal boundaries presents a serious concern for estimating population density. Similarly, the heterogenous municipal structure needs to be considered. For this, we expect future work will address these issues and offer further insight to better understand the complex relationship between population and territory.

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APPENDIX

Table A.1.
Municipalities altered or pseudo-municipalities and population, 1860-1930.

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
1008	Arrazua-Ubarrundia							1,031	X
1507	Arrazua	640	527	548	513	579	552		
1529	Ubarrundia	744	441	515	502	468	492		
1013	Barrundia	1,455	1,277	1,336	1,304	1,340	1,268	1,212	X
1514	Guevara	406	255						
1031	Laguardia	2,750	2,591	2,257	2,470	2,200	2,076	2,216	X
1522	Páganos	216	202	219	237	197	190		
1032	Lanciego/Lantziego	977	1,012	1,159	1,147	937	859	843	X
1532	Viñaspre	187	186						
1055	Valdegovía/Gaubea	3,560	3,214	3,116	3,005	3,018	2,831	3,174	X
1046	Erriberagoitia/Ribera Alta	1,456	1,277	1,186	1,169	1,145	1,158	1,609	
1516	Lacozmonte	553	429	408	390	467	500		
1528	Subijana	484	369	358	335	302	298		
1531	Villanañe	325	335	243	269	310	309		
1059	Vitoria-Gasteiz	18,728	25,039	27,660	30,701	32,893	34,785	40,641	X
1501	Alí	750							
1504	Aríñez	319	229	203	240	247	284		
1511	Elorriaga	1,071							
1062	Zambrana	453	337	347	386	327	369	851	X
1508	Berganzo	431	367	337	305	290	287		
1519	Ocio	250	249	253	205	171	164		
1506	Arraya	939	868	818	777	862	858	848	X
1524	Sabando	104							
2034	Fuentealbilla	1,259	1,550	2,275	2,344	2,328	2,883	2,737	X
2036	Golosalvo	237	217	235				314	
2041	Jorquera	2,428	2,514	1,725	1,719	2,269	2,503	1,890	X
2083	Villavaliente							638	
2056	Ontur	1,639	1,909	2,187	4,061	4,484	3,201	3,262	X
2004	Albatana	996	1,198	1,206			1,282	1,251	
3001	Adsubia	436	518	554	631	692	841	851	X
3501	Forna	355	298	309	178	151			
3006	Alcalalí	874	1,303	1,278	1,118	925	909	1,010	X
3502	Llosa de Camacho	262							
3014	Alicante/Alacant	31,162	34,926	40,115	50,142	55,300	63,908	73,071	X
3050	Campello, el					2,928	2,992	3,012	
3114	Romana, la							2,264	
3059	Crevillent	8,075	8,683	9,972	10,726	10,452	11,216	11,991	X
3504	San Felipe Neri	493	394						

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
3077	Fondó de les Neus, el/ Hondón de las Nieves	2,116	2,576	2,910	3,690	3,538	3,454	2,232	X
3078	Hondón de los Frailes							793	
3092	Muro de Alcoy	2,946	3,535	3,397	3,406	3,523	3,724	3,780	X
3500	Cela de Núñez	540							
3099	Orihuela	25,208	24,300	24,364	28,530	35,072	37,180	38,570	X
3503	Molins	352	329						
4003	Adra	9,607	11,323	9,029	11,188	10,210	8,565	10,314	X
4500	Alquería	803							
4013	Almería	29,426	40,338	36,200	47,326	48,407	50,194	53,977	X
4052	Huércal de Almería	2,005		1,908	2,390	2,344	2,562	2,802	
4022	Bédar	2,207	3,258	3,152	4,529	5,080	5,299	1,532	X
4048	Gallardos, Los							1,951	
4040	Doña María Ocaña							1,955	X
4502	Doña María	754	743	689	1,097	1,099	983		
4504	Ocaña de Albolodúy	850	842	802	948	664	901		
4046	Fondón	3,360	2,571	2,722	2,603	2,790	2,411	2,485	X
4505	Presidio de Andarax	1,011	817						
4066	Níjar	9,447	13,500	14,221	12,497	12,740	10,809	10,040	X
4094	Turrillas	1,064			1,397	1,357	926	777	
4083	Serón	7,227	7,586	7,006	4,689	5,226	8,264	9,361	X
4008	Alcóntar				1,483	1,716	2,116	2,105	
4090	Tahal	1,415	1,896	1,837	1,978	1,863	1,652	1,758	X
4501	Benitorafe	409							
4100	Vera	9,160	8,606	8,610	8,446	8,638	6,888	5,011	X
4075	Pulpí		3,015	2,992	3,745	3,595	3,303	3,067	
5084	Gilbuena	921	968	1,021	1,056	1,085	1,055	633	X
5108	Junciana							487	
5129	Mirón, El	467	546	598	590	539	690	709	X
5500	Aldealabad del Mirón	234	256	238	283	189			
6040	Corte de Peleas	435	733	997	1,058	1,244	1,657	968	X
6045	Entrín Bajo							964	
6095	Olivenza	7,178	7,759	8,177	9,066	12,194	11,649	11,813	X
6501	San Jorge	810							
7001	Alaró	4,879	5,325	5,876	5,976	6,033	5,925	4,238	X
7016	Consell							1,762	
7026	Eivissa	5,522	7,393	7,423	6,327	6,225	6,168	7,616	X
7024	Formentera	1,684			2,258	2,298	2,508	2,929	
7032	Maó	21,976	15,842	18,445	17,144	17,542	17,866	17,010	X
7052	Sant Lluís					2,116	2,065	2,096	
7064	Castell, Es		1,746	2,606	2,497	3,110	2,607	2,281	
7033	Manacor	12,590	14,929	19,635	12,408	12,436	13,033	15,721	X
7051	Sant Llorenç des Cardas-sar				2,440	2,883	2,994	3,646	

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
7040	Palma	53,019	58,224	60,514	63,937	67,544	77,418	88,262	X
7500	Establiménts	1,507	1,466	1,492	1,484	1,471			
7057	Santanyí	5,670	5,878	5,892	6,692	6,551	6,809	5,582	X
7059	Salines, Ses							1,510	
7058	Selva	4,529	4,870	5,153	4,875	4,911	5,289	4,056	X
7034	Mancor de la Vall							1,262	
7060	Sineu	4,453	4,881	4,935	5,139	4,871	4,808	3,942	X
7028	Lloret de Vistalegre							1,197	
8019	Barcelona	189,948	248,943	272,481	533,000	587,411	710,335	1,005,565	X
8123	Molins de Rei	2,855	2,907	2,661	2,936	3,327	3,962	6,275	
8211	Sant Feliu de Llobregat	2,478	2,749	2,990	3,314	3,852	4,406	6,343	
8503	Corts, Las	828	2,547	4,811					
8505	Gracia	19,969	33,733	45,042					
8506	Horta	2,772	3,367	3,437	4,354				
8514	San Andrés de Palomar	11,055	14,606	14,971					
8515	San Gervasio de Cassolas	2,512	5,146	8,206					
8519	Sans	7,984	15,980	19,105					
8520	Sant Martí de Provensals	9,333	24,839	32,695					
8521	Santa Cruz de Olorde	330	272	315	207	248			
8522	San Vicente de Sarriá	4,201	4,223	4,630	6,576	8,073	11,536		
8526	Vallvidrera	277	197	220					
8096	Granollers	4,702	5,714	6,208	6,755	7,293	8,397	12,699	X
8512	Palou	674	655	680	664	755	756		
8109	Lluçà	895	819	739	613	694	772	834	X
8513	Salsellas	239	164	137					
8115	Martorelles	657	741	816	830	913	1,087	1,089	X
8256	Santa Maria de Martorelles							342	
8202	Sant Celoni	2,445	2,360	2,415	2,568	3,101	3,311	4,192	X
8509	Montnegre	503	538	545	483	408	376		
8510	Olzinellas	309	304	242	250	278	261		
8233	Sant Pere de Torelló	1,182	892	957	975	1,003	1,279	1,938	X
8501	San Andrés de la Bola	477	337	245	224	272	275		
8508	Masías de San Pedro de Torelló	359	262	264	279	274	295		
8254	Santa Maria de Corcó	1,746	1,329	1,057	1,537	1,799	2,132	2,252	X
8517	San Martín Sescorts	407	400	378					
8279	Terrassa	8,873	11,199	13,182	15,956	22,679	30,532	39,975	X
8518	San Pedro de Tarrasa	2,314	3,016	3,083	4,404				
8284	Tordera	3,378	2,935	2,895	2,714	2,889	2,996	3,357	X
8511	Orsavinyá	512	389	357	334	326	316		
8287	Torrelavit						1,399	1,388	X
8507	Lavid	678	811	826	718	781			

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
8524	Terrasola	567	509	580	515	536			
9012	Alfoz de Santa Gadea	544	655	711	783	1,430	2,340	635	X
9025	Arija							2,187	
9021	Arauzo de Salce	460	442	539	560	666	641	346	X
9022	Arauzo de Torre							350	
9032	Avellanosa de Muñó	591	551	647	672	812	873	650	X
9179	Iglesiarrubia							320	
9042	Barrio de San Felices			529	505	526	532	548	X
9532	Quintanilla de Riofresno	551	513						
9054	Bozoó		451	384	385	362	371	357	X
9551	Villanueva Soportilla	477							
9059	Burgos	25,721	29,683	31,301	30,167	31,489	32,301	40,061	X
9547	Villayuda	341	356	354	400	441	408		
9061	Cabañes de Esgueva	612	673	750	791	868	866	446	X
9355	Santibáñez de Esgueva							405	
9067	Canicosa de la Sierra	759	880	1,008	1,037	1,087	1,129	799	X
9309	Regumiel de la Sierra							452	
9109	Condado de Treviño	4,393	3,865	3,801	3,701	3,622	3,694	3,946	X
9503	Añastro	219	228	213	198	231	246		
9120	Encío		299	252	210	208	197	181	X
9524	Moriana	372							
9143	Galbarros	297	283	262	263	256	263	253	X
9501	Aedo	405							
9186	Junta de Oteo	1,805	2,064	2,272	2,174	2,115	2,141	1,936	X
9189	Junta de Traslaloma	979	1,015	1,307	1,255	1,114	1,104	1,132	
9500	Aforados de Losa	593	581						
9534	Relloso	172							
9205	Masa	291	252	313	267	238	225	732	X
9233	Nidáguila	228	227	186	210	222	198		
9540	Terradillos de Sedano	224	222	225	233	241	228		
9212	Merindad de Castilla la Vieja	3,178	3,031	2,945	2,876	3,463	3,523	3,898	X
9502	Aldeas de Medina	1,868	1,846	1,720	1,678				
9213	Merindad de Cuesta-Urria	3,355	2,327	2,121	1,971	1,757	1,719	2,033	X
9394	Trespaderne		824	820	804	807	839	1,215	
9216	Merindad de Valdeporres	1,823	2,019	1,951	2,092	2,293	2,208	2,492	X
9519	Junta de Puentedey	485	497	533	507				
9217	Merindad de Valdivielso	4,460	4,303	3,852	3,833	2,439	2,362	2,381	X
9014	Altos, Los					1,639	1,676	1,835	
9529	Pesadas de Burgos	202	197	150	167	189	193		
9541	Villaescusa del Butrón	329	299	280	320	261	268		
9219	Miranda de Ebro	2,896	4,006	4,911	6,199	7,321	8,615	12,268	X
9518	Ircio	333							

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
9522	Montañana	339	351	329					
9238	Oña	1,175	1,331	1,443	1,515	1,515	1,344	1,517	X
9539	Tamayo	150							
9257	Pedrosa del Páramo	460	446	455	438	417	420	276	X
9202	Manciles							151	
9323	Rojas	637	627	566	604	566	542	383	X
9265	Piérnigas							197	
9330	Salas de los Infantes	968	1,121	1,186	1,383	1,545	1,360	1,528	X
9312	Revilla y Ahedo, La		514	507	493	493	454	420	
9334	Salinillas de Bureba	600	520	491	478	443	466	281	X
9280	Quintanabureba							227	
9360	San Vicente del Valle							245	X
9536	San Clemente del Valle	476	410	381	338	263	285		
9395	Tubilla del Agua	692	740	724	729	705	661	1,010	X
9506	Bañuelos del Rudrón	158	164	154	125	117			
9538	Tablada del Rudrón	315	275	288	300	279	393		
9398	Úrbel del Castillo				517	527	497	486	X
9525	Nuez de Arriba	550	553	543					
9411	Valle de Oca							788	X
9515	Cueva-Cardiel	408	371	365	333	299	250		
9544	Villalbos	169	124	116	120	133	129		
9545	Villalómez	271	274	266	221	201	203		
9549	Villanasur-Río de Oca	287	298	286	284	262	216		
9413	Valle de Valdebezana	1,732	1,833	1,953	2,209	2,034	2,261	4,523	X
9514	Cubillos del Rojo	253	252	248	263	246			
9517	Valle de Hoz de Arreba	2,055	2,134	2,148	2,228	2,089	2,032		
9429	Villaescusa la Sombría			390	379	363	348	339	X
9542	Villaescusa la Solana	447	411						
9431	Villafranca Montes de Oca	769	916	882	827	787	716	781	X
9526	Ocón de Villafranca	261	264	253	250	234	211		
9457	Villarcayo	821	839	840	930	930	983	1,488	X
9509	Bocos	220	202	205	198	189	189		
9464	Villatuelda	387	438	500	537	530	500	288	X
9380	Terradillos de Esgueva							285	
9527	Olmos de la Picaza			358	341	351	345	378	X
9512	Castromorca	318	377						
10033	Cabañas del Castillo	1,633	1,788	1,946	2,152	2,594	2,474	1,530	X
10134	Navezuelas							1,199	
10050	Casar de Palomero	1,427	1,336	1,397	1,433	1,743	1,748	1,994	X
10505	Ribera-Oveja	139	143	156	181				
10099	Holguera	551	553	773	889	896	974	1,069	X
10503	Grimaldo							120	

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
10167	Santa Cruz de Paniagua	387	445	619	733	873	767	737	X
10501	Bronco	164	191						
10196	Valdastillas	411	417	506	559	596	661	385	X
10154	Rebollar							308	
10210	Villamiel	1,562	1,821	1,794	1,770	1,936	1,873	1,637	X
10508	Trevejo							404	
11033	San Roque	11,174	8,724	8,793	8,569	10,165	10,903	10,610	X
11022	Línea de la Concepción, La		9,155	13,862	31,862	33,296	63,236	35,371	
12006	Alcudia de Veo	496	497	478	867	859	794	780	X
12502	Veo	442	408	347					
12080	Morella	6,563	7,190	6,812	7,335	6,722	5,498	5,832	X
12068	Herbés	709	720	706	666	638	546		
12082	Nules	4,801	4,443	4,513	5,367	5,826	5,874	6,703	X
12501	Mascarell	380							
12084	Onda	5,222	5,465	5,673	6,595	7,027	6,631	7,472	X
12500	Artesa	285							
12104	Segorbe	7,958	8,095	7,440	7,045	7,190	6,555	6,603	X
12503	Villatorcas	51							
12121	Traiguera	2,718	2,857	2,931	2,962	3,152	3,021	2,416	X
12101	San Rafael del Río							614	
12128	Vilafamés	4,207	4,918	5,789	6,708	7,314	7,356	4,154	X
12124	Vall d'Alba							2,719	
13015	Almodóvar del Campo	6,595	10,362	12,008	12,525	13,833	12,635	13,974	X
13500	Fontanosas	479							
13501	Tirteafuera	251							
13038	Chillón	2,915	2,586	3,444	3,414	4,263	4,521	4,475	X
13046	Guadalmez							1,669	
13055	Mestanza	2,056	3,261	3,820	3,332	3,638	3,505	5,050	X
13080	Solana del Pino	658			908	1,072	1,273	1,808	
14002	Aguilar de la Frontera	12,422	11,725	12,451	13,236	12,637	14,864	15,809	X
14045	Moriles						2,228	3,308	
14009	Belmez	3,363	7,097	12,046	8,978	9,460	10,151	10,421	X
14052	Peñarroya-Pueblonuevo							24,260	
14501	Peñarroya				3,156	4,529	6,963		
14502	Pueblonuevo del Terrible				6,789	11,609	16,822		
14012	Bujalance	8,395	9,818	9,967	10,756	11,281	12,639	14,308	X
14500	Morente	400							
14043	Montoro	13,183	13,316	12,563	14,581	15,144	18,140	15,923	X
14016	Cardeña							4,669	
14058	Rute	7,063	9,641	10,553	10,740	10,920	11,178	14,687	X
14503	Zambra	1,511							
15030	Coruña, A	30,132	33,739	37,251	43,971	47,984	62,022	74,132	X

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
15502	Oza (Partido de La Coruña)	6,360	7,248	8,032	9,644	8,918			
15069	Pontedeume	4,981	8,496	8,502	5,943	6,344	6,584	7,056	X
15091	Vilarmaior	2,413			3,062	3,210	3,242	3,124	
15078	Santiago de Compostela	23,773	24,166	24,300	24,120	24,637	25,870	38,270	X
15500	Conjo	6,050	6,557	6,206	7,398	7,558	7,584		
16108	Huelves	548	592	597	555	570	604	583	X
16151	Paredes		166	163	140	153	129	126	
16126	Mira	1,776	1,896	2,140	1,745	2,193	2,422	2,564	X
16137	Narboneta							423	
16131	Monteagudo de las Salinas	496	575	507	570	572	569	562	X
16276	Yémeda			167	173	211	217	225	
16215	Tragacete	1,093	1,085	1,127	1,397	1,454	1,303	736	X
16239	Vega del Codorno							451	
16220	Valdecabras	618	774	679	751	759	726	383	X
16219	Uña							796	
17036	Campdevànol	670	567	608	1,318	1,756	2,097	2,315	X
17515	San Lorenzo de Campdevanol	500	357	387					
17068	Foixà	817	879	962	976	931	949	587	X
17203	Ultramort	333						318	
17097	Madremanya	614	537	922	865	890	821	422	X
17173	Sant Martí Vell	487	375					340	
17138	Portbou			2,605	2,581	3,116	3,475	3,976	X
17506	Culera	839	1,223						
17161	Sant Feliu de Pallerols	3,686	1,545	1,581	1,627	1,776	1,841	1,593	X
17133	Planes d'Hostoles, Les		1,550	1,529	1,540	1,619	1,879	1,715	
17164	Sant Hilari Sacalm	2,163	1,971	2,228	2,510	2,549	2,725	2,713	X
17504	Carós	282	241	233					
17167	Sant Joan de les Abadesses	1,106	2,210	2,645	2,995	3,649	3,524	3,924	X
17512	Ribera de San Juan de las Abadesas	1,080							
18008	Alcázar y Fregenite							940	X
18501	Alcázar y Barjis	872	858	885	797	628	638		
18506	Fregenite	456	496	474	444	467	497		
18141	Murtas	3,798	3,757	3,651	2,878	2,493	2,280	3,180	X
18504	Cojayar	579	516	466	365	306	350		
18508	Mecina-Tedel	998	822	732	444	490	515		
18147	Órgiva	4,897	4,554	4,450	4,371	4,595	5,051	5,619	X
18502	Bayacas	244	138	153	203	253	266		
18182	Ugíjar	3,432	2,973	2,944	2,903	3,557	3,080	3,026	X

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
18060	Cherín	979	752	694	620			658	
19032	Anguita	774	977	879	930	997	873	717	X
19556	Santa María del Espino							266	
19048	Baños de Tajo	372	412	389	386	424	413	296	X
19118	Fuembellida							166	
19069	Carrascosa de Tajo	481	485	467	430	437	432	236	X
19205	Oter							138	
19162	Luzaga	393	387	327	368	397	398	359	X
19153	Iniéstola							79	
19163	Luzón	861	996	899	972	900	870	640	X
19089	Ciruelos del Pinar							200	
19185	Miñosa, La		594	622	685	720	715	713	X
19514	Cañamares	552							
19222	Pobo de Dueñas, El	835	902	950	1,015	1,082	1,035	737	X
19213	Pedregal, El							324	
19230	Quer	215	196	220	204	207	208	192	X
19568	Valbueno	100							
19251	Saúca	485	555	528	593	684	668	369	X
19116	Estriégana							193	
19533	Lebrancón	721	758	706	720	763	652	228	X
19273	Torete							205	
19522	Cuevas Labradas							262	
19540	Olmedillas	410	394	358	369	381	340	177	X
19276	Torrecilla del Ducado							104	
20009	Andoain	2,617	2,418	2,648	2,866	2,850	3,322	3,710	X
20516	Soravilla	269	234						
20019	Beasain	1,448	2,144	2,030	1,932	2,973	3,775	5,260	X
20503	Astigarreta	320	289	256	225	255	193		
20508	Gudugarreta	91	84						
20064	Pasaia	1,266	1,591		2,856	3,571	4,772	7,519	X
20514	Pasajes de San Juan			1,082					
20515	Pasajes de San Pedro			662					
20069	Donostia-San Sebastián	14,111	21,355	29,047	37,812	49,008	61,774	78,432	X
20511	Igueldo	522							
21042	Isla Cristina	3,191	4,480	5,187	5,969	8,312	9,567	10,499	X
21500	Redondela, La	697	866						
21078	Zalamea la Real	5,169	7,753	6,240	7,335	13,348	10,344	11,418	X
21052	Nerva			6,431	7,908	16,087	14,972	16,726	
22010	Albella y Jánovas				940	918	932	846	X
22508	Albella y Planillo	778	717	739					
22578	Janovas	273	241	260					
22038	Aso de Sobremonte		249	253	248	258	266	250	X

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
22654	Yosa de Sobremonte	262							
22049	Barbués	395	364	404	463	490	504	253	X
22236	Torres de Barbués							223	
22053	Benabarre	2,397	2,031	1,979	1,652	1,586	1,543	1,577	X
22510	Aler	235	205	211	168	165	161		
22062	Bisaurri		854	863	696	766	673	697	X
22517	Arasanz	865							
22084	Castejón de Sos		796	799	708	742	722	630	X
22614	Ramastué	764							
22098	Escarrilla				176	176	147	168	X
22622	Sandinies	239	200	193					
22114	Gistaín	470	413	406	313	329	500	739	X
22634	Serveto	322	308	328	324	328	335		
22117	Graus	3,242	3,121	3,164	2,813	2,745	2,515	3,295	X
22527	Barasona	601	555	543	432	452	459		
22532	Benavente de Aragón		445	445	289	339	402		
22643	Torrelabad y Soler	467							
22120	Hecho	1,709	2,022	1,808	1,661	1,414	1,340	1,226	X
22640	Siresa	392							
22134	Laguarta	1,190	1,194	1,221	1,110	1,041	1,010	1,389	X
22525	Bara y Miz	389	398	348					
22649	Used y Bara				327	387	346		
22149	Loarre	1,444	1,444	1,524	1,544	1,449	1,462	883	X
22151	Loscorrales							569	
22215	Seira		354	336	271	241	633	522	X
22528	Barbaruens	348							
22233	Torre la Ribera		379	346	305	313	337	375	X
22651	Villacarlí	474							
22500	Abay	397	550	469	463	443	462	498	X
22522	Banaguás	280							
22501	Abena				313	318	277	275	X
22543	Binué	308	313	294					
22502	Acín		281	284	280	266	251	209	X
22652	Villanovilla	323							
22529	Barbenuta						307	281	X
22506	Ainielle	139							
22535	Berbusa		269	286	305	317			
22518	Arbués		380	345	357	326	262	266	X
22507	Alastuey	341							
22536	Berdún	916	802	817	911	867	815	907	X
22591	Majones	353	237	272	232	196	192		
22538	Bergua-Basarán							368	X
22531	Basarán	281	255	280	260	243	215		

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
22537	Bergua	255	258	299	204	218	236		
22545	Bono		252	255	278	238	242	228	X
22512	Aneto	360							
22548	Cajigar						342	334	X
22621	San Esteban del Mall	478	344	288	249	272			
22574	Gésera		492	474	467	482	481	448	X
22603	Ordovés y Alavés	556							
22575	Guasa		317	278	315	318	262	262	X
22648	Ulle	343							
22601	Oliván		384	485	440	441	457	416	X
22553	Casbas de Jaca	534							
22636	Sieste		403	405	370	380	358	368	X
22588	Latorrecilla	407							
22647	Triste				452	762	556	632	X
22625	Santa María y la Peña	431	491	481					
23025	Castellar	2,645	3,323	4,086	4,948	4,515	5,221	6,318	X
23062	Montizón	673	845	884		1,337	1,539	2,263	
23047	Iruela, La	3,182	3,891	4,326	5,113	5,581	5,924	4,363	X
23030	Chilluévar							2,585	
23055	Linares	12,342	36,627	29,692	38,245	37,039	40,010	42,170	X
23501	Tobaruela	259							
23074	Rus	2,784	2,837	3,340	3,350	3,950	4,148	4,377	X
23500	Mármol	368	411						
24056	Cistierna	2,057	2,050	2,093	3,024	4,673	5,728	3,908	X
24137	Sabero							2,580	
24115	Ponferrada	3,338	6,647	7,324	7,188	7,448	9,829	10,785	X
24503	Columbrianos	1,212							
24507	Toral de Merayo	1,552							
24130	Riaño	1,833	1,898	1,926	2,025	2,185	1,766	1,856	X
24111	Pedrosa del Rey						427	482	
24147	San Esteban de Valdueza	1,120	2,484	2,316	2,218	2,036	2,019	2,053	X
24506	San Clemente de Valdueza	1,194							
24225	Villasabariego	903	1,512	1,677	1,751	2,035	2,014	2,190	X
24509	Villafañe	607							
25017	Alins	376	229	185	230	216	191	741	X
25510	Areo	484	290	264	215	237	211		
25517	Aynet de Besán	425	339	280	234	225	267		
25559	Norís	82	62	51	62	62	68		
25584	Tor	116	80	64	85	63	60		
25034	Artesa de Segre	1,224	1,272	1,653	1,736	1,981	2,080	2,719	X
25520	Baldomá	883	798	797	747	587	585		

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
25047	Bellcaire d'Urgell	1,278	1,275	1,360	1,728	2,215	2,401	1,612	X
25035	Sentiu de Sió, La							892	
25052	Bellvís	1,643	1,517	1,794	2,714	2,985	3,665	2,737	X
25168	Poal, El							659	
25054	Benés				408	487	552	469	X
25522	Batlíu de Sás	642	404	446					
25092	Floresta, La			988	556	559	533	622	X
25153	Omellons, Els	897	989		513	507	451	465	
25123	Lladorre			563	592	467	534	606	X
25580	Tabescan	798	657						
25196	Sant Esteve de la Sarga						733	694	X
25501	Alsamora	1,086	1,029	1,036	818	809			
25216	Talavera		780	836	855	792	787	767	X
25530	Civit	861							
25234	Tremp	2,238	2,217	2,631	2,054	1,987	2,115	3,329	X
25528	Castisent	818	829						
25538	Fígols de Tremp			672	492	490	582	571	
25238	Vallbona de les Monges	1,146	1,082	1,116	1,034	1,095	1,176	701	X
25567	Rocallaura							383	
25250	Vilanova de Meià	995	970	880	814	756	715	1,303	X
25521	Baronía de la Vansa	587	578	396	464	441	460		
25573	Santa María de Meyá	553	600	475	412	332	273		
25513	Arrós y Vila	327	186	371	307	268	277	234	X
25592	Vilá	221	127						
25527	Castellbó	420	348	237	177	215			X
25590	Valle de Castellbó	1,111	698	678	419	478			
25595	Villa y Valle de Castellbó						701	723	
25542	Figuerosa			749	736	643	691	640	X
25502	Altet	815	731						
26002	Agoncillo	714	758	765	930	1,126	1,214	1,347	X
26019	Arrúbal	215	138	71					
26108	Ocón	2,031	1,542	1,311	1,309	1,386	1,232	1,214	X
26066	Galilea		532	526	541	564	575	551	
26127	Rodezno	579	721	773	855	704	611	595	X
26503	Cuzcurritilla	126							
26135	Santa Engracia del Jubera	947	1,482	1,293	1,233	1,099	920	828	X
26502	Collado, El	450							
26142	San Vicente de la Sonsierra	2,490	2,482	2,766	2,616	1,854	1,877	1,820	X
26504	Ribas	234	176	140	144	118			
26157	Tricio	585	558	556	655	840	630	727	X

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
26016	Arenzana de Arriba	205	180	178	173		167	156	
26169	Villanueva de Cameros	378	460	486	483	480	393	379	X
26500	Aldeanueva de Cameros	121							
27007	Begonte	5,432	5,495	5,603	6,541	6,730	7,270	6,335	X
27056	Rábade							989	
27018	Fonsagrada, A	18,018	15,908	16,419	17,302	17,321	17,750	15,807	X
27035	Negueira de Muñiz							1,534	
28079	Madrid	298,426	397,816	470,283	539,835	599,807	750,896	952,832	X
28500	Alameda, La	212	177						
28115	Pozuelo de Alarcón	888	1,381	1,521	1,873	2,436	2,677	4,064	X
28512	Húmera	171	126						
28124	Robledillo de la Jara	411	429	413	413	443	427	263	X
28016	Atazar, El							145	
28145	Talamanca de Jarama	369	417	410	494	460	543	582	X
28503	Campoalbillo	94							
28172	Villalbilla	437	463	600	554	595	669	608	X
28511	Hueros, Los	81	86						
29015	Antequera	25,851	25,664	27,070	31,609	32,366	31,526	32,974	X
29507	Villanueva de Cauche	604							
29019	Arenas	2,399	2,746	1,853	1,876	2,165	2,112	2,402	X
29504	Daimalos Vados	337							
29066	Macharaviaya	947	1,255	668	650	595	502	495	X
29500	Benaque	654							
29067	Málaga	94,732	115,882	134,016	130,109	136,365	150,584	188,010	X
29502	Churriana	2,426	2,832	3,378	3,036				
29901	Torremolinos	1,903	2,151	2,394	3,048	2,830	3,016		
29084	Ronda	17,966	19,181	18,350	20,995	22,525	30,393	33,161	X
29506	Serrato	614							
29086	Sayalonga	1,282	1,859	1,451	1,196	1,280	1,471	1,415	X
29503	Corumbela	386							
29094	Vélez-Málaga	21,097	24,332	23,425	23,586	24,140	24,893	27,564	X
29501	Chilches	923							
31056	Biurrun-Olcoz							538	X
31502	Biurrun	392	355	352	402	327	379		
31506	Olcoz	287	221	243	204	164	175		
31077	Corella	4,991	5,613	6,649	6,793	6,200	6,830	5,676	X
31070	Castejón							1,892	
31098	Esteribar	2,038	2,037	2,051	2,102	2,127	2,165	2,378	X
31504	Larrasoaña	139	180	204	202	216	161		
31186	Odieta	663	617	562	522	575	534	675	X
31507	Ostiz	204	151	174	163	143	144		
32024	Celanova	4,679	4,628	4,838	4,895	4,662	4,839	7,314	X

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
32504	Vilanova	2,804	1,865	1,892	1,822	1,910	2,055		
32032	Xinzo de Limia	5,157	5,368	5,531	5,622	6,173	6,599	8,495	X
32503	Moreiras	1,637	1,817	1,920	1,797	1,904	1,900		
32045	Maside	8,336	6,231	6,541	6,339	6,052	5,797	5,877	X
32065	Punxín		2,320	2,409	2,173	2,172	2,216	2,073	
32068	Ramirás							5,806	X
32502	Freás de Eiras	2,898	2,940	2,909	2,926	2,823	2,910		
32505	Villameá de Ramiranes	2,657	2,664	2,627	2,527	2,575	2,558		
33011	Cangas del Narcea	21,337	22,212	22,361	22,742	23,104	23,668	21,417	X
33500	Leitariegos	413	413	414	353	282	296		
33017	Castropol	13,460	8,135	7,837	7,731	7,212	6,937	7,203	X
33070	Tapia de Casariego		5,346	5,044	5,106	4,925	4,940	4,416	
33028	Ibias	7,653	6,436	6,565	7,079	6,882	6,987	7,387	X
33022	Degaña		1,683	1,732	1,677	1,549	1,483	1,308	
33041	Navia	10,442	6,335	6,330	5,804	6,490	7,017	7,659	X
33077	Villayón		3,912	3,349	3,843	3,846	3,749	3,804	
33044	Oviedo	28,225	34,460	42,716	48,103	53,269	69,375	75,463	X
33502	Ribera de Abajo	1,537	1,027	1,139					
33501	Peñamellera	5,037	5,416	5,297					X
33046	Peñamellera Alta				1,720	2,061	2,037	2,116	
33047	Peñamellera Baja				3,437	3,798	3,734	3,888	
34005	Alar del Rey		731	784	864	1,012	1,022	1,454	X
34506	Nogales de Pisuerga	954							
34016	Arenillas de San Pelayo	505	197	225	249	249	220	225	X
34202	Villabasta de Valdavia		205	218	174	185	182	170	
34027	Barruelo de Santullán		3,255	3,148	3,389	4,417	6,600	8,695	X
34509	Santa María de Nava	1,321							
34135	Pomar de Valdivia			1,864	1,839	2,091	2,005	2,207	X
34517	Villarén	1,618	1,728						
34164	San Martín de los Herreros	582		514	534	610	635	574	X
34513	Ventanilla		649						
34188	Valdegama		827	839	795	896	930	900	X
34501	Gama	626							
34193	Valoria de Aguilar			427	450	513	498	529	X
34503	Lomilla	431	405						
34245	Villota del Páramo			802	922	1,029	1,004	1,038	X
34519	Villosilla de la Vega	770	739						
34500	Cenera de Zalima				587	624	616	587	X
34504	Matamorisca	527	520	552					
34505	Moslares	757	470	481					X
34038	Bustillo de la Vega		369	385	478	584	597	667	

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
34147	Renedo de la Vega				535	545	566	566	
34511	Valle de Santullán			419	495	522	479	445	X
34508	San Martín y Parapertú	357	478						
34510	Terradillos de Templarios	801	477	499	513	539	519	516	X
34109	Moratinos		321	313	348	351	321	294	
35017	Puerto del Rosario	517	491	443	506	724	931	3,441	X
35500	Casillas del Ángel	1,091	1,001	897	1,229	1,062	1,106		
35503	Tetir	1,279	1,072	980	1,110	1,084	1,145		
36005	Caldas de Reis	6,192	5,878	5,153	7,505	7,836	7,825	8,319	X
36508	Sayar	1,494	1,483	1,472					
36030	Mondariz	7,751	6,212	5,309	5,213	5,952	6,764	6,687	X
36031	Mondariz-Balneario							774	
36038	Pontevedra	6,718	19,857	19,996	22,330	24,222	26,944	30,821	X
36500	Alba	4,463							
36505	Mourente	4,562							
36507	Salcedo	3,254							
36053	Soutomaior	6,058	3,142	3,222	3,275	3,405	3,524	3,630	X
36019	Fornelos de Montes		2,833	2,887	2,795	3,047	2,940	2,817	
36056	Valga	5,855	6,146	5,773	6,002	6,122	6,207	4,679	X
36044	Pontecesures							1,811	
36057	Vigo	11,070	13,416	15,044	23,259	41,213	53,100	65,012	X
36501	Bouzas	6,818	7,470	7,723	7,569				
36060	Vilagarcía de Arousa	4,621	5,715	6,274	7,312	8,691	14,859	16,672	X
36502	Carril	2,152	2,571	2,533	2,303	2,575			
36509	Villajuán	2,520	2,924	3,044	3,119	3,570			
37107	Ciudad Rodrigo	6,223	6,859	8,330	8,930	8,824	8,761	9,484	X
37500	Bocacara	218							
37149	Garcirrey	324	218	269	200	450	357	349	X
37502	Casasola de la Encomienda	246	183	200	154				
37183	Martín de Yeltes	409	607	710	865	1,286	1,120	1,121	X
37501	Campocerrado	178	166	220	162				
37211	Narros de Matalayegua	474	657	811	876	1,063	887	894	X
37504	Ínigo	365							
38024	Llanos de Aridane, Los	4,818	5,960	5,919	6,638	7,214	6,912	5,786	X
38045	Tazacorte							3,104	
38048	Valverde	5,026	5,422	5,897	6,508	6,827	4,390	5,033	X
38013	Frontera						2,835	3,038	
39001	Alfoz de Lloredo	2,604	2,293	2,643	2,544	2,855	2,900	3,149	X
39090	Udías		931	842	903	1,164	1,424	1,575	
39002	Ampuero	1,535	2,493	2,601	3,006	3,624	3,547	3,846	X
39503	Marrón	881							

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
39004	Arenas de Iguña	1,803	2,247	2,375	2,414	2,499	2,225	2,607	X
39506	Riovaldeiguña (Valle de)	604							
39508	San Vicente de León y Los Llares	320							
39010	Bárcena de Pie de Concha	1,116	900	1,126	1,091	1,200	1,235	1,107	X
39504	Pujayo	347							
39015	Camaleño	1,902	2,607	2,456	2,686	2,492	2,591	2,587	X
39501	Espinamá	540							
39017	Campoo de Yuso	3,161	1,554	1,547	1,701	2,215	2,368	2,400	X
39065	Rozas de Valdearroyo, Las		1,829	1,621	2,059	2,173	2,713	2,858	
39020	Castro-Urdiales	4,555	7,623	9,466	14,191	12,463	11,786	12,418	X
39507	Sámano (Valle de)	2,984							
39032	Hermandad de Campoo de Suso	2,158	2,293	3,543	3,729	3,651	3,663	3,696	X
39502	Marquesado de Argüeso	1,120	1,213						
39038	Limpias	1,295	1,133	1,095	1,474	1,484	1,464	1,644	X
39509	Seña	205							
39077	Santiurde de Reinosa	1,112	1,146	1,133	1,083	1,037	1,035	973	X
39505	Rioseco	257							
39093	Valdeprado del Río	777	2,534	2,584	2,631	2,539	2,447	2,381	X
39500	Carabeos, Los	1,380							
40081	Frumales	371	413	381	423	492	535	476	X
40158	Perosillo							145	
40525	Ochando		224	271	266	298	306	308	X
40529	Pascuales	211							
41031	Castillo de las Guardas, El	3,653	3,701	4,512	4,422	4,987	5,499	4,503	X
41057	Madroño, El							1,093	
41065	Morón de la Frontera	17,130	14,879	16,103	14,190	17,099	18,758	22,485	X
41035	Coripe				1,977	2,259	2,420	3,075	
41095	Utrera	13,895	15,103	15,010	15,138	15,460	21,316	24,204	X
41063	Molares, Los	609					1,122	1,944	
41500	Tomares y San Juan de Aznalfarache	951	1,070	1,176					X
41086	San Juan de Aznalfarache				859	1,475	2,204	3,687	
41093	Tomares				687	884	1,067	1,819	
42032	Bayubas de Abajo	653	687	771	784	732	743	577	X
42033	Bayubas de Arriba							180	
42042	Buitrago	307	154	137	117	141	114	112	X
42028	Ausejo de la Sierra				383	372	306	285	

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
42539	Cuellar de la Sierra	111	334	366					
42178	Talveila	789	841	793	721	703	647	484	X
42070	Cubilla							253	
42622	Velilla de Medinaceli	1,134	1,072	901	912	985	968	492	X
42564	Jubera							268	
43086	Montblanc	4,675	4,775	5,964	5,243	4,923	4,707	4,572	X
43503	Guardia dels Prats	371	350						
43504	Lilla	888	753						
43087	Montbrió de la Marca			294	327	281	280	260	X
43509	Vallvert de Queralt	306	279						
43104	Perelló, El	2,694	4,130	5,018	4,134	4,146	4,411	4,408	X
43013	Ametlla de Mar, L'				2,537	2,802	3,022	3,083	
44023	Allueva	466	480	561	577	551	542	232	X
44102	Fonfría							209	
44203	Salcedillo							170	
44216	Teruel	10,432	9,486	9,423	10,797	11,935	12,010	13,584	X
44502	Concud	548	534	479	557	439	430		
44248	Valverde	303	262	200	200	246	278	158	X
44081	Collados							142	
44511	Piedrahita	399	475	384	423	412	366	242	X
44501	Colladico, El							129	
45095	Mata, La	1,036	1,241	1,273	1,295	1,512	1,738	2,121	X
45501	San Pedro de la Mata	147	147	135	133	169	175		
45170	Torrecilla de la Jara	550	698	833	910	1,107	1,202	963	X
45146	Retamoso de la Jara							601	
46006	Albaida	3,204	3,403	3,528	4,035	4,127	4,249	4,027	X
46500	Alforj	455	400	420					
46007	Albal	1,569	1,888	2,203	2,293	2,373	2,673	3,100	X
46065	Beniparrell	284			503	581	683	748	
46081	Canals	2,875	3,430	4,443	4,695	4,857	4,967	5,261	X
46502	Ayacor	479	693						
46519	Torre Cerdá	269							
46119	Ènova, l'	719	1,105	1,159	1,312	1,405	1,348	1,465	X
46518	Sanz	192							
46145	Xàtiva	14,530	14,534	14,099	12,600	12,737	14,148	15,087	X
46501	Anahuir	167	167						
46154	Llanera de Ranes	760	840	809	890	988	939	922	X
46520	Torrent de Fenollet	106							
46184	Ontinyent	11,027	11,727	11,165	11,430	12,390	12,470	12,342	X
46124	Fontanars dels Alforins							1,246	
46209	Rafelguaraf	528	1,026	1,052	1,217	1,591	1,591	1,941	X
46521	Tosalnou	164							

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
46217	Rotglà i Corberà		858	869	973	990	970	1,006	X
465005	Rotglá	851							
46250	Valencia	107,703	143,861	170,763	213,550	233,348	251,258	320,195	X
46503	Benifaraig	593	653	669					
46504	Beniferri	221							
46505	Benimaclet	409							
46506	Benimamet	1,370	1,519						
46509	Borboto	683	582	577					
46510	Campanar	1,741	2,022	2,152					
46511	Carpesa	670	583	586					
46512	Mahuella	209	222	200					
46513	Masarrochos	666	696	712					
46514	Orriols	333	402						
46515	Patraix	484							
46516	Pueblo Nuevo del Mar	8,571	10,493	11,291					
46517	Ruzafa	13,013							
46523	Villanueva del Grao	3,948	4,433	5,619					
46522	Villa de la Unión			1,804	2,260				X
46058	Benifairó de les Valls	792	766			944	978	1,161	
46122	Faura	1,061	1,020			1,505	1,537	1,669	
47165	Tordesillas	4,137	3,764	3,448	3,590	3,669	3,579	4,071	X
47504	Villavieja del Cerro	554	426	507	500	468	445		
48007	Munitibar-Arbatzegi Gerrikaitz			1,184	1,172	1,056	1,053	1,064	X
48505	Arbacegui	770	757						
48522	Guerricaiz	432	332						
48013	Barakaldo	2,688	4,710	8,868	15,013	19,249	26,906	34,209	X
48502	Alonsotegui	323	351	381					
48020	Bilbao	17,969	32,734	50,772	83,306	93,536	112,819	161,987	X
48500	Abando	5,079	2,771	4,015					
48510	Begoña	4,535	1,867	2,662	5,802	7,279	11,097		
48513	Derio	225	223	255	293	333	424		
48514	Deusto	1,899	2,323	2,972	4,142	5,777	7,911		
48534	Zamudio	920	960	1,089	1,170	1,229	1,444		
48535	Zamudio-Derio							2,719	
48027	Durango	3,154	4,276	3,713	4,319	5,145	5,758	8,572	X
48533	Yurreta	1,145	1,341	1,487	1,565	1,664	1,750		
48028	Ea	1,289	1,182	1,496	1,443	1,394	1,320	1,307	X
48509	Bedarona	376	274						
48038	Gamiz-Fika							1,053	X
48517	Fica	290	319	313	326	338	374		
48519	Gámiz	630	601	641	594	604	657		

INE	*Municipality*	*1860*	*1877*	*1887*	*1900*	*1910*	*1920*	*1930*	*Capital*
48046	Gernika-Lumo			2,837	3,250	3,561	4,712	5,229	X
48521	Guernica	1,583	1,580						
48526	Luno	1,202	1,689						
48069	Mungia	2,466	2,432	1,822	4,621	5,299	5,453	5,000	X
48528	Munguía, Anteiglesia de	1,909	1,923	2,382					
48082	Santurtzi					3,370	4,646	8,074	X
48083	Ortuella					5,469	5,553	6,393	
48531	Santurce	1,622	2,614	5,360	7,781				
49029	Burganes de Valverde			695	777	797	854	878	X
49516	Olmillos de Valverde	498	560						
49074	Fornillos de Fermoselle	711	796	839	820	852	814	596	X
49073	Formariz							275	
49077	Fresno de Sayago	890	892	909	920	847	785	570	X
49070	Figueruela de Sayago							162	
49089	Gáname	787	844	833	726	682	615	325	X
49510	Fadón							201	
49095	Hiniesta, La	584	718	835	866	960	901	658	X
49178	Roales							395	
49110	Manzanal de Arriba				1,197	1,102	1,253	1,383	X
49512	Folgoso de la Carballeda	1,250	1,228	1,038					
49128	Morales de Rey	1,495	1,596	1,749	1,742	1,749	1,714	1,193	X
49203	Santa María de la Vega							742	
49217	Tardobispo	636	719	713	647	595	575	362	X
49532	Tuda, La							287	
49223	Trabazos	1,106	1,134	1,134	1,180	1,454	1,464	1,875	X
49536	Villarino Tras la Sierra	421	545	603	609	447	413		
49230	Vallesa de la Guareña			734	710	813	671	778	X
49517	Olmo de la Guareña, El	516	640						
49500	Argusino	673	722	923	903	897	881	449	X
49506	Cibanal							373	
50001	Abanto	516	475	460	631	642	753	776	X
50506	Pardos	151	137	153					
50251	Tarazona	8,394	8,270	8,538	8,790	8,601	8,321	9,605	X
50513	Tórtoles	264							
50297	Zaragoza	67,428	84,575	92,407	99,118	111,704	141,350	173,987	X
50500	Alfocea	223	240						
50501	Casetas, Las	309	361						
50504	Juslibol	549	393						
50505	Monzalbarba	793	707						
50507	Peñaflor	1,018	1,016	1,062					
50515	Villamayor	1,922	1,789	1,975	2,091	2,025			

Sources.- ESPOP

Table A.2.
Altered and unaltered municipalities and homogenous pseudo-municipalities by province (1860-1930).

PROVINCE	*ALTERED*	*UNALTERED*	*HOMOGENOUS*
Araba/Álava	23	53	76
Albacete	6	77	83
Alicante/Alacant	15	122	137
Almería	19	79	98
Ávila	4	265	269
Badajoz	4	158	162
Balears, Illes	17	40	57
Barcelona	34	271	305
Burgos	77	413	490
Cáceres	12	209	221
Cádiz	2	38	40
Castellón/Castelló	14	125	139
Ciudad Real	7	88	95
Córdoba	12	60	72
Coruña, La	6	88	94
Cuenca	10	276	286
Girona	14	232	246
Granada	10	190	200
Guadalajara	23	375	398
Gipuzkoa	10	79	89
Huelva	4	72	76
Huesca	62	293	355
Jaén	8	89	97
León	11	223	234
Lleida	36	279	315
Rioja, La	14	167	181
Lugo	4	60	64
Madrid	10	185	195
Málaga	15	86	101
Murcia	0	42	42
Navarra	9	257	266
Ourense	9	84	93
Asturias	13	61	74

PROVINCE	*ALTERED*	*UNALTERED*	*HOMOGENOUS*
Palencia	25	222	247
Canarias, Islas	7	81	88
Pontevedra	17	44	61
Salamanca	8	378	386
Cantabria	23	77	100
Segovia	4	271	275
Sevilla	9	89	98
Soria	9	335	344
Tarragona	7	177	184
Teruel	9	269	278
Toledo	4	201	205
Valencia/València	37	224	261
Valladolid	2	234	236
Bizkaia	27	86	113
Zamora	22	277	299
Zaragoza	11	294	305
España	735	8.395	9.130

Sources.- ESPOP