

## **Transport and mobility infrastructures on the Balearic Islands. Challenges and perspectives**

**Jaume Mateu**

Universitat de les Illes Balears

**Joana M. Seguí-Pons\***

Universitat de les Illes Balears

### **Original source:**

***Llibre de la Revista de Catalunya, 01: 125-135 (2017)***

(<http://www.pamsa.cat/pamsa/revista/rc/01.html>)

Translated from Catalan by Mary Black

### **1. Introduction**

The European Union views transport and mobility policies as essential factors in territorial development. Transport policies should contribute to lowering regional disparities and especially provide access to island and peripheral regions, such as the Balearic Islands. Promoting transport infrastructures and mobility policies is thus a basic factor in economic, social and territorial development.

In the specific case of the Balearic Islands, the fact that they are islands, unlike the region of Valencia and Catalonia, forces them to depend more heavily on these policies, which thus become a decisive cornerstone in the islands' economic development, even more so if we consider that in addition to being island territories, the Balearic Islands are also comprised of small, distinct territories. Transports, especially those to and from abroad, are necessarily structural factors for small, divided territories, especially Menorca, Ibiza and Formentera, which is magnified by their twofold and threefold insularity in the transport of both travellers and goods.

In terms of the territory, the recent evolution of transports on the Balearic Islands have followed two clear driving forces which explain both the design of the networks and their weaknesses. The first is the heavy influx of tourists from both Spain and abroad; since the 1960s, this has led to constant growth in infrastructures, which are highly developed in relation to the islands' demographic size. This is particularly true of the airports, which are the prime means of

\* Contact address: Joana Maria Seguí-Pons. [Departament of Geography](#), Universitat de les Illes Balears. Edifici Beatriu de Pinós. Valldemossa road. 08112 Palma, EU. E-mail: [joana.segui-pons@uib.es](mailto:joana.segui-pons@uib.es).

international passenger transport, compared to the ports, which specialise more in goods and interregional passenger travel.

The second, the product of the combination of strong demographic expansion associated with successive waves of immigration and the diffuse spread of urbanisation, along with a series of public policies which have promoted the use of private transport in recent years, explains the development and design of the surface transport network, which generates a largely unsustainable mobility pattern, as clearly reflected in the low representation of public modes of transport in commutes as a whole.

Ultimately, the archipelago's specialisation in tourism determines the structure and features of the islands' transport infrastructures, which are closely tied to the needs and seasonal flows of the tourists themselves.

Without failing to acknowledge the importance of motor transport in the island's economy, its nature and the effect it has on international transport adds even further difficulties and costs to local industry and agriculture, which are nonetheless strategic sectors in the evolution towards a more economically diversified model. In contrast, it is important to recognise the increase in accessibility and connectivity from the islands to the heart of Europe brought about by the tourism model, which is not only a fundamental flow in the tourist-residential economy but also ushers in new formulas to export products and strategies to promote research and innovation policies.

## 2. The connection with the outside world

The fact that the Balearic Islands are islands means that everything – passengers and goods – has to go through its official gateways: ports and airports. The Balearic Islands' ports have become the gateway for goods, while the airports are the hub of passenger transport. Eighty-five percent of travellers come via airports, while 99.6% of goods are transported by sea (Table 1). The dependence on the tourism model is reflected in the seasonality indicator (70%), which is identical in both air and sea transport, that is, for both passengers and goods. In the case of air travel, connectivity is quite broad, while by sea, Barcelona and Valencia are the main connections.

**Table 1. Operativity indicators of air and sea transport on the Balearic Islands (2013)**

	Air Transport	Sea Transport
Passengers carried (%)	85.7	14.3
Goods carried (%)	0.16	99.84
Connectivity for passengers <sup>1</sup>	139	12
Dominant market	International	Domestic
Seasonality of tourist flows <sup>2</sup>	70.7	69.7

<sup>1</sup> Number of connected ports or airports

<sup>2</sup> % of passengers carried between May and September over the yearly total

Source: Authors based on data from AENA and Port Authority of the Balearic Islands.

### 2.1. Airports, the main gateway to the Balearic Islands for tourists

Any change in the Balearic Islands' economic cycles has a direct impact on air traffic; indeed, the evolution in air traffic is the clearest indicator of the evolution in the islands' tourism. In 30 years (between 1985 and 2015), the volume of passengers who have used the islands' airports has risen from 12 to 33 million. And 2015 and 2016 saw new record numbers of passengers thanks to the incipient economic recovery after years of crisis. Indeed, perhaps it was even a consequence of the crisis: in the past two years, the effects of the political crises and Islamic terrorism in North African and other countries and safe destinations have been felt. This and the new forms of cooperative tourism (the "Air BNB effect") have boosted traffic in recent years.

Despite these spectacular figures, the airports on the Balearic Islands have lost specific weight within the Spanish airport system during this period. For example, while they handled almost 24% of total air traffic in 1985, and Palma was ranked second in number of passengers – and first in the summertime – its share is currently 16%, while the ranking of the Palma airport, the largest on the Balearic Islands has gone down a notch, replaced by Barcelona. Another negative point is the scant diversification of destinations that can be reached, which are determined by the strategic interests of the airlines, the most important of which are British and German "low-cost" airlines, which have made the phenomenon of year-long residential tourism possible. Paradoxically, the connections among the islands, which are less interesting to airlines, and between Menorca and Madrid between October and May, are subjected to the rules on mandatory public services, a measure which has proven to be insufficient given the airfares that many residents have to pay for their obligatory commutes.

The importance of each means of transport on the Balearic Islands also stems from the very layout of the region (Table 2). Because of its size, Mallorca accounts for 76% of total passenger transport. The more than 23 million passengers Son Sant Joan carried in 2015 make it the third busiest airport in Spain in traffic, only surpassed by Madrid and Barcelona.

**Table 2. Passenger traffic share and air mobility rate. Balearic Islands, 2015**

	Passengers	% over total Balearic Islands	Air mobility rate <sup>1</sup>
Mallorca	23,745,023	71.7	28
Ibiza	6,477,283	19.6	48
Menorca	2,867,521	8.7	30
<i>Total Balearic Islands</i>	33,089,827	100.0	30

<sup>1</sup>Air traffic passengers/resident population.

Source: Authors based on statistics from AENA, 2015.

Looking towards the future, the Balearic Islands' demand for participation in airport management is the crux of their claims. Given all the airport issues, the local political and economic institutions have been upholding the need to create a new airport management model with the participation of the Government of the Balearic Islands, Island Councils, town halls, chambers of commerce and other economic and social stakeholders. That is, it is suggesting co-management between the state

entity AENA and regional public stakeholders so that without going so far as privatising the airports, they can be managed in a consensual fashion with the goal of halting the constant increase in the infrastructures' capacity and flows while meeting the real accessibility needs of everyone, both residents and visitors alike. However, it is also essential to keep sight of the inescapable connection with the islands' economies, and of course the territory's carrying capacity, which is often questioned by the size of an increasingly large gateway.

## 2.2. Ports, an alternative under expansion

The duality between state- and region-run ports is also a handicap when guiding maritime transport policies. The largest ports (Palma and Alcúdia on Mallorca, Ibiza, La Savina on Formentera and Mahon on Menorca) are managed directly by the Spanish Port Authority. The others, sports marinas and fishing ports, are managed by the Government of the Balearic Islands. Only Ciutadella – under regional management – is a strategic port in terms of maritime connections with Mallorca thanks to its proximity to Alcúdia, with which it provides regular passenger connections. It has thus started to compete with the port of Mahon, traditionally the leading port on Menorca, leading to dysfunctions given that they are run by different administrations.

As mentioned above, ports on the Balearic Islands serve as a gateway for the entry of goods. This is a key factor in the economy, and the islands would be unable to hold out more than a few weeks without this constant influx of products – most of them meant for tourists – which supply the island population with more than 13 million tonnes of goods unloaded. This traffic primarily comes on horizontally-loading Ro-Ro ships on all the islands, which facilitates their distribution because it averts the need for lengthy loading and unloading operations in the ports (Table 3).

**Table 3. Indicators of coastal traffic and tourist cruise ships in the main ports of the Balearic Islands, 2015**

	<b>Passengers on regular lines</b>	<b>%</b>	<b>Goods (Tn)</b>	<b>%</b>	<b>Passengers on cruise ships</b>	<b>%</b>
	embarked and disembarked		embarked and disembarked		at base and traffic	
Palma	791,851	15.8%	8,340,649	62.4%	1,721,906	87.2%
Alcúdia	265,804	5.3%	1,522,648	11.4%	1,365	0.1%
Mahon	120,499	2.4%	696,679	5.2%	59,342	3.0%
Ibiza	2,164,876	43.1%	2,537,684	19.0%	190,308	9.6%
La Savina	1,679,449	33.4%	268,509	2.0%	1,539	0.1%
<i>Balearic Islands</i>	5,022,479	100.0%	13,366,169	100.0%	1,974,460	100.0%

Source: Authors based on the Port Authority of the Balearic Islands.

Despite the predominance of cargo transport, there are also regular passenger lines with Barcelona, Valencia, Denia and Alicante, which are the main connections between the peninsula and the Balearic Islands. The majority of lines that make these routes operate with ferries, but there are also horizontally-loading Ro-Ro ships which carry both passengers and lorries loaded with goods. In recent

years, this traffic has also been joined by tourist cruise ships, which brought almost 2 million visitors in 2015, making the port of Palma the second busiest in this sector in Spain.

### 3. Unsustainable land mobility

Land mobility on the islands has clearly evolved towards private vehicles, and the cause is known: a huge expansion of roadway infrastructures, especially on Mallorca and Ibiza since 1998 (Table 4), and justified by the increase in demand, which has enormously facilitated motorised travel in private vehicles. In contrast, there has been a comparatively lower and less planned investment in collective transport. The effect has been quite striking around the region and has led to major transformations in the landscape, in addition to impassioned social and civic protests (Seguí, 2008).

One of the consequences of this evolution is the high level of motorisation among islanders, which stands at almost 900 vehicles/1,000 inhabitants, one of the highest rates in Europe. This phenomenon is a constant on the islands, where the growth in the vehicle fleet is higher than the demographic growth.

**Table 4. Indicators on the evolution of the roadway network on the Balearic Islands**

Indicators	1998	2008
Total length	2,200 km.	2,169 km.
Motorways	59 km.	94 km.
Two-lane roads	7 km.	90 km.
Others	2,134 km.	1,985 km.
Intensity rate	2.76 km lanes/1,000 inhabitants	2.15 km lanes/1,000 inhabitants
Density rate	0.44 km lanes/km <sup>2</sup>	0.43 km lanes/km <sup>2</sup>

Source: Authors based on the Statistical Yearbook of the Ministry of Public Works, 2008 and the Statistical Institute of the Balearic Islands (IBESTAT).

Palma, where almost half the island population lives, and which is home to the main exterior transport infrastructures, has the largest number of tourist places and the highest concentration of companies. It is the true centre of the roadway network. Its expansion has also contributed to consolidating a metropolitan ring of neighbouring towns. The urban expansion throughout the entire metropolitan area follows the extensive occupation model, with large bedroom communities generating the most daily round-trip commutes for work and study, as well as flows for shopping and leisure, which have migrated out towards the periphery. Thus, the main entryways to the city become bottlenecked, rendering the first ring road running around the outside of the urban nucleus obsolete.

Ibiza has also experienced a major expansion of its expressways, especially with the development of the ring roads around Vila (E10, E20) and the motorways leading to the Airport and Ibiza-Sant Antoni.

On Menorca, where the traffic is the lowest, there has been less roadway development. Right now, the aborted project to split the Me-1 Mahon-Ciutadella motorway is still in the air, although it is primarily controversial because of the two-

tier interchanges, which would not fit in well with the preserved Menorcan landscape. What stands out on Menorca is a high-density ring around the capital, Mahon, mostly associated with trips to the airport and residential and tourist urbanisations. Also important within its territorial context are the average daily intensities recorded at the entrances to the main urban nuclei.

Needless to say, tourism also has a powerful effect on the roadway network. The excessive use of rental vehicles as the mobility of choice for tourists, strongly driven by the upswing in the residential tourism model, loads the entire network with vehicles, in some cases bringing it close to saturation point. Furthermore, the seasonal component is also quite noticeable.

Given the mobility pattern, which is as unsustainable as it is persistent, it should come as no surprise that the 2006 Sectoral Transport Steering Plan of the Balearic Islands made the revival of collective transport one of its priority objectives, a necessary step in working towards a balance of land transport on each of the islands. This includes regular urban and interurban passenger roadway transport on all three islands and railway transport on Mallorca, the only island with a railway system, distinguishing between conventional interurban trains and the urban underground. On Menorca and Ibiza, improvements in frequency and the construction of intermodal stations in the cities of Ibiza, Sant Antoni and Mahon have considerably improved this network.

However, it should be noted that the objectives of the 2006 Steering Plan have not been achieved effectively enough. In terms of regular interurban transport, the rigidity of the concession system has meant that the public authorities have little ability to change the model on all the islands, even though improvements have been made through new mechanisms – such as programme contracts – which have enabled regular bus transport to reach many spots on the islands. In the railway network, the effect of poor planning has led programmes whose strategic importance is acknowledged to be stalled – such as the streetcar in the Bay of Palma or the expansion of the network towards Alcúdia. Instead, the focus has curiously been on projects that were not included in this plan yet have very low profitability, such as the university underground, acknowledged in many spheres as one of the worst investments in railway infrastructures in all of Spain in recent years. Nonetheless, the railway network has gone from 30 km in length between Palma and Inca in 1985 to 80 km today with the extension to Manacor and Sa Pobla. It has also developed positively in qualitative terms, thanks to increased frequency. Furthermore, the electrification of the service to Manacor and Sa Pobla planned for 2017 entail yet another step towards more sustainable collective transport.

Two factors open up a window of opportunity in this sense: the revision of the Steering Plan via a new instrument included in the recent Law on Transports of the Balearic Islands, the Mobility Plan of the Balearic Islands, which will start in 2017, and the end of the regular road transport concessions in 2018, which will allow the concession model to be thoroughly revised and bring regular interurban transport up to the quality standards it deserves in view of the number of travellers it carries.

#### 4. Looking ahead to the future

In his book on creative cities (Florida, 2009), Richard Florida developed the concept of “mega-regions” and sketches three on the Iberian Peninsula: Lisbon (the entire Atlantic coastline from Lisbon to El Ferrol), Madrid and its more extensive metropolitan area, and Barcelona-Lyon, which encompasses the entire Mediterranean axis from Algeciras to Marseille and Lyon. This latter is the eleventh most important mega-region in the world and the fifth in Europe after Amsterdam-Brussels-Antwerp, London-Leeds-Manchester, Milan-Turin and Frankfurt-Stuttgart, far above others like Paris (17th) or Madrid (38th). And one of the factors explaining this difference is precisely the Mediterranean connection to Europe, which has a very high potential for development if it gains ground as one of the gateways from the Asian countries.

Therefore, it is clear that the Mediterranean axis, and specifically the Valencia-Barcelona-France connection, has a development pattern that makes it one of the most dynamic in southern Europe. Recognising this, along with the historical ties between the Region of Valencia, Catalonia and the Balearic Islands, only reaffirms the obvious need for cooperation in order to strengthen these ties and take advantage of shared synergies.

By now, it is also obvious that cooperation on the Balearic Islands is closely tied to maritime (primarily) and air connections. Given the role of the ports of Valencia and Barcelona as the islands’ suppliers, these connections will only get stronger in the future. Yet we must go even further: working together on the advances in airport-co-management; taking advantage of models in terms of the deployment and management of the railway network (the recent agreements between Railway Services of Mallorca and the Railways of the Government of Catalonia and with Railways of the Government of Valencia are good examples) and stressing key factors in the development of new mobility policies, such as technological innovation; focusing on systems working towards zero emissions, where electrical mobility will play a prime role; and coordinating territorial policy and mobility planning to work towards more sustainable mobility in all senses.

#### Bibliography

FLORIDA, R. (2009). *Les ciutats creatives*. Barcelona: Pòrtic.

SEGUÍ-PONS, J.M. (2007). “Infraestructures i territori. La mobilitat fa les infraestructures o les infraestructures fan la mobilitat? Són eixos que vertebreren o fragmenten el territori?” in *Jornades sobre sostenibilitat i territori. Els límits del creixement als Països Catalans*. SCOT - Institut d’Estudis Catalans. Fundació Congrés de Cultura Catalana. Lleida, 23-24 November 2007.

SEGUÍ-PONS, J. M.; MARTÍNEZ, M. R. (2010): “Visions territorials de les Illes Balears”, in *Llibre Blanc de les Infraestructures de l'Euram Euroregió de l'arc mediterrani-Volum 3. Anàlisis acadèmiques de l'Euram* (pp. 311-334). Institut Ignasi Villalonga d’economia i empresa. Edicions Tres i Quatre. 2 vols. València.

