Chapter 11
Improving urban
public transport



"Our aspiration is to see Malaysia's public transport system become the mode of choice of urban commuters over the medium term as we attempt to manage the polarity between the less fortunate, who have no option but to use public transport, and the rest, who are able to rely on private vehicles. As an entry point, we will begin with Klang Valley but over time, expand to other cities. To guide our journey, we have set an ambitious target of not only reversing the declining trend of modal share of public transport in Klang Valley but actually increasing it from the current 10% to 25% by the end of 2012. As Minister of Transport, I am committed to delivering this and hope that all Malaysians will support me and my team in this endeavour"

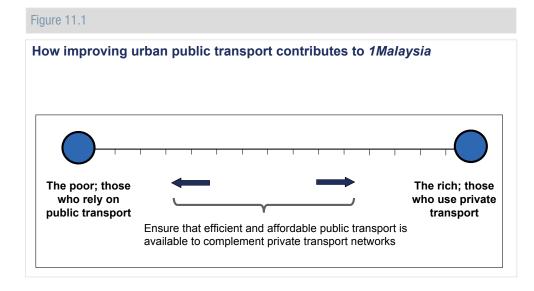
#### Dato Sri Ong Tee Keat, Minister of Transport

The significance of cities as highly productive centres of our increasingly service-oriented economy is growing. Transport networks must be able to support the economic growth, growing populations and diverse expectations of urban activity (including tourism). There is clear global evidence that a comprehensive and well-performing transport system is an important enabler of sustained economic prosperity.<sup>36</sup>

In the mid-1990s, we began a programme of massive investment in public transport infrastructure, completing three major rail systems in Klang Valley: the Putra Light Rail Transit system (now known as the Kelana Jaya Line), the Star Light Rail Transit system (now known as the Ampang Line) and the Monorail system. In 2003, we began to restructure the Klang Valley transport industry by consolidating the majority of rail and bus systems under a single company, Syarikat Prasarana Negara Berhad (Prasarana). Today, Prasarana continues to be the largest public transport operator in Klang Valley with an approximate 60% market share.

However, in recent years, our cities have come under tremendous pressure from continued economic and population growth. Public transport is now one of the major woes of urban people with a direct impact on their daily lives. This is borne out by the media: each year, it features as one of the top-five categories of news articles.

Alleviating this pain involves managing the polarity between maintaining a well-functioning private transport network for those who can afford private vehicles and establishing an efficient, affordable public transport network that becomes the mode of choice for everyone, and not just for the less fortunate (Figure 11.1).



Evidence from the Eddington Transport Study in 2006 conducted in the UK found a 5% reduction in travel time for all business and freight travel on the roads could generate around GBP 2.5 billion of cost savings – some 0.2% of GDP.

Our historical approach to urban transport has been to try to build our way out of congestion, relying on more roads and more cars as a solution to increasing demand for travel. Mature cities cannot escape the problem of congestion by simply building more roads. We need to shift from emphasising the efficient and cost-effective movement of vehicles to the movement of people.

Public transport's share dropped from 34% in 1985 to 20% in 1997<sup>37</sup> and is now closer to 10–12%.<sup>38</sup> Why has it steadily fallen? Taking Klang Valley as a microcosm of the urban public transport issues facing us, public transport commuters today suffer daily from congestion, unreliable service and limited connectivity and accessibility. For example:

- **High congestion during peak periods**: Our main rail lines suffer from excessive crowding with 140%<sup>39</sup> capacity on KTM Komuter and 180% on the Kelana Jaya LRT services. This translates into an uncomfortable and frustrating journey experience. Similarly, bus services on popular routes suffer from packed conditions during peak hours, e.g., 23 of RapidKLs 166 routes are over capacity.
- Unreliable service with frequent delays and cancellations: Trains and buses frequently do not adhere to schedules (or in the case of buses, do not have schedules), making it difficult for commuters to plan, often disrupting peoples' lives, given the unpredictability of service.
- Poor connectivity between modes: A frequently-quoted example is the lack of clear, standard connectivity between Monorail and LRT stations at KL Sentral. On an average day, roughly 3,000 commuters walk more than 350 metres around a construction site to connect between the two stations through poorly maintained and partially sheltered walkways. In addition, there are other stations such as Hang Tuah and Titiwangsa where connectivity for passengers transferring between stations is a challenge due to lack of proper pedestrian facilities integrating the rail stations.
- Poor access to public transport services: Current estimates are that only 61% of Klang Valley's population live within 400 metres (a reasonable walking distance) of a bus route. In addition, of the roughly 4,000 bus stops in Klang Valley, approximately 40% have no shelter or signage.

If we fail to address the problems of public transport, our cities will be choked affecting the productivity of our core city centres, the quality of life of our urban public and our ability to elevate Malaysian cities to global standards.

# 11.1 We aspire to increase public transport modal share in Klang Valley, Penang and Johor Bahru, with an initial target of 25% by 2012 for Klang Valley

We aim to vastly improve public transport within Malaysia's major population centres. We will start with an ambitious goal of achieving 25% share of person-trips via public transport during the morning peak period of 7 AM to 9 AM in Klang Valley

<sup>37</sup> Based on the 1999 Study on Integrated Urban Transport Strategies for Environmental Improvement conducted by the Japan International Co-operation Agency (JICA), more commonly known as the JICA Study

<sup>38</sup> This figure is lower than the often cited figure of 16% public transport modal share, which is an accurate representation of modal share within the urban core (focusing on traffic crossing the Middle Ring Road II boundary). Extending coverage to the whole of Klang Valley and taking into account both radial traffic (travel to and from KL CBD) and circumferential traffic (suburb to suburb travel) yields a modal share closer to 10–12%.

<sup>39</sup> A frequently used measure of public transport capacity is the load factor of a vehicle, which is essentially the number of passengers on board divided by the number of passengers the vehicle is designed to carry. Load factors that are above 100% indicate that the vehicle is carrying more passengers than it is designed to carry, which typically reflects extremely crowded conditions that are uncomfortable and sometimes unsafe. Load factors that are too low, e.g., 40%, indicate that the trains are empty, essentially not efficiently utilised.

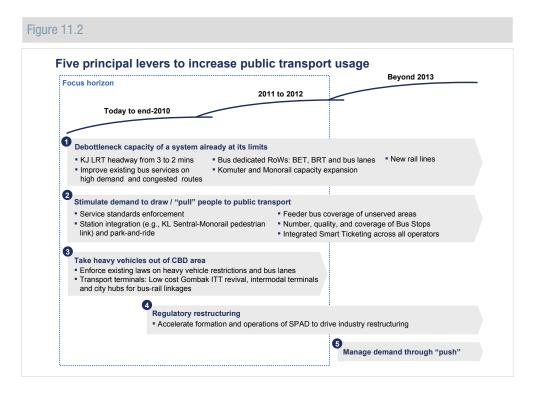
by 2012 and subsequently adapting and applying successful initiatives to Penang and Johor Bahru. In Klang Valley, this is equivalent to increasing ridership by 2.5 times from an estimated 240,000 daily passengers (during the morning peak) to approximately 600,000 by 2012.

In addition to overall public transport modal share, we have identified four focus areas to anchor our efforts to significantly improve urban public transport:

- Reliability and journey times: Improve the reliability of services focusing on punctuality of service and significantly reduce door-to-door journey times, including in-vehicle and out-of-vehicle travel times during morning peak periods
- Comfort and convenience: Improve the end-to-end journey experience on public transport from the moment commuters step out of their homes to the moment they arrive at their destinations
- Accessibility and connectivity: Ensure ability of the rakyat to have easy access to public transport
- Availability and capacity: Provide sufficient public transport capacity to serve existing and new passengers

#### 11.2 We have identified five principal levers to increase public transport

We have identified four levers to pull between 2009–2012 to achieve 25% public transport modal share in Klang Valley by 2012 and one additional lever to pull beyond that timeframe to secure and extend these expected improvements. These actions are summarised in Figure 11.2.



Streamline capacity of a system already at its limits: By 2012, we will increase
passenger capacity on the KTM Komuter and LRT lines by 1.7–4 times (depending
on specific line). Dedicated rights-of-way for buses across 12 major corridors in
Klang Valley will be introduced gradually, subject to detailed engineering and
planning feasibility studies. In total, these 12 corridors could carry 35,000 to

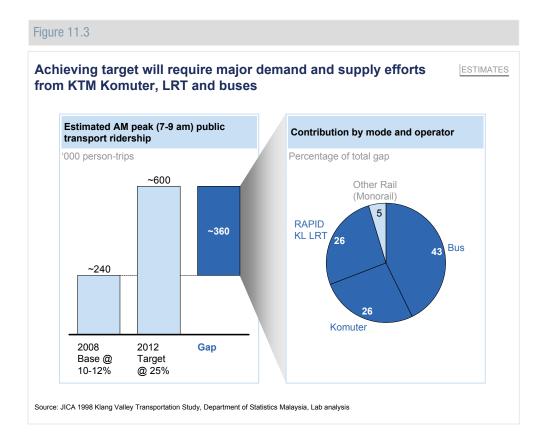
55,000 passengers during the morning peak hours, or 6 to 9% of total public transport ridership by 2012. The size of the existing bus fleet will be increased by 850 buses, almost doubling the number of buses operated by RapidKL today. This will improve services on current routes and provide service to 53 new routes to address currently underserved areas.

- Stimulate demand to draw people to public transport: Initiatives include introducing an integrated ticketing platform and fare structure (introducing the 1Ticket, 1Seamless Journey concept across all 16 operators in Klang Valley), adding roughly 6,800 new parking spaces across 14 key rail stations outside the urban core by 2012, enhancing feeder services into rail stations and upgrading high-traffic stations and terminals. Enforcement and monitoring will be critical to ensuring that all operators adhere to minimum service and operational standards. In order to achieve this, major efforts are required in integrating backend IT systems and launching joint on-the-ground enforcement efforts, across all major enforcement agencies the 10 local authorities (PBTs), CVLB, JPJ and PDRM.
- Take heavy vehicles out of the Central Business District (CBD) area by creating three major integrated transport terminals (ITTs) outside the city core, beginning with the southern ITT Bandar Tasik Selatan. This will be supported by ITT Gombak by 2011 (which will divert more than 780 inter-city buses daily from the north and east from the city core) and then a third, potentially in Sungai Buloh, to serve the northern inter-city express buses beyond 2012. Within the city centre, there will be two types of public transport hubs. Intra-city terminal hubs at Pasarama Kota, Hentian Putra and Pudu will facilitate the flow of traffic from the suburbs into the city. Fourteen Hentian Akhir Bandars (HABs) will facilitate the movement of passengers and public transport vehicles within the city centre to reduce congestion and streamline overlapping routes.
- Regulatory restructuring: It is critical to ensure that the proposed Land Public Transport Authority (SPAD Suruhanjaya Pengangkutan Awam Darat) is fully operational by the end of 2010. A prerequisite for success will be the creation of a single point of accountability for policy planning and regulatory oversight. Currently 12 Ministries and various agencies are involved in different aspects of public transport, and no single industry captain coordinates efforts across the entire public transport system.

And, beyond 2012, ...

• Manage demand through push: Once public transport modal share is above 25% and the public transport system has been improved in terms of reliability, journey times, comfort, accessibility and connectivity, we will accelerate initiatives to increase the relative attractiveness of public transport vis-à-vis private vehicles. One example is congestion pricing, which has been implemented with great success in cities including London and Singapore. In London, congestion pricing reduced the number of vehicles entering the CBD by 34%, with a corresponding increase in vehicle speeds of roughly 12% within the CBD.

The challenge of more than doubling our public transport ridership in less than three years is a daunting one. However, if successfully implemented, we expect this portfolio of initiatives to enable us to achieve this target by 2012. As described in Figure 11.3, roughly 60% of the increase in public transport ridership will be by rail. Buses will play a critical role both in quickly providing new high-speed services from the suburbs into the city centres and as an efficient last-mile service provider through feeder services to and from rail.



### 11.3 We will remove bottlenecks in a system already at its limits

The following are our initiatives to reform train and bus services.

### 11.3.1 Increasing KTM Komuter capacity by four times on a sustainable basis

KTM Komuter is an important lifeline for many suburban commuters today. Services run at more than 1.4 times average load factors during the morning peak period, implying that a train designed to carry 400 people now carries around 600 people during peak hours. Furthermore, service is often delayed or cancelled causing great inconvenience to the approximately 50,000 daily riders.

A major initiative will be to quadruple capacity of KTM Komuter trainsets through refurbishments and purchases of rolling stock. This will more than halve the waiting times of commuters and enhance greatly their travel experience. The system currently runs with headways<sup>40</sup> of 20 minutes, which will be reduced to 7.5 minutes outside the CBD and down to 3.75 minutes on the busiest segments within the CBD. In addition, the current fleet is made up of three-car trains, while platform lengths can accommodate six-car trains. By reducing headways and increasing the number of carriages in each train, capacity can effectively be quadrupled.

With investment in feeder services, parking and station upgrades, there should be sufficient demand potential in the station catchment areas to more than fill this additional capacity.

Quadrupling capacity will require increasing the inventory of rolling stock by an additional 15 three-car trainsets (also known as EMUs<sup>41</sup>) and 38 six-car trainsets. This increase can be achieved through a combination of resurrecting current rolling

Defined as the time between the one train's arrival and the next train's arrival

Electrified multiple units

stock that are not operational and purchasing new trainsets. Full quadrupled capacity is expected to be on-line by the first half of 2012 if the process is begun immediately (given manufacturing lead times of 18–24 months).

To ensure this investment is fully leveraged, it is critical to enhance the availability levels<sup>42</sup> of KTMBs Komuter trains, which currently runs at approximately 40%. Typical levels should be closer to 80–85% for similarly-aged rolling stock. As such, maintenance procedures and systems, driving practices and maintenance budgets need to be upgraded to world-class levels as a matter of priority to ensure we derive full benefit from this investment. In addition, we will explore whether outsourcing maintenance will deliver faster service times and cost effectiveness.

### 11.3.2 Increasing capacity on other rail lines – Light Rail Transit and Monorail

The Kelana Jaya LRT line is the most congested in Klang Valley. Today it transports roughly 34,000 commuters during the morning peak period, at load factors as high as 1.8 times. It currently runs two-car trains at a headway of 3 minutes. In anticipation of the 34-km line extension to be completed by the end of 2012, RapidKL has ordered 35 new four-car trainsets, with four new trainsets having gone into operation in December 2009. With the delivery of these trainsets, RapidKL will be able to reduce headways from 2.8 minutes to 2.5 minutes, running a mixed fleet of two-car and four-car trainsets. Combined, these initiatives are expected to triple capacity and enable ridership during the morning peak period to increase from current levels of approximately 34,000 (at 1.8 times load factor) to roughly 98,000 (at 1 times load factor) when fully deployed.

The Ampang LRT line currently runs six-car trainsets, as its station platforms are longer than those of the Kelana Jaya LRT line. Today, services run at approximately 80% load factor, below design capacity. Prasarana (the owner of both LRT lines) can almost immediately reduce headway from 2.8 minutes to 2.5 minutes by using its current fleet subject to sufficient increase in demand. Prasarana will only do so when enhanced feeder services, parking and station upgrades have been deployed to drive increased demand.

The Monorail system currently runs at up to 1.3 times load factors at critical stretches during the morning peak, with heavy congestion in core stations such as Hang Tuah. Close to 88% of Monorail riders are continuing journeys from LRT and KTM Komuter, a critical last-mile role. As the capacity and ridership of the two LRT lines and KTM Komuter increases dramatically going forward, it will be crucial to ensure the monorail does not become the bottleneck. In order to prevent this, the Monorail will need to increase total capacity from approximately 6,800 passengers during morning peak today to roughly 12,000 passengers by 2012. This will be achieved through a combination of increasing the train lengths from two- to four- (or even six-)car sets, and reducing current headways of 5 minutes to closer to 3 minutes.

### 11.3.3 Providing priority lanes and dedicated bus rights-of-way on high demand routes

Bus services have long suffered from a negative public perception of being the poor man's transport. Current bus services are unable to match the high speed, high capacity and high frequency of rail systems as they crawl through existing and heavily congested highways in tandem with thousands of other cars and vehicles. To overcome this, we will launch three key efforts across 12 major corridors heading into the CBD: Bus Expressway Transit, Bus Rapid Transit and Bus Lanes.

<sup>&</sup>lt;sup>42</sup> Availability is defined as the proportion of rolling stock that is available for service at any point in time.

Bus Expressway Transit (BET) services will be launched on four underutilised highways in Klang Valley. Commuters will enjoy up to a 55% shorter average journey time on this limited stop service with priority toll booths.

A full-fledged Bus Rapid Transit (BRT) system will be implemented, similar to highly successful systems in Curitiba, Brazil and Bogota, Colombia that combined carry over 2 million passengers per day. Even in neighbouring Thailand, the first of five planned BRT corridors totalling 114 km was scheduled to be launched in December 2009. For Klang Valley, the BRT system will be launched across three major corridors heading into the city centre with a total route length of 49 km. These corridors will be physically separated from existing lanes with concrete barriers and have dedicated stations for loading and unloading of passengers – not unlike that of LRT systems.

For the five remaining corridors with more restrictive physical constraints, a detailed planning and engineering study will be conducted to assess the feasibility of implementing bus lanes. The lanes could potentially be deployed fairly quickly without actual physical segregation of the lanes, but with lane markings for flexible traffic management (e.g., bus lanes only during morning and afternoon peak hours).

Implementation of the BRT and bus lane systems could accommodate 35,000 to 55,000 more passengers during the morning peak period with an average reduction of up to 50% in journey times due to the significantly higher speeds at which these buses will travel unhampered by traffic.

## 11.3.4 Increasing bus capacity on congested routes in white space (underserved areas)

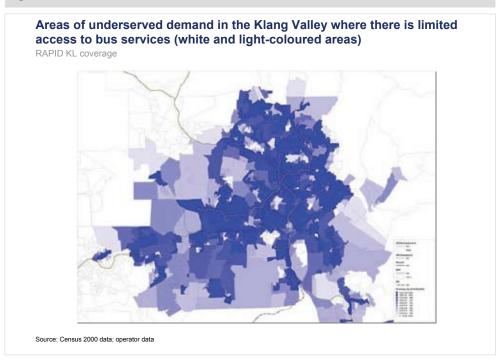
There are currently 13 bus operators within Klang Valley, with RapidKL holding the largest market share at approximately 50%. RapidKL has roughly 710 buses in daily operation and is expanding its fleet by 400 new buses to be delivered during 2010 and 2011. In order to achieve bus ridership of roughly 100,000 passengers during the morning peak period (excluding BET, BRT and bus lane ridership), there needs to be better service on existing routes and new routes put in place to address under-served areas and neighbourhoods.

- Current routes: RapidKL alone operates a total of 166 routes, with the bulk of these being social routes i.e., low ridership routes where load factors during the morning peak period are typically below 40%. RapidKL's efforts to improve ridership on current routes will focus on: (i) debottlenecking 23 congested high-traffic routes and (ii) improving service frequency of 88 routes to a minimum of a 20-minute headway for feeder lines and 15 minutes for trunk lines.
- White space (underserved) areas: Currently only about 60%<sup>43</sup> of Klang Valley's population live within 400 metres of a bus route (Figure 11.4). A total of 53 new routes have been identified to serve outlying and underserved areas, which will increase the total coverage to about 70%.

In order to achieve these ambitious targets for bus ridership, the industry will require a total of 850 new buses over 2010–2012, of which 400 buses have already been purchased by RapidKL.

<sup>43 -60%</sup> coverage based on latest available micro-level information from Census 2000. Coverage of routes only includes RapidKL routes. Other bus operators play a significant role in public transport, but there is a lack of recent, reliable sources of information on their services and routes. (This is one of the key efforts being addressed under performance management of public transport operators). Nevertheless, based on interviews with operators and riders, RapidKL's coverage typically overlaps with most of the major bus operators, except in the farther suburbs such as Rawang and Putrajaya

Figure 11.4



Together, these initiatives will increase the available capacity in the morning peak period to over 600,000 passenger trips in Klang Valley.

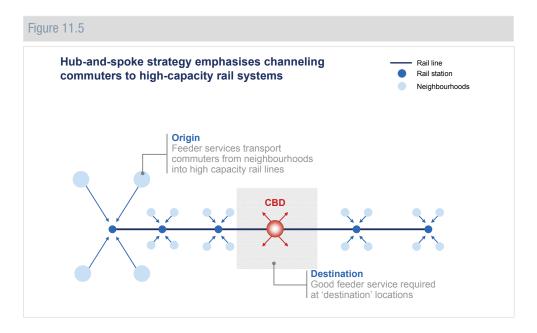
#### 11.4 We will stimulate demand to draw people to public transport

We will attract more of the rakyat to use public transport via the following actions.

# 11.4.1 Rail: Enhancing catchment from stations by upgrading high-traffic stations and enhancing feeder services

As capacity is increased across rail lines, it is critical to stimulate demand and attract commuters to fill up trains and buses. Drawing from experience in other countries, an efficient way of moving people is via a hub-and-spoke network, where feeder services (the spokes) take commuters from their neighbourhood homes to the nearest train station (the hub), which then channels them in a fast and comfortable manner to their end destination, usually within the city centre (Figure 11.5).





However today, over 50% of the RapidKL LRT and KTM Komuter stations have poor service, with either only one or no feeder routes serving the station. With the massive deployment of additional rail capacity, it will become even more critical to overcome limiting physical constraints around rail stations to feed passengers to these stations via buses.

In addition, 14 rail stations outside the urban core would benefit from additional parking to encourage park-and-ride commuters. Starting with Sungai Besi, Gombak, Ampang, Bandar Tun Razak and Bandar Tasik Selatan in 2010, additional parking will be added in stages over the next three years to accommodate 6,800 more cars at these stations. Conventional multi-storey parking typically costs in the order of RM 12,000 per bay, but lower-cost designs (e.g., fewer amenities, modular design with pre-fabricated parts) can potentially reduce this to around RM 5,000 per bay. These projects will be financed via PFIs to reduce the burden on the Government purse.

### 11.4.2 Bus: Enhancing and monitoring operator service standards and enforcement to facilitate flow of traffic

Many operators do not meet quality standards for on-time performance, comfort or cleanliness. A set of quality standard specifications has been developed with benchmark standards and targets. In the short term, bus and rail regulators CVLB and DoR will need to rely heavily on flash reports from the operators (which DoR already tracks and monitors today) to assess improvements in targets.

In the longer term, we will leverage and build on the Intelligent Transportation and Information System (ITIS), currently administered by DBKL, to become the Klang Valley Transportation Performance Management Hub. Real-time or near real-time information can be uploaded directly from the operators into the centre for more effective performance monitoring. Monitoring performance alone will not guarantee success however. Regulators will need to move towards explicitly linking bus operating licenses to minimum service standards to allow for proper consequence management in the case of non-performance.

Enforcement of private vehicles and taxis is another perennial issue that will need coordination and joint effort across the 13 agencies involved in enforcement – the 10 PBTs, PDRM, JPJ and CVLB. Four initiatives include increasing the use of IT and surveillance technology to detect and efficiently punish those who do not adhere

to regulations, increase the number of enforcement personnel on the ground in a coordinated fashion across all 14 agencies and streamline and close legal loopholes in the enforcement process to ensure that offenders do not escape without being punished appropriately.

Blacklisting offenders with outstanding summonses to prevent them from renewing their vehicle road taxes would be a quick and very effective way of demonstrating the seriousness and commitment to stricter enforcement standards.

# 11.4.3 Bus: Enhancing the quality of bus stops and ensuring scheduling information at all bus stops

Today there are an estimated over 4,000<sup>44</sup> bus stops in Klang Valley, of which over 40% are unsheltered and have no signage. We will start by cataloguing and numbering all bus stops across Klang Valley in a coordinated fashion and will also aggressively explore opportunities with private companies, such as advertising agencies, to help fund and maintain bus stops across all PBTs.

In addition, clear scheduling signage for all operators will be posted at all bus stops. One challenge with this, as observed, will be vandalism and posting of notices on signage (e.g., Ah Long, tuition services). Enforcement activities will include encouraging the public to report such incidences (together with operating a complaint hotline), acting against those individuals found committing vandalism and also (when appropriate) against the proprietors of services being advertised.

# 11.4.4 Integration: Infrastructure improvements to improve intermodal transfers and the pedestrian experience

Physical connectivity across modes is an inevitable and critical element of today's multi-modal journey experience. Many stations suffer from poor physical access, resulting in commuters having to traverse poor walkways and long unsheltered walks to get from one station to another – a serious deterrent for any traveller. One high profile and frequently-quoted example is the 350-metre walk between the Monorail station and KL Sentral, the city's transport hub. In the future, as Malaysian Resources Corporation Berhad (MRCB) completes the next phase of its development (Lot G), the two stations will be physically connected via a completely enclosed walkway through the mall. In the short term, we will build a functional enclosed shelter around the construction site to provide relief to roughly 3,000 commuters daily. This solution will be implemented in early 2010 with assistance from MRCB.

Finally high-traffic stations will be upgraded to enhance usability, universal access (e.g., ramps, lifts) and general ambience. Work led by Prasarana on three other high-priority stations – Masjid Jamek, Hang Tuah and Titiwangsa – is expected to be completed by the end of 2010. Prasarana is also embarking on an ambitious programme to equip all 24 Ampang Line stations to be accessible by disabled people, 14 of which will be completed by the end of 2010.

# 11.4.5 Integration: Establishing integrated smart ticketing across all public transport modes and operators

For the multimodal commuter, ticketing is a complex business. Sixteen operators each issue their own tickets and almost all bus operators operate on a cash fare basis, resulting in long waiting times, loss in fare revenue from ticket fraud and a need for multiple tickets. Currently up to 25% of travel time for the average bus

<sup>44</sup> Due to lack of information, this is at best an estimate of official and unofficial stops; unofficial stops are places where buses regularly pick up and drop off passengers that are not officially recognised by the local authorities.

commuter is spent queuing or waiting in the bus while others queue to pay for their fare. Migrating users to a cashless system would approximately halve the transaction time it takes to purchase tickets (Figure 11.6).

In addition, there are currently 16 different bus and rail operators across Klang Valley, each with independent ticketing and collection systems. The establishment of 1Ticket, 1Seamless Journey will greatly simplify and stimulate use of public transport.

Finally, there is an estimated 20% revenue leakage in bus and rail, due to an imperfect cash system, costing operators an estimated RM 125 million in revenues every year. Migrating to a cashless system across all modes will reduce this significantly as cash handling processes are greatly reduced.

Figure 11.6 Integrated smart ticketing is critical to reduce journey times 1 Reduction in boarding times Long queues during peak 25-30% of time is spent waiting Cashless ticketing has Time 25-30% the potential to reduce spent of time boarding times by up in vehicle to half Cashless ticketing has 2 Reclaiming lost revenues the potential to save Cash transactions are subject Industry revenues the industry up to to petty fraud - potential loss RM mn per veal RM125 million in total in revenues of up to 20% annual revenues 620 495 Creation of With Ticket Without fraud fraud Seamless Journey 3 Creating 1Seamless Journey 16 operators in the Klang Valley with 16 Tickets

Deploying integrated ticketing and automatic fare collection (AFC) will incur a cost of approximately RM 35 million, if implemented on a cost-sharing basis with Touch n Go in order to leverage existing infrastructure. It will be mandatory for all operators to install cashless infrastructure in their vehicles and at their stations, at no upfront cost to them. Options around alternative reloading infrastructure leveraging mobile operators and banks are being explored. We will share the cost of readers and terminals with the cashless system operators, e.g., Touch n Go, mobile operators, banks. In addition, to encourage the usage of the cashless system, a fare differential of 20% will be introduced between cash and cashless fares. This practice is widely used in most model public transport systems, such as the Oyster Card in London, Ez-link in Singapore and Octopus in Hong Kong.

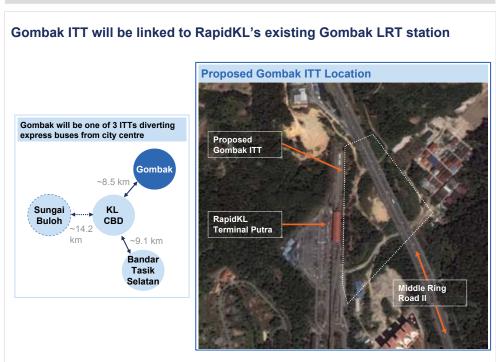
#### 11.5 We will take heavy vehicles out of the CBD area

We will also take the following initiatives to keep heavy vehicles away from the CBD.

## 11.5.1 Creation of three integrated transport terminals (ITTs) outside the city core to divert roughly 780 inter-city buses out of the CBD

The first ITT terminal at Bandar Tasik Selatan will be completed by November 2010, when it will divert roughly 700 express buses from Puduraya, providing much relief to city centre traffic flow. Planning for the Gombak ITT has been long in the making, but has never progressed due to budget constraints. However there is significant value in an ITT at Gombak to divert roughly 780 inter-city buses from the northern and eastern corridors out of the city core. An improved Gombak ITT will be implemented by 2011 based on a modular approach. This will be a low-cost ITT, with sufficient infrastructure to ensure a smooth flow of traffic, ample parking and cohesive integration with the Gombak LRT (Figure 11.7). Extra features including an integrated commercial centre will be deferred to a later date. We will fully fund this low-cost Gombak ITT and pursue subsequent upgrades via PFI partnerships.

Figure 11.7



A second ITT to serve the northern inter-city corridor will be built in Sungai Buloh beyond 2012, which will divert some traffic from Gombak.

### 11.5.2 Upgrading three intra-urban hubs

Three intra-urban terminal hubs will be established to collect traffic from high-density radial corridors leading into the CBD. These include Pasarama Kota, Hentian Putra and Puduraya. UDA Holdings, the developer of Puduraya is currently rejuvenating the station, at a cost of RM 80 million. When the Bandar Tasik Selatan ITT hub is completed in November 2010, roughly 700 express buses will be diverted from the city centre, allowing for a less congested environment. With the progressive completion of the Gombak ITT by 2011 and the Sungai Buloh ITT at a later stage, over 2,000 express buses currently plying these three city hubs will be diverted to the fringes of the city.

### 11.6 We will restructure the regulatory system

There are currently 12 Ministries and many agencies (both at the local and federal level) involved in governing various aspects of public transport within Klang Valley. A prerequisite for successful implementation of the above initiatives will be the creation of a single point of accountability for policy planning and regulatory oversight (Figure 11.8). It is critical to ensure that the proposed Land Public Transport Authority (SPAD) is fully operational by mid-2010.

However, there is a need for an interim governance structure to ensure execution throughout 2010. A programme management office (PMO) under the Ministry of Transport (MOT) will be put in place to manage execution until SPAD is fully operational. Reporting directly to the Prime Minister, through the Urban Public Transport Delivery Task Force forum, the PMO will convene relevant ministries and agencies to ensure integrated and detailed plans and policies are created (for the above initiatives) and monitor the progress of the initiatives. The PMO will work in close collaboration with an interim SPAD NKRA team, sharing resources and location. The SPAD NKRA team's mandate will be to deliver five initiatives that have no clear owner – bus right-of-way, bus stops, performance management, network restructuring and ticketing integration.

Figure 11.8 SPAD will drive industry restructuring efforts when operational in June 2010 Planned Land Public Transport Commission (SPAD) will be the natural owner of Urban Public Transport moving forward Follow best practice of other cities, (e.g., TfL in London, LTA in Singapore) SPAD will be natural owner of Suruhanjaya - Monitoring and enforcement Pengangkutan of service standards **Awam Darat** - Central long-term planning (SPAD) Creation of a sustainable operating and financial model for private operators Source: Lab analysis: SPAD report (EPU)

#### 11.7 We will manage demand through push

Once we have achieved our aspiration for a public transport modal share of 25% (in Klang Valley), we will implement further measures to increase the relative attractiveness of public transport over private vehicles. Demand management initiatives such as congestion pricing, parking surcharges and vehicle taxes have been implemented with great success in cities, such as Singapore and London. The objective of such measures are to price in the true cost of private vehicle ownership and usage of the system (i.e., private vehicles pay for the congestion that they cause

in the system). Such measures can only be implemented once commuters are given a viable alternative to private vehicles – a well-functioning, efficient and sustainable public transport system. As such, these measures will start to be implemented from 2013 onwards.

### 11.8 The Government commits to the following NKPI targets

Tables 11.1 and 11.2 describe KPI targets and other outcomes respectively, for 2010:

Table 11.1: NKPIs and targets for Urban Public Transport (Klang Valley)

Focus area	KPI	System	Baseline	2010
Public transport usage	<ul><li>Modal share</li><li>Ridership of public transport</li></ul>	Overall Overall	10%	13% 265,000
Accessibility and connectivity	% of population living within 400 metres of public transport route	Overall	63%	75%

Table 11.2: Outcomes in 2010 for Urban Public Transport (Klang Valley)

Categories	Outcomes in 2010
Bus	<ul><li>200 new buses</li><li>4 new bus expressway transit corridors</li><li>800 upgraded bus stops</li></ul>
Rail	26 new four-car trains for Kelana Jaya line
Integration	<ul> <li>New integrated transport terminal in Bandar Tasik Selatan</li> <li>All operators have cashless system and offer discounted fares for cashless tickets</li> <li>4,000 new parking spaces at rail stations</li> </ul>
Network	<ul> <li>Road tax renewal refused for drivers with outstanding summonses</li> <li>Heavy vehicle restriction in central business district during peak hours</li> </ul>

Besides the above KPIs, we also aim to improve reliability (% of journey times completed within 60 minutes during the morning peak period) and to increase user satisfaction with the comfort and convenience of public transport. Baseline surveys are being conducted to help in determining targets for these measures and will be announced in the first quarter of 2010.

### 11.9 Early signs of progress seen on urban public transport

We have seen some encouraging early impact, including:

- Realignment of 45 RapidKL routes to reduce passenger transfers, saving time and costs, and improving coverage in November 2009
- Reduction of KTM Komuter headway from 20 minutes to 15 minutes by optimising deployment of trainsets in November 2009 on the highest traffic segments, i.e., Sungai Buloh to Kajang and Kuala Lumpur to Shah Alam
- Addition into revenue service of four four-car trainsets on RapidKL's Kelana Jaya LRT line in December 2009
- Launch of RM 150 RapidKL integrated travel passes allowing unlimited travel on all Prasarana services, i.e., Rapid KL buses, Kelana Jaya LRT, Ampang LRT and Monorail.

### 11.10 Our next steps will be to develop a land transport masterplan and new deals for operators

Our aspiration of more than doubling public transport ridership is ambitious but will be the critical first step in ensuring the sustainability of our city. Over the longer term, we intend to carry out a comprehensive review of the following elements:

- Land Public Transport Masterplan: In the longer term, SPAD will lead the development of an integrated Land Public Transport Masterplan that will drive the land public transport landscape of our cities for the next decade. Public transport system plans are inherently long-term and require tight integration with urban planning and design (e.g., provision of incentives for developers to integrate with long-term rail lines) and a long lead time for implementation. This masterplan will need to integrate local, state and federal plans for a coherent and collaborative approach for the future.
- A new deal for operators: As citizens place the Government under increasing
  pressure to be more effective and deliver better services at lower cost, we need
  to develop a new model that balances financial sustainability of private sector
  operators with minimum standards for non-profitable services.

## 11.11 The rakyat should use and demand efficient and comfortable public transport

There is much that the rakyat can do to help achieve the 25% public transport modal share target. For a start, citizens should continue to be vocal about their right to efficient and comfortable public transport.

They should engage with their local representatives and operators to help their community become more accessible. Start small and be specific: ask for a new bus stop, more frequent services and better lighting around stops and stations. When buying a new house, ask the developer how it plans to make the development more accessible to public transport. Most importantly, the rakyat is asked to 'leave their cars behind'. Again, start small: try local buses on weekends or commit to commuting via public transport one day a week.

