

Urban mobility challenges in Malaysian Cities

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Introduction

The rapid rate of urbanization has transformed many urban landscapes across the globe. In 1950, a mere 30% of the world population lived in urban areas. In 2018, it was 55%. By 2050, 68% of the world's population is projected to be urban¹. In Malaysia, the rate of increase in its urban population has been even more staggering. The urban population has grown from 3 million people or 28.4% of the total population in year 1970 to 24.4 million people or 75.1% of the total population in 2020². In merely 50 years, the urban population in Malaysia has increased by more than eight folds, most of which have been concentrated in the Greater Kuala Lumpur conurbation.

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¹ UNDESA (2019)

² DOSM (2022)

Rapid urban growth that is not adequately managed can lead to undesirable economic and social outcomes if adequate infrastructures or policies are not in place or developed to respond to the changing population dynamics. Highways, roads, sidewalks, rail and bus services all play a vital role in connecting people to family, friends, jobs, education and recreational activities. At the core of this urban setting lies the challenge of addressing the increasing demand for urban mobility: how can urban infrastructures effectively facilitate the movement of its residents?

This article explores the challenges of urban mobility in Malaysia. It argues that the prevailing urban transportation system has encouraged and entrenched a high degree of automobile dependency within Malaysian cities.

High private vehicle ownership, low public transport usage

The Kuala Lumpur City Council recognized the need to pursue a more transit-oriented development strategy since the mid-1980s to address the increasing demand for mobility within the city centre. The KL Structure Plan of 1984 laid the groundwork for the development of urban rail systems in the KL metro area³. At the national level, similar calls for the development of an efficient public transit system have been consistently reiterated in other policy documents over the years. However, much of the efforts on the ground have focused on increasing road capacity to accommodate unrestrained motorisation, especially in the Greater Kuala Lumpur conurbation. Past investments in our transportation systems have primarily focused on accommodating the movements of motor vehicles.

This auto-oriented development and the resulting associated land use patterns in Malaysian cities have resulted in continued investments into building additional roads, particularly toll expressways, to ease congestion at the expense of designing effective multi-modal transportation systems that make it easy for city dwellers to walk, cycle or use public transit. This has ultimately led to an over dependence on motorised vehicles as the primary source of mobility in urban areas. In the case of Malaysia, these vehicles are mostly privately owned cars and motorcycles, further reducing the role of public transit in the urban transportation system.

It is of no surprise then to note that Malaysia has one of the highest rates of car ownership in the world⁴. In 2023, a total of 1.53 million new vehicles were registered with the Road Transport Department (JPJ) in the entire country. An overwhelming majority of these, totalling 1.47 million units, were private cars and motorcycles. Cumulatively, a total of 36.6 million vehicles, 34.3 million of which were privately owned cars and motorcycles, were registered with JPJ as at end 2023, most of which are registered in Kuala Lumpur and Selangor⁵. Between 1990 and 2023, compared to an average urban population growth of 3.5% annually, the number of registered private vehicles grew at almost twice that rate, at 6.6% on average⁶.

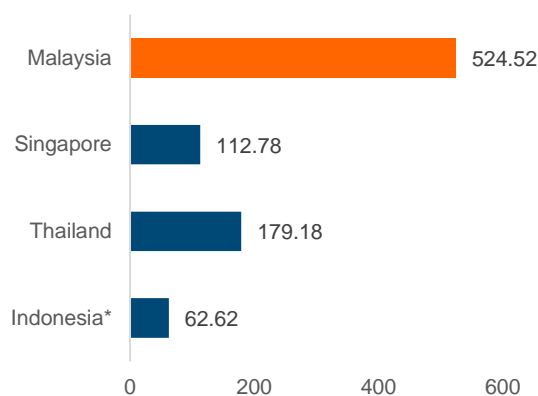
³ DBKL (1984)

⁴ MOT (2019)

⁵ MOT (2023)

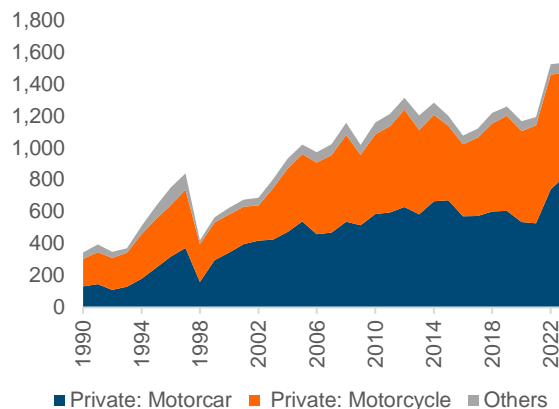
⁶ Author's calculation based on data from the World Bank (n.d)

Figure 1: Passenger cars per 1000 people, by country



Source: CEIC data (n.d)

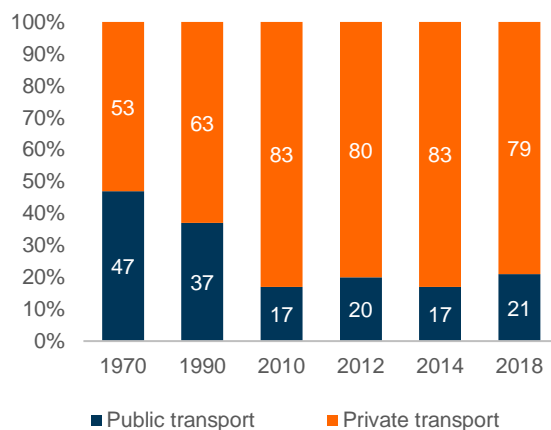
Figure 2: Newly registered vehicles in Malaysia in '000s, by type of vehicles



Source: CEIC data (n.d)

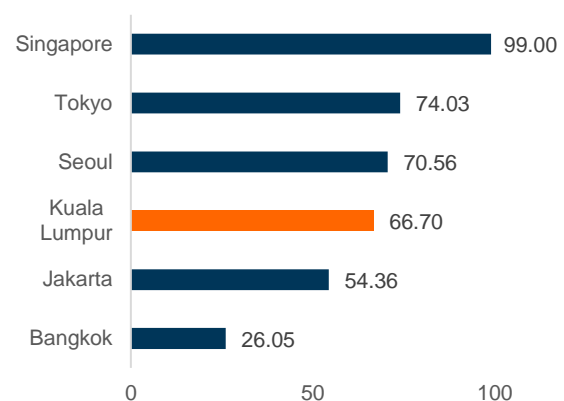
In contrast, the use of public transit has generally declined. In 1970, 47% of total journeys in the city were made using public transport. By 2010, this number dwindled to only 17%. Since then, the use of public transport as a share of total transit has steadily increased to 21% in 2018⁷. This is less than half of the targeted public transport usage that is set in the 11th Malaysia Plan (40% by 2020). This has been newly revised in both the National Transport Policy 2019-2030 (40% by 2030) and the National Energy Policy 2022-2040 (50% by 2040)⁸.

Figure 3: Urban transport modal share (selected years), by type



Source: SPAD (2014), 12th Malaysia Plan

Figure 4: Percent of population with convenient access to public transport in 2020, selected cities



Source: UNDESA (n.d)

⁷ SPAD (2014)

⁸ MOT (2019), EPU (2022)

Despite additional investments into the public transport system (especially in the Greater KL conurbation), the preference for public transport has remained low among users. Ridership figures of the newly introduced Mass Rapid Transit (MRT) system, which is below target⁹, suggest that the additional development of big transit infrastructures without an accompanying multi modal transit ecosystem (for example, adequate feeder bus services and accessible micromobility solutions) that is supportive may relegate these investments to be ineffective at increasing public transport usage.

More importantly, the physical built form of Malaysian cities does not take public transport into consideration. While the development of a transit-oriented transportation network provides the necessary infrastructure for the provision of public transport services, just as important is the need to develop and design a pedestrian friendly built environment for urban areas that will make these transit nodes conducive for public use. The lack of emphasis in enhancing the comfort and experience of pedestrians and public transit users was already highlighted in the 2006 National Urbanisation Policy document, reflecting the government's awareness of this gap in urban design¹⁰.

Currently, only 66.7 percent of the urban population in Kuala Lumpur has convenient access to public transportation¹¹. When your built environment makes it easier for you to drive a car to get to other places, you will naturally be more inclined to do so. Similarly, minor interventions within the current built environment of Malaysian cities can make a big difference in making public transport a viable transit option for city dwellers. For example, wider pedestrian pathways and additional pedestrian crossings across busy roads can improve first and/or last mile connectivity and make it easier and safer for people to walk and switch between transportation nodes.

Conclusion

Increased motorization rates and declining public transit usage has led Malaysian cities to an urban transportation system that is embedded in a vicious cycle where people are more inclined to drive cars given deficiencies in the public transit system resulting in even more congestion on our roads. This in turn, leads to the construction of more roads to ease congestion and thus, takes away allocation for the improvement and development of the public transit network. Consequently, urban transport planning within Malaysian cities assume a 'traffic focus', where success is defined in terms of facilitating vehicle movement¹², positioning overall policy planning to be at odds with a more sustainable mobility-focused or access-focused goal for urban transport systems. Over the long term, the prevailing urban transport system has encouraged and entrenched very high levels of private motor vehicle usage as past investments into large, long lived and fixed infrastructure influence current associated land use patterns and traffic flow design as well as limit any future ones.

⁹ National Audit Department (2024)

¹⁰ PLANMalaysia (2006)

¹¹ UNDESA (n.d)

¹² Litman (2003)

It is vital for our country to pursue a more efficient way to address the mobility demands of its ever-growing urban residents. The recent announcements for public transport improvements in the Budget 2025 are promising. Initiatives such as additional bus lanes and bus stop improvements in Kuala Lumpur aim to increase both the availability and accessibility of public transport to the population. Nevertheless, this positive momentum in urban transport planning must also address the incompatible dynamics of public transit usage within the existing auto-oriented development of most Malaysian cities.

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