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TRANSPORTATION & SAFETY

Achieving National Key Results Area Targets on Public Transport

By Ir. Lee Choy Hin,
Managing Director,
G&P Highways and Transportation Sdn Bhd

Under the Government Transformation Programme – Improving Urban Public Transport, Greater KL Plan has been identified and formulated to become one of the critical components of the National Key Results Area (NKRA). From the various announcements and publications by Ministry of Transport and the Land Public Transport Commission (SPAD in *Bahasa Malaysia* acronym) in the past months, it is apparent that the Government recognizes the need to have an all-round and comprehensive approach on upgrading of public transport in order to achieve the desired target of modal shift to fulfill the NKRA criteria on Public Transport. Throughout the world, high usage of urban public transport is symbolic of a status of an advanced city. With environmental consciousness and the go green concept, public transport has become a critical factor in achieving urban sustainability. Improving urban public transport for greater usage has thus become even more urgent on the environmental agenda, besides the traditional time and cost savings factor.

Public transport, especially transit lines, is a costly and yet irreversible investment. Without appropriate long term planning to complement the physical infrastructure provision, and effort to integrate the various public transport system for efficient connectivity, it would be difficult to achieve the set target to increase patronage of public transport to overcome urban traffic congestion woes.

Long term planning

From various urban public transport improvement related projects

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undertaken or planned such as upgrading of bus service, refurbishment and addition of more bus stops, extension of Light Rail Transit (LRT) lines and increased capacity of monorail operations, to the construction of transport terminals such as the state-of-the-art Integrated South-Bandar Tasik Selatan Transport Terminal (TBS-BTS), and the somewhat controversial Mass Rapid Transit (MRT) project recently announced; the Government undoubtedly has shown determination to achieve the set goal under the NKRA. Besides the physical implementation of various transport related projects, there have been changes to the regulatory and legislature aspects as well, notably the establishment of the high powered Land Public Transport Commission under the Prime Minister's Department.

The question that remains is whether all these action plans and changes are adequate. Are there more measures that are necessary to complement the above to achieve the NKRA target, so that urban dwellers will see light at the end of the tunnel, instead of perpetual traffic congestion?

With the imminent implementation of the MRT under the Greater KL Plan, the backdrop of urban transport of the Greater KL region will change drastically, no doubt. Nevertheless, while it is appropriate for KL to move on to be a world class city with advanced, high speed and high capacity rail based public transport; equally important, is the need to develop proper land-use plan to complement the MRT to realize the objective of such high cost public transport investment project. By merely developing an advanced public transport system without establishing a long term plan for its future patronage will not only mean unsatisfactory performance of the system in terms of modal split, it will also affect the KPI of the various stakeholders involved, and the financial viability of the project.

The business of commuter centric urban public transport system is to cater to people's needs from the time they leave their homes, to the time they arrive at their destinations. This calls for:

- System Capacity
- Quality of Public Transport System
- Good Service & Information
- Convenient Ticketing
- Reduced Journey Time

With the existing LRT and monorail systems in operation, the first consideration is to integrate the MRT with existing transit system, which should then be efficiently linked to traditional bus service to form a comprehensive seamless and hassle free urban public transport network. In the longer term, however, it will be necessary to establish appropriate guidelines on land-use and development to promote usage of transit system.

Measures to reach targets

To establish a wholesome planning towards reaching the target of public transport patronage as set by the Land Public Transport Commission, the followings are some of the measures implemented by other advanced countries which we may emulate.

Transit Oriented Development in township development

It is widely recognized that to achieve the objectives of rail based public transport system, the location of individual stations, besides the alignment, is a very critical factor. This is because, unlike roads where junctions can be frequent, stations are the only access to the rail based public transport. The right choice of the station location, or the right planning of development pattern surrounding the stations, has proven to be the determinant of the success of transit public transport system. In this regard, the proper planning and design of station locations cannot be over-emphasized.

It is because of the above that proper land-use plans need to be formulated in line with the planned MRT lines and stations. In advanced countries such as Australia, Transit Oriented Development (TOD) has become the guiding principle in township development planning. In the broader sense, TOD encompasses integrating conventional road based and rail based public transport systems.

Under the TOD concept, development proposals have to consider land-use and public transport from the outset. Guidelines on land-use and development such as those published by VicRoad stipulated the necessary conditions to plan as TOD before development approval can be granted.

The Guidelines on Land-use and Development published by VicRoad of Australia contains the following:

- Stipulation of design principles, requirements on public transport in development planning
- Advice on trains, trams, buses & interchanges:
  - bus routes in new development
  - road design with public transport and transit provisions
  - walking and cycling
  - design requirements for public transport infrastructure such as stops and parking facilities
  - requirements to cater for those with special needs
- Design parameters that facilitate provision of public transport services
- Development designed and implemented that supports sustainable public transport operation

Plate 1: Park & Ride In Putrajaya

An example of a guided development plan is that commercial and office components of a new development shall centre around the stations to make it attractive to use the rail based transport system. Likewise, the stations at the residential end have to be well linked to the population nucleus.

In Australia, for example, 90% of urban growth centres are planned with access within 400m from public transport services. Bus stops are located every 300m along key attractions to make it convenient for commuters and public to patronise the service.

Park & Ride for higher patronage

As the weather condition of our country is different from Australia, feeder bus and "Park & Ride" may be more significant than the distance factor to ensure greater patronage of transit system. Feeder bus system and "Park & Ride" facilities serve to divert long car trips to public transport to reduce congestion and competition of road space to improve modal shift. Plate 1 shows the attempt to introduce the "Park & Ride" in Putrajaya.

Moreover, where there are constraints to provide transit stations, "Park & Ride" facility serves to extent the catchment of public transport patronage. By and large, greater demand for "Park & Ride" is strong indications of increased public transport patronage. All these "Park & Ride" facilities must have adequate parking space capacity and equally important, be safe and comfortable. Often, such facilities are provided with "Kiss & Ride" area for easy drop off and pick up.

Integrated Transport Plan for sustainability

The crucial aspect of development control under the broad land-use planning policy is that all major new developments are required to have Integrated Transport Plan (ITP) for the proposal to be considered and approved. The ITP contains the following:

- Details of existing and proposed road network, vehicles and pedestrians connection
- Existing and future public transport network (transit and bus service)
- Facilities proposed

The intention to incorporate ITP is to ensure that public transport planning will be an integrated part of the development plan, not just an add-on. Moreover, it is done to avoid sub-standard solutions and after thought situation to avoid poor public transport access to the development when implemented. ITP sets out the way various forms of transport will be integrated with land use to optimise sustainability.

ITP aims to achieve greater public transport usage target through proper integration of various transport modes, instead of the narrower car biased road and junction improvement considerations for planning approval based only on traffic impact assessment, presently practiced in our country.

Malaysia has built various tolled highways, both urban and rural in the past decades. To integrate toll collection so that road users are not inconvenienced having to carry various different types of prepaid cards, the "touch-n-go" prepaid toll collection system was devised and successfully implemented. Road users need to carry only one card to pay for toll

on any highway country wide. This same concept is what is needed for the ticketing system of public transport. Patrons will find it easy and convenient to use public transport if there is a prepaid card that can be used to pay the charges from home to the destinations, irrespective of how many different transport modes and interchanges one goes through.

Together with this, it is also pertinent to have easy, safe and convenient public transport interchanges to achieve integration both in terms of ticketing and mode change.

In the overall system of rail and road based transport, the operation of the latter is pertinent to the success of the overall urban transport system. This is because transit mode cannot be expected to perform well without being complemented by efficient bus service. It is therefore important that appropriate attention be given to provide efficient, reliable and comfortable bus service.

The commonly seen deplorable bus station condition in our country as shown in Plate 2 cannot attract customers. To complement the future MRT, we have to upgrade the bus service to the one used in an advanced country as shown in Plate 3.

Conclusion

In conclusion, while MRT may be timely for Greater KL, without a proactive approach considering Transit Oriented Development for the potential development areas traversed through and the stations planned within the MRT corridor region, the objective to resolve traffic congestion and to effect greater modal shift to public transport will remain just a myth.

It is inevitable that more land banks will be utilized, and even more may be stimulated for development; as a result of the operation of the MRT. Therefore, if these "new-found-lands" are left to develop just like in the past where traffic impact is only the consideration, the target to achieve higher percentage of public transport usage will remain far fetched. The paradigm shift is to require transport impact studies to be carried out to these future development plans, instead of the vehicle biased traffic impact study; before development order is granted. The Land Public Transport Commission is the most appropriate agency to establish the necessary guidelines and to institute such requirements on development planning for the long term goal of achieving NKRA.

Plate 2: Deplorable Condition of Bus Station Commonly Seen in Our Country

Plate 3: Modern Bus and Comfortable Station for Improved Patronage