

INDUSTRY CAREER GUIDE: Transportation and Logistics¹

¹ This career guide was written by Rhory Fernandez and Gina Ledda as part of the project *Career Guides for Selected Industries*, commissioned by the Bureau of Local Employment of the Department of Labor and Employment to the Angelo King Institute of De La Salle University.

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EXECUTIVE SUMMARY

The transportation and logistics industries involve the physical movement of persons and goods. Logistics specifically refers to the transport of the goods, materials, or products, which includes the management of freight, storage, packaging, and inventory. Transport and logistics encompass a wide range of activities and play a vital role in the growth of other sectors of the Philippine economy. Extreme competition and growing international trade highlighted the role of the Service Sector where Transportation, Communication and Storage (TCS) is a component. In 2010, the Service Sector accounted for P3.2B (55%) of the real Gross Domestic Product (GDP) where TCS contributed P428M (13%). The TCS showed the fastest growth of 4.1% for the consecutive years 2008 and 2009. More recently, there has already been a recorded 7.4% increase for the first two quarters of 2011 relative to 2010.

The basic modes of transport are road, rail, water, and air. The Philippines as an archipelago requires both land and sea transport networks. Road networks are relied extensively to transport passengers and handle freight movement. Ports, together with airport, railways and roads, are vital to connect the main islands of Luzon, Visayas, and Mindanao. Rail services in the Philippines are of two types: traditional commuter railway and passenger light rail, both are operational only in Luzon. These are distinguished in terms of technology and consequently speed of rail service, but offer similar kinds of employment. The 2010 Annual Labor and Employment Status of the National Statistics Office (NSO) shows that there has been an increase in the employment rate and labor force participation in the Philippines from 2009 to 2010 despite impact of global financial crisis. In 2010, 51.8% of the total estimated 36.0 million employed persons were employed in the Service Sector. Around 15% of the employed persons in the Service Sector were engaged in TCS from 2006 until 2009. Given this, there is a consistent demand and supply of work and opportunity in this sector.

The occupations in the transportation and logistics industry in the Philippines represent a broad spectrum, from self-employed tricycle operations to highly complex jobs like piloting aircraft. Road sector workers are generally composed of operators, drivers, conductors, inspectors, tour guides, heavy equipment operator, mechanics, dispatchers and other support staffs. Rail sector workers are mainly involved in train operations, engineering operations and other support services. Occupations in the port sector provide services for loading and unloading ships, passengers and cargo while those in the shipping sector refer mainly to jobs onboard commercial water vehicles, namely those on deck, engineering department and services. Jobs in the service departments of international cruise ships are the fastest growing segment in the category of seafarers. Air transport workers are mainly involved in air service operations, aviation engineering operations, airport terminal services, air traffic controllership and airport-related support services. In general, transport and logistics activities are characterized by taking responsibility for transporting other people's lives and goods, and the watchword and guiding principle in the industry is safety. Safety regulations and procedures are embodied in laws and specific industry regulations implemented by the different agencies of the Department of Transportation and Communications (DOTC).

The transport and logistics industries are generating greater value than before, primarily due to the birth of a more competitive environment and the functional fragmentation of the production process especially in the manufacturing sector. The shift in focus - from merely transporting commodities and people within an archipelagic backdrop to the growing need for maritime, aviation, land transport systems and logistics to support and ensure the efficient flow of resources and manufactured outputs across spatially distributed firms located within and cross-border – is expected to continue. Performance estimates for the transport and communication sector alone predict that it could account for as much as 7.2% share of GDP in 2014, roughly equivalent to US\$22.5 billion in nominal income.

The Medium Term Development Plan 2011-2016 recognizes the need to address the Philippines' infrastructure backlog and cites as a priority the creation of an integrated and multimodal national transport and logistics system. For road transport, working towards a more efficient transport network will mean connecting underserved rural areas with markets in expanded logistics chains. Internal logistics activity in the Philippines is considered to be relatively small compared to nearby Association of Southeast Asian Nations (ASEAN), and the government sees this as an opportunity to spur the growth of MSMEs (Micro, Small and Medium Enterprises) by linking them to global supply chains through better transportation and logistics infrastructure. There are plans to construct new railway lines and extend existing ones through public-private partnerships. In the water transport sector, the government plans to promote the Batangas and Subic ports as destinations for international cargo ships to decongest the Manila port and open opportunities in the nearby areas. The government will also boost shipbuilding, which currently ranks fifth in the global industry, by encouraging foreign investment. The government also plans to open and improve domestic airports and increase the capacity of existing international airports to accommodate more flights. Among the employment opportunities available in the sector, seafarer jobs lead as a strong growth market. Currently one out of every four seafarers in the world is a Filipino and the government plans to sustain and build on this trend.

Introduction

The archipelagic feature of the Philippines poses a challenge to interconnect the more than 7,000 islands in an effective and efficient transportation network. The transport system and infrastructure network went through stages of development

During the Pre-Hispanic period, the Royal chair (for the *lakan*²) and the carabaos were used as land transportation, while *Balangay*³ for sea transport.

Development in the transportation sector flourished during the Spanish colonization. For water transport, they introduced the Galleons for trading and sailboats, bancas, cascos and praut for inter-island transfer. Massive improvement flourished for inland transportation network due to construction of roads and bridges. The upper class in the society used *calesa* and *carretela*⁴, while the middle class and working class used the tranvia. The first railroad was built from Manila to Dagupan and cars from Europe and Steamship were introduced in the country.

Thereafter, during the American occupation, they introduced automation in the transportation facilities introduced by the Spaniards. They replaced old horse-driven tranvia with an electric one and they brought with them airplanes. The railroad was extended to the northern and southern part of Luzon. The Filipinos enjoyed the automobiles and the first mass-vehicular transportation service – the bus. For the water system, Manila became the largest port and the travel center in Asia.

After the World War II, many tranvias were destroyed. This led to the conversion of military Jeeps into public transport – the origin of the *Willy's Jeepney*. The aerial mode of transportation was developed by the introduction of the first commercial flight. Airlines were then used to travel domestically and internationally, thus the birth of the Philippine Airlines in 1941. The streets now were busy with buses and taxis. The *Sarao Jeepneys* replaced Willy's Jeep as mode of public transportation. The word *jeepney* is a portmanteau of "jeep". It is the most popular means of public

² *Lakan* is a Filipino nobility rank in the Pre-Hispanic period in the Luzon region which means "paramount ruler"

³ *Balangay* is a small boat used by people who migrated from Borneo to the Philippines

⁴ *Calesa and Carretela* are horse-driven carriages

transportation due to its glitzy design and greater seating capacity. *Jeepney* is a symbol of Philippine culture.

Nowadays, the Filipinos enjoy a wide array of mediums for transportation in land, air, and sea. Aside from the modern fashionable cars that are running the roads in EDSA, the general public can enjoy the Light Railway Transit and Metro Rail Transit. The government is continuously upgrading the system of transport through extensions and expansions of the railways, airports, and ports.

This study will serve as a primer to interested parties who will undertake participation in the transport industry for business, employment, investment and profit prospects. Also, the overall assessment of the transportation sector of the Philippines will provide policymakers, academicians and other stakeholders a basket of information applicable to market practice, rules and regulations examination, policy improvement, interagency coordination, improved research, and inter-industry linkages.

I. Nature of Industry

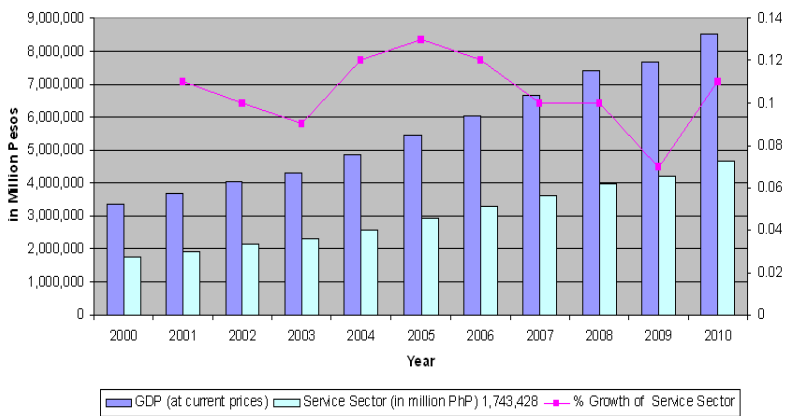
In this age of globalization where the movement of peoples and goods and services are at an increasing rate, notwithstanding economic downturns, the distance between countries had been redefined. Extreme competition and growing international trade highlighted the role of the different channels and networks, a critical component to support the movement of peoples and freight to their target destinations.

The transportation sector plays a big role towards the development of a country. It is an industry, whereby fully utilized, can attract foreign direct investments (FDIs) and improve the flow of movements of goods and services in trade – an essential component to improve the country's economic status.

Transportation is defined as the physical movement of goods, materials, or products from raw material suppliers, plants or warehouse to the customers' logistical destination. The basic modes of transportation are land, water, air and rail. Moreover, logistics involves the movement and transport of the goods, materials, or products, which includes the management of freight, storage, packaging and inventory management.

Transportation, Storage and Communication (TSC) is a component of the Service Sector in the Philippine GDP. Figure 1 shows the contribution of the Service Sector in the GDP for the last ten years. The Service Sector has continuously been the greatest contributor, at more than 50%, amongst the two other Industries, Agricultural, Hunting, Forestry and Fishing Sector and Industry Sector. The growth of the Service Sector has been consistently above 9%, except in for the visible decline towards 2003 and 2009 as impacted by financial crises.

Figure 1: Share of Service Sector to GDP & Growth of the Service Sector, 2000-2010 (at current prices)

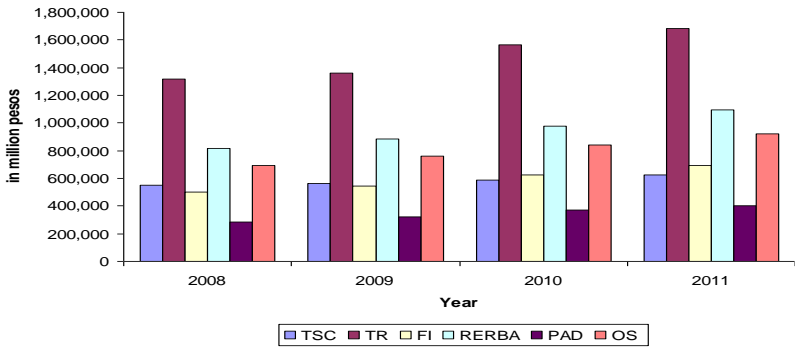


Source

of base data: National Statistical Coordination Board

The TSC is the fourth largest contributor to the Service Sector. Its percentage share to the Service Sector has been relatively constant at about 12 to 13% as shown in Figure 2. The TSC has very minimal growth rate by just about 2 to 6% from 2008 to 2011. The other components of the Service Sector are Trade and Repair of Motor Vehicles, Motorcycles, Personal and Household Goods (TR), Financial Intermediation (FI), Real Estate, Renting and Business Activities (RERBA), Public Administration and Defense; Compulsory Social Security (PAD), and Other Services (OS).

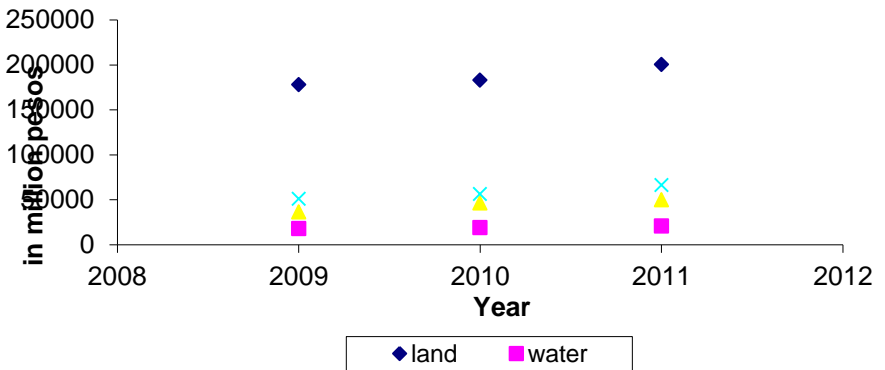
Figure 2: Service Sector Composition, 2008-2011



Source of data base: National Statistical Coordination Board

Performance estimates for the TSC from 2008 until 2011 show that amongst the mode of transportation, the Land Transportation is the greatest contributor to the Transport and Storage Composition, followed by Storage, then Air Transportation and finally Water Transportation. It is estimated that it could account for as much as 7.2% share of GDP in 2014, roughly equivalent to US\$22.5 billion in nominal income.

Figure 3: Transport and Storage Composition, 2009 to 2011

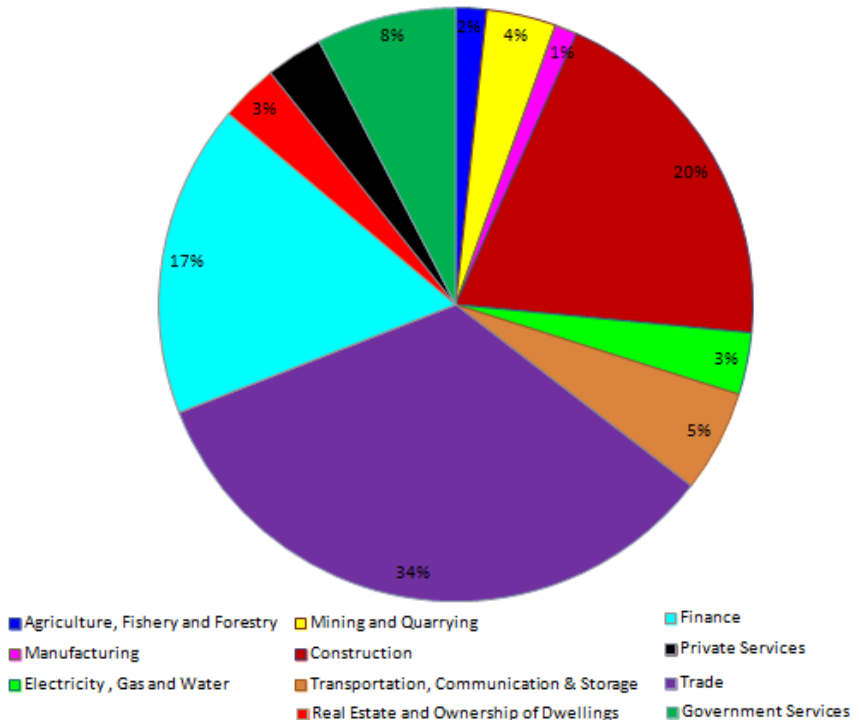


Source of data base: National Statistical Coordination Board

In a wide array of supply chains, the Transportation, Communication and Storage Subsector constitutes to ten forward and backward linkages in the entire Service Sector as presented in Figure 4. TCS is connected to the networks of Trade, Finance, Real Estate & Ownership of Dwellings, Private Services, Government Services, Agriculture, Fishery & Forestry, Mining & Quarrying, Manufacturing, Construction and Electricity, Gas & Water Subsectors. Based on the Input-Output percentage impact to Total Intermediate Inputs, TCS has the largest contribution to

Trade at 33.40%, followed by Construction (19.70%), and Finance at 16.95%. This is a huge network of drivers of growth where TCS plays a vital role.

Figure 4: Input-Output of the 11-Sector Transaction Percentage to Total Intermediate Inputs, 2000



Source of data base: National Statistical Coordination Board

The National Economic and Development Authority (NEDA) identified in its Philippine Development Plan (PDP) 2011-2016 Priority Industry Clustering 2011-2014 from North Luzon, South Luzon, Visayas and Mindanao and there is a wide variety of probable investments in tourism (medical and eco-tourism), development of economic zones, expansion of the Business Process Outsourcing (BPO) hubs, agribusiness, growing renewable energy sector, and booming real estate development, all of which are signaling a strong demand for transport professional in the formal and informal sectors and transport related occupational trends, including the skilled workers. A strong mechanism should be created to make sure that the government can provide enough supply to the growing trends in the investment sector where Transportation Sector plays a vital

role. Given the situation, there is a need for a national, social, and economic impact provided there will be identified shortages in the medium or in the long run.

In the past decade, there has been a remarkable demonstration on the performance of the Transport and Logistics Industry. Technological advancement and trade revolutionized the general economic environment of this subsector's potential as a major contributor of value in the economic supply chain and a source of comparative advantage of the country. This industry owes a large part of its development to the birth of a more competitive environment and infrastructure, resulting primarily to the functional fragmentation of the production process especially in the manufacturing sector. What used to be a centralized production set-up devolved into outsourcing in different strategic locations. The shift in focus occurred – from the ability to transport commodities and people within an archipelagic setting to the growing need for maritime, aviation, land transport systems and logistics to support and ensure the efficient flow of resources and manufactured outputs across distributed firms located within and cross-border.

In 1999 alone, the aviation sector contributes P35.5 billion, equivalent to 4% of the GDP and the jobs created related to it reached 123,000. The Maritime Industry contributed 4.5% on the average from 2003 to 2006 to the GDP.

In the Philippines, the Department of Transportation and Communications (DOTC) is the executive department responsible for the transportation and communications systems maintenance and expansion. The effective instruments for national recovery and economic progress include land, air, and sea and communications infrastructure.

The attached agencies to DOTC are the following:

1. Land Transportation Office (LTO)
2. Land Transportation Franchising and Regulatory Board (LTFRB)
3. Civil Aviation Authority of the Philippines (CAAP)
4. Maritime Industry Authority (MARINA)
5. Philippine Coast Guard (PCG)
6. Philippine National Railways (PNR)
7. Light Rail Transit Authority (LRTA)
8. Metro Rail Transit Corporation (MRTC)

9. Manila International Airport Authority (MIAA-NAIA)
10. Mactan-Cebu International airport Authority (MCIAA)
11. Philippine Ports Authority (PPA)
12. Civil Aeronautics Board (CAB)
13. Toll Regulatory Board (TRB)
14. Office for Transportation Security (OTS)
15. Cebu Port Authority (CPA)

b. Industry Organizations relative to sub-sectors

Land Transport

Road Sector

The Philippines as an archipelago requires both land and sea transport networks. These road networks are relied heavily to transport passengers, and its freight movement. Filipinos found ways to integrate the islands through a good transport system. Ports, together with airport and railways, are vital to connect the main islands of Luzon, Visayas, and Mindanao. The Philippine Transport Sector is divided into three (3) subsectors: road, railways, and waterways.⁵

Table 1: National Road Length, 2010

Road Network	Length (km)
National Road	31,242.377
National Arterial Road (NAR)	15,871.905
National Secondary Road (NSR)	15,370.472
National Bridges*	330,089 linear meters (95% permanent)

Source: Department of Public Works and Highways (DPWH)

Database: Road and Bridge Information Application (RBIA)

* data as of 2009

The national road network as of 2010 is presented in Table 1. The national road network length is 29, 899 kilometers, where 51% are arterial roads and 49% are secondary roads. For the National Arterial Roads, 12.48% are in good condition rating,

⁵ http://www.ifrtd.org/en/regions/country_pages/Philippines.php retrieved 5 September 2011.

15.64% are in fair condition rating, 9.80% are in poor condition rating and 11.62% are in bad condition rating. For the National Secondary Roads, the ratings are 24.27%, 32.51%, 19.76%, and 20.82% for the good, fair, poor, and bad condition ratings, respectively. The national bridges measure 330,089 linear meters. As of December 2010, the national road length increased by 4.49% as a result of conversion or reclassification of various local roads into national roads. The national road network is 49.37% concrete.

Philippine roads are classified into National and Local Roads. National Primary Roads include National Arterial and National Secondary. Local Roads are composed of Provincial, Municipal, and Barangay roads. Per NSCB definition, National Primary Roads are roads which form part of the main trunk line systems continuous in extent and roads which are declared national roads except those parts of a continuous system, e.g. roads leading to national airports, seaports, etc., and coast-to-coast roads not forming part of the trunk line system of principal traffic route. Secondary Roads are roads which include all access to national ports, airports and parks, city roads and street forming secondary trunk line system. Municipal Roads are roads within a municipality which are not categorized as provincial, national, or barangay roads, while Barangay Roads are roads where all roads existing and to be constructed outside the city/municipality/poblacion⁶ limits are located.

Figure 5 shows the national road network composed of North-South Backbone, East West Lateral, Other Roads of Strategic Importance and Secondary Roads. For 2010, it is now composed of 17%, 10%, 24% and 49% of our roads, respectively.

Figure 5: Philippine National Road Network

⁶ Poblacion is a Spanish word which means 'town' or 'population'



Source: Department of Public Works and Highways

The agencies that oversee the land transport sector are LTO and LTFRB. The LTO ensures the safety and comfort of the commuting public, while collecting various fees from the registration of motor vehicles, the issuance of licenses to qualified motor vehicle drivers, the collection of fines and penalties for motor vehicle related infractions, and the sale of motor vehicle license plates. The LTFRB promulgates, administers, enforces and monitors compliance of policies, laws and regulations of public land transport services.

The relatively large highway network gives room for mass transit in the Philippines. There are two modes of public transport, the

primary modes and the auxiliary modes. The primary modes include private car, taxi, rail system, Asian Utility Vehicle (AUV) also called *fx* or *megataxi*, air-buses (air-conditioned and non-airconditioned), mini-bus and *jeepneys*. The auxiliary modes include the *pedicab*⁷, *kalesa*⁸, *kuliglig*⁹ and *tricycle*¹⁰. These modes of transportation are predominantly privately owned and operated.

Public Utility

Public Utility is a private transportation company that performs public services which are under governmental regulations.¹¹ Public transports are available for use by the general public. According to the DOTC, more than 60% of the passengers use public utility vehicles compared to private vehicles.

Bus services operate all over the country. Buses travel on predetermined roads carrying numerous passengers. Bus services are in varying form, coverage, and types. A bus carries numerous passengers, in the Philippines covering 52 kilometer distance. For specialist services, there are school bus services and coach services. These are operated by private companies with fixed or flexible routes. Luxury buses for long distance provincial travels are normally equipped with more comfortable seating, separate luggage compartment, video, air-conditioned, and with toilet. These luxury buses are limited and have fix schedules and require early booking.

The Philippine buses are categorized with the following:

1. Public Utility Vehicles (PUV)

⁷ A pedaled bike with a sidecar attached to the side, much like a tricycle provide transport services through narrow streets of Metro Manila and routes where there are no jeepneys and buses operating.

⁸ A Spanish-era form of transportation that still exists in the capital and in some provinces, a horse pulling a cart.

⁹ Illegal DIY motorcycle using multi-purpose diesel or gasoline engines, usually with a sidecar attached -- similar to a tricycle.

¹⁰ A type of Auto rickshaw. A regular motorcycle with additional passenger seating. Designs vary but are usually fairly standard within a municipality. Passenger seating is usually in a side car attached to the right side, but some designs seat passengers in a towed trailer or enclose the motorcycle inside of a body structure. Passenger seating capacity varies for different designs, ranging from two up to seven or more. One or two additional passengers may be seated behind the driver, usually riding sidesaddle on the motorcycle pillion.

¹¹ <http://www.thefreedictionary.com/public+utility> retrieved 5 September 2011.

- a. For Metro Manila Operations (City Transport)
 - i. Air conditioned Buses
 - ii. Ordinary Buses (Non-Air-conditioned)
 - b. For Provincial Operations
 - i. Short distance – commuters routes (e.g. Sta. Cruz, Laguna to Manila or Manila to Tagaytay)
 - i.1. Air conditioned Buses
 - 1.2. Buses (Non-Air-conditioned)
 - ii. Long Distance (e.g. Manila to Tacloban or Baguio to Manila)
 - ii.1. Luxury buses with beds or business-class seats
 - ii.2. Air conditioned buses with TV and curtains
 - ii.3. Ordinary buses (same features as air-conditioned buses except for the air conditioned)
 - ii.4. Old local buses (non-air-conditioned with no glass in the windows)
- 2. Shuttle
 - 3. Tourist
 - a. Local
 - b. Foreign

As a requirement, the Tourist Buses must be accredited by the Department of Tourism (DOT), hotels, and venues to visit.

Shuttle buses or coaches are public transport bus services designed to transport passengers between two fixed points which are usually short or medium distances, normally without intermediate stops with fixed time schedule. Shuttle usually links with other transport hubs (e.g. airport shuttle bus). In the Philippines, shuttle busses are in common terminals to corporations or businesses in a remote area.

School bus services transport students to and from school. These are licensed by LTFRB to operate in specific schools and are implemented as special journeys on the normal public timetable since its time and route of arrival and departure from school depends on school time. These school buses are exempted from the Unified Bus Reduction Scheme. The LTFRB standards require school buses to be painted school bus yellow and equipped with warning and safety devices.

Today, long distance trips by land take several days; thereby sleeping accommodations are essential part of the transportation sector.

The most ubiquitous form of transport in the Philippines other than buses is our very own *Jeepney*. *Jeepney*, commonly referred to as a *jeep* is the most popular means of public transport for short distances, covering about 10 kilometers, which is equivalent of a mini-bus found everywhere in the country. It carries around 16 to 22 passengers, comes both in air conditioned and ordinary (non-air-conditioned) forms, and usually operates where buses operate less frequently such as side streets in Metro Manila and provincial highways. The routes are usually written on the side of the *jeepney*. The modern *jeepneys*, which evolved from the surplus of American jeeps, are custom made.

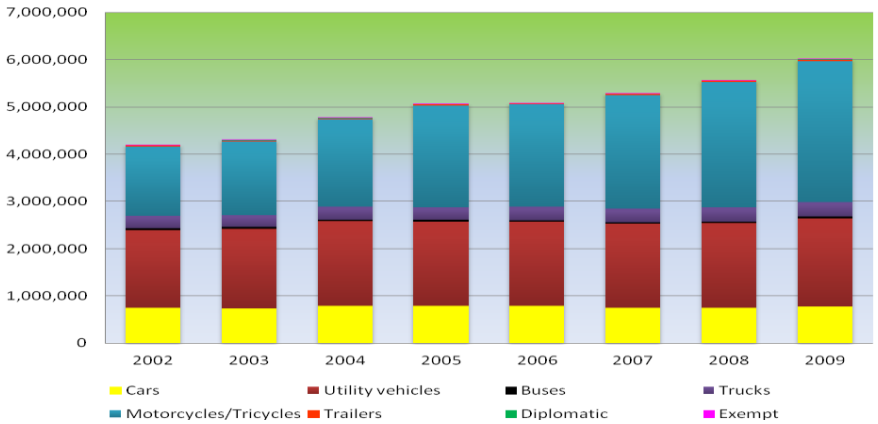
Table 2: Highest Concentration of Public Utility Jeepneys in the Philippines

Rank	Region	PUJ Population	Areas Covered
1	National Capital Region	48,366	Metro Manila
2	Region IV-A & B	42,183	(Region IV-A) CALABARZON Regional Center - <i>Calamba City</i> Constituent Provinces: <i>Batangas, Cavite, Laguna, Quezon Rizal</i>
			(Region IV-B) MIMARO Regional Center - <i>Calapan City</i> Constituent Provinces: <i>Marinduque, Occidental Mindoro Oriental Mindoro, Romblon</i>
3	Region III – Central Luzon	31,734	Regional Center - <i>San Fernando City</i> Constituent Provinces: <i>Aurora, Bataan, Bulacan, Nueva Ecija, Pampanga, Tarlac, Zambales</i>
4	Region VI- Western Visayas	14,102	Regional Center - <i>Iloilo City</i> Constituent Provinces: <i>Palawan, Aklan, Antique, Capiz Guimaras, Iloilo, Negros Occidental</i>
5	Region VII -Central Visayas	11,563	Regional Center - <i>Cebu City</i> Constituent Provinces: <i>Bohol, Cebu, Negros Oriental, Siquijor</i>

Source: LTRFB, UP National Center for Transportation Studies

The vans and/or fx (AUV) available within the city which carry more passengers and charge less than taxi but with a flat rate per head.

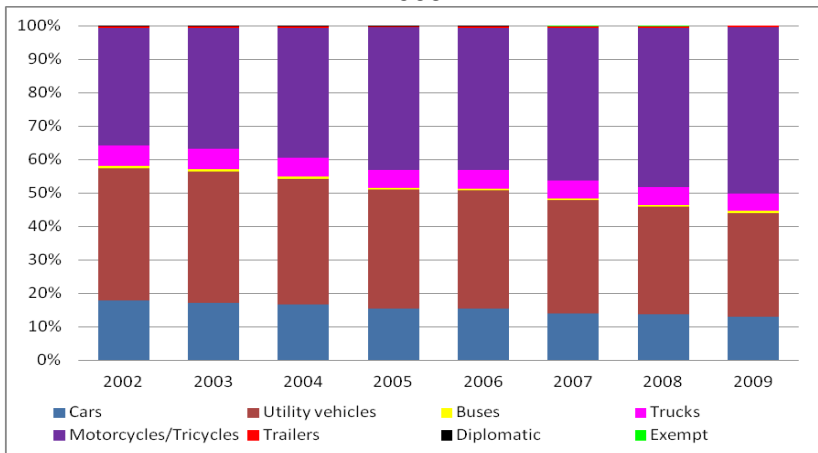
Figure 6: Land Transportation Statistics, 2002-2009



Source: National Statistical Coordination Board

Figure 6 shows the number of registered land transportation vehicles from 2002 to 2009. From 2002 to 2009, there has been 49% increase in the total volume of registered land transportation vehicles. It is interesting to note that relative to all the types of land transportation vehicles, only Motorcycles/Tricycles were able to increase by 1,511,920 units from 2002 to 2009.

Figure 7: Percentage of Land Transportation Statistics, 2002-2009



Source: National Statistical Coordination Board

The data presented by Figure 7 shows that only Motorcycles/Tricycles had a positive marginal increase from 2002 to 2009. There has been 103% increase in the number of Motorcycles/Tricycles from 1,470,376 units to 2,982,296 from 2002 to 2009. Note that the Utility vehicles have been increasing but at a decreasing rate. There was just 13% increase in the

number of Utility vehicles and a reduction in the number of buses operational by 3% from 2002 to 2009.

According to the number of motor vehicles registered by classification and mode of registration in the LTO from 2008 to 2010, there has been an increasing number of new and renewal for hire vehicles registered. On the average, there has been an average of 29.52% increase of new registered for hire vehicles while there has been 1.12% increase amongst the renewal.

There are 46 major routes and 126 sub routes in Greater Manila Area (GMA) enlisted by the LTFRB serviced by the public utility vehicles.

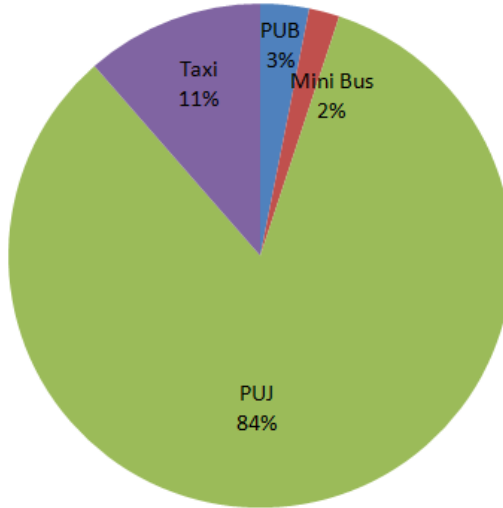
Presented in Table 3 below are the number of franchises and units accredited per region in the road transport services in the Philippines, which includes Public Utility Bus (PUB), Mini Bus, Public Utility Jeepney (PUJ) and Taxi. Majority of the franchises were released to the PUJs at 84%, followed by Taxi at 11%, PUBs at 3% and Mini Bus at 2% (see Figure 8).

Table 3: Cross Section of Road Transport Services in the Philippines

SERVICES	Public Utility Bus		Mini Bus		Public Utility Jeepney		Taxi	
	Franchise	Units	Franchise	Units	Franchise	Units	Franchise	Units
a. Aircon			a. Aircon		a. Aircon		a. Aircon Sedan	
b. Regular			b. Regular		b. Regular		b. Regular Sedan	
c. Articulated			c. Dual		c. Dual		c. Mega-taxi	
d. Double Decker			d. Inter-Regional					
e. Inter-Regional Buses								
REGIONS								
CO	1,406	11,777	0	0	8,482	10,461	14,949	18,767
NCR	0	0	0	0	47,518	48,366	3,819	4,342
I	1,337	1,697	12	14	9,960	11,020	0	0
II	717	1,443	123	140	9,104	9,662	0	0
III	0	0	450	1,453	27,313	31,734	36	184
IV	366	1,105	701	974	39,751	42,183	45	190
V	869	1,647	69	100	7,386	7,878	8	9
VI	573	705	1,306	1,376	13,058	14,102	1,775	2,037
VII	1,029	2,111	2	2	9,783	11,563	2,862	5,159
VIII	803	1,160	988	1,076	5,336	6,571	75	97
IX	109	202	542	677	3,600	4,156	9	37
X	6	730	196	237	5,319	6,830	888	1,700
XI	133	809	75	95	8,431	9,577	1,637	3,728
XII	6	28	147	199	2,398	2,885	76	124
GRAND TOTAL	7,354	23,414	4,611	6,343	197,439	216,988	26,179	36,374

Source: LTFRB, UP National Center for Transportation Studies

Figure 8: Percentage of issued franchises



Source: LTFRB, UP National Center for Transportation Studies

Rail Sector

The rail sector refers to the mode of transport that conveys passengers and goods on trains that run along steel rails. Although rail services form part of land-based transport, they are usually discussed separately because of their distinct technologies and consequently the employment opportunities they create. In general, rail transport is considered a more convenient and safer form of land-based transport compared to road services because trains run on dedicated railway tracks and do not encounter traffic, thus facilitating on-time programming and scheduling of runs.

There are currently two types of rail services that are operational in the Philippines: traditional commuter railway and passenger light rail. They are distinguished in terms of technology and consequently speed of service, but offer similar kinds of employment.

Railway transport

The railway transport system has always been viewed as a factor of socio-economic development growth. The Philippine government launched the Strong Republic Transit System to integrate the different rail lines in Metro Manila in 2003 to provide 'reliable, seamless and integrated mass transit system at par with

global standards'. The Manila Light Rail Transit (LRT), Manila Metro Rail Transit System (MRT), and Philippine National Railways (PNR, North Line and South Line) are covered under this project.

The Philippine National Railways (PNR) is the most extensive intra-island railway in Luzon operated by the government. The PNR operates in two commuter rail services in Metropolitan Manila and Bicol Region. The PNR operates two rail lines: the North Main Line (Green Line) and South Main Line (Orange Line), with three spur lines. The PNR is currently operational in the areas of Manila, Laguna, Quezon, Camarines Sur and Albay.

Figure 9: Bicol Train Route

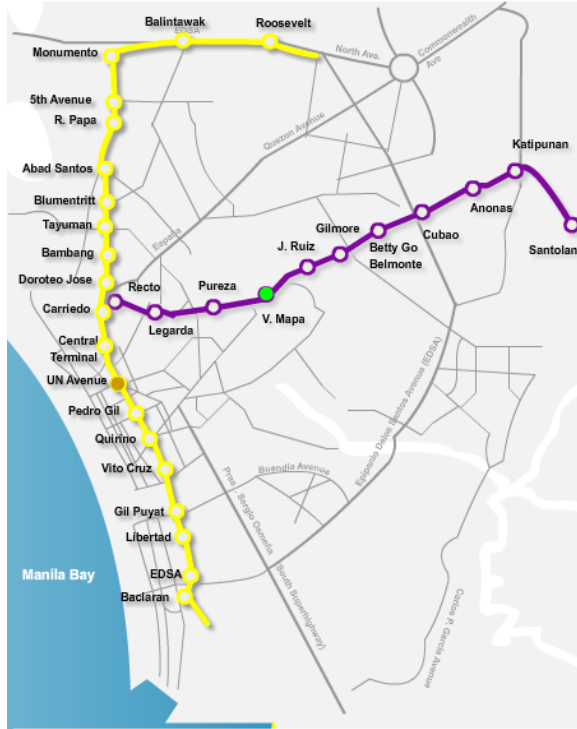


Source: Philippine National Railways

The LRT1 (Yellow Line) is a fully automatic, electrically driven, and driver-less rail transport system that carries commuters in Metro Manila. LRT 1 is a 15-kilometer elevated railway system that runs along Taft Avenue between Baclaran, Pasay City and Monumento, Caloocan City and is now extended up to Roosevelt Station in Quezon City.

The Megatren, also known as LRT 2 (Purple Line), is 13.8 kilometers in length and runs from Santolan, Pasig City to Recto, Manila.

Figure 10: LRT Line 1 and LRT Line 2 Route Map

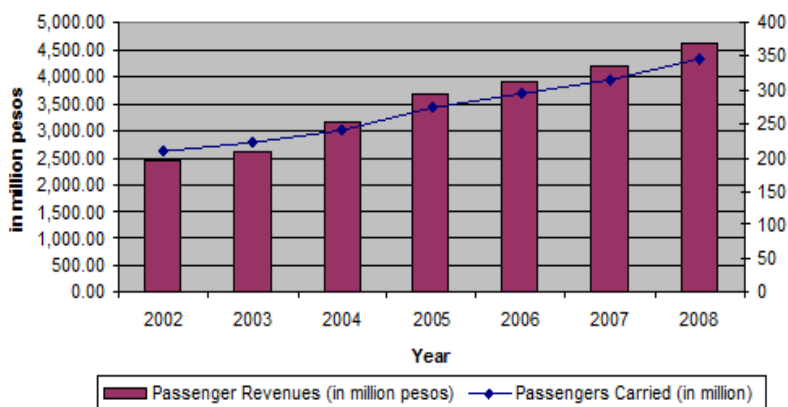


Source: Light Rail Transit Authority

MRT (Blue Line) or LRT 3 is a privately-owned and operating under a Build-Lease-Transfer contract of 16.9 kilometers length and runs along EDSA. The light rail system uses more technologically advanced system than the traditional railway system and travels faster, up to 80 km per hour at top speed.

The Light Rail Transit Authority (LRTA) is the wholly owned government corporation primarily responsible for the construction, operation, maintenance and/or lease of light rail transit systems in the Philippines. Thus, all employees in the rail industry in the Philippines work for the government.

Figure 11: Railway Movement, 2002-2008



Source: National Statistical Coordination Board

Figure 11 illustrates the number of passengers and income generated by the railway system of the Philippines from 2002 to 2008. As the number of railway system increases all throughout the period, the number of passengers increased significantly by 65% from 2002 which are around 209 million passengers, which is conduit for an 87% increase in revenues at Php4.6 million in 2008 from Php2.5 million in 2002.

Water Transport Sector

Given this geographical configuration, water transport is one of the most important means of moving people and goods within and outside the country. Nautical highways link the main islands to smaller ones especially in the southern part of the country where the islands are more widely dispersed and road infrastructure less developed. Around 98% of domestic inter-island trade is accomplished through shipping, amounting to about 80 million tons of cargoes every year. Maritime transport also facilitates the movement of over 40 million Filipinos and foreign tourists within the country.

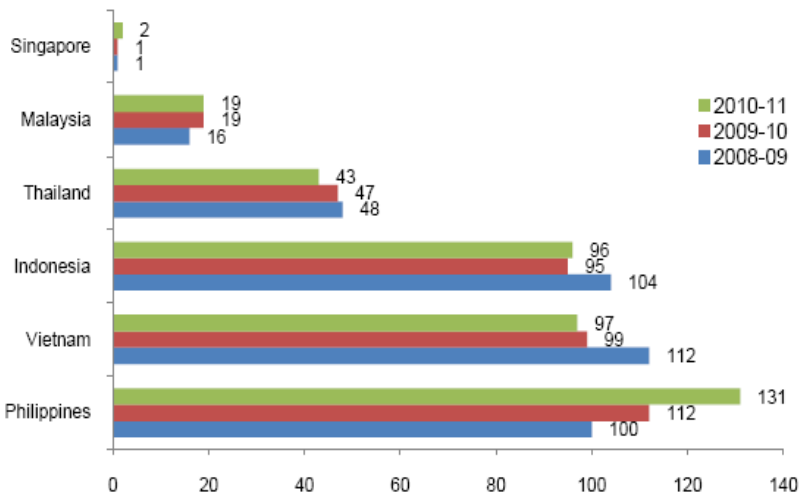
Water transport can be further subdivided into ports and shipping sectors. Activities in ports, the gateways where ships load and unload passengers and goods, imply mostly land-based types of employment compared to those on maritime transport vehicles.

Ports

There are 2,456 ports located in the different islands of the Philippines. In 2009, Philippine ports handled 150 million metric

tons cargo, around half of them to and from foreign destinations, and 43 million passengers. Around 65% are public ports while fishing ports and private ports each account for 17%, implying that most of the country's ports are small. The Philippine Ports Authority operates the biggest public ports while four other independent port authorities (IPA), the Cebu Port Authority, the Subic Bay Metropolitan Authority, the Bases Conversion Development Authority, and the Cagayan Economic Zone Authority manage other major ports in the country.

Figure 12: Quality of Port Infrastructure Score, 2008-2010, ASEAN 6



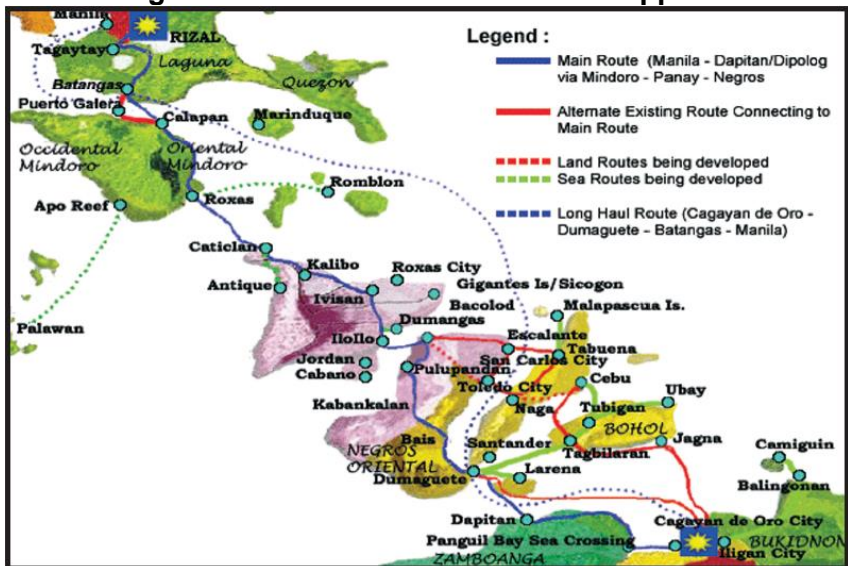
Source: WEF Global Competitiveness Reports, Arangkada Philippines 2010

Figure 12 shows the quality of port infrastructure of the member countries of the ASEAN 6 which includes the Philippines. Note that the ranking of the Philippine ports declines as years pass by and the Philippines is the lowest ranking among the neighboring countries. To be globally competitive and to attract more Foreign Direct Investments, the government must put large amount of investment to the ports of the Philippines to modernize the services and to become an effective channel of the transportation network.

Ports are important for passenger handling, for the inbound and outbound movement of cargo, and for services to ships such as shipbuilding and ship repair. The Strong Republic Nautical Highway System (SRNH) links roads, ports and domestic shipping

routes creating a highway through the sea using Roll-on-Roll-off (RoRo) ferry terminals and vessels to bridge the major islands. Currently, the SRNH has a total of 22 links through 41 ports, with 14 links through 18 ports in the pipeline. This nautical highway system was envisioned to lower the cost of domestic, inter-island tourism as well as the faster delivery of agricultural and manufactured goods to markets.

Figure 13: Ro-Ro Network of the Philippines



Source: Philippine Ports Authority

Especially important to the logistics industry are the terminal ports that cater solely to freight ships in the loading and unloading of cargo. The biggest terminal or container ports in the country are located in Manila – North Harbor (for domestic traffic), South Harbor (for international cargo), and the Manila International Container Terminal (MICT). These publicly owned ports are under the scope of the PPA but are operated by private firms with long-term permits. The International Container Terminal Services, Inc. (ICTSI) operates the MICT and five other major terminal ports in the country and is the biggest private employer in port operations.

Shipping

The shipping industry plays an important role in the trade of goods and the transport of travelers to and from destinations. Ships can be classified as passenger or cargo ships plying inter-island (domestic) and international sea routes. International shipping lines are an important source of employment for Filipinos. In 2010, the Philippines deployed 347,150 seafarers, a 51% increase from 2004. According to the Maritime Industry Authority (MARINA), the number of Filipino seafarers in 2010 was 25% of the total global supply of seafarers in maritime trade, meaning one out of every four seafarers in the world is a Filipino.

Filipino seafarers are mostly deployed in cargo ships, bulk carrier, container and tanker vessels hiring 41% of total seafarers in 2010. Bulk carriers are larger in size than passenger ships and are designed to carry large volumes of dry cargo like coal and other industrial products. Tankers transport “liquid bulk” such as crude oil and chemicals while container ships stack metal containers in a space-efficient manner for easier loading and unloading.

International cruise ships are the fastest growing source of employment for Filipinos. In 2010, the Philippines deployed around 133,000 non-marine seafarers, compared to 125,000 ratings (entry-level seamen) and 82,000 officers, a 271% increase from 2007. Cruise ships are increasingly a popular mode of maritime transport for vacationers with leisure time and money, and thus offer a wide variety of hospitality-related jobs to cater to the comfort and entertainment needs of passengers. Cruise ships hire people with and without college degrees and value relevant working experience in such fields as hotel, casino, spa and wellness therapy, beauty and health therapy, retail, food and beverage, entertainment, IT, and security.

Air Transport

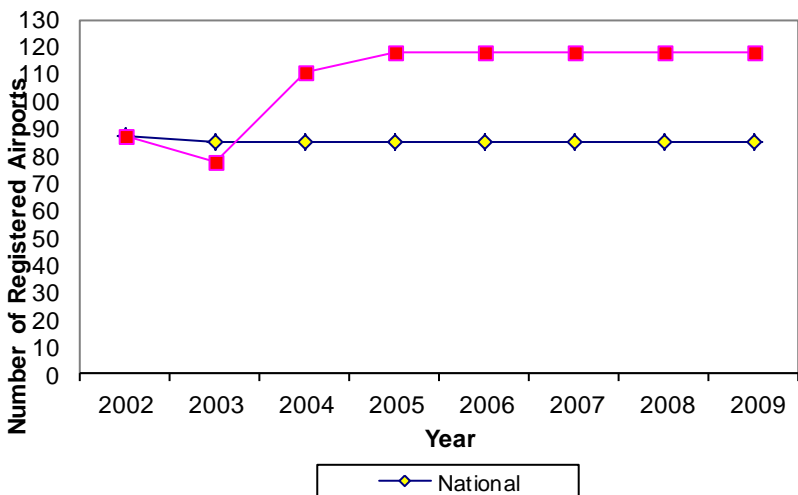
The civil aviation services sector is an important sub-sector of the transportation and logistics industry and is composed of passenger and cargo services. Air transport is an important link between capital cities and other economic hubs in the Philippines and with major destinations internationally. Airports contribute significantly to the economy through tourism and airfreight logistics through cargo handling.

Of the 85 airports operational in the Philippines, ten are classified as international airports capable of handling flights to and from

foreign destinations. Three of the four major international airports are located in Luzon, namely, the Ninoy Aquino, Clark and Subic International Airports.

The domestic civil aviation industry was liberalized in 1995 with five commercial airlines serving the domestic market. Philippine Airlines still captures more than half the market, while Cebu Pacific served 45.6% of the market in 2008. Zest Airways, Southeast Asian Airlines and Spirit of Manila Airlines are the smaller airlines. Liberalization means more affordable travel for a growing number of Filipinos, paving the way for local tourism.

Figure 14: Number of Registered Airports, 2002-2009



Source: National Statistical Coordination Board

Figure 14 presents the total number of registered airports in the Philippine from 2002 to 2009. The national airport, after a 2% decline in 2003, there has not been any airports national airport registered in the country. At the same time, after the 42% increase in the number of registered private airports from 78 to 111, the figures have been at 118 from 2005 to 2009.

c. Industry Subsectors

In 2009, there were 4,181 establishments nationwide engaged in Transport, Communications and Storage activities. Land transport has the most number of establishments at 1,019 (24%) with job creations amounting to 48,101 (27%), except Others. Establishments engaged in Water transport activities has been

recorded at 353 (8%) creating 31,215 (17%) employment. There were only 40 air transport establishments nationwide and these hired about 7% of the total number of employees working in the TCS Sector.

Table 3: Summary Statistics for Transport, Communications and Storage Establishments for All Employment Sizes by Industry Group, 2009

	Number of Establishments	Total Employment
Land transport*	1,019	48,101
Water transport**	353	31,215
Air transport***	40	12,872
Activities of travel agencies, etc.	983	9,162
Storage and warehousing	195	3,488
Telecommunications	301	35,333
Postal and courier activities	105	10,850
Activities of other transport agencies	1,185	28,821
Total	4,181	179,842

* including supporting and auxiliary activities to land transport and other land transport operation

** including coastal, sea and inland water transport, supporting and auxiliary activities to water transport, and towing and pushing services

*** including scheduled and non-scheduled air transport and supporting and auxiliary activities to air transport

Source: 2009 Annual Survey of Philippine Business and Industry

Around 195 establishments were involved in storage and warehousing activities hiring 2% of the total number of employees in the sector. Establishments engaged in travel agency services numbered 983 or 23% of the total and employed 5% of the total number in the sector.

Employment for the sector reached a total of 179,844 in 2009. Almost all or 98.7% of all workers were paid employees for a total of 177,506 workers.

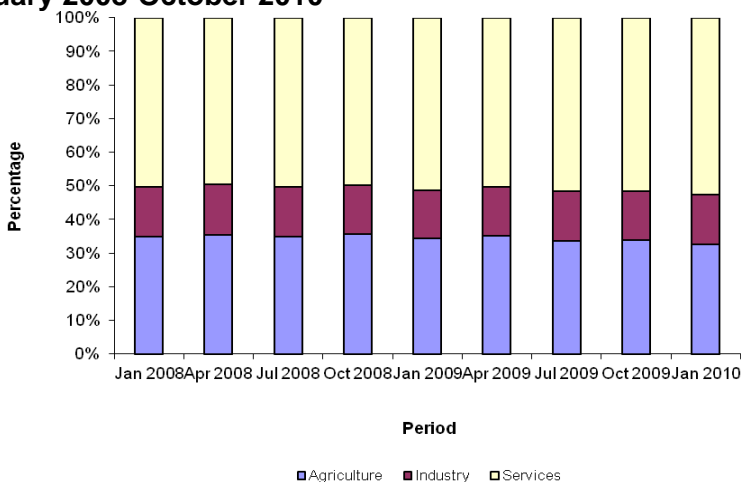
II. General Employment

The occupations in the transportation and logistics industry in the Philippines represent a wide range of activities, from self-employed tricycle operations to highly complex jobs like piloting aircraft. In general, transport and logistics activities are characterized by taking responsibility for transporting other people's lives and goods, and the watchword and guiding principle in the industry is safety. Safety regulations and procedures are embodied in laws and specific industry regulations implemented by the different agencies of the Department of Transportation and Communications.

The growth and development of the Transportation Industry must be supported by the Transport Sector Labor Market. The labor force is the backbone of the Transport Sector, together with the infrastructure. Stable stream of talents, both in the formal and informal sectors, must be sustained to support the pipeline of economic growth. The capacity of the workers must be developed and enhanced to ensure a safe and reliable transport network.

Figure 15 shows the number of employed persons by major industry group. Consistently, as the Service Sector is the greatest contributor to the economic growth, it is also the major source of employment. Across the years 2008 to 2010, the Service Sector constitutes 48 to 53% to employment each quarter. This is followed by the Agricultural Sector at around 32 to 36% and Industry Sector 13 to 14%.

Figure 15: Employed Persons by Major Industry Group, January 2008-October 2010



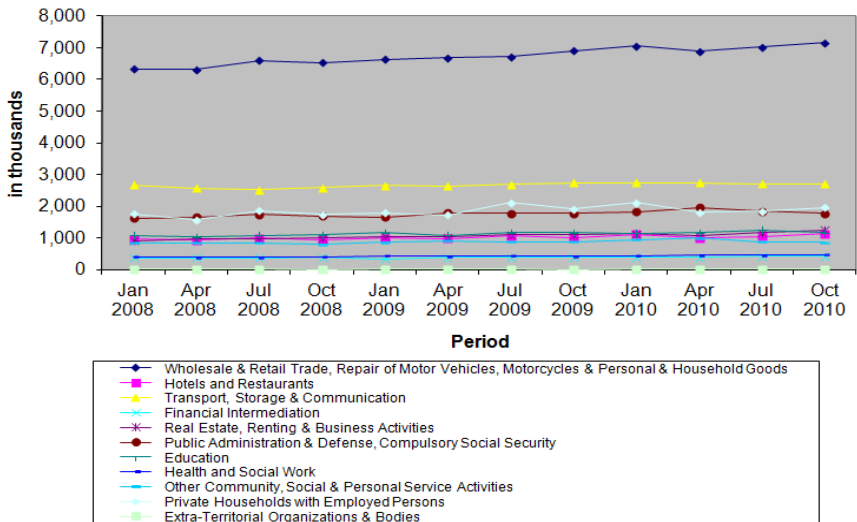
Source of data base: Labor Force Survey, National Statistics Office

The Transportation, Communication and Storage Subsector is the second largest contributor to the employment figures of Service Sector at around 14 to 15% next to Wholesale and Retail Trade, Repair of Motor Vehicles, Motorcycles and Personal and Household Goods which creates about 37 to 38% employment, although its growth started to decline in the first quarter of 2009.

a. Occupations and Employment levels in the subsectors

Figure 16 illustrates the distribution of number of employees in each subsector or the Services Sector from Jan 2008 to October 2010. It is interesting to note that the second largest contributor to the workforce of the Service Sector is coming from the TCS subsector.

Figure 16: Employed Persons by Subsectors of Services Sector, Jan 2008 - Oct 2010



Source of data base: Labor Force Survey, National Statistics Office

Land Transport

Road sector workers are generally composed of drivers, conductors, inspectors, mechanics, dispatchers and other support staffs. The utility vehicle drivers do not necessarily require proper educational background. Rather, the skill and years of experience

of the driver is highly credited and valuable. Often, conductor, inspector, mechanic, and tour guide are required to have driving skills.

Rail sector workers are mainly involved in train operations, engineering operations and other support services. Employees involved in train operations oversee the efficiency and safety of train services. The work ranges from the monitoring of train movements, traffic control, overseeing proper implementation of fare collection and train station operations. The engineering department oversees the maintenance and repair of the trains or rolling stock, the electronic equipment and the tracks.

Water Transport

Occupations in the *port sector* provide services for loading and unloading ships, passengers and cargo. Cargo and container handling services are the main business of port operations. The general types of employment include arrastre and stevedoring, cargo and container handling, portorage and related port services such as tugboat and towing service, ship supplies provision, and maintenance and repair services. Other support industries include freight forwarders who take care of the onward and inward transport and distribution of cargo, warehousing, and those that support the government agencies that handle customs, including safety and health inspection.

There are many tasks that need to be carried out onboard commercial water vessels and therefore occupations in the *shipping sector* are varied. There are three kinds of jobs onboard: jobs on the deck, the engineering department and in services.

‘Deck Officers’ is the collective term used for professionals who are responsible for safe navigation of the ship. These include the Captain, Chief Officer, Second Officer, Third Officer and Junior Officers. The entry-level position is called rating. The Engineering Department is responsible for running and maintaining the ship’s machinery and for the fire safety of the ship. The various jobs available in the Engine Department are: Chief Engineer, Radio Officer, Electrical Officer and Junior Engineers.

Jobs in the service departments of cruise ships are the fastest growing segment in the category of seafarers. The Service Department is responsible for providing comfortable living

conditions for both crew as well as passengers. Cruise ship service has grown in recent years with more than 13.6 million people worldwide sailing on cruise ships in 2009. With the increasing number of ports of call around the globe, cruise ships will continue to hire international staff.

Air Transport

Air transport workers are mainly involved in air service operations, aviation engineering operations, airport terminal services, air traffic controllership and airport-related support services. Flight crew refers to employees of airline companies whose work entails actually flying the aircraft or attending to onboard passengers.

Most pilots fly airplanes and helicopters, transporting people and cargo. There are categories of pilots that depend on the number of hours flown, types of airplanes handled, and years of flying experience. The cabin crews, also known as flight stewards or stewardesses, are employed by commercial airlines primarily to ensure the safety of passengers while on board aircraft. Prior to take off, among the cabin crew's duties are to go over safety and emergency checklists, perform a safety demonstration, and secure the cabin. These air hosts and hostesses provide customer service such as serving meals and drinks while in flight. There are grades of flight crew with pursers usually a more senior flight attendant.

Airport services encompass the on-ground, pre-departure and post-arrival services handled by the different airlines. The duty manager is the over-all person in charge of airport operations and coordinates with the airport authorities. Airport terminal workers complement airline workers in the vicinity of the airport and usually undertake safety inspections on passengers.

The check in department or ground crew processes the check in of passengers for their flights. They handle passenger complaints, inquiries and special requests, for example, assistance for the elderly. They ramp department attends to the proper loading of baggage and cargo before every flight, monitoring the movement of the loaders, machines used to load baggage onto aircraft. The load control supervisor and agents coordinate with flight control and the ramp and check in departments to ensure the correct load for a particular aircraft.

Maintenance and engineering services encompass a variety of mechanic and technician positions, such as sheet metal, fuel tank and avionics technicians as well as interior installers, mechanical plating and structures technicians. Aircraft mechanics are highly specialized technical positions and specializations include electronics, sheet metal, non-destructive testing and hydraulics.

Air traffic controllers work at the airport control tower and direct air traffic to avoid collision and ensure the on-time and safe landing, berthing and departure of aircraft.

b. Basic educational/training/skill requirements

Different occupations in the Transportation and Logistics industry require varying levels of educational attainment. Messengers riding motorcycles need to have a valid driver's license but do not require a high school diploma. Entertainment and service crew on cruise ships usually do not require a college degree. For these kinds of jobs, relevant work experience and proficiency in English are usually more important than an academic degree.

In some jobs, technical skills are more valued than educational attainment – this includes aviation mechanics and heavy equipment operators, to name a few. Drivers of public utility vehicles do not require high educational attainment. Drivers, in main roads are required to have professional licenses, as well as the conductors from the LTO. Often, drivers in the arterial roads do not have license since the modes of transport that they are driving only requires physical strength. To add, some of these are not regulated by the government because these are no longer under the supervision of the LTFRB. In contrast, most managerial jobs across subsectors require a college degree. Higher technical positions, such as engineers, typically require a degree in a relevant engineering course and a license.

There are specialized private training schools that offer courses related to occupations in air transport. Some pilot training schools also offer courses on aircraft maintenance for example, ratings for airframe. Reputable schools have course offerings recognized by the Commission of Higher Education (CHED), the Technical Education and Skills Development Authority (TESDA) and the Civil Aviation Authority of the Philippines (CAAP). Civil Aviation Training Center (CATC) is the training arm of CAAP that provides

national courses in air traffic control, airways communications and air navigation facilities maintenance.

In the sea transport, there are a wide variety of private seamen training centers and maritime colleges located all over the Philippines. The Philippine Merchant Marine Academy (PMMA) is operated by the Philippine government under the supervision of the Commission on Higher Education (CHED). Graduates of the PMMA have the option to enlist for active military duty either with the Philippine Navy or the Philippine Coast Guard or to join the private maritime industry. The regulation and supervision of seamen training centers is the responsibility of the Maritime Training Council (MTC). The MTC is attached to the Department of Labor and Employment (DOLE) and its members include the heads of the CHED, the Maritime Industry Authority (MARINA), the Philippine Coast Guard, the Professional Regulation Commission (PRC), the Philippine Overseas Employment Administration (POEA), and the Overseas Workers Welfare Administration (OWWA).

c. Professional Licensure Requirements

Professional licenses are needed across subsectors. Logistics companies require drivers who have professional driver's license from the Land Transportation Office, the same with heavy equipment operators. The Civil Aviation Authority of the Philippines issues licenses for pilots, flight engineers, flight navigators, flight dispatchers, aviation maintenance technicians and specialists, and air traffic controllers. These licenses, with the required medical examination, need to be renewed periodically. Some job occupations require more than one license, for example, a pilot for a passenger airline needs an air transport license (ATPL) or a commercial pilot license, a radio telephony license as well as an English Proficiency Rating (EPR). Seafarers must have Seafarers Registration Certificate (SRC) from the Professional Regulation Commission (PRC). Maritime Industry Authority (MARINA) is the agency issuing the license of qualified seamen, which includes Major Patrons, Minor Patrons, Boat Captains, and marine Diesel Mechanics, to name a few.

d. Personal Qualities

The movement of people and freight is considered a serious responsibility, therefore transport and logistics companies look for people who are stable, professional, decisive, and honest and with integrity. Good physical condition is usually required especially for jobs that require physical strength like heavy equipment operators in logistics companies and long-distance bus drivers.

For job positions that require interaction with passengers, employers favor workers who are personable and know how to get along and work with others, especially those from other nationalities and cultures. Cruise ships emphasize their preference for service-orientated people.

Many jobs within the industry require extended travel or time away from home and family. For these jobs, like those on international ships, employers look for people who are open to travel, have a sense of adventure and who have the maturity to handle the loneliness that one might experience.

Pilots are required to have an uncorrected 20/20 vision.

III. Industry Occupations

The Transportation and Logistics industry caters a wide variety of jobs for all types of employees, ranging from entry-level to highly-specialized positions. Filipinos are highly qualified for both local and international positions across industry subsectors depending on the job description, education requirement and work experience.

a. Working Conditions

i. Nature of Employment in Subsectors

Occupations in the Transportation and Logistics offer opportunities for different types of employment. The entrepreneurs who drive their own tricycles or jeepneys are self-employed. Contractual employment is possible in the state-run railway companies that are government owned. Due to budget constraints, the PNR and LRTA hire some personnel on a contractual basis. A permanent position is opened only when the incumbent employee leaves the service.

Seafarers are normally employed on a contract basis, for example, for a period of three to six months. The employer is mandated by the contract to provide free airfare from the point of hire, which is the Philippines, to the point of embarkation at the beginning and the end of the contract period. Those employed by a cruise ship sign a contract for six months, which may be extended by the cruise line for up to ten months. There is a compulsory break from six to eight weeks after a contract is completed. Usually another contract is offered if job performance was satisfactory.

Outsourced employment is possible in some subsectors. Local airlines have devolved ground services such as call center reservation, catering and baggage handling to service providers. Those seeking jobs related to airlines can apply with these companies directly. On the other hand, the LRTA plans to outsource the operation and maintenance of Line 1 and MRT 3 by 2012.

ii. Full time and Part time Employment

Drivers in road transport, which includes buses, *jeepneys*, taxis, AUVs, tricycles are not considered full time employees, but are regular drivers. There is a utility vehicle assigned to them, but they do not have fix salary if they are on a boundary basis and they do not have all the benefits that a full time employee receives even if he has been driving in a company for a period of time. The earnings of these drivers depend on their ability and hard workmanship.

Essential jobs in the main industry subsectors are usually full-time jobs. Employers invest in valuable workers in terms of trainings and are keen to retain their services. Airline flight crews are usually permanent employees after passing a six-month probationary period and can advance up the appropriate ranks subject to years in service and ratings. Similarly, core jobs in operations and engineering for rail transport, logistics, and container terminal ports companies are usually permanent positions.

Employment in ships may be considered part time employment in the sense that one is not hired throughout the year. Employees on cruise ships sign contracts that are four to six months in duration

and there is a mandatory rest period of a few weeks between contracts.

iii. Working Hours

Occupations in the transportation and logistics industries are characterized by irregular hours and working in shifts. Regular working hours are mandated by law and by international industry codes.

In road transport, drivers of buses differ working hours depending on the route. Long distance provincial operations usually have drivers alternately driving before they reach the destination. City drivers are usually on a 12-hour shift, while there are drivers of taxis in duty for 24 hours and some 12 hours. Staff of operators are usually working 8 hours or shifting.

In railway transport, the light rail and the commuter trains have daily schedules that run from early morning to late at night. Some employees from the train operations and engineering departments report for work before the first run to check the trains and inspect the tracks. The earliest shift for light rail workers starts at 3 a.m. and the last shift ends at midnight.

In port operations, a cargo handling company maintains a twenty-four hour work schedule on a two or three shift basis, taking into account the schedule of arrival and departure of vessels in the port. The company cannot require a worker to render service more than twelve hours in a shift, meaning eight regular working hours and four hours of overtime.

On board a ship, normal working hours of seafarers are based on an eight-hour day, with one day of rest per week. International maritime guidelines state that a seafarer must not work more than fourteen hours in any twenty-hour period.

Flight operations can take place anytime of the day or night and so airport and airline workers have variable work hours. Pilots can work 14 to 16 hours in any 24 consecutive hours, but limited to 32 hours in any seven consecutive days. Pilots cannot fly more than 100 hours in a month or 1,000 hours in any calendar year. Work hours of the other flight crew have similar restrictions. Long-haul (international) flight attendants are away from home for 18 out of

each 28-day roster period, and are often required to work weekends and public holidays.

iv. Working Environment

Essential workers in the transportation and logistics industry usually do not work inside the comforts of an office building. Port and shipyard workers are exposed to the elements and work in open areas like docks or cramped spaces like a ship's hold even in inclement weather. They also run the risk of disease and contamination from toxic substances like asbestos used in ship building.

Road transport employees are often the ones exposed to problems of the road, often they are the ones unorganized and exploited. Majority of the workers experience informalization or casualization of labor. They are not assured of continuous work due to absence of contract so they can be laid off anytime, a perfect example of job insecurity and contract labor. The entire labor force does not receive the statutory minimum wage, despite working more than 8 hours. They are also not given any social benefits required by law, unless they enroll themselves. The government and employers do not include this in their budgetary allocation. Most of the time, drivers and conductors are not given enough time to rest, giving them extreme fatigue, causing an increasing number of vehicular accidents recorded on the road, which gives them a bad image. Studies show that fatigue and stress are related to irregular shift patterns, night driving, long working hours, and long hours of driving among professional drivers. Currently, issues concerning the use of illegal drugs amongst drivers have been revealed. Drivers use drugs to keep them awake for long driving hours. Drivers and conductors are very much vulnerable to bad elements such as robberies, ambushes, and traffic accidents and not to mention the problems related to traffic policemen and local administrators. Often on the road, they are also exposed to extreme temperatures and weathers. In their specific garages, mechanics are not properly equipped with safety gadgets and are often just wearing slippers.

Seafarers are confined to a ship that may travel in the open sea for days, both in good weather and bad. This is a job for those who do not suffer from seasickness. One must have enough psychological and mental stamina to cope with the loneliness and sense of disconnectedness from family and familiar surroundings.

Commercial airline flight crews need to work in cramped conditions at a high altitude, and cabin attendants are on their feet most of the time attending to passengers. Flying in bad weather increases the stress of these workers who need to be appearing calm and composed while being extra vigilant to avoid dangerous situations. Flight crews may work many hours straight on long haul flights and need to coordinate with different kinds of people: passengers of every age, ground staff, pilots, caterers and check-in agents. They also spend time away from home because of overnight layovers in foreign destinations that they may need to take, depending on the flight schedules.

v. Fringe Benefits

Land transport employees do not enjoy fringe benefits other than free travel. There are some bus companies operating in long distance operations which offer free meals.

Free travel is the unique fringe benefit offered in most sub-sectors of the transportation and logistics industry. Workers in rail transport, cruise ships and airline companies ride for free in their respective means of transportation, subject to specific restrictions. Free or discounted travel may be extended to the immediate family members of permanent employees.

Workers on international ships have free lodging and meals while onboard and so they are able to save much of their salary. They are also entitled to free airplane tickets to the port of embarkation at the start of the contract and back to their home country afterwards. In addition, workers on cruise ships have pleasant and comfortable surroundings, interact with passengers, and travel to interesting and scenic tourist destinations. Those in the entertainment department and other jobs that interact with passengers augment their base pay with tips.

Airline flight crews who arrive at a foreign destination are provided hotel accommodation, transportation and an allowance for meals. These airline workers as well as the seafarers onboard international ships have the benefit of visiting foreign countries.

“Travel and get paid for it” may describe many jobs in this industry, but it is important to remember that one needs to work hard.

vi. Occupation Hazards

Owing to the nature of the work, occupations involving the transport of people and goods are high stress jobs. Safety procedures need to be strictly followed at all times. In addition, workers in this industry typically need to handle huge machinery or complicated equipment requiring concentration, skill and physical strength. A minor error at the workplace can cause serious injury or even a fatal accident.

Land transportation drivers are very exposed to high occupational health hazards, being exposed to stress and fatigue. They are also exposed to occupational risks being on the road 24/7, for any mechanical malfunction of the vehicle that they are driving. Driving is considered as one of the most accident-prone job. The presence of road safety hazards and pollution has an impact to the working conditions of the drivers.

Train drivers may experience the loss of peripheral vision known as tunnel vision. Personnel in the train operations and engineering departments who need to work in the Lines and Depot Area exercise caution to avoid accidents caused by the arrival and departure of trains. In addition, light rail station tellers may be exposed to robbery attempts.

Ports and shipyards are considered dangerous work places with high accident rates. Handling heavy machinery and equipment exposes a worker to machine malfunction, for example, the hoisting of steel containers loaded with goods using a gantry crane. Ship workers run the risk of disease and contamination from toxic substances like asbestos used in shipbuilding. They also work close to fire and electricity and are exposed to the risks of burns and explosions.

Although flying is not a physically strenuous activity, flight attendants and especially pilots may experience a lot of stress because they are responsible for many lives. Air traffic and communications controllers experience similar fatigue and high stress because of the nature of the job. Pilots and flight attendant who fly very long distances may experience jet lag; fatigue caused by moving through different time zones, and disrupted sleeping patterns. Flight crews as well as those who work in airport terminals face the potential risk of hearing loss caused by the noise from aircraft engines.

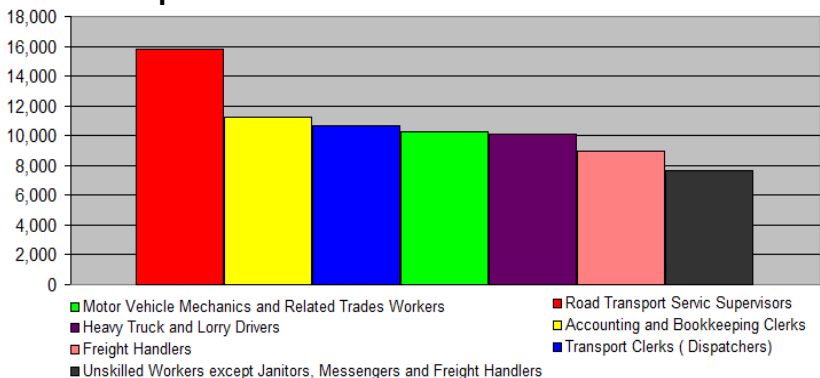
Seafarers generally live in cramped spaces and experience loneliness and depression in the months they are separated from their families. They develop coping mechanisms to minimize the impact on their psychological and mental health.

b. Earnings

According to the 2009 Survey of Philippine Business and Industry, the TCS subsector paid a total compensation of P62.1 billion, an equivalent of P 349,905 average annual compensation, to its employees. About P28 billion or almost half of the total compensation of the sector was remunerated by Telecommunications industry. Scheduled Air Transport industry placed second with P9.2 billion or 15% of total earnings. Activities of Other Transport Agencies recorded P5.8 billion or 9.4% compensation expense.

Scheduled Air transport industry employees were the highest earners amongst the TCS subsector employees in 2009 with an average annual compensation of P811,094.00. Employees of Telecommunications and Non-scheduled Air Transport Industries followed with P793,278.00 and P420,107.00, respectively. Workers in Inland Water Transport industry received the lowest average annual compensation of P 60,025.00.

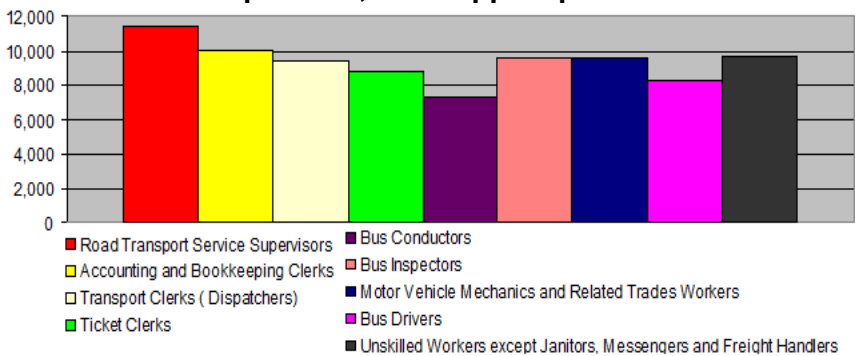
Figure 17: Average Monthly Wage Rates of Other Land Transportation, in Philippine pesos



Source: Bureau of Labor and Employment Statistics

The Bureau of Labor and Employment Statistics (BLES) of the Department of Labor and Employment (DOLE) released the average monthly wage rates of the Land Transportation Sector which includes Road Transport Service Supervisors, Accounting and Bookkeeping Clerks, Transport Clerks (Dispatchers), Motor Vehicle Mechanics and Related Trades Workers, Heavy Truck and Lorry Drivers, Freight Handlers, and Unskilled Workers except Janitors, Messengers and Freight Handlers, Ticket Clerks. The Road Transport Service Supervisors receive the greatest average monthly rate amongst the Other Land Transportation occupation at P15,794.00, more than 100% of the salary of the Unskilled Workers except Janitors, Messengers and Freight Handlers. The average salary of the Average Monthly Wage Rates of Other Land Transportation employees is P10,666.00.

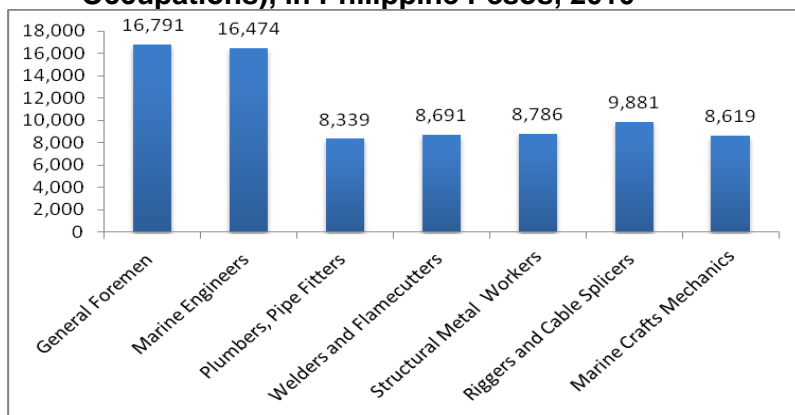
Figure 18: Average Monthly Wage Rates of Bus Line Operation, in Philippine pesos



Source: Bureau of Labor and Employment Statistics

Similar to the Other Land Transport average monthly wage rates, Road Transport Service Supervisors also get the highest salary amongst the average monthly wage rates of Bus Line Operation at P11,405.00, though the value is lower by P4, 389.00. The average of the Average Monthly Wage Rates of Bus Line Operation which includes Road Transport Service Supervisor, Accounting and Bookkeeping Clerks, Transport Clerks (Dispatchers), Ticket Clerks, Bus Conductors, Bus Inspectors, Motor Vehicle Mechanics and Related Trades Workers, Bus Drivers and Unskilled Workers except Janitors, Messengers and Freight Handlers is P9,341.00.

Figure 19: Average Monthly Wage Rates of Workers in Building and Repairing of Ships and Boats (Selected Occupations), in Philippine Pesos, 2010

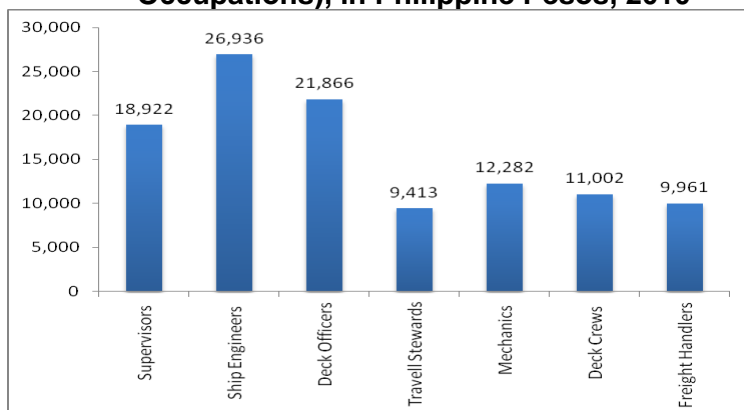


Source: Bureau of Labor, Employment and Statistics

As shown in Figure 19, in the field of Building and Repairing of Ships and Boats, General Foremen and Marine engineers received the highest monthly wages in 2010, at P16,791.00 and P16,474.00, respectively. Plumbers and pipe fitters earned the least at P8,339.00 monthly.

Among workers in selected occupations in the Water Transport sector Ship Engineers and Deck Officers earned the most every month, at P 26,936.00 and P 21,866.00, respectively. Earning the least are Travel Stewards who earn P 9,413.00 monthly and Freight Handlers with monthly wage rate of P9,961.00.

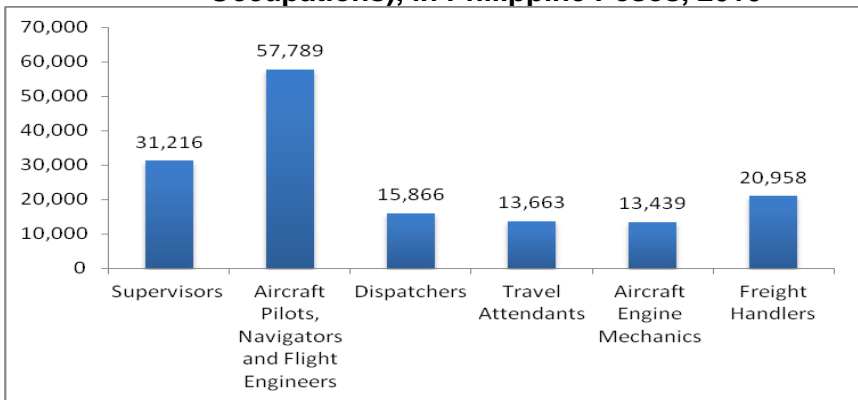
Figure 20: Average Monthly Wage Rates of Workers in Water Transport (Selected Occupations), in Philippine Pesos, 2010



Source: Bureau of Labor, Employment and Statistics

Workers in air transport registered the highest wage rates among all TSC industries with aircraft pilots, navigators and flight engineers earning an average of P 57,789.00 monthly. Aircraft engine mechanics earned the least at P 13,439.00 per month, although this salary is significantly higher than the lowest wage earners among water and land transport workers.

Figure 21. Average Monthly Wage Rates of Workers in Air Transport (Selected Occupations), in Philippine Pesos, 2010



Source: Bureau of Labor, Employment and Statistics

There are ways to earn more in some transportation and logistics subsectors. Flight cruise on long haul flights usually receive a daily allowance on layovers away from their home country. Some logistics companies offer incentive bonuses to heavy equipment operators based on performance and productivity measures. Customer-facing workers in cruise ships increase their base pay through tips. Usually, international maritime jobs on contract basis are tax-free.

It is important to note there are important differences in wages depending on location and type of establishment. Employees of private companies generally earn more than those working for the government, for equivalent positions. Companies based in Metro Manila usually give higher wages than those located in provinces, given the differences in cost of living. The biggest earning differentials are between Philippine and international wages. Filipinos hired by companies based abroad can earn at least double the salary they would be paid for the same job in the Philippines.

c. Training and Advancement

Companies involved in the industry invest in technology to facilitate the efficient, safe and cost-efficient movement of passengers and cargo. Being essentially service companies, these firms necessarily need to invest in their core employees. Workers occupying essential positions in transportation and logistics companies regularly undertake training to update skills and keep abreast with new technology relevant to their field, for example, updated logistics software or a new type of airplane. Regular training programs usually include safety policies and procedures and can be handled by national regulatory agencies or international transport associations like the International Air Transport Association (IATA).

Companies operating in the industry usually sponsor work-related training for employees. The government-owned railway companies usually receive funding from donor countries to send technical personnel for training. Private cargo handling firms operating in ports coordinate with the Philippine Ports Authority Training Center (PPATC) for relevant in-service training programs.

Private terminal port companies usually invest in manpower development, especially container handling equipment operators. Operators of quay cranes, rubber tired gantries and prime movers are considered highly skilled employees and part of the firm's retention program is to reward star performers with cash incentives based on productivity targets. The company may also give all employees the opportunity to hone technical skills through a multi-skills equipment operators training.

Commercial airline flight crews undergo yearly equipment qualification courses, aircraft proficiency checks, and flight safety foundation training sponsored by the airlines or aircraft manufacturing companies. An aircraft maintenance company recruits mechanics by offering basic course programs composed of classroom and on-the-job training at its facility.

Technology and job-specific training is apart from the usual corporate training programs that may include behavioral training, team building, customer service, and work attitudes and values enhancement workshops.

d. Description of Specific Occupations

Land Transport

Road Sector

Bus Operators

Bus operator¹² shall mean any-franchised and registered bus operator lawfully operating in Metro Manila under relevant Philippine law and administrative issuance, rules and regulations.

To establish a bus business, the operator must possess the following requirements:

1. Garage with complete facilities
2. Barracks with toilet
3. Office
4. Maintenance crew
5. Vulcanizing shop
6. Mechanic

Advantages of going into the transport business:

- a. Cash basis
- b. You can promise cash payment to loans
- c. Very liquid
- d. Greater opportunity to get credit from suppliers and banks
- e. Return on Investment – 3 years

Bus Driver

A bus driver is a person who drives the PUV bus professionally from the point of origin to the point of destination. The bus driver picks up and drops off passengers on predetermined bus stops. Bus drivers have assigned routes as mandated by LTFRB.

The Metropolitan Manila Development Authority (MMDA) under Memorandum Circular No. 02 Series of 2011 informed all Metro Manila Bus Operators regarding hiring of female bus drivers due to the widespread concern over the numerous fatal road accidents involving buses driven by males. This is also one way to eliminate all forms of discrimination against women which seeks to eliminate prejudices and customs based on the idea of the inferiority or superiority on one sex or on stereotyped roles for men and women based on the United Nations Convention on the Elimination of All Forms of Discrimination Against Women. The Republic Act No. 9170 states that the state shall provide ample opportunities to

¹² Definition given by the Metro Manila Development Authority (MMDA)

enhance and develop women’s skills, acquire productive employment and contribute to their families and communities to the fullest of their capabilities.

Bus operators who will hire women as drivers would be given incentives, to wit:

- a. The MMDA strongly encourages Bus Operators to hire female bus drivers in accordance with Philippines labor laws, rules and regulations.
- b. As an incentive, buses driven by female drivers and duly registered and included in the fleet of a Bus Operator shall be exempted from coverage under the Unified Vehicular Volume Reduction Program under MMDA Regulation No. 96-005, as amended.

The basic skills and related requirements, tenure, working environment, advancement and training, working hours, and prospects of the bus drivers in different bus categories PUV buses (for Metro Manila Operations, for Provincial Operations-Short Distance and Provincial Operations-Long Distance) are the same. The only difference is the salary range.

Tour bus drivers on the other hand are considered driver/tourist supervisor. They are considered the higher end amongst the bus drivers because they have specialized skills such as geography (since their routes are not the usual fix routes) and history since he will be driving to different historical places.

<p>Basic skills and related requirements</p>	<ul style="list-style-type: none"> • At least five (5) years working experience with good moral character • <i>wido</i>¹ • Driver’s license (restriction Code 3-professional driver)² • Clearances: <ol style="list-style-type: none"> 1. Barangay 2. Police 3. National Bureau of Investigation (NBI) 4. Bus Association (e.g. IMBOA³) 5. LTO ⁴
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	<p>6. MMDA⁴</p> <ul style="list-style-type: none"> • Medical Examinations: <ol style="list-style-type: none"> 1. General check up 2. Drug test 3. Eye test • NSO Birth Certificate • Certificate from previous employment • Background Investigation (BI)⁵ • Ability to make minor repairs of the bus
Tenure	<ul style="list-style-type: none"> • Six months or less⁵ / no permanency
Working Environment	<ul style="list-style-type: none"> • must wear uniform • works with less supervision and manages the bus time depending on rush hour and lean hour • Ensure the bus is clean and tidy • Neatly groomed and Properly attired (wear uniform and enclosed shoes) • Behave with courtesy towards any intending passengers, other bus drivers and authorized officers on the road • Not to use cellular phones while driving • Follow traffic rules and regulations • Hand over driver license and driver authority card to authorized officer when requested to do so. • Checks the operating conditions of the vehicle and report to the mechanic for any

	concerns
Advancement and Training	<ul style="list-style-type: none"> • Training is within the company (OJT) <ul style="list-style-type: none"> -senior driver trains the new drivers -for senior driver to issue clearance • Training given by the Personnel Department <ul style="list-style-type: none"> -good grooming and hygiene
Working Hours	<ul style="list-style-type: none"> • 14 hours 10 hours work (peak hours) + 4 hours rest/meals (lean hours)
Salary Range	<p>For City Operations (Air conditioned and ordinary)</p> <ul style="list-style-type: none"> • Commission basis <ul style="list-style-type: none"> -10% of income for the day's trip • There are bus companies already giving salaries over and above the minimum wage + benefits⁶ <p>For Provincial Operations (Short distance)</p> <ul style="list-style-type: none"> • Minimum (weekly or semi-monthly) + incentive (1% of income) <p>For Provincial Operations (Long distance)</p> <ul style="list-style-type: none"> • Minimum (weekly or semi-monthly) + incentive (1% of income) + free meals in designated stop over owned by the PUV corporation
Prospects	<ul style="list-style-type: none"> • People who are employed as bus drivers have greater

	<p>opportunities to land on jobs abroad since this type of skill is in demand abroad</p> <ul style="list-style-type: none"> • Since there is a high turnover for bus drivers, there are always openings available in corporations
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¹ *wido* is a colloquial term used in the transportation industry. It means that the driver has experience but with no formal education. There are bus drivers who are no read no write but are very experienced drivers.

² License - an authority issued by the Land Transportation Office (LTO) to a person who is qualified to operate a vehicle. **Professional Driver's** - an authority, embodied in a form prescribed by the LTO, of a person to operate a private or public utility vehicle for compensation. **Non-Professional Driver's** - an authority embodied in a form prescribed by the LTO, of a person to operate vehicles, except public utility vehicles, without compensation (NSCB definition).

³ Integrated Metropolitan Bus Operators Association (IMBOA) for any cases (i.e. accidents, killed)

⁴ Must submit original copies; needed to check if the applicant has any road violations

Will be conducted by the Bus Operator to verify address (for violations) and to check family issues

⁵ There is a high bus crew high turnover

⁶ According to Labor Secretary Rosalinda Baldoz in an interview in Inquirer

Shuttle driver

A shuttle driver is a person who professionally drives a shuttle service from specific pick up points to its destination. The shuttle must have permit to operate from LTRFB.

<p>Basic skills and related requirements</p>	<ul style="list-style-type: none"> • At least five (3) years working experience with good moral character • Driver's license (restriction Code 3 – professional driver) • Knowledge of traffic and school bus regulations • Clearances: <ol style="list-style-type: none"> 1. Barangay 2. Police 3. National Bureau of Investigation (NBI) 4. Bus Association (e.g. IMBOA³) 5. LTO 6. MMDA
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	<ul style="list-style-type: none"> • Medical Examinations: <ol style="list-style-type: none"> 1. General check up 2. Drug test 3. Eye test • NSO Birth Certificate • Certificate from previous employment
Tenure	6 months or less / no permanency
Working Environment	<ul style="list-style-type: none"> • responsible for the safety of the passengers • working at very specific daily time schedules to ensure that all employees/passengers will arrive on time for their schedules • ensures that the shuttle is in good working conditions • pick up and drop off employees/passengers at specific points and as per time schedule • Physical Demands <ol style="list-style-type: none"> 1. Physical effort leading to physical fatigue 2. Strenuous job – sit for long periods and requires intense concentration • Environmental conditions <ol style="list-style-type: none"> 1. Can withstand traffic 2. Must work in all different weather conditions (extreme heat and extreme rain) • Sensory demands <ol style="list-style-type: none"> 1. requires intense concentration. • Mental Demands <ol style="list-style-type: none"> 1. Mental or emotional fatigue
Advancement and Training	<ul style="list-style-type: none"> • Within the shuttle company
Working Hours	<ul style="list-style-type: none"> • Depending on the contract agreed by two corporations (the bus company and the corporation serviced by the shuttle)
Salary Range	<ul style="list-style-type: none"> • Minimum + incentive
Prospects	<ul style="list-style-type: none"> • The development of Economic

	<p>Zones and Industrial Zones in the outskirts of Metro Manila (nearby provinces) led to an increase in the need of shuttle services thereby increasing the demand for the job.</p>
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School Bus Drivers / Operators

School bus drivers are responsible to transport students to and from school. School buses in the Philippines are usually van types (air conditioned or ordinary). The school bus drivers could either be employed or the operator himself. The first route of the school bus driver is to collect all the students in the mornings from their houses to bring them to school and in the afternoon or early evenings, the second route, to collect the students in school and transport them back to their houses. School bus drivers must assist the students in boarding and carrying their bags and in going down.

<p>Basic skills and related requirements</p>	<ul style="list-style-type: none"> • Educational attainment is not a qualification • At least five (3) years working experience with good moral character • Driver's license (restriction Code 3 – professional driver) • Knowledge of traffic and school bus regulations • The school bus must have a franchise from the LTFRB and must be accredited to the school servicing • Responsible for the safety while operating the school bus according to a set daily schedule • Ensure that the school bus is in good operating condition at all times • Pick up and drop off students as per the schedule • Maintain order and security on the bus and obey all laws, regulations and rules of conduct
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Tenure	<ul style="list-style-type: none"> • Contractual / Per school year basis
Working Environment	<ul style="list-style-type: none"> • Physical Demands A School Bus Driver is a moderately strenuous job. It can lead to physical fatigue. Requires intense concentration • Environmental Conditions The School Bus Driver must work in all different weather conditions (extreme heat and extreme rain) • Mental Demands and Sensory Demands Conditions that may lead to mental or emotional fatigue
Advancement and Training	<ul style="list-style-type: none"> • Provided by LTFRB or the school where the service is accredited
Working Hours	<ul style="list-style-type: none"> • Flexible – it depends on the school schedule
Salary Range	<ul style="list-style-type: none"> • Below minimum (employed) • Above minimum (operator)
Prospects	<ul style="list-style-type: none"> • The increase in the number of schools and the increasing number of couples working, making themselves incapable to send their children to school every day is a good venue to operate this type of business or be a source of employment.

Jeepney Drivers

In the Philippines, commonly, the jeepney drivers are the operators themselves. Jeepney drivers transport passengers within their limited route of 10 kilometers.

Basic skills and related requirements	<ul style="list-style-type: none"> • Educational attainment is not a qualification as long as professional driver • Driver's license (restriction Code 3 – professional driver) • Barangay clearance • Police clearance • NBI Clearance
Tenure	<ul style="list-style-type: none"> • None

Working Environment	<ul style="list-style-type: none"> • Work is limited within the confinement of the jeepney • Must ensure that the passengers will arrive to their destination safely • Working on streets makes the driver susceptible to diseases due to weather conditions, pollution, and exposure and contact to passengers • There is a risk to encounter vehicular accident • There is a risk to be a victim of bad elements (hold uppers, etc.)
Advancement and Training	<ul style="list-style-type: none"> • LTFRB • Jeepney operators and drivers associations such as FEJODAP
Working Hours	<ul style="list-style-type: none"> • 7 – 8 hours
Salary Range	<ul style="list-style-type: none"> • What is left from boundary and gasoline <ol style="list-style-type: none"> a. Boundary – Php600.00- Php800.00 b. Diesel (30 liters) • Usually Php500.00/day
Prospects	<ul style="list-style-type: none"> • Bad. The roads in Metro Manila are widely congested thereby the income is no longer that high. Traffic causes income to decrease. To add, the presence of air conditioned services such as fx increases the competition.

Tricycle Driver

A tricycle driver drives a motorcycle with a sidecar which is used as a passenger cabin. This is one of the most popular and cheap form of public transport running in short distances on arterial roads. According to the Asian Development Bank (ADB) study, customarily the tricycles provide supplementary services by transporting passengers from tertiary roads to national highways and vice-versa.

Basic skills and related requirements	<ul style="list-style-type: none"> • No educational attainment requirement • Can read and comprehend traffic signs • Community Tax Certificate • Driver's License (not fully implemented) • Barangay Clearance • Route of the tricycle
Tenure	<ul style="list-style-type: none"> • None

Working Environment	<ul style="list-style-type: none"> • Works within the confinement of the tricycle but on the road • Works with minimum supervision • Since tricycles are non-air-conditioned, there is a high risk of getting diseases due to exposure to environmental elements (extreme weather conditions) and different people • High risk for road accidents • High risk for exposure to criminals (hold uppers, pick pockets)
Advancement and Training	<ul style="list-style-type: none"> • None
Working Hours	<ul style="list-style-type: none"> • Flexible (depending on operator arrangement)
Salary Range	<ul style="list-style-type: none"> • P120.00 – P150.00 goes to boundary, a certain portion is allotted for gasoline, and the remaining amount is their take home income
Prospects	<ul style="list-style-type: none"> • In the Metropolitan Manila, since tricycles are used as mode of transportation in areas where <i>jeepneys</i> are not servicing, the development of roads and transformation of minor roads to major roads is a threat to the area that they are covering for service. Since tricycles are not allowed to pass thru national highways for security reasons, this limits that area that they can cover. There is also an increasing number of general public owning their own motorcycle bikes, thus, demand decreases. For security reasons, there are also villages that no longer allow tricycles to operate. Those who are becoming health conscious prefer walking than to ride tricycles. • In the provinces, there are still places where tricycle is their primary mode of transportation. Operators were even able to reinvent the physical features of the tricycle in order to carry more passengers because they travel at a

longer distance.

Conductor – PUV buses

A conductor assists the passengers and takes care of the tickets. In the long-distance travels he assists in the loading and unloading of luggage into the bus boot. Nowadays, conductors for long distance travels must also be a professional driver. He serves as co-driver - substitute of the driver.

Basic skills and related requirements	<ul style="list-style-type: none"> • Educational attainment is not a qualification as long as professional driver • Driver's license (restriction Code 3 – professional driver)¹ • Barangay clearance • Police clearance • NBI Clearance
Tenure	<ul style="list-style-type: none"> • None
Working Environment	<ul style="list-style-type: none"> • Works within the confinement of the bus but on the road • Works with minimum supervision • If assigned to an ordinary bus – high risk of getting diseases due to exposure to environmental elements and different people • High risk for road accidents • High risk for exposure to criminals (hold uppers, pick pockets) • Health hazard – exposure to different weather conditions and food elements (meals)
Advancement and Training	<ul style="list-style-type: none"> • OJT from senior conductor -For senior conductor to release clearance • Personnel Department -good grooming and hygiene
Working Hours	<ul style="list-style-type: none"> • 14 hours 10 hours – work 4 hours – rest/meals
Salary Range	<ul style="list-style-type: none"> • Commission basis (Metro Manila Operation and Provincial Short distance) <ul style="list-style-type: none"> • 8% of income for the day's trip • Commission basis (Provincial Long

	Distance) <ul style="list-style-type: none"> • Minimum + free meals in stopover (managed by the bus corporation)
Prospects	<ul style="list-style-type: none"> • There is a high turnover rate for conductors since they are not permanent employees. The development of roads and bridges connecting the Philippines makes the far flung areas accessible for land transportation. This in turn can increase job demand.

¹ for long distance operations

Inspector – PUV buses

The inspector controls the activity of the conductor in the issuance of the tickets to the passengers. They are deployed in major streets to check on their buses, ride in the bus, inspects the ticket of the passengers if it is within the series. Once done, would go down the bus and wait for another bus to come by. Inspectors are hired in Metro Manila bus operations only.

Basic skills and related requirements	<ul style="list-style-type: none"> • College undergraduate and must know how to prepare reports (internal for the company) • Knowledgeable in preparing inspector's report • Experience for at least two (2) years • Policy clearance • NBI clearance • 2x2 picture
Tenure	<ul style="list-style-type: none"> • 6 months or less
Working Environment	<ul style="list-style-type: none"> • Work with minimum supervision • high risk of getting diseases due to exposure to environmental elements and different people • High risk for exposure to criminals (hold uppers, pick pockets) • Health hazard – exposure to different weather conditions (extreme heat and extreme rain)and food elements (meals)
Advancement and Training	<ul style="list-style-type: none"> • Undergo training since you will check on conductors' one should have been a conductor first
Working Hours	<ul style="list-style-type: none"> • 8 hours

Salary Range	<ul style="list-style-type: none"> • Basic pay + overtime (OT) pay in excess of 8 hours
Prospects	<ul style="list-style-type: none"> • The decline in the number of buses operating within Metro Manila due to traffic congestion and decision of LTFRB to decrease the number of buses running in the major roads such as EDSA¹ lead to a decrease in the number of employed inspectors. But since they are not permanent employees, there is a probability of getting a job once the former inspector ends his term of employment.

¹ Epifaño Delos Santos Avenue

Tour Guide

Buses for tours must be accredited by Department of Tourism (DOT), hotels, restaurants and historical places to go and visit. At the same time, the tour guide must be accredited by the DOT and the historical places to visit.

Basic skills and related requirements	<ul style="list-style-type: none"> • At least college level • Communicates well in English • Smart • At least two years job experience • Must know <u>geography</u> and history
Tenure	<ul style="list-style-type: none"> • Part-time job
Working Environment	<ul style="list-style-type: none"> • Must attend to the needs of the passengers • To give lectures about the different historical places • Must orient the tourists with the rules and regulations by the places visited • Must attend to the entrance fees of the places visited • Work is not limited within the bus but also in visited places • Give instructions to the tourists
Advancement and Training	<ul style="list-style-type: none"> • Seminars are provided by the DOT • Corporations offer free training and seminar • Historical places sometimes offer seminar

Working Hours	<ul style="list-style-type: none"> • 8 hours
Salary Range	<ul style="list-style-type: none"> • Per trip basis Php500.00 + tip from tourists + free food from the stopover owned by the bus corporation.
Prospects	<ul style="list-style-type: none"> • The boom of the Tourism Industry can lead to possible increase in demand for these types of jobs.

Mechanic / Maintenance (for all PUV transportations)

The mechanics are divided into junior, senior, and head mechanics. Junior mechanics are usually the helpers.

Basic skills and related requirements	<ul style="list-style-type: none"> • Junior mechanic <ul style="list-style-type: none"> • Usually helper / skilled • Senior mechanic <ul style="list-style-type: none"> - educated or experienced (vocational school) - depending on the qualifications - overhaul chassis /engine mechanic • Mechanical Engineer (Head)
Tenure	<ul style="list-style-type: none"> • Some bigger bus companies have in house mechanics
Working Environment	<ul style="list-style-type: none"> • Works within the facilities of the garage • Ensures that the vehicles are in good working conditions • Exposure to dirt and dust • On call
Advancement and Training	<ul style="list-style-type: none"> • TESDA • In house – senior mechanic training the junior mechanic
Working Hours	<ul style="list-style-type: none"> • Works for 24 hours = 3 shifts e.g. lube man
Salary Range	<p>Junior - minimum wage Senior – above minimum Head – P25,000.00 for 50 units and above</p>
Prospects	

Heavy Equipment Operator

A heavy equipment operator performs tasks associated with moving goods using machinery such as a forklift or crane. The operator might load and unload containers, bring goods to

warehouses, check inventory, weigh and tag products, shrink wrap goods and inspect and maintain equipment. Logistics and distribution companies hire heavy equipment operators to transport goods usually on pallets. Cargo handling companies situated in terminal ports also hire these technically-skilled workers.

Basic skills and related requirements	<ul style="list-style-type: none"> • Usually male • High school or vocational course • At least three years of related experience • Valid driver's license • Good eye-hand-foot coordination
Tenure	<ul style="list-style-type: none"> • Usually full time employees
Working Environment	<ul style="list-style-type: none"> • Industrial areas like terminal ports, warehouses, logistics, freight and distribution companies
Advancement and Training	<ul style="list-style-type: none"> • A cargo handling operator usually sponsors in-service training in coordination with the Philippine Ports Authority Training Center (PPATC)
Working Hours	<ul style="list-style-type: none"> • Irregular 8-hour daily shifts, one day off per week
Salary Range	<ul style="list-style-type: none"> • Depends on the type of equipment handled
Prospects	<ul style="list-style-type: none"> • Industries that employ heavy equipment operators such as warehousing are sensitive to fluctuations in the economy. When international or domestic trade is high, there are usually many jobs available. These decrease during economic downturns.

Train Driver

A Train Driver is in charge of driving a railway or light rail train. He contributes to the efficient running of the train system by careful observance of established safety procedures.

Basic skills and related requirements	<ul style="list-style-type: none"> • High school graduate / completion of relevant vocational or trade course • Valid driver's license • 1 - 2 years' experience in driving • 4 - 8 hours of relevant training
Tenure	<ul style="list-style-type: none"> • Full-time employment • Hired directly by the government through the Philippine National Railways (PNR) and the Light Rail Transit Authority (LRTA)
Working Environment	<ul style="list-style-type: none"> • Works inside the control room of a train • Must observe safety procedures and keep alert for any possible dangerous situations
Advancement and Training	<ul style="list-style-type: none"> • Training workshops usually in house • Abroad, usually in the form of grants or scholarships from donor agencies
Working Hours	<ul style="list-style-type: none"> • Irregular 8-hour daily shifts, one day off per week
Salary Range	<ul style="list-style-type: none"> • Train Driver - around P20,000 monthly gross salary
Prospects	<ul style="list-style-type: none"> • Good, LRT plans to increase more lines while PNR is pursuing rehabilitation efforts

Railway Engineer

A Railway Engineer is in charge of the smooth and safe rail service operations and the maintenance of the rolling stock and the railway lines. His tasks may include the supervision of railway maintenance foremen and workers.

Basic skills and related requirements	<ul style="list-style-type: none"> • Bachelor's degree in engineering relevant to the job
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Tenure	<ul style="list-style-type: none"> • Full-time, permanent employment • Hired directly by the government through the Philippine National Railways (PNR)
Working Environment	<ul style="list-style-type: none"> • Usually in train depot yard overseeing repairs and maintenance work
Advancement and Training	<ul style="list-style-type: none"> • Training workshops usually in house • Abroad, usually in the form of grants or scholarships from donor agencies
Working Hours	<ul style="list-style-type: none"> • Irregular 8-hour daily shifts, one day off per week
Salary Range	<ul style="list-style-type: none"> • Principal Engineer A - around P35,000 monthly gross salary
Prospects	<ul style="list-style-type: none"> • Good, LRT plans to increase more lines while PNR is pursuing rehabilitation efforts

Maintenance Worker or Technician

The transport of passengers and cargo is accomplished with the use of vehicles that travel on roads, on the water or in the air. These vehicles and the accompanying equipment need continuous maintenance to ensure safe passage and efficient, cost-effective and timely operations. Railway maintenance workers, aviation technicians, and bus line mechanics are some examples of this type of occupation.

For example, an aviation maintenance technician specializes in areas like A&P mechanics, sheet metal, fuel tank and mechanical plating. The following are the requirements specified by the Civil Aviation Authority of the Philippines (CAP) for the issuance of an Aviation Maintenance Specialist (AMS) license and rating for specializations in airframe and power plant.

Basic skills and related requirements	<ul style="list-style-type: none"> • At least 18 years of age • Ability to read, write, speak and understand English • Should pass a knowledge test covering areas such as air law and airworthiness, natural science and aircraft general knowledge
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Tenure	<ul style="list-style-type: none"> • Full-time employment by airline or a e company offering aircraft maintenance, repair and overhaul (MRO) services
Working Environment	<ul style="list-style-type: none"> • Aircraft hangars and airports
Advancement and Training	<ul style="list-style-type: none"> • Airline companies send technicians to train on specific aircraft
Working Hours	<ul style="list-style-type: none"> • An 8-hour day, irregular or regular hours depending on the type of company
Salary Range	<ul style="list-style-type: none"> • P 15,000 monthly gross salary for entry-level position
Prospects	<ul style="list-style-type: none"> • Good, as there are plans to open more airports in the Philippines which means more flights • International airlines continue to hire Filipinos

Materials Control Manager

A materials manager is responsible for the inventory of raw materials and components needed for manufacturing by a company. He/she coordinates with the company's purchasing and manufacturing divisions as well as suppliers to guarantee timely, reliable, and cost efficient delivery of materials.

Basic skills and related requirements	<ul style="list-style-type: none"> • Bachelor degree in Business Administration or any course • At least 2 – 3 years related experience in logistics operations • May require knowledge of IT-related tools
Tenure	<ul style="list-style-type: none"> • Regular or full time employees
Working Environment	<ul style="list-style-type: none"> • Industrial areas like ports, container terminal companies, logistics companies that deliver goods • Manufacturing companies located here or abroad

Advancement and Training	<ul style="list-style-type: none"> • Usually in-house or local technical training sponsored by the company • Training abroad depending on the company's affiliations and resources
Working Hours	<ul style="list-style-type: none"> • Usually a regular eight-hour day, one day off per week
Salary Range and Benefits	<ul style="list-style-type: none"> • P30,000 gross monthly salary (mid-career) for local positions
Prospects	<ul style="list-style-type: none"> • Logistics industries are sensitive to fluctuations in the economy. When international or domestic trade is high, there are usually many jobs available. These decrease during economic downturns.

Warehouse Manager

A warehouse manager oversees the day-to-day operations of the warehouse. He/she coordinates truck pickup and deliveries, monitors stock inventory, and supervises packaging and other aspects related to the field of logistics, distribution and material management. A warehouse manager must be familiar with the latest technology in warehousing and logistics. He/she may also be in charge of overseeing the employees working in the warehouse.

Basic skills and related requirements	<ul style="list-style-type: none"> • Bachelor degree in Business Administration or related course • At least 2 years supervisory experience in warehousing and logistics operations • Knowledge of computerized inventory control systems • Ability to develop and implement warehousing and logistics operational policies and procedures • Strong organizational skills and problem-solving abilities
Tenure	<ul style="list-style-type: none"> • Regular or full time employees
Working Environment	<ul style="list-style-type: none"> • Industrial areas like ports, container terminal companies, logistics companies that deliver goods

Advancement and Training	<ul style="list-style-type: none"> • Usually in-house or local technical training sponsored by the company • Training abroad depending on the company's affiliations and resources
Working Hours	<ul style="list-style-type: none"> • Usually a regular eight-hour day, one day off per week
Salary Range and Benefits	<ul style="list-style-type: none"> • P35,000 gross monthly salary (mid-career)
Prospects	<ul style="list-style-type: none"> • Logistics industries are sensitive to fluctuations in the economy. When international or domestic trade is high, there are usually many jobs available. These decrease during economic downturns.

Air Transport

This section highlights the essential jobs in each subsector arranged alphabetically, where possible, similar positions and their corresponding requirements are grouped together. A representative sample of positions that require a broad range of education background from high school education to a bachelor's degree is featured.

Airline Cabin Crew

Cabin crew, also known as flight stewards or stewardesses, are employed by commercial airlines primarily to ensure the safety of passengers while on board aircraft. These air hosts and hostesses also provide customer service such as serving meals and drinks while in flight. There are grades of cabin crew; a purser is usually a more senior flight attendant.

Basic skills and related requirements	<ul style="list-style-type: none"> • Minimum 21 years of age • High School Diploma or equivalent • Must be fluent in written and spoken English • Height requirement: for females, at least 5'2 in height with minimum arm reach of 212 cms on tiptoe; for males, at least 5'6 in height • Good set of teeth (no braces or retainers) • Must know how to swim
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Tenure	<ul style="list-style-type: none"> • Regular or full time employees
Working Environment	<ul style="list-style-type: none"> • Limited work area in an airplane • Must attend to needs of passengers
Advancement and Training	<ul style="list-style-type: none"> • Flight attendants have rigorous two or three month training on specific aircraft, including safety procedures • Promotion depends on performance and years of experience
Working Hours	<ul style="list-style-type: none"> • Irregular working hours. Flight crew can have variable work schedules, e.g. working several days on, then several days off, irrespective of public holidays
Salary Range and Benefits	<ul style="list-style-type: none"> • P 40,000 gross monthly pay for domestic cabin attendant • P 60,000 gross monthly pay for international cabin attendant • Comprehensive medical coverage and insurance • Free duty transport • Free flights yearly • Flying privileges for immediate family
Prospects	<ul style="list-style-type: none"> • Good, as there are plans to open more airports in the Philippines which means more flights • International airlines continue to hire Filipinos

Airline Pilots

Airline pilots and copilots take charge of flying an aircraft carrying passengers and cargo. The chief pilot during a flight is usually called the captain. A pilot is rated according to the type of aircraft flown. For example, to qualify for pilot-in-command of an Airbus 320, one must have at least 3,000 hours total flying time, and at least 1,500 hours piloting an Airbus 320.

<p>Basic skills and related requirements</p>	<ul style="list-style-type: none"> • At least 23 years old • Graduate of a four-year college course • Graduate of a flight training course • Logged at least 1,500 hours of flying • Must have a license issued by the Civil Aviation Authority of the Philippines (CAAP) • Must pass a medical examination, including neuro-psychological testing • 20-20 vision, with depth perception and not colorblind
<p>Tenure</p>	<ul style="list-style-type: none"> • Regular or full time employees
<p>Working Environment</p>	<ul style="list-style-type: none"> • Cockpit of an airplane
<p>Advancement and Training</p>	<ul style="list-style-type: none"> • Pilots hired by private airline companies undergo regular training to keep abreast and to gain proficiency in certain types of aircraft. • Must undergo medical examination and renew CAAP license every three years.
<p>Working Hours</p>	<ul style="list-style-type: none"> • Cannot fly more than 100 hours a month or more than 1,000 hours a year. • Irregular working hours. Pilots have variable work schedules, e.g. working several days on, then several days off, irrespective of public holidays
<p>Salary Range and Benefits</p>	<ul style="list-style-type: none"> • P100,000 average monthly gross pay for a beginner pilot • Comprehensive medical coverage and insurance • Free duty transport • Free flights yearly • Flying privileges for immediate family

Prospects	<ul style="list-style-type: none"> • Good, as there are plans to open more airports in the Philippines which means more flights • International airlines continue to hire Filipinos

Air Traffic Controller

An Air Traffic Controller (ATC) directs and maintains the safe and efficient flow of air traffic in an airport or within an assigned airspace according to established procedures and policies. An ATC guides pilots during take-off and landing of aircraft, monitors weather and other potentially hazardous conditions, and moves aircraft to designated airspaces to maximize safety and minimize delay. The ATC profession is acknowledged globally as one of the most difficult and stressful jobs today because of the tremendous amount of responsibility these professionals carry while on duty.

Basic skills and related requirements	<ul style="list-style-type: none"> • Not more than 28 years old at the time of application • Good health, keen eyesight, no physical disabilities • A college degree holder, preferably in engineering • Computer literate • Good eyesight • Good command of oral and written English
Tenure	<ul style="list-style-type: none"> • Full-time employment • Hired directly by the government through the Civil Aviation Authority of the Philippines (CAAP) • Deployed directly by the CAAP to an airport in the Philippines

Working Environment	<ul style="list-style-type: none"> • Highly stressful • An ATC usually works in the air control tower of an airport and must be able to read radar and other equipment, understand weather conditions, draw up flight plans, and make important decisions that factor in traffic volume, human and other variables
Advancement and Training	<ul style="list-style-type: none"> • Trained directly by the CAAP • Periodic training required by the CAAP
Working Hours	<ul style="list-style-type: none"> • Eight hours in 24 hours, one day off per week • Irregular hours
Salary Range	<ul style="list-style-type: none"> • An ATC is a government employee and the salary is controlled by the Department of Budget and Management • P 50,000 monthly gross salary for a mid-career ATC
Prospects	<ul style="list-style-type: none"> • Good, as there are plans to open more airports in the Philippines • International airports continue to hire Filipinos

Sea Transport

Cruise Ship Entertainment or Service Crew

Cruise ships hire entertainment or service crew to cater to the needs of passengers. Crew members come from varied backgrounds, for example, bar tending, waiting on tables, spa and personal wellness, hairdressing, day care center, singing and dancing. Many positions do not require a college degree.

Basic skills and related requirements	<ul style="list-style-type: none"> • High school diploma or basic education • Relevant experience in the area or department • Proficient in written and spoken English • Should be highly service-orientated • Enjoys working with people and is a team player • Should be able to function well while living in relatively limited areas with other crew members away from home
Tenure	<ul style="list-style-type: none"> • Usually a four to six-month contract, with a mandatory rest period of six to eight weeks between contracts • The cruise ship company provides airline tickets to and from the port of embarkation
Working Environment	<ul style="list-style-type: none"> • Passenger cruise ship • Main duty is to attend to the needs of passengers in the particular area or department
Advancement and Training	<ul style="list-style-type: none"> • Possibilities for promotion to the next level (on subsequent contracts) based on performance
Working Hours	<ul style="list-style-type: none"> • Working in shifts, usually irregular hours
Salary Range and Benefits	<ul style="list-style-type: none"> • Junior Waiter/Waitress: USD 1,800 - 2,400 a month depending on gratuities, the cruise line and itinerary and size of ship • Massage Therapist: USD 2,800 - 4,800 a month subject to conditions mentioned above • Hair Stylist/Hairdresser: USD 2,200 - 4,600 a month subject to conditions mentioned above • Deck Attendant: USD 900 - 1,200 a month subject to conditions mentioned above • Free food, accommodation and

	medical care while onboard ship • Discounted cruise ship rates for family members
Prospects	• Cruise ship vacations are becoming more popular so global demand is expected to increase in the next few years with new cruise ships to be put in operation • International shipping companies continue to hire Filipinos

Ratings

Ratings refer to the entry-level positions in the Deck and Engine Departments of a ship.

The following are the minimum requirements for a Qualification Document Certificate issued by the Maritime Industry Authority (MARINA) for Ratings in the Deck Department serving onboard ships of not less than 100 GT and for Ratings in the Engine Department serving onboard ships powered by main propulsion machinery of not less than 200 kW propulsion power.

Basic skills and related requirements	• At least 18 years old • Certified physically and medically fit particularly regarding good eyesight and hearing from a Department of Health (DOH) accredited hospital or clinic • Preferably a graduate of a maritime course
Tenure	• Full time employment or service contract, depending on local or international hiring company
Working Environment	• Passenger or cargo boat, in smooth or rough sea and weather conditions

Minimum Required Training and Sea Service	<p>Requirements for Ratings in the Deck Department:</p> <ul style="list-style-type: none"> • Basic Safety Course (BSC) • Deck Watch keeping Course (for non-graduate of maritime course) • Must have served on board ship of not less than 100 GT for at least six (6) months in deck department <p>Requirements for Ratings in the Engine Department:</p> <ul style="list-style-type: none"> • Basic Safety Course (BSC) • Must have served onboard vessels powered by main propulsion of not less than 200 kW propulsion power for six (6) months in the engine department.
Working Hours	<ul style="list-style-type: none"> • Eight hours in every 24-hours, not more than 48 hours in a week • All work rendered in excess is considered overtime
Salary Range	<ul style="list-style-type: none"> • Bosun (Rating in Deck Department) on board an international cruise ship: USD 1,600 - 1,800 a month • Oiler (Rating in Engineering Department) on board an international cruise ship: USD 1,100 - 1,800 a month
Prospects	<ul style="list-style-type: none"> • Good, as inter-island ships are an important component of Philippine transport • International shipping companies continue to hire Filipinos

Ship Officer

Ship Officers take charge of a ship and belong either to the Deck or Engineering Department.

The following are the minimum requirements a Qualification Document Certificate issued by the Maritime Industry Authority (MARINA) for an Officer in the Deck Department serving onboard ships of not less than 100 GT or Officer in the Engine Department serving onboard ships powered by main propulsion machinery of not less than 200 kW propulsion power.

Basic skills and related requirements	<ul style="list-style-type: none"> • At least 20 years old • Certified physically and medically fit particularly regarding good eyesight and hearing from a Department of Health (DOH) accredited hospital or clinic • PRC License
Tenure	<ul style="list-style-type: none"> • Full time employment or service contract, depending on local or international hiring company
Working Environment	<ul style="list-style-type: none"> • Passenger or cargo boat, in smooth or rough sea and weather conditions
Minimum Required Training	<ul style="list-style-type: none"> • Basic Safety Course (BSC) <p>Additional requirements for Officer in the Deck Department:</p> <ul style="list-style-type: none"> • Deck Watch keeping Course (for non-graduate of maritime course) • Collision Regulation (for non-graduate of maritime course) • ROC / SSROC, if applicable
Working Hours	<ul style="list-style-type: none"> • Eight hours in every 24-hours, not more than 48 hours in a week • All work rendered in excess is considered overtime
Salary Range	<ul style="list-style-type: none"> • Captain of an international cruise ship: USD 5,800 - 9,800 a month depending on the cruise line • Chief Engineer of an international cruise ship: USD 5,600- 8,700 a month depending on the cruise line
Prospects	<ul style="list-style-type: none"> • Good, as inter-island ships are an important component of Philippine transport • International shipping companies continue to hire Filipinos

IV. Job Outlook and Prospects

a. Outlook for the Industry for the next five to ten years

The Medium Term Development Plan 2011-2016 recognizes the need to address the Philippines' infrastructure backlog that constrains overall growth. The Plan prioritizes that the creation of an integrated and multimodal national transport and logistics system. For road transport, working towards a more efficient transport network will mean connecting underserved rural areas with markets in expanded logistics chains. Internal logistics activity in the Philippines is considered to be relatively small compared to nearby ASEAN countries, and the government sees this as an opportunity to spur the growth of MSMEs (Micro, Small and Medium Enterprises) by linking them to global supply chains through better transportation and logistics infrastructure.

In the railways subsector, the LRTA is planning the construction of a new line, the MRT 7. It is exploring public-private partnerships (PPP) for the extension of Line 1 from Baclaran to Bacoor, Cavite (Cavite Extension) and Extension of Line 2 eastward to Masing and westward to Divisoria Mall. A long-term project of the PNR is to offer freight cargo rail service from the Manila port to the Batangas Port. It continues to study the possibility of reviving the railway service between Manila to Pampanga, specifically, to connect Clark International Airport. PNR also plans to improve its long-distance commuter service to Bicol.

In the water transport sector, the government plans to promote the Batangas and Subic ports as destinations for international cargo ships to decongest the Manila port and open opportunities in the nearby areas. The government will also build up the shipbuilding subsector, which currently ranks fifth in the industry, by encouraging investments from identified markets such as South Korea and Japan, and providing human capital enhancement programs.

The government also plans to open and improve domestic airports and increase the capacity of existing international airports to accommodate more flights. The Philippines has signed a number of protocols with the other ASEAN countries on Transport Facilitation and the Regional Integration of the Air Travel Sector.

These movements for further liberalization of transport sectors will mean expanded business and employment opportunities in general.

b. Occupations with Greatest Demand

In general, if the Philippine economy continues to grow, jobs in the transportation and logistics industry will likewise increase because of its close link to the business activity of moving persons and goods. Greater foreign and local demand for Philippine-made goods will mean the importation or production of the raw materials used for manufacturing, which mean more logistics activity. The exportation of the finished goods or their distribution to other parts of the country will mean transport movement via land, water or air. Logistics companies that are to achieve success are those that can plan, control and implement the effective and efficient storage and flow of goods and related services. With the increasing trend towards IT and technology-based tools, logistics management specialists in warehousing, forecasting, materials handling, and inventory control will become more valuable.

With budget airlines helping to make travel more affordable, the continuing global demand for travelers to visit proximate and distant destinations has meant that airline flight crews continue to be recruited by both domestic and foreign international airlines. At the other end of the spectrum, the trend towards luxury travel is also sustained, which means jobs in cruise ships for Filipinos will continue to grow. Fifteen new cruise ships are scheduled to come in to service in 2014, with 47,000 new sea jobs to be created.

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Government Agencies

Civil Aviation Authority of the Philippines

Clark International Airport Corporation

Department of Transportation and Communications (Civil Aeronautics Board)

Land Transportation Franchising and Regulatory Board

Light Rail Transit Authority

Maritime Industry Authority

Maritime Industry of the Philippines

Philippine National Railways

Philippine Ports Authority