

# Asian Transport Outlook (ATO)

## How many jobs does the transport sector generate?

The transportation sector is a significant industry sector in any economy. It offers a wide variety of employment involving different skills sets. In the ATO economies, it is estimated that the transport sector in the ATO economies employs more than 165 million people<sup>1</sup>, accounting for more than 8% of total employment while representing 6.5% of gross domestic product (GDP)<sup>2</sup>.

International Labour Organisation (ILO) estimates on the transport sector employment include the following subsectors:<sup>3</sup>

- Manufacture of coke and refined petroleum products - This division is based on transforming crude petroleum and coal into usable products and includes nuclear industries.
- Manufacture of motor vehicles, trailers and semitrailers - This class includes the manufacture of motor vehicles for transporting people or goods. The manufacture of various parts and accessories, as well as the manufacture of trailers and semitrailers
- Manufacture of other transport equipment - This category includes the building and repairing of ships and boats, manufacture of railway and tramway locomotives and rolling stock, manufacture of aircraft and spacecraft, manufacture of motorcycles, manufacture of bicycles and invalid carriages, manufacture of vehicles drawn by animals etc.
- Civil engineering - This division includes general construction for civil engineering objects. It includes new work, repair, additions and alterations, the erection of pre-fabricated structures on the site, and construction of temporary nature. Included is the construction of heavy constructions such as motorways, streets, bridges, tunnels, railways, airfields, harbours and other water projects, irrigation systems, sewerage systems, industrial facilities, pipelines and electric lines, outdoor sports facilities, etc.
- Wholesale and retail trade and repair of motor vehicles and motorcycles - This section includes wholesale and retail sale (i.e. sale without transformation) of any type of goods and the rendering of services incidental to the sale of these goods. Wholesaling and retailing are the final steps in the distribution of goods. Goods bought and sold are also referred to as merchandise. Also included in this section are the repair of motor vehicles and motorcycles.

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<sup>1</sup> Based on international labour organisation estimates

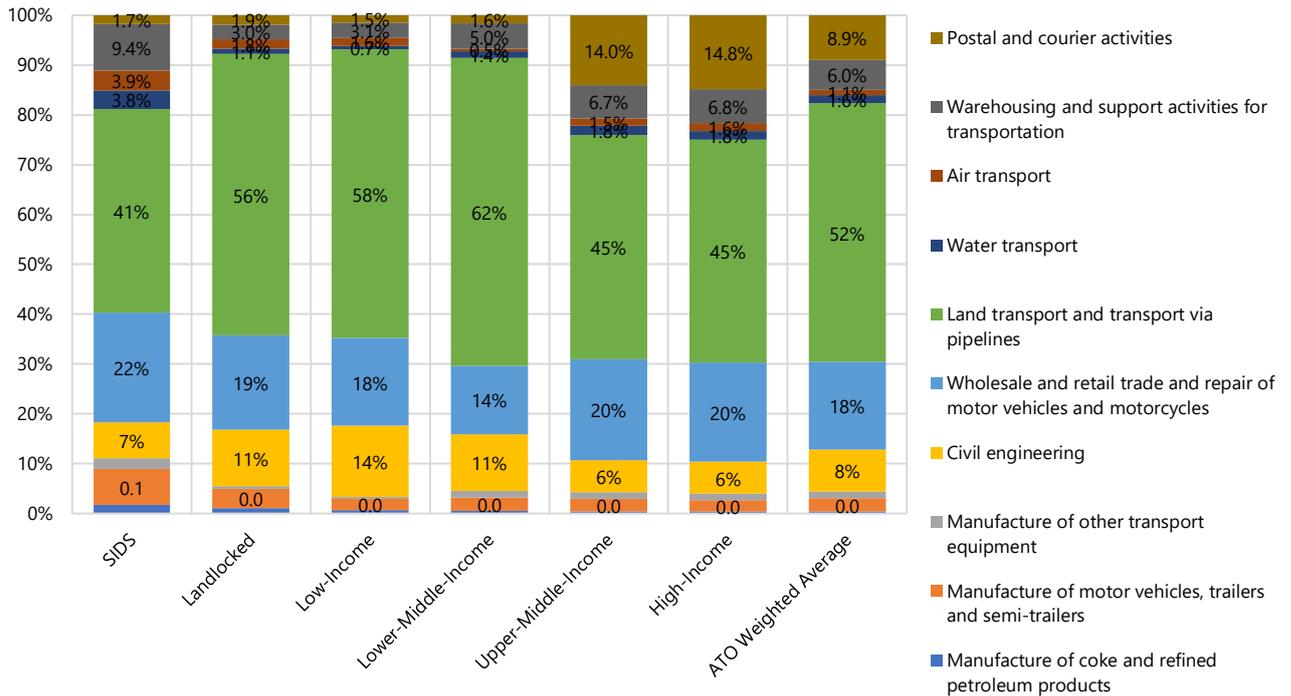
<sup>2</sup> Gross value added by the transport, storage and communications sector. It does not include fuel production, vehicle manufacture, infrastructure development etc. In [EU, the transport sector](#) accounts for 4.5% of total workforce in the European Union and represents 4.6% of gross domestic product (GDP). In [the United States](#), transport accounted for 9 per cent of GDP in 2015 and employed about 13 million people

<sup>3</sup> Comparability of employment statistics across countries is affected most significantly by variations in the definitions used for the employment figures. The "ILO" transport subsectors overlap with some of the non-transport sectors while some transport subsectors and informal transport employment are still largely missing in the employment estimate. This estimate needs to be validated with country statistics.

- Land transport and transport via pipelines - This category includes the transportation of passengers and freight via road and rail, as well as freight transport via pipelines.
- Water transport - This division includes passengers' transportation or freight over water, whether scheduled or not. Also included is the operation of towing or pushing boats, excursion, cruise or sightseeing boats, ferries, water taxis etc.
- Air transport - This division includes: transportation of passengers or freight by air or via space
- Warehousing and support activities for transportation - This division includes activities related to handling freight immediately before or after transport or between transport segments. The operation and maintenance of all transport facilities are included. This division also contains activities assisting passengers, such as those of travel agencies.
- Postal and courier activities - This class includes: - pickup, transport and delivery (domestic or international) of mail and parcels.

Based on the analysis of international labour statistics, the average share of various subsectors is shown below (Fig. 1). There is a significant variation in the employment trends across different typologies of economies. In higher-income economies, the logistics activities generate a substantial share of employment, while aviation and waterways become critical in SIDS economies. Together, aviation and waterways create an average of 2.7% employment in Asia, while in SIDS, these two sub-sectors generate 7.8% employment. Overall, land transport services, i.e., transport of passengers and freight via road and rail, create more than half of all transport sector employment. Automobile production, auto retail trade and repair and maintenance generate about 22% of total transport sector employment.

**Figure 1: Employment in the Transport Sector, Latest Estimates (2019)**



Source: ILO,

ATO Data Used: SEC-TRE-003 to SEC-TRE-013,

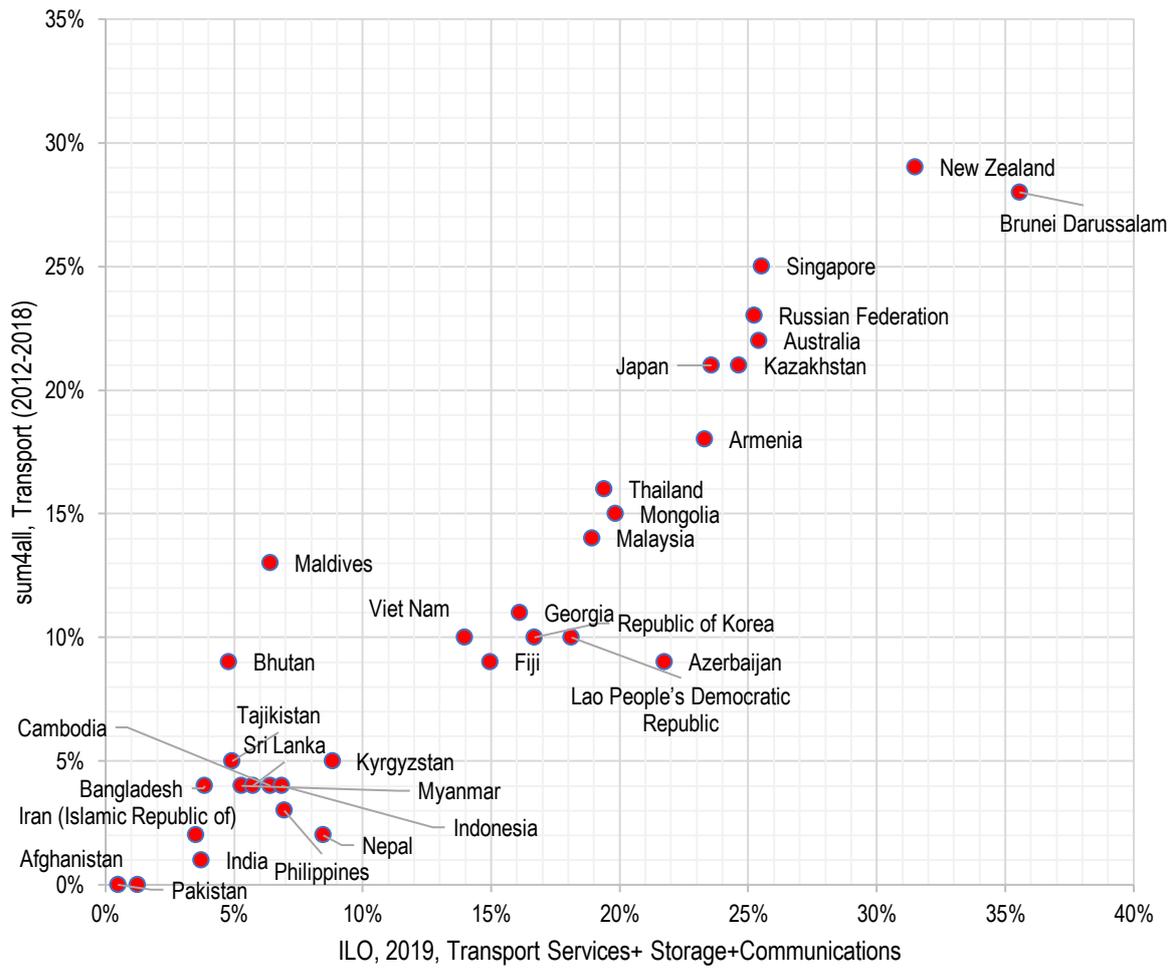
Data on the share of women employed in the transport sector is generally scarce, however, the available limited insights available from the ILO<sup>4</sup> and the World Bank<sup>5</sup> show that female participation in the transport industry is low, i.e., only about 11% in 2019 in transport<sup>6</sup>, storage and communications industry. In 2000, the female participation in the transport industry was only 10% (ILO), indicating a marginal improvement in the past two decades. The only exception being high-income economies, where female participation in the transport industry is 23%. Further, there is considerable variation among economies and estimates, as shown below (Fig. 2).

<sup>4</sup> <https://ilostat.ilo.org/data/>

<sup>5</sup> <https://www.sum4all.org/>

<sup>6</sup> The ILO global estimate is 14%. ATO indicator is 'SEC-TRE-014(1)', 'SEC-TRE-014(2)

Figure 2: Female Participation in Transport Sector Employment, multiple years



Source: ILO, World Bank, <https://ilostat ilo.org/data/>, <https://www sum4all.org/>  
 ATO Data Used - 'SEC-TRE-001(1)