

# URBAN ENVIRONMENT



2.16

Environmental profile of Spain 2012

The fact that the majority of the population carries out its daily activities in urban environments makes these the origin of severe environmental pressures that in turn are suffered by the same urban areas. In Spain, 79.1% of the population lives in municipalities with more than 10,000 inhabitants (which make up just 9.4% of the total municipalities).

Several action plans, as well as legislation, have been set out in order to improve the sustainability of the city environment. Among these, the 'Energy Efficiency Plan 2011' of the EU, which promotes energy saving by means of improving the efficiency of buildings, sustainable urban mobility and green infrastructure, and Directive 2012/27/EU, of 25 October 2012, on energy efficiency, promoting efficiency in urban systems for heating and cooling.

In Spain several initiatives can be highlighted, such as the 'Renewable Energy Plan 2011-2010' or the measures proposed in the 'National Plan for Air Quality and the Protection of the Atmosphere 2013-2016'. This last plan establishes a framework to improve air quality in Spain through concrete actions in coordination with other sectoral plans and with the ones adopted by the autonomous communities and local authorities. The 78 measures it sets out have the aim of reducing pollution and improving air quality in the cities.

Additionally, the Infrastructure, Transport and Housing Plan of the Ministry of Development, presented in the summer of 2012, considers the urban dimension of transport as one of its fundamental elements. This plan considers the Sustainable Mobility Plans as instruments that require the collaboration of the different administrations in terms of planning



and the development of public transportation and of the encouragement of sustainable mobility.

In relation to environmental noise, the information gathered by the Ministry of Agriculture, Food and Environment contained in strategic noise maps can be consulted at the Basic Information System on Acoustic Pollution (SICA) on the website: <http://sicaweb.cedex.es/mapas-consulta-fase2.php>. This web page is updated continuously with the latest strategic noise maps that are sent to the MAGRAMA.

#### KEY MESSAGES

- 79.1% of the Spanish population lives in municipalities with more than 10,000 inhabitants. In 2012, these municipalities made up only 9.4% of the total of 8,116.
- The number of properties registered as being of Cultural Interest, which are an important part of the architectural heritage of the cities, have shown an increasing trend over recent years.
- The number of passenger journeys on urban transport decreased in 2012 by 4.4% with respect to the previous year: the subway registered a decline in the number of users of 4.5% while bus use suffered a decrease of 4.3%.
- The Network of Local Development Networks is a vehicle for public participation in the environment and the development of the 'Agenda 21'. This network included 2,801 municipalities in 2011 and around 28.2 million of inhabitants; additionally, 934 signed the Covenant of Mayors.

#### INDICATORS

- Urban pressure on land
- Architectural heritage of Spain's cities
- Urban transport
- Public participation in urban sustainability



## Urban pressure on land

*In 2012 urban growth was only 0.3%, the lowest in recent years*

Urban density in Spain (Cities with more than 10,000 inhabitants)



Source: Own preparation with data from INE

According to the municipal population census, the Spanish population has continued to grow over recent years, although 2012 is the year that saw the lowest growth, of only 0.16%. During the period 2000-2012, the population grew 16.7%. The slowdown of this progress, initiated in 2010, is influenced, among other reasons, by migration in search of better employment conditions, caused by the economic crisis.

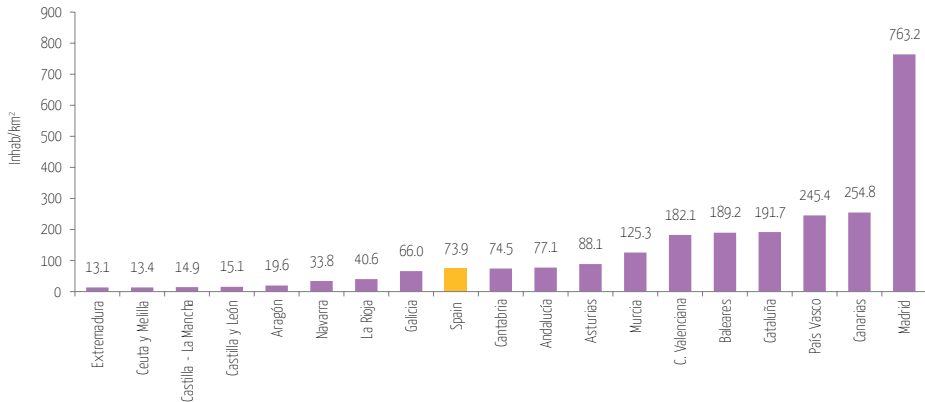
An analysis of the population of municipalities with more than 10,000 inhabitants shows a similar behaviour, with growth of 21.4% from 30,796,529 inhabitants in 2000 to 37,389,664 inhabitants in 2012. The level of 10,000 inhabitants is the limit used in certain forums to distinguish between rural and urban environments. In 2012, 9.4% of Spanish municipalities were urban according to this criterion, however 79.1% of the population lived in them.

'Urban density' is calculated by comparing the population living in municipalities with more than 10,000 inhabitants and a total surface area. In the case of Spain it is also calculated at autonomous community level. It is an expression of the density (inhabitant/km<sup>2</sup>), which allows for an assessment of the pressure due to concentration of inhabitants arising from the urban environment.

During the period 2000-2012 urban density has increased in Spain by 21.4%, reaching 73.9 inhabitants/km<sup>2</sup> in 2012. Madrid, the Canary Islands and the Basque Country were the

autonomous communities with the highest urban densities in 2012. At the other end of the scale are Castile-Leon, Castile-La Mancha y Extremadura. Figures for Ceuta and Melilla are not comparable due to their small areas and high population densities.

Urban density by autonomous community. 2012



Source: Own preparation with data from INE

## NOTES

- The indicator shows the pressure exerted on land by urban population centres with over 10,000 inhabitants. It is calculated as the coefficient of the population living in these municipalities and the surface area of each respective autonomous community, and also for the entirety of Spain. For the purpose of calculating the indicator, the data in the municipal census at 1 January of the years studied from 2000 until 2012 was used.
- Traditionally, municipalities with 10,001 or more inhabitants have been considered urban. Although this definition is used to calculate various indicators, this classification may well be disguising many situations that are not really urban (according to the methodology used to delimit Urban Areas in Spain by the Statistical Atlas of the Ministry of Development).
- According to the Statistical Atlas of Urban areas in Spain, there are 1,076 urban areas in Spain (13.3% of Spanish municipalities). Their population accounts for 81.4% of the Spanish total and the area they occupy makes up 20.6% of the country's total land area.

## SOURCES

- National Statistics Institute. Municipal register (different years). Available in: INEbase/Demografía y población /Cifras de población y Censos demográficos/Cifras oficiales de población: Revisión del Padrón municipal.
- National Statistics Institute. Geographic area. Available in: INEbase/Entorno físico y medio ambiente/Entorno físico/Territorio/Población, superficie y densidad por CCAA y provincias/Población, superficie y densidad por CCAA y provincias.
- Ministry of Development, 2012. Statistical Atlas of Urban areas.

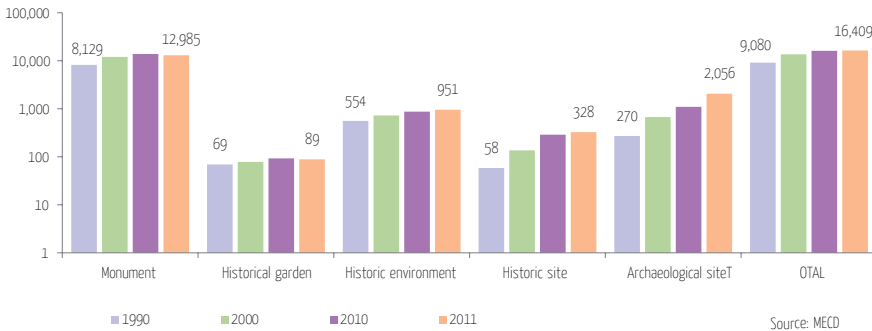
## MORE INFORMATION

- <http://www.ine.es>
- <http://siu.vivienda.es/portal/>

## Architectural heritage of Spain's cities

The number of properties registered as being of Cultural Interest increased, totalling 16,409 in 2011

Protected historical heritage. Number of Sites of Cultural Interest (property)

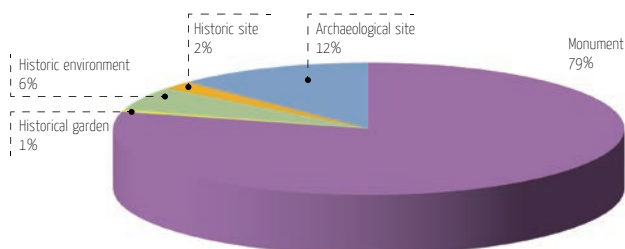


The number of properties registered as being of Cultural Interest and that make up part of the architectural heritage of the cities has seen a growth trend in recent years. In 2011, the number of such properties registered as being of Cultural Interest increased by 2.17% from 16,061 in 2010 to 16,409.

By category, registrations of historic monuments and gardens have reduced by 5.3% and a 3.3% respectively. On the other hand, historic environments have increased by 8.9%, historic sites by 14.3% and, notably, archaeological sites, have increased by 86.2%, from 1,104 in 2010 to 2,056 in 2011.

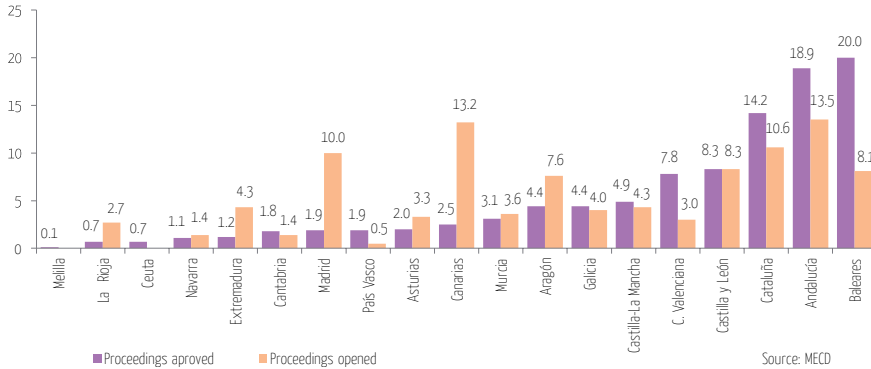
Despite this year on year behaviour the distribution of the categories maintains the proportion of previous years, especially in relation to the monuments.

Breakdown of sites of cultural interest by category. 2011



In terms of registered properties, the Balearic Islands, Andalusia and Catalonia had in 2011, in total, 53.1% of the properties, while Andalusia, the Canary Islands and Catalonia were the autonomous communities with most properties proposed for registration.

Protected historical heritage breakdown by autonomous communities. Año 2011 (%)



## NOTES

- The graph showing data on Protected Historical Heritage was produced using a logarithmic scale due to the large difference between the number of monuments and the other categories.
- The elements making up Spain's Historical Heritage, according to their legal category and taking into account their legal protection, can be classified into two types: Cultural Interest Goods, which can be either movable or immovable property, and other goods, that for their special relevance must be catalogued, although they are not considered as Cultural Interest Goods.
- The category Monuments includes immovable property such as public monuments, museums, archive and libraries held by the state, and those immovable goods considered to be of Cultural Interest by the Law 16/1985, such as castles, hórreos (raised granaries) and boundary crosses. Equally, it includes other categories of legal protection established by the specific legislation of the autonomous communities.

## SOURCES

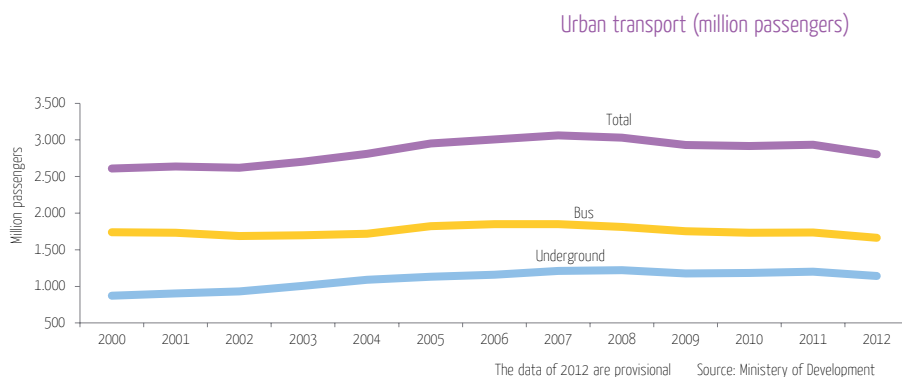
- Ministry of Education, Culture and Sports, 2013. Yearbook of Cultural Statistics 2012.
- CULTURAbase. Cultural statistics diffusion System. Web of the Ministry of Education, Culture and Sports. In Servicios al Ciudadano/Estadísticas culturales/ Explotación estadística de la Base de Datos de Patrimonio/Bienes inmuebles inscritos como Bienes de Interés Cultural por categoría.

## MORE INFORMATION

- <http://www.mcu.es>

## Urban transport

*Urban transport of passengers decreased in 2012 by 4.4% with respect to 2011*



According to the Statistics on Passenger Transport prepared by the National Statistics Institute, the number of urban transport users reached 2,804 million in 2012 (provisional data), meaning a decrease of 4.4% in comparison with the previous year. In 2011 the rate of change was 0.6%, five percentage points higher than the previous one registered.

The urban metropolitan transport service was used by 1,140.9 million travellers in 2012. With respect to 2011, the subway in 2012 registered a decrease in the number of users of 4.5%, while in 2011 an increase of 1.3% was registered. At the same time, urban bus transport in 2012 suffered a decrease of 4.3% in its users, while in 2011 increased by 0.1%.

By autonomous communities, only six cities have metropolitan transport. Madrid has the most travellers, however, over the last five years the Madrid subway has lost the most travellers (-12.2%), followed by Valencia (-7.3%). For their part, the traveller numbers for the subways of Barcelona and Bilbao have hardly changed.

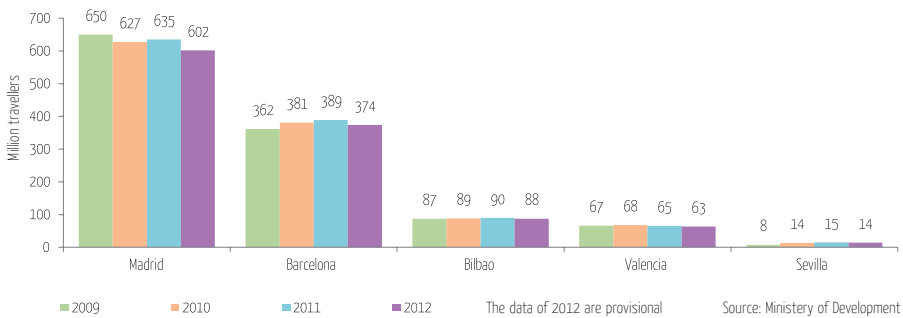
In respect of urban bus transport, the autonomous communities of Madrid, Catalonia and Andalusia had the most travellers in 2012 (27.5%, 17.1% and 13.1% respectively); although that year all the autonomous communities showed falling annual rates for this mode of urban transport.

The report from the Observatory of Metropolitan Mobility (OMM), of June 2012, highlights the preference for the use of private vehicles to make journeys for work purposes; this report was carried out with information provided by 20 Public Transport Authorities, and covers a population

of almost 26 million inhabitants, representing 54.6% of the Spanish population. This preference is particularly marked within medium size metropolitan areas (which offer less public transport). In small metropolitan areas, the distances make both biking and walking a possibility, which make up more than 30% of the total.

Nevertheless, the use of private vehicles or public transport is reduced when the reason for the journey is not work, given an increase in the biking and walking rates for these journeys.

Number of travelers per year by metropolitan



## NOTES

- 'Metropolitan Area' means an urban geographical area with a high degree of interaction between its various urban centres in terms of journeys, day-to-day relationships, and economic activity. A single definition has not yet been established to demarcate Spain's metropolitan areas. Under OMM criteria, metropolitan areas coincide with the area within which each Public Transport Authority operates.
- Urban passenger transport data contains information from: F.C. Metropolitano de Barcelona, S.A.; Metro Bilbao; Metro de Madrid, S.A.; Metro de Sevilla Sociedad Concesionaria de la Junta de Andalusia, S.A.; Ferrocarriles de la Generalitat Valenciana: Metrovalencia y TRAM de Alicante; Transportes Metropolitanos de Barcelona; Empresa Municipal de Transportes de Madrid, S.A.; Empresa Municipal de Transportes de Valencia; Transportes Urbanos de Sevilla, S.A.M. and Transportes Urbanos de Zaragoza, S.A.

## SOURCES

- Ministry of Development, 2012. *Statistical Yearbook of 2011*.
- National Statistics Institute, 2013, *Statistic for passenger transportation. Year 2012*. Press Note 27 February 2013.

## MORE INFORMATION

- <http://www.fomento.es/>
- <http://www.ine.es/>
- <http://www.observatoriomovilidad.es/>
- <http://www.transyt.upm.es/>
- <http://www.eea.europa.eu/soer/europe/urban-environment/>





# Public participation in urban sustainability

*Public participation regarding sustainability issues has in the Network of Networks for Local Sustainable Development an each time more consolidated structure*

Network of networks of local development sustainable. 2011  
(Number of municipalities and population covered)



The Network of Local Sustainable Development Networks maintains its role as a forum for discussion and the exchange of experiences between the different autonomic and regional networks that work with Agenda 21. This makes it a public participation vehicle for the environment, and is made up of 18 networks, representing 2,801 municipalities with a total population of 28,192,276.

The Urban Environment Strategy (approved by the Network of Local Sustainable Development Networks in June 2006) and the Spanish Strategy of Sustainable Development of 2007, was the starting point for the drawing up of the Spanish Strategy of Local Urban Sustainability, approved in 2011, which contains the principles, objectives, guidelines and measures to advance towards greater local sustainability.

The conceptual framework of the Urban Environment Strategy and the Spanish Strategy for Local Urban Sustainability is the 'Green Paper on Urban and Local Sustainability in the Information Age'. This is a reference document for environmental policies in relation to the process of change in Spanish urban systems, and serves as a technical and educational tool for professionals and technicians to allow our cities to make progress towards more sustainable models.

This book, published in 2012 by the Ministry of Agriculture, Food and Environment, is structured in three parts. The first part contains the main problems facing the urban environment: urbanism, mobility, building, biodiversity and urban management. The second part is focused on a study of urban metabolism (energy, water, use of resources, waste management, air and urban noise), as well as rural-urban relations. Finally, the third part goes into detail on social sustainability, specifically as regards the relationship between the urban environment and social inclusion within a context of sustainable development. The networks have participated actively in the preparation of this manual through its revision and by providing their own experiences.

Finally, in terms of the urban environment, the Covenant of Mayors is a movement to allow local institutional participation. In Spain, as of March 2013, 1,259 municipalities had signed it (these represent a population of 22,661,791 inhabitants, the equivalent of 51% of the total Spanish population). Signatories to the agreement commit to applying a Sustainable Energy Action Plan one year after signing up. So far, 68% of the total Spanish municipalities have done so. In Europe, a total of 4,417 majors have signed, covering a population of 168,810,485 inhabitants.

#### NOTES

- The Covenant of Majors is the mainstream European movement involving local and regional authorities, voluntarily committing to increasing energy efficiency and use of renewable energy sources on their territories.

#### SOURCES

- Ministry of Agriculture, Food and Environment, 2011. Spanish Strategy for the Urban and Local Sustainability.
- Ministry of Agriculture, Food and Environment, 2012. Green paper on Urban and Local Sustainability in the Information age.
- Data provided by the Directorate-general for Environmental Quality and Assessment and Natural Environment. Ministry of Agriculture, Food and Environment

#### MORE INFORMATION

- <http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/movilidad-urbana/desarrollo-medio-am-urb/>
- <http://www.ecourbano.es/index.asp>
- <http://www.sostenibilidad-es.org/es/informes/informes-anuales/sostenibilidad-en-espana-2011>
- [http://www.pactodelocalcaldes.eu/index\\_es.html](http://www.pactodelocalcaldes.eu/index_es.html)