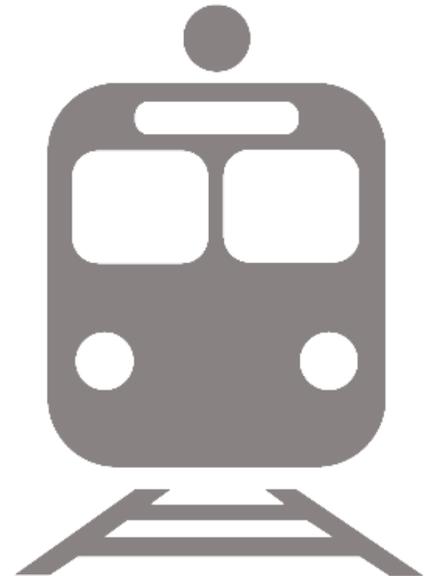


The most In-Demand jobs in the Transportation sector

Report 2014



Elaborated by:

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1. Introduction to the Sector

The main objective of the transport sector is to promote the mobility of people and goods, allowing its movement from one place to another. Depending on the mode of transport three subsectors can be distinguished:

- **Air transportation:** It includes fields of activity such as aircraft maintenance, aeronautic services (airfield, airlines and airport services), air transportation (warehousing, storage and handling of goods) and air transport of people (assistance and services to passengers and airport users).
- **Land transportation:** It includes the transportation of people by road, rail transportation of people and ground transportation of goods.
- **Water transportation:** It includes activities related to port services and transportation of people and goods by means of a watercraft.

Due to the nature of its activities, the transport sector is clearly strategic, both for industry and commerce, a fact that makes it a lever to promote economic growth.

2. Current Environment

Global trends: The European Commission, fully aware of the relevance of this sector, has an area of transportation in charge of certain issues of this sector that may affect all member states of the European Union (EU), such as air and ground traffic management, oil dependence and emissions control. The current EU strategy in this sector is to provide certain levels of quality to all transport infrastructures and to promote the competitiveness of European transport sector in a global market that is continuously expanding. Regarding ground transportation, the European Commission has proposed measures to open rail networks to a greater competition and to motivate investments in order to provide a better service to passengers. Regarding water transportation, according to the latest data published in the data sheets of the EU in 2014, 90% of EU foreign trade and 40% of trade between member states of the UE is conducted by maritime networks.

Spain: According to the latest data released by the National Statistics Institute (NSI), during the third trimester of 2013, the transport sector (together with commerce and hotel industry) has driven the services sector, which has achieved a growth of 0,7%. In regard to air transportation, data recorded by the NSI, the number of passengers has fallen by 7,3% in January 2014 compared to the same period in 2013. This situation contrasts with the one of the high-speed rail transportation, which in January 2014 surpassed for the first time the aircraft in number of passengers. As for the affiliation of professionals in this sector, the 2014 was started with 5.736 fewer workers in the field of transport and logistics in Spain, a fact that has led to a decline of 0,91% in terms of people affiliated to the Security social in December 2013.

Catalonia: The situation in Catalonia and especially Barcelona is very different and more optimistic than the situation of the rest of the Spanish state. Both, El Prat airport and the Port of Barcelona, offer a broad range of opportunities to manage goods in a very efficient manner and with high quality. As the city of Barcelona offers many benefits, the extension of the current space for rail transportation is being considered, in order to increase its capacity for goods transportation. On the other hand, due to the development of the Mediterranean corridor is expected that Spain, and especially Catalonia, will be positioned as one of the main European and intercontinental logistics platforms, which will be a great opportunity to boost the economy. Additionally, the Catalan public administrations seek to bring society into a model of sustainable mobility, promoting the use of public transport with a clear goal to reduce car use, a fact that is causing changes in the transport sector as the launch of the new orthogonal bus network in the city of Barcelona.

| Transportation sector | Sector's contribution to Catalan GVA ⁽¹⁾ | Employed population in Catalonia ⁽²⁾ | Number of companies in Catalonia ⁽³⁾ |
|-----------------------|---|---|---|
| | 0,82% | 39.876 | 12.920 |

(1) Encuesta Industrial de Empresas y Encuesta Anual de Servicios del INE e Idescat. (2011)

(2) Directorio Central de Empresas (DIRCE). (2013)

(3) Directorio Central de Empresas (DIRCE). (2013)

3. Key Sectorial Trends

| Sectorial trends | | |
|--|---|---|
|  | Model of sustainable mobility | <p>We are heading towards a model of more sustainable mobility. This fact is clearly seen in land transport, with the rise of collective transport and the continual decrease in private vehicle users and automotive purchases. Another innovation related to this trend of a more sustainable mobility commended by EU, refers to the use of authorized fuel in European waters. From 2020, in European waters, the only fuel that can be used will have to contain a maximum of 0,5% of sulfur, a fact that supports the commitment of the EU to a model sustainable mobility.</p> |
|  | Optimization and infrastructures development | <p>According to the latest report from the transport sector published by <i>El Economista</i> in April 2014, shows a trend to a significant improvement in the infrastructure of the sector. For example, the Railway Infrastructure Administrator is completing AVE's work with the aim of opening more than 1,000 new kilometers during 2015 in different areas of Galicia, the Atlantic Axis, Extremadura and Mediterranean. Other maintenance tasks such as feeder road rehabilitation in Catalonia or substantial improvements to motorways and expressways are demanding professionals of the sector.</p> <p>One initiative that Catalonia intends to perform with the launch of the so called <i>Eurovinyeta</i>, consists to raise money depending on the size of the trucks and the distance traveled inside the region in order to channel the resulting funds into the development, improvement, maintenance and optimization of the transport sector infrastructures.</p> |
|  | Integrated network of transport | <p>Increasingly, the combined use of two subsectors such as land-rail subsector and maritime subsector is being encouraged. This situation is especially clear in freight transport and their relationship with logistics. The main objective of the transport sector, regarding freight transport, has to do with all phases of the company that seek to increase the added value of their organization. As for the maritime ports, in this case the Port of Barcelona, the interest in developing an integrated network and intermodal transportation it is still one of main sectorial trends.</p> |
|  | Promotional Packs and Low Cost flights | <p>Transport sector is offering more and more advantages to passengers, that is why customers are why customers are ready to listen and take all the opportunities. A clear example of this are the low cost flights that numerous companies offer. In fact, the success of low cost airlines is driving some traditional companies to develop a low-cost subsidiary in order provide services for shorter distances such as the case of Spain, flights to European cities. Another example is the increasing number of discounts in land (rail and road) transportation. In this case, in 2013 in Spain, 85% of AVE's travelers bought their ticket with a discount. Therefore, these discounts and low prices allow this sector to increase its consolidation in the cities.</p> |
|  | International cruises | <p>Another sectorial trend is related to the relationship between the transport sector, culture and tourism. This trend refers to the wide range of services that are provided as a result of the increasing popularity of international cruises. However, it must be said that companies have become adapted to the different audiences in order to offer both luxury cruises and more affordable cruises. Therefore, international cruises are becoming more popular as a holiday option, a fact that has a positive impact on the transport sector.</p> |

4. Employment in the Transportation sector

Despite the occupation that will be required by the sector will not record the levels experienced in Catalonia before the economical crisis, the continuous innovation of logistics processes, goods and transport, will demand specialized professionals with a clear focus in developing processes oriented towards high quality and respect for the environment and finally, taking into consideration the increasing transport coordination between some countries and regions, the knowledge of English would be essential.

| Analysis of employment in the Transportation sector | Current trend | Forecast growth |
|---|---|---|
| |  |  |

📈 Recovery/Growth; ➡ Maintenance; ⬇ Decrease

4.1. The most required highly-qualified jobs

| Job Position | Description | Requirements valued (Education, experience and skills) | Additional considerations |
|--------------|---|---|--|
| 1 | Freight transport planner | <ul style="list-style-type: none"> Education: It is required to have a Bachelor's degree in business, international trade or industrial engineering. Experience: Despite the integrated networks have been developing this last years, previous experience in similar positions is highly valued Skills: Planning and organization. | <ul style="list-style-type: none"> The sector demands multi-skilled professionals that are oriented towards continuous improvement and increasing the efficiency of processes, creation, both in the development of maintenance of transport networks. |
| 2 | Maritime safety and quality inspector | <ul style="list-style-type: none"> Education: The training profile of a maritime safety and quality inspector is very specific and requires a high level professional merchant navy qualification. The formal training required is a degree in engineering or architecture. Experience: No previous experience required, but many inspectors often have experience as a merchant navy captain Skills: Analytical and conceptual thought. | <ul style="list-style-type: none"> Knowledge of English and a second foreign language is required. As the sector is facing a changing environment, the required professionals should be able to develop tasks with a high level responsibility and they must have skills such as: Orientation towards achievement, Leadership and Flexibility and change management. |

| Job Position | Description | Requirements valued (Education, experience and skills) | Additional considerations |
|--|--|---|---|
| <p>3</p> <p>Rolling stock maintenance engineer</p> | <p>This is the professional responsible for managing maintenance projects related to rolling stock (trains) in order to ensure that they run properly and improve their performance. Similarly, they are responsible for coordinating the work teams who perform the above-mentioned maintenance tasks, which include the detection and repair of errors, the refurbishment of trains and the installation of new stock, among others.</p> | <ul style="list-style-type: none"> • Education: At least, the professional needs a Bachelor's degree in Engineering or Architecture. They need training in specific programs such as Autocat • Experience: Applicants are normally expected to have two years of experience in similar positions • Skills: Concern for order and quality | <ul style="list-style-type: none"> • The sector demands multi-skilled professionals that are oriented towards continuous improvement and increasing the efficiency of processes, creation, both in the development of maintenance of transport networks. |
| <p>4</p> <p>Airport environmental officer</p> | <p>This is the person responsible for the environmental management of the airport. Take charge of the coordination and control of issues related to the environment: noise, air quality, waste residues, fauna, etc</p> | <ul style="list-style-type: none"> • Education: It is advisable to have a bachelor's degree in Biology, Physics and Chemistry. | <ul style="list-style-type: none"> • Knowledge of English and a second foreign language is required. |
| <p>5</p> <p>Technical engineer of sustainable mobility</p> | <p>The technical engineer of sustainable mobility is responsible to develop is responsible for developing transportation services or improvements service-oriented to people. Also develop other current trends such as new ways of transportation based on the concept of "Smart City"</p> | <ul style="list-style-type: none"> • Education: Specific training in Engineering or Architecture with an expertise in urban planning, depending on the position that the candidate is applying. • Experience: Experience to developing similar projects are highly valued | <ul style="list-style-type: none"> • As the sector is facing a changing environment, the required professionals should be able to develop tasks with a high level responsibility and they must have skills such as: Orientation towards achievement, Leadership and Flexibility and change management. |

4.2. The most required less-qualified jobs

| | Job Position | Description | Requirements valued (Education, experience and skills) | Additional considerations |
|---|--|---|--|--|
| 1 | Passenger handling agent | This is the professional in charge of attending to passengers in the airport terminal. Functions include the invoicing and the boarding of passengers, as well as informing of flight connections. | <ul style="list-style-type: none"> • Education: Basic education or intermediate professional training is required. Knowledge of English is essential. • Experience: Required minimum of 3 years in an academy and in case of Catalan airports, you must speak Catalan language. • Skills: Customer Orientation | <ul style="list-style-type: none"> • The sector required to kind of professionals: first, professionals for a front-office position, which need skills and experience in customer service and good communication. Second, professionals who are in charge of the maintenance of transport, oriented towards the environment, with specific knowledge of this area and a high level to Learning and use of knowledge |
| 2 | Passenger service agent | This professional attends to, helps all passengers that are in transit in an airport, and provides up-to-date information. Activities can be very wide ranging in this post and involve any type of problem posed by passengers. These professionals are their point of support. These professionals are sometimes referred to as "green jackets" in Spanish airports, due to their specific attire. | <ul style="list-style-type: none"> • Education: In this case, the selection process is very specific and AENA is the responsible. A test that includes a competences test, an English level test and an optional test specific to the Autonomous Community in which the position is being offered must be passed. • Skills: Communication. | <ul style="list-style-type: none"> • Despite being professionals with low-skilled jobs, knowledge of other languages, especially if you work in front-office is essential. |
| 3 | Electrical and mechanical engineer | The systems and machines which make up the railway network and rolling stock are devices whose mechanisms combine electrical and mechanical parts and, as such, comprise both electrical and mechanical elements. Electrical and mechanical engineers are the professionals responsible for performing maintenance on and repairing electrical and mechanical machines and systems from the railway network, thereby ensuring that the transport network runs smoothly. Examples of these devices include the electric motors used in trains and the mechanical devices that these drive. | <ul style="list-style-type: none"> • Education: Intermediate and advanced vocational training related to electricity and manufacturing. • Skills: Learning and use of knowledge and Analytical thought. | <ul style="list-style-type: none"> • Despite being professionals with low-skilled jobs, knowledge of other languages, especially if you work in front-office is essential. |

5. Conclusions and Future prospects

Redefinition and new opportunities



- It is a good time for all the Spanish ports to redefine and consolidate their leadership positions. In fact, according to recent published reports, more than 12 Spanish ports of general interest have been listed by the EU as potential managers of liquefied natural gas (LNG) by the use of fixed or mobile stations. The UE is financing these projects with more than 2,6 million euros for the implementation in the Mediterranean ports, Santander and Ferrol; this fact will increase the demand of professionals with an expertise in the sector and with knowledge of energy and the environment.
- The investigation of new alternatives to existing fuels, in the line with this re-definition of the sector towards a more sustainable model, aims to create large ships, with more energetic efficiency and that produces less pollution while reducing costs.

The professionals in the Transportation sector



- The Mediterranean corridor, designated as set of group of high-speed line connecting Algeciras and France, would be an important source of employment due to the increase in demand of jobs linked to both maritime or land transport, both of passengers and goods.
- The transport sector requires professionals capable to innovate and improve processes and services, increasing their efficiency. Also, for both freight transport and activities addressed to facilitate and improve people's mobility, professionals with a clear customer orientation and focused in results, and with competences related to management and leadership are required.

Alerts



- Although during these past years, there have been improvements in the coordination and planning of transport routes, a lot of things need to be developed in this sense, thus being necessary professionals capable to develop new strategies
- Related to trend experienced by other economics sectors and by the society at large, the increasing use of tools linked to TIC, with the aim of getting close to users and sectorial professionals, may require the development of new applications and technological tools.
- Discontent of professionals, from airlines and public transport services, in front of certain situations, which is expressed through strikes, is projecting an unattractive image of the sector.

Strengths



- The increase of the use of public transport in some Catalan cities, means that Public Administration has the challenge to offer good quality collective transportations and fully adapted to the citizens needs.
- It is expected that the measures being carried in regard to the creation of integrated, open and competitive networks will bring new and better jobs around the EU.
- The link between the transport sector and tourism sector is very positive for both sectors, encouraging the mobility of people with the goal of leisure and culture.

The transportation sector requires professionals with ability to innovate and improve de processes and services in terms of efficiency.

Sources: Latest information available. INE; Idescat; Encuesta Industrial de Empresas y Encuesta Anual de Servicios; Ministerio de Fomento; Directorio Central de Empresas (DIRCE); Informes de l'Ajuntament de Barcelona. Prensa: La Vanguardia, Expansión, Especial Expansión, El Vigía, Actualidad Económica.

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- ✓ De Jesús, E. (2014). El transporte registra las peores previsiones en el transporte por carretera europeo hasta 2016. *El Vigía*.
- ✓ Blanco, Y. (2014). El tirón del AVE amortigua la caída general de viajeros. *Expansión*.
- ✓ De la Riba, S. (2014). Tocado pero no hundido. *Actualidad Económica*.
- ✓ Redacción. (2013). La Intermodalidad guía la nueva Estrategia Logística de Fomento. *El Vigía*.
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6. Sectorial complementary Webography

- ✓ IME – Instituto Marítimo Español
<http://www.ime.es/site/index.php>
- ✓ Port de Barcelona
<http://www.portdebarcelona.es>
- ✓ Asociación Española del Derecho Marítimo
<http://www.aedm.es>
- ✓ Generalitat de Catalunya – Web del transporte aéreo
<http://www10.gencat.cat>
- ✓ AENA – Aeropuertos Españoles y Navegación Aérea
<http://www.aena.es>
- ✓ Centro Español de Logística
<http://www.cel-logistica.org>
- ✓ Logística y Transporte
<http://www.logisticaytransporte.es>

Barcelona Treball (The job seeking website of Barcelona)

Do you want more information of the main occupations of the ? You can know in detail the tasks required for each professional, the training needed to work, the key competencies and associated jobs posted on the major job seeking websites.

www.bcn.cat/treball > [Economic Sectors](#)
> [Job profiles search engine](#)

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