

Riding Southeast Asia's first high-speed train between Jakarta and Bandung is a breeze. A journey of 143 kilometres (km) which used to take three to four hours by conventional railway and up to six hours by road has been cut to just 30 minutes. Built with Chinese investments and technology, Whoosh, which can reach speeds up to 300 km an hour, has been a game changer for mobility in Indonesia.

Coined by former President Joko Widodo following a nation-wide competition, Whoosh stands for "Waktu Hemat, Operasi Optimal, Sistem Hebat" (literally translated as time-saving, optimal operation, reliable system). The project, which cost US\$7.3 billion, took more than seven years to complete.

While the final costs overran the initial budget of US\$5 billion, Indonesians have taken a huge liking to the high-speed train. According to Eva Chairunisa, the general manager corporate secretary of PT Kereta Cepat Indonesia China (KCIC), Whoosh recorded 9,000 passengers per day when it began operations in October 2022 and to date has sold over four million tickets.

Daily passenger traffic has since grown by twofold to over 22,000, with 44 percent of passengers travelling between the two cities for leisure and family visits.

FROM CONGESTION TO CONNECTIVITY

Southeast Asia is betting on new urban transit systems to solve its urban gridlock problems.

"This figure underlines the important role of Whoosh in supporting and promoting the tourism sector in Indonesia," she noted in an official statement.¹

Whoosh is part of a larger Indonesian railway masterplan as the country aims to extend its railway network to over 10,000 km by 2030, an increase from just 4,814 km recorded in 2014. The increase includes over 3,000 km of urban railway and an estimated US\$52 billion will be required to accomplish the masterplan.

Such accelerated development of the country's rail network is deemed crucial for promoting economic growth, ensuring nationwide connectivity, and reducing logistics costs, which are the highest in the region.²

Other ASEAN countries are also spending big on rail networks, both between cities as well as metro lines within cities, so as to improve mobility and economic productivity.

Hanoi's Cat Linh-Ha Dong metro line, Vietnam's first and only mass rapid transit (MRT) system, has also proved to be popular, with 60 percent of its passengers noting that they used the rail instead of riding motorbikes, while 18 percent said they ride it instead of using cars.

Vu Hong Truong, general director of Hanoi Metro Company, added that after three years of operation, the metro line has served around 35,000 passengers a day, with 45 percent of them commuting to work and another 45 percent to school.³

MRT TO UNCLOG CITY ROADS

Cities such as Jakarta, Hanoi, and Manila are infamous for their traffic congestion. With little space to build new roads and highways, the MRT is thus viewed as the most viable solution to improve mobility for its residents.

Every day, more than one million cars move in and out of Jakarta as residents commute between the suburbs and central Jakarta. Such a large number of cars is one of the key contributors to the infamous traffic that clogs Jakarta's roads and contributes to its pervasive air pollution.

Many of the residents living in the greater Jakarta area, which is the second largest Asian metropolitan area after Tokyo-Yokohama with a population of 35.4 million, have little choice but to drive between their homes and workplaces, given the lack of adequate public transport.

Jakarta is not alone amongst Asian cities in facing this challenge. Public transport infrastructure has not kept up with the explosion in population growth and urban built-up areas in cities across Southeast Asia. However, that may be changing as governments accelerate the pace of their investments in public transport infrastructure.

According to Statista.com, Southeast Asia is expected to witness a significant growth in the public transportation market. Countries such as Indonesia, Malaysia, Vietnam, and Thailand are all investing significantly in railways.

Such investments will bear long-term returns. Revenue is expected

to reach US\$7 billion by the end of this year and is projected to grow annually at a rate of 2.6 percent until 2029, resulting in a projected market volume of US\$8 billion.⁴

Indeed, urban rail transit, which includes various modes of railways, is seen as the best solution to alleviate the chronic traffic congestion that plagues the roads of many Southeast Asian cities. For example, the transport system for Greater Kuala Lumpur includes an MRT, light rail transit (LRT), monorail, commuter railway, and a dedicated airport expressway.

In Jakarta, the local government has also spent heavily on the Bus Rapid Transit (BRT) system which now reaches most parts of the city. Transjakarta was the first BRT system in Southeast Asia and is today the largest of its kind in the world, supporting 11 million people who crisscross the megapolis every day.

Supported by a grant from United States Agency for International Development (USAID), Transjakarta is a showcase of the benefits of BRT for other Southeast Asian cities. Since it first opened in 2004, the Indonesian government has continued expanding Transjakarta into an enormous transit system covering 244 km across the city.⁵

Apart from investing in physical infrastructure, government policies also have a huge impact on mobility trends.

Allan Tandiono, project manager and business development director for PT KCIC, commented that improving mobility in cities such as Jakarta must involve more



than just building metro lines and improving the bus system. He noted that the government's fuel subsidies, for example, encourage people to drive while the country's large auto industry is also keen to sell more cars.

"Public transportation will continue to grow and expand as demand is greater than supply," he said. "But there are challenges such as integrating the various public transport systems as people often do not live close to stations and bus stops." He added that while fuel subsidies were critical for supporting low-income families and boosting economic growth by keeping energy costs low, such policies also encourage middle-class families to travel by car instead of using public transport. The Indonesian government spends around US\$5 billion a year on fuel and gas subsidies.

In recognition of the impact of such subsidies on both the environment as well as the state budget, the government has announced plans to reduce fuel subsidies in 2025, which could save the country US\$4 billion a year.

TRANSIT-ORIENTED DEVELOPMENTS

Given the complexity of improving mobility in large metropolitan cities such as Jakarta and the need to meet the demand for more landed housing and better living conditions, Indonesian private property players have started to build new townships which are designed around the concept of transit-oriented developments (TODs).

TODs typically include a central transit stop such as a train station surrounded by high-density mixed use areas, with lower-density housing spreading out from the centre. These developments are also more walkable, so that residents can rely less on cars.

One of the first TODs in Indonesia is BSD City, a joint venture between Mitbana (a consortium comprising Mitsubishi Corporation and Surbana Jurong) and Sinar Mas Land. Located about 30 km southwest of Jakarta, BSD is a fast-growing tech and education hub with more than 450,000 residents.

Capitalising on existing facilities, the TOD will offer access to multiple public transportation options including road, rail, and park-and-ride facilities to enhance last-mile connectivity and reduce congestion from BSD to Central Jakarta.⁶

TODs can be an effective measure to help cities solve issues that arise from growth strategies that were previously carried out. The COVID-19 pandemic has also compelled more people to forsake high-rise living in densely populated areas and opt for more landed housing in suburban areas, even if it means additional commuting time.

With many Southeast Asian cities experiencing rapid economic growth, motorisation, and socio-economic progress, new solutions will be needed to improve public mobility and lower emissions which often lead to air pollution.

Governments and the private sector are responding to these challenges by investing heavily in public transport infrastructure such as urban transit systems and innovative urban townships that are centred around green spaces and walkability, rather than being car-centric. ^{AMI}



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