

Penang as liveable city: urban transport issues



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Abstract

Cities as we know them today are already dramatically changing. Our living environments are reshaping the way we live. Malaysia is planning for long-term sustainability, encouraging us to think about how we can shape it and new ideas that can transform our future. The importance of ecosystem has resulted in the concept of Livable City that becomes a popular concept which is widely used in most city center of established country but in Malaysia it is still considered a new concept.

It is obvious that the concept has contributed a great deal to the urban environment. This research will discuss the contribution of urban transportation bringing forwards our country to become a livable city by taking Penang as its case study. Achieving livable city concept is important as it subsequently enhance city with benefits that sustainable lifestyle can provide in terms of environmental, economic and social. Therefore this initiative will be further enhanced on policy commitment by the Penang State Government to make Penang a Cleaner, Greener and Healthier city.

What has constantly guided our approach to sustainable development is far-sighted, holistic, and comprehensive planning, which enables us to take into account future development needs through an integrated planning process.

Introduction

The twenty-first century finds civilization heavily based in cities that have grown into metropolitan areas. Many of these focal points of human activity face problems of economic inefficiency, environmental deterioration, and an unsatisfactory quality of life--problems that go far in determining whether a

city is " livable. A large share of these problems stems from the inefficiencies and other impacts of urban transportation systems. The era of projects aimed at maximizing vehicular travel is being replaced by the broader goal of achieving livable cities: economically efficient, socially sound, and environmentally friendly. This explores the complex relationship between transportation and the character of cities and metropolitan regions. Transportation for Livable Cities dispels the myths and emotional advocacies for or against freeways, rail transit, bicycles, and other modes of transportation.

The consequences of excessive automobile dependence and shows that the most livable cities worldwide have intermodal systems that balance highway and public transit modes while providing for pedestrians, bicyclists, and para transit. The policies necessary for achieving livable cities: the effective implementation of integrated intermodal transportation systems. Traffic impact mitigation measures can be divided into two categories: those related to land use and those related to transportation.

Two case studies in Bangkok, Thailand showed that measures related to land use were effective in reducing congestion in the area surrounding a development, while traffic-related measures were useful in alleviating site-specific impacts. In the centre of Bangkok, the ineffective implementation of measures related to land was considered one of the major causes of traffic congestion. It is recommended that the Bangkok Metropolitan Administration should develop more explicit policy tools for mitigating the traffic impact of new developments.

Definition of Liveable City

A liveable city is cities that provide a good quality of life for its citizens.

- Develop in an environmentally responsible manner
- Sustain a robust a vibrant economy background

Penang is a state in northern part of peninsular Malaysia. Penang is the second smallest state in Malaysia and consists of Penang Island and Seberang Perai on the mainland. Penang Island consists of about 1048 km², with an estimated population of around 1520 thousand, while Seberang Perai occupies an area of about 738 sq km, with a population of 670 thousand.

The major urban centers on the island are Georgetown, which is the administrative centre, and Butterworth and Bukit Mertajam on the mainland. Penang Island has an international airport and is linked by a ferry service and a bridge to the mainland. The major port facilities are on the mainland, while passengers and minor cargo vessels are handled at Swettenham Pier on the island. Penang is a highly urbanized state, with a vibrant economy driven primarily by manufacturing industry and tourism.

Known as the “ Silicon Valley of Asia”, it is home to most of the major electronics and semiconductor giants in the world and is a major centre for international industrial investment. With its beaches, multicultural and heritage attractions, Penang is also a leading tourist destination for both domestic and international visitors. Until the current financial crisis, the state was experiencing a rapid rate of economic growth with an average of 12 per cent growth in gross domestic product between 1992 and 1997.

Current Urban Transport Issues in Penang

Cities are locations having a high level of accumulation and concentration of economic activities and are complex spatial structures that are supported by transport systems. The larger the city, the greater its complexity and the potential for disruptions, particularly when this complexity is not effectively managed. The most important transport problems are often related to urban areas and take place when transport systems, for a variety of reasons, cannot satisfy the numerous requirements of urban mobility.

Urban productivity is highly dependent on the efficiency of its transport system to move labor, consumers and freight between multiple origins and destinations. Additionally, important transport terminals such as ports, airports, and rail are located within urban areas, contributing to a specific array of problems. Among the most notable urban transport problems are:

- High private vehicle dependency
- Public transport inadequacy

The limited capacity, poor reliability and quality of public transport facilities in the state is a major determinant of mode of transport choice. Presently, over 60 per cent of those travelling by bus (schoolchildren, factory workers, migrant workers, the poor and elderly) are captive passengers who do not own a private vehicle (Penang State Government 1995). Despite significant improvements having been made to the bus system in the last few years, such as the introduction of air-conditioned buses and minibuses and the expansion of routes, the proportion of bus passengers on the busiest routes is estimated to remain below 30 per cent. While bus users complain about delays and missed schedules, bus operators are frustrated by buses being

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unable to follow fixed schedules due to traffic congestion during peak hours.

iii. High rate of traffic accidents The number of road accidents in the state more than doubled between 1991 and 1995, while the number of casualties and deaths increased by 235 per cent and 175 per cent respectively. Casualties per 1,000 vehicles also increased from 3.5 in 1991 to 9 in 1995. The rate of fatalities in 1995 (34 per 100,000) was more than twice that in 1991 (13 per 100,000) and significantly higher than the level considered acceptable (5-10 per 100,000). More than 50 per cent of fatalities and 60 per cent of casualties are motorcyclists. It is also significant to note that between 1992 and 1996, 12 to 15 per cent of total fatalities and 10 to 13 per cent of total casualties were pedestrians, and 5 to 7 per cent of total fatalities and 5 to 6 per cent of total casualties were cyclists. iv.

Inadequate facilities for pedestrians, cyclists and the mobility-impaired Existing pedestrian footways are of inadequate quality and do not provide sufficient levels of safety and comfort to encourage walking. Facilities for cyclists, such as bicycle lanes, are non-existent. The transportation needs of the mobility-impaired such as the elderly and the disabled, as well as those of young children have also been seriously neglected. v. Traffic Congestion and parking difficulties Traffic congestion in Penang has reached fairly serious levels due to the rapid increase in traffic volumes on the major urban roads.

Traffic volumes between 1975 and 1995 more than doubled on most roads, with increases of up to 5 times on certain road sections in Seberang Perai. In terms of vehicle concentration, there has been an increase of almost 40 per cent since 1980, with an estimated doubling in travel delays. Traffic is

growing at an average of 7 per cent annually on most of the major roads in the state (Highway Planning Unit 1995) in close correlation with the average 8 per cent annual growth rate in the total number of cars and motorcycles.

While congestion reduces travel speed, which causes much inconvenience and economic loss, it also results in higher vehicle emissions due to engine idling and the frequent acceleration and deceleration associated with stop-and-go conditions, as most vehicle emissions (except nitrogen oxides) typically decrease with speed.

The BEST service was introduced by the Penang State Government in March 2011 as the country's first park and ride service as an effort to promote more efficient connectivity via public transport in the state. On average, some 800 passengers commute between Penang island and the mainland daily. From 3 September 2012, in addition to the existing park and ride hub at Sunway Carnival Mall, the BEST service introduced two new feeder hubs at Bandar Perda and Auto City at Juru. Save on fuel and toll charges, park your car and take a free ride on the BEST service.

If you stay on the mainland and drive to work daily in the Bayan Lepas FIZ, the BEST service is made for you. Park your car at Sunway Carnival Mall for RM 1.00 (per entry) or park for FREE at Bandar Perda* and Auto City. BEST covers all areas in FIZ 1, 2, 3, 4, Technoplex and BLIP. In the evening, the BEST service takes you back to your car. * CATS (Central Area Transit Service) Rapid Penang CAT (Central Area Transit) is the free bus service funded by Penang state government with frequencies of every 20-30 minutes around the UNESCO World Heritage Site of Georgetown.

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