

# Transport and Traffic

## Overview

The transport and traffic sector includes roads, railroads, aviation, marine transport, and ports and harbors. For a country that consists of a number of islands like Indonesia, transport and traffic do more than form the network that links separate national territories and the foundation for economic development. They also play an important role in unifying the country by connecting people of different islands. JICA has provided assistance that matches the Indonesian government's development policies for transport and traffic in each era and region. Among other ways, it has done so by putting emphasis on tying together the resources that are found throughout the country for fair allocation of development benefits in outlying regions. JICA has also stressed the importance of the elimination of infrastructure deficiencies amid growing traffic demand as well as the promotion of private sector-led sustainable economic growth in metropolitan Jakarta and other urban centers.

### (1) Roads

The Indonesian government established roads as a highest-priority item in its first long-term 25-year plan (1969-1994), and it has allocated budgetary expenditure to this item accordingly. In Indonesia, which has lagged in railroad development in the post-War era, road traffic has come to make up a large portion of land transport with the advance of motorization. Today, road traffic accounts for approximately 90% of passenger transport and approximately 50% of cargo transport.

At the beginning of its cooperation to Indonesia in the 1960s, JICA supported road repair and maintenance, and bridge improvement on main regional roads on Sumatra, Kalimantan, and Sulawesi, rather than on Java. On one main arterial road passing north-south roughly through the center of Sumatra—from Bakuaheni in Lampung Province in the south to Banda Aceh in Nanggroe Aceh Darussalam Province in the north (total length of approximately 2,500 km)—Japan implemented improvements on roughly 60% of the road's length. Entering the 1970s, the focus of JICA's cooperation moved to metropolitan Jakarta, where improvement of toll roads in Jakarta had begun. As a result, approximately 20% of expressways in metropolitan Jakarta were constructed with cooperation provided by JICA. In the 1980s, JICA shifted its attention to ordinary arterial roads and bridge improvement. During this time, a methodology was established whereby a master plan would be drawn up and then individual plans within it would be implemented using some or all of ODA loans, technical cooperation, and grant aid. Later, from the middle of the 1990s, JICA began providing support as part of regional economic development in outlying regions. At the same time, JICA began to support the introduction of a public-private partnership scheme in road construction and providing cooperation in the rehabilitation and asset management fields.

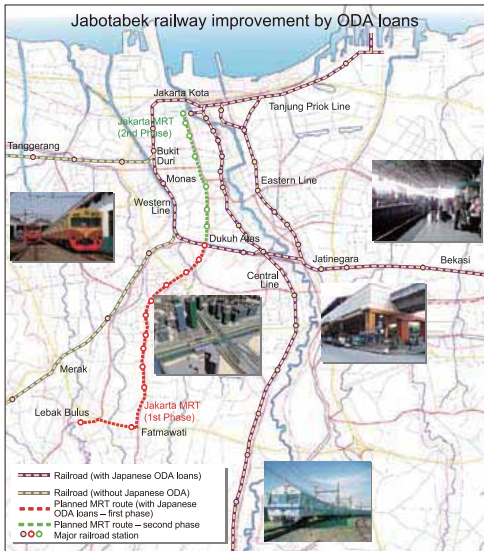
### (2) Railroads

Looking at the railroads sector, JICA has been supporting the repair and double-tracking of Java's northern and southern lines since the 1960s. As of today, approximately 50% of double-tracking work has been made possible with JICA's assistance. This double-tracking is reducing accidents and shortening travel time between points.

Much of the work in a railroad modernization project for metropolitan Jakarta that began in 1976 was completed with ODA loans from Japan. The loans covered many aspects of the project, including car procurement, track improvement, installation of communications facilities, electrification, construction of rail yards and repair facilities, station improvement, signal installation, double-tracking, and



**The Jakarta-Sumatra road and ferry terminal**  
An expressway from Jakarta to Merak and the Merak-Bakuaheni Ferry Terminals were constructed with ODA loans. In addition, JICA supported the improvement of approximately 60% of the total length of the major arterial road that passes through the center of Sumatra linking Banda Aceh, the capital of Nanggroe Aceh Darussalam Province in the northernmost part of Sumatra and Bakuaheni in the southernmost part of Sumatra. The construction of the Merak-Bakuaheni Ferry Terminals was started in 1972, and an expansion project was conducted in 1982. Today, 60 daily round-trip ferry passages transport many passengers and much cargo, making the facility one of the largest ferry terminals in Asia. The network of the roads and ferry linking together Jakarta and the northernmost part of Sumatra supports industrial activities on the two islands.



Gambir Station in Jakarta



elevation of the central line. As a result, the project is relieving traffic congestion in the metropolitan area, increasing logistical efficiency, and improving air quality. In addition, construction of the Jakarta MRT (Mass Rapid Transit) system, which will reinforce transport capacity and include Indonesia's first subway, is scheduled to be constructed with ODA loans. JICA is also providing technical cooperation for car maintenance and operational improvement.

### (3) Aviation

For Indonesia—a country with a vast territory made up of numerous islands—aviation is an important means of transportation that is seeing dramatic increases in passenger numbers. JICA's support for Indonesia's aviation sector began with expansion of the international airport in Bali in the 1980s. Thus far, JICA has helped Indonesia respond to rapidly growing aviation demand by improving five airports. From the 2000s, JICA has been providing technical cooperation related to aviation security systems and operational safety as a contribution to air safety, and is aiding in the preparation of a master plan for long-term policy in the aviation sector.

### (4) Ports and harbors/marine transport

Because Indonesia is an island country, marine transport is an extremely important means of transportation that has large markets in terms of both cargo and passengers. JICA has supported improvements in the major Port of Tanjung Priok (ranked 26 in the world in terms of yearly handled container volume [2008]); the Port of Tokyo is ranked 24th; the Port of Semarang; the Port of Dumai, which serves as an embarkation port for petroleum and exports of palm oil; the Port of Makassar in eastern Indonesia; the Port of Bitung; and the Port of Kupang. JICA supported construction of the Merak-Bakuaheni Ferry Terminals, which links Java and Sumatra, beginning in the 1970s. This facility has grown into one of the largest ferry terminals in Asia.

## Results

JICA has contributed significantly to the improvement of transport and traffic infrastructure that forms the foundation for economic growth by providing support that is in line with conditions in each era and Indonesian government policy. Moreover, JICA has participated in Indonesia's national unification by helping build the network that links separate regions and brings people together. Specifically, JICA has:

- Supported expressway improvement and railroad modernization in metropolitan Jakarta and contributed to greater efficiency in the movement of people and goods in the metropolitan area, thereby bringing greater efficiency to industry.
- Supported industrial activity on Sumatra and Java by helping improve roads and the ferry terminal that link locations between Jakarta and various places in Sumatra. JICA has also promoted railroad use on Java, where industry is concentrated and alleviation of traffic congestion is an important issue, by supporting the repair and double-tracking of Java's northern and southern lines.
- Supported airport and port/harbor improvement, and promoted the building of a network for movement of the people and goods of separate islands.



Minangkabau Airport (Padang)

**Airport improvement**  
Thus far, JICA has supported the construction or expansion of Denpasar International Airport (Bali), Minangkabau Airport (Padang), Sepinggan Airport (Balikpapan), Juanda Airport (Surabaya), and Sultan Mahmud Badaruddin II Airport (Palembang). Denpasar International Airport receives visitors from around the world as an international tourist location. Juanda Airport handles approximately 60 flights a day operating between Jakarta and Surabaya, which is the fourth busiest air corridor in the world. And Minangkabau Airport, which was not severely damaged following a 2009 earthquake and remained open during the earthquake's immediate aftermath, played a significant role in transport for rescue and relief activities by the Indonesian government and other countries.



Bakuaheni Ferry Terminal



Merak Ferry Terminal