# Journal of the Indonesia Infrastructure Initiative PRAKARSA

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# Moving People in Jakarta

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### Editor's Message

In the world of economics, a circle can be vicious or it can be virtuous. Either way, the circle is a loop where increasing A leads to more of B, which leads to more of A, which leads to more of B and so on. Examples of such circles are everywhere – one that appeared in the Air Transport edition of **Prakarsa** (January 2012) showed how a nation's economic growth leads to increased business/leisure flying, which leads to better routes and connectivity, which makes the region more attractive to business and tourism, which leads to further economic growth.

In theory, such circles perpetuate themselves forever. The feedback continues indefinitely, leading to a situation that is always getting better or always getting worse. The key is to identify the external circumstance that will begin the virtuous circle – or break the vicious one.

As the articles in this edition of **Prakarsa** show, Jakarta's urban transport offers many examples of circles. Unfortunately, there seem to be more vicious circles than virtuous ones. Take the quality of bus service, for example. Uncomfortable, poorly maintained buses are an unpleasant experience for passengers, who will opt for the comfort of a private car or the relative speed and convenience of an *ojek* (motorcycle taxi). Revenue from bus fares then declines, operators cannot afford maintenance so the quality of the bus-riding experience deteriorates, so passengers choose not to use the bus, so revenue declines again.

A similar feedback loop occurs with congestion. When the daily commute stretches to hours, passengers who have a choice would rather endure the seemingly endless journey from the comfort of a private vehicle. This adds to the congestion, which slows the commute, which makes the private car seem like a more attractive option, which adds to the congestion.

Is Jakarta's situation beyond repair? Not if planners bring about the circumstances that break the vicious circles – and hopefully generate new, virtuous circles. Solutions are available: A more sophisticated fare system that allows more equitable fare charging at the same time useful data on commuter movement is collected. Fleets of buses that match the size and design with the length of the route and the demand for service. Restrictions on the use of private vehicles.

Here is a circle for *Prakarsa* readers: Every day, people experience the horrors of Jakarta congestion. From this evidence, they conclude that the situation is hopeless, and do nothing to fight for change. The situation worsens. And people experience more of the horrors of Jakarta congestion, yet remain passive. But there is a virtuous circle that could replace the vicious one. Read the articles in this issue, and you may be able to envision a city where people start using public transit, word spreads that it is an effective and comfortable means of navigating the city, more people do it, political will increases, revenue pours in, and resources are devoted to safe, convenient, affordable public transport. It's a virtuous circle worth aspiring to. • CSW

# Infrastructure by the Numbers

#### **Rp 1.4 trillion**

The total cost of the proposed elevated busway line project, or Corridor 12 of Trans-Jakarta, which connects Ciledug and Blok M, as estimated in 2013.

#### 9.9 million

Number of cars, motorcycles, trucks and other vehicles that take to the capital's streets each workday, according to the Jakarta Transportation Agency in 2013.

#### 10 km

Average vehicle speed per hour in Jakarta in 2013, down from 16.8 km in 2012, according to the Jakarta Transportation Agency.

#### **Rp 400 billion**

Amount allocated by the Government in 2014 for the development of mass transport mode of bus rapid transit (BRT) in six major cities (Medan, Jakarta, Bandung, Surabaya, Bali and Makassar).

#### Rp 12.8 trillion/year

The cost of traffic congestion in Jakarta, according to the Ministry of Transportation.

#### **Rp 1 million**

Current level of the fine to be imposed on the driver of a car that drives in the TransJakarta bus lane.

#### **65%**

As referenced in a 2011 ADB study, the percentage of Jakarta's pedestrian overpasses that are underutilised (in other words, most pedestrians choose to jaywalk rather than use the bridge) because of issues such as poor maintenance, lack of cleanliness, hard-to-use staircases, and concerns over safety.

### JAKARTA'S PUBLIC TRANSPORT SYSTEM: AN OVERVIEW

Jakarta's public transport system consists of a wide array of motorcycles, vans, taxis, and buses of all sizes. Each mode has an appropriate role to fill in moving people safely, affordably and conveniently throughout the city. The current system is inefficient, but steps are being taken to change this. • By Richard Iles and Rudi Wahyu Setiaji



*Ojek* and *angkot* drivers wait for passengers on this busy road in Jakarta. *Courtesy of Richard Iles* 

The Jakarta public transport system is highly diversified. It includes *ojek* (motorcycle taxis), *bajaj* (three-wheeled, enclosed motorised rickshaws), regular taxis (sedans carrying up to four passengers in addition to the driver), and *angkot/mikrolet* (9–14 seat minivans); as well as buses of various sizes, configuration and standards; and heavy rail. These will be supplemented in future by Mass Rapid Transit (MRT) and monorail services. Each of these modes has its own characteristics, advantages and disadvantages. But transport services are not always provided by the most suitable mode.

Ojek are becoming increasingly common in Jakarta. They have the advantage of being able to move more quickly and easily through heavy traffic, and are cheap to acquire and operate. They can serve a useful purpose in carrying passengers for short distances to and from bus stops or rail stations, and on narrow, minor roads not served by any other form of public transport. In Jakarta they are more widely used as a substitute for buses and taxis on main roads, principally because of their advantage of speed on the city's congested streets.

Ojek are not regulated by the government, and no official figures are available as to their number. However, there are several thousand of them, and the number is increasing steadily. They are often driven inconsiderately and dangerously (including on sidewalks when roads are congested). On a per-passenger basis, their contribution to atmospheric and noise pollution and traffic congestion is high. While they can contribute to meeting urban mobility requirements their appropriate role is limited, and some means must be found of eliminating them from those sectors of the market for which other modes are more suitable.

#### **Key Points:**

The Jakarta public transport system is highly diversified. It includes *ojek* (motorcycle taxis), *bajaj* (three-wheeled, enclosed motorised rickshaws), regular taxis (sedans carrying up to four passengers in addition to the driver), and *angkot/mikrolet* (9–14 seat minivans); as well as various types of buses and heavy rail and, in the future, Mass Rapid Transit (MRT) and monorail services. Each of these has a greater or lesser role to play, but these modes are often used inefficiently at present.

Ojek and bajaj are both useful for travelling short distances and on narrow roads. But they tend to be dangerous and harmful to the environment, and should play a reduced role in the public transport system.

Taxis are a significant component of Jakarta's public transport system. A substantial portion of the present demand for taxis is almost certainly due to the lack of acceptable alternatives.

Angkot or mikrolet are most suited to short routes linking residential areas with nearby commercial centres and bus terminals. But any mikrolet operate on longer routes on main roads, duplicating bus services.

Buses of various sizes, configurations and standards operate an extensive network of routes throughout Jakarta. The flagship of the Jakarta bus system is the Bus Rapid Transit (BRT) system operated by TransJakarta. Other types of bus services, with buses of varying size and comfort levels, address a range of market sectors and requirements.

No buses operating in Jakarta at present conform to international standards for urban bus design, but the need to replace ageing vehicles provides an opportunity to address this issue. Larger buses than are currently operated on most routes could be used to improve safety and convenience and to reduce environmental impact. Again, the vehicle replacement process offers an opportunity to improve this. The transition towards a smaller, more efficient vehicle fleet must be managed sensitively to minimise adverse social impact, since many small operators/drivers rely on small buses for their livelihoods.

Commuter services operated by the national rail operator, supplemented by the monorail and MRT systems due to commence operation in 2016 and 2017, will increase the capacity and attractiveness of public transport, but existing modes will continue to cater for the majority of commuters throughout DKI Jakarta.

Bajaj, which can carry up to three passengers on a demand-responsive basis similar to taxis, are widely used in Jakarta, mainly for short-distance trips. Like taxis, bajaj may cruise for passengers or wait at specific points. Estimates are that approximately 13,000 bajaj operate in DKI Jakarta (the special capital region of Jakarta). The majority of them, painted orange, are over 20 years old, and are powered by two-stroke petrol engines with high emission levels. Many are in very poor, even dangerous condition.

Newer, blue-painted bajaj are gas-fuelled. There are plans to progressively replace all bajaj with clean, electric-powered vehicles. Bajaj have a useful role in carrying small groups of people for short distances along narrow residential roads, but are less suited for use on main roads where their low speeds and open design make them and their passengers vulnerable. If more formal and better quality public transport services, notably bus services, were more widely available, it is probable that the demand for bajaj would be considerably reduced.

Taxis are a significant component of the public transport system throughout Jakarta. All are equipped with meters, and either cruise for passengers or wait at points such as railway stations, bus terminals, shopping centres, hotels and office buildings.

#### The Role of BRT:

BRT (Bus Rapid Transit) is a high-volume passenger transport mode using buses operated along dedicated tracks (busways) which are physically separated from other road traffic. Where busways intersect with roads carrying other traffic it is common for traffic signals to be phased to give priority to buses in order to minimise bus journey times. At very busy intersections the busway may be grade-separated by means of a flyover or underpass; such enhancements do not apply in Jakarta at present but some are included in plans for corridor upgrades.

The higher operating speeds made possible by the exclusive right of way and priority measures, coupled with the use of high-capacity buses, enable very high passenger volumes to be catered for: over 10,000 passengers can be moved per hour in each direction, far more than can be carried on conventional bus services sharing road space with other traffic, or by private cars or motorcycles.

But such volumes can be achieved only if the exclusivity of busways is effectively enforced, if there are effective priorities for buses at intersections, if appropriately specified high-capacity buses are operated, and if the services are operated efficiently.

The capacity of a busway is not unlimited, however: as a rule of thumb a busway with a single lane in each direction cannot cope with more than 100 buses (regardless of size) per hour in each direction. For maximum passenger capacity, it is therefore necessary to operate maximum-sized buses, which normally means deploying large articulated buses. In some cities in other countries, bi-articulated buses carrying more than 250 passengers each are used. The use of smaller buses will reduce the total available capacity, and this will be particularly detrimental where passenger volumes are high. There must also be provisions at some stops for one bus to overtake another, requiring a double-lane busway on certain stretches of the corridor.

BRT services, particularly where the chosen bus configuration necessitates the provision of high-level boarding platforms as in Jakarta, require substantial infrastructure at each station. This requires longer intervals between stops than is practical for conventional bus services. Conventional services require minimal infrastructure, so bus stops are typically spaced closer together; this provides increased convenience for passengers, which is particularly beneficial for short-distance passengers. The increased spacing of BRT stops will enable higher operating speeds to be attained, but also increases average walking distances to bus stops, with an adverse effect on passenger convenience. To an extent, therefore, BRT and conventional bus services are complementary in that they cater for different market sectors, with the former catering for longer-distance passengers and the latter for shorter-distance travellers.

For very high passenger volumes which cannot be adequately provided for by BRT services, higher-capacity modes such as light or heavy rail should be provided. The commuter rail services operated by the national railway company already play a significant role, and these will soon be augmented by the MRT and monorail services. Spacing of rail stations is normally greater than for BRT services, and therefore it is likely that there will continue to be a role for both BRT and conventional bus services even on corridors to be served by rail.

Therefore, while BRT has an important role to play, this must not be confused with the roles played by other public transport modes. BRT and rail services are essential to cater for high-volume movements on main corridors, but these must be complemented by conventional buses, mikrolet, taxis, bajaj and even ojek to cater for lower-volume demand, and in places where travel patterns are complex and do not follow main corridors. Each mode must, however, be confined to the service which it performs best, and this will call for effective measures to ensure proper coordination and integration of services, with minimal requirement for interchange between modes, and seamless interchange where this is unavoidable.

There are over 12,000 taxis operating in DKI Jakarta, operated by nearly 50 companies of all sizes. Some large companies, such as Blue Bird and Express Taxis, operate several thousand vehicles each. As in most large cities, the principal role for taxis in Jakarta is to carry groups of up to four people from point to point, particularly when there is no convenient or direct public transport connection.

Problem	Main Causes	Remedy	
Inconvenient services	Informal operating system and flat fare structure encourages short routes	Route network providing more direct links, requiring more complex fare structure; more formal structure necessary	
inconvenient services	Inconsistent provision of designated bus stops and shelters	Provide bus stops and shelters at suitable intervals along every route, and enforce their use	
	Poorly designed and specified vehicles	Provide adequate mix of appropriate vehicle types	
Uncomfortable services	Inappropriate bus fleet mix		
	Inadequate capacity leading to overcrowding	Improve vehicle utilisation through better operating practices	
Unreliable services	Traffic congestion, road capacity inadequate for traffic volumes,	Priorities for buses Restraint on private transport use	
Low service speeds, excessive journey times	poor traffic management, poor enforcement of traffic regulations		
Poor standards of safety	Bus fleet in poor and unsafe condition	Provide formal bus maintenance facilities; eliminate inefficient operating practices restricting generation of funds for maintenance and replacement; improve enforcement of regulations	
Excessive levels of exhaust emissions	Bus neet in poor and unsale condition		
High transport costs for those on low incomes	Inefficient operating practices inflating costs	Formalise bus industry	
Difficult, unsafe conditions for pedestrians, discouraging walking and limiting access to public transport*	Poor facilities for pedestrians, poor enforcement of regulations, poor design and maintenance of infrastructure	Improve standards and enforcement	

#### Figure 1: Jakarta's Bus Infrastructure – Problems and Solutions

However, a substantial portion of the present demand for taxis is almost certainly due to the lack of acceptable public transport alternatives. If MRT and monorail services were introduced, and improvements were made to Bus Rapid Transit (BRT) and other bus services, it is likely that the demand for taxis would fall substantially. In particular, if traffic conditions were improved to permit higher bus operating speeds, this could lead to the introduction of reliable and convenient premium-quality bus services that charged fares higher than existing bus services but lower than taxis. This would make significant inroads to the taxi business, while providing lucrative business for bus operators.

Angkot or mikrolet operate throughout Jakarta. Approximately 16,500 of them operate in the city, on about 150 routes. They belong mostly to individuals or small businesses, many of which own only one vehicle. They are most suited to short routes linking residential areas with nearby commercial centres and bus terminals, along roads which are unsuitable for larger vehicles. However, a substantial number of mikrolet operate on longer routes on main roads, duplicating services operated by larger buses. Such routes would be more efficiently operated by fewer, larger vehicles, requiring less road space per passenger, with lower operating costs, and causing less pollution.

Buses of various sizes, configuration and standards are the most highly visible component of the public transport system, and operate an extensive network of routes throughout Jakarta. (See Figure 1 for an overview of the problems with Jakarta's bus infrastructure and the solutions.)

The flagship of the Jakarta bus system is the BRT system operated by TransJakarta (see box on page 5, "The Role of BRT"). The system comprises exclusive busways on 12 route corridors, with two additional corridors to be added in the near future. The first (corridor 1, from Kota to Blok M) commenced operation in 2004, and the Jakarta system now has the highest mileage (170 km) of dedicated busway in the world. There were 579 articulated and rigid buses in the fleet at the end of December 2013, and a further 300 are to be delivered in 2014.

The busways generally run along the median strip of dual carriageways. The majority of bus stops are therefore in the centre of the road, and are accessed by subways, light-controlled atgrade pedestrian crossings, or – in the vast majority of cases – by bridges. The core BRT routes operate wholly along the busways, but an increasing number of "direct services" are being introduced, which operate partly along busways and partly on ordinary roads or toll roads. Some of these services operate to and from points outside DKI Jakarta.

There are approximately 500 non-BRT bus routes in operation in Jakarta; more than 70 routes operate along the busiest corridor, Jalan Sudirman and Jalan Thamrin, alongside the BRT Corridor 1. Each route is operated by a single operator (which may be a company or a cooperative comprising many individual owners), normally using one type of vehicle. According to a JICA study, in 2010 there were approximately 1,000 large and 2,500 medium-sized buses operating in DKI Jakarta, excluding those operated on the BRT system. Exact numbers are difficult to establish since some licensed buses are not operated, while some others are operated illegally without licenses, although these issues are being addressed by the local transport regulatory agency (the Dinas Perhubungan, or Dishub).

The different types of bus services in Jakarta address a range of market sectors and requirements. The types of services include BRT, *Patas* (which features limited-stop services, both air-conditioned and non-conditioned, generally on longer routes), and regular buses (basic-standard vehicles serving all bus stops, although in practice not all stopping places are marked, and buses tend to stop anywhere). Regular buses may be sub-divided into large (typically 12m long, carrying 50–70 passengers) and medium-sized buses (8–9m long, carrying 30–50 passengers). Some new medium-sized buses are air-conditioned, but the majority are not.

Each of the different bus service and vehicle types is required to meet different types of demand. At present, the assignment of roles is not always appropriate: For example, the majority of services provided by medium-sized buses would be more efficiently provided by larger buses. However, all the types of bus service now operating are required to meet the needs of different market sectors, and their appropriate roles should be recognised.

#### Private Transport – A Vicious Cycle Which Must Be Broken

The problems of traffic congestion in Jakarta are well known. They are due primarily to the fact that the existing capacity of the road system is inadequate for the volume of traffic using it. And this volume is increasing by the day: it is reported that the number of motorcycles alone is increasing by around 1,000 daily. Private cars and motorcycles, in terms of the road space required per person, are far more demanding of road space than public transport, particularly high-capacity buses. Unfortunately, experience worldwide shows that increasing road space by building new roads or widening existing ones only generates new traffic to fill the additional space, and the outcome is even more congested roads than before. This is therefore not a viable long-term solution; in any case, provision of new road space is both very expensive and extremely degrading to the environment.

Jakarta is faced with a vicious circle. Unattractive public transport services discourage users: those who can afford it will migrate to private transport, primarily motorcycles and cars. These additional private vehicles add to the congestion, increasing journey times for everyone. Public transport becomes even more unattractive – if a commuter has to spend many hours per week in traffic jams, this is much pleasanter in the comfort and privacy of a private car than standing in an overcrowded commuter bus. In addition, the migration of public transport passengers to private transport means reduced revenue for transport operators, and less money to spend on fleet maintenance or renewal – so the condition of the vehicles deteriorates and the overall system capacity declines. If fares are increased to compensate for the decline in passengers, even more will seek alternative transport. In short, the quality and attractiveness of public transport will decline, and its cost will increase.

The introduction of the BRT system has helped considerably in addressing this problem, and more recently the Governor has initiated the purchase of large fleets of new buses to raise the quality and capacity of the public transport system. In the longer term there will be the MRT and monorail. But improving public transport alone will not be enough. A bus, however comfortable, will never be more attractive than a car if it is standing still in a traffic jam. Even the BRT is still suffering from serious delays at traffic intersections. The MRT and monorail will not suffer from traffic congestion but will be available to only a relatively small proportion of commuters, and those not living within easy walking distance of a station must still use congested streets to access the system.

Government has long recognised that positive measures are necessary to reduce the use of private transport and encourage the use of public transport, and has taken action to address the problem. The Jakarta 3-in-I scheme has been a bold measure to encourage high vehicle occupancy and hence make more effective use of road space, although its impact has been reduced by the common practice of giving lifts to strangers for payment, just to make up the required number. There are proposals and plans for further control of private transport including electronic road pricing and restrictions on the use of motorcycles in certain parts of the city – all of which are to be welcomed. Other measures must include restrictions or outright banning of parking on certain streets, and strict enforcement of all traffic rules and regulations. Some streets might be prohibited for private transport, and be accessible only by public transport or on foot.

There must also be more priority given to public transport vehicles, through methods such as segregated bus-only lanes on roads where buses would otherwise be delayed by traffic congestion (these would be in addition to the BRT busways, and on some corridors would run parallel to them); allowing buses to make right turns where it is prohibited for other traffic; and allowing buses to operate against the traffic flow on one-way streets in segregated bus lanes. Designated bus stops, with shelters where appropriate, must be provided at convenient points, suitably spaced, along all roads served by buses, not only on main corridors. In addition, access to public transport services must be facilitated by enforcing regulations regarding the use of sidewalks, so that all pedestrians including public transport users have safe, unimpeded use of all sidewalks in the city.

Such a package of measures can reverse the vicious circle. Bus services will become quicker, pleasanter and more convenient; reduced journey times will reduce costs and increase revenue per km, thus enabling fares to be kept low whilst improving profitability with minimal or no subsidy; and people will move more quickly, more safely throughout a cleaner, healthier and pleasanter city.

The key message is clear: public transport improvements must go hand in hand with positive measures to control private transport use. Otherwise getting around Jakarta will become intolerable.

Buses used for regular services provide basic comfort and facilities. The Patas buses normally provide a higher standard of comfort; some are air-conditioned, in which case higher fares are charged. Some buses, which were acquired second-hand from Japan, are configured as urban buses with relatively low floors providing easy access and accommodation for a large number of standing passengers. But the majority of buses used in Jakarta, other than the TransJakarta buses, are more suited to long-distance inter-urban rather than urban operation.

#### What IndII Is Doing to Help

Indll has been assisting DKI Jakarta to raise the standard of public transport services in the province through its TransJakarta Improvement Program, which commenced in 2012. The program is divided into two sub-activities. One is focussed on improving the management, operational and financial performance of the TransJakarta BRT system, with a team of experts working closely with TransJakarta management at their head office in Cawang. The team provides hands-on advice and assistance in the day-to-day operations as well as assisting with longer-term strategic planning.

The second sub-activity is broader. In essence, it is concerned principally with improving existing non-BRT public transport services, mainly conventional bus and mikrolet services throughout Jakarta. A separate team of specialists in public transport planning, regulation, operation and engineering is based at the headquarters of the Jakarta transport regulatory authority (Dishub) and is assisting and advising key officers on a wide range of long-term issues including the formalisation of the public transport sector, route network planning, bus design and maintenance, fares and ticketing, and regulation.

In the immediate term the team is also assisting with urgent tasks such as planning the deployment of a fleet of 346 buses purchased by the Jakarta Governor, and the planning of proposed new routes. A major challenge will be dealing with the disruption to traffic when the MRT construction gets under way, and then the need to coordinate road and rail public transport modes when the MRT commences operation. The current international standard for urban bus design is based on a low-floor configuration with wide passenger doors (typically two or three on the largest vehicles) providing quick, convenient and safe boarding and disembarking and ease of access. The ease of access is relevant to all passengers, but particularly for those with mobility impairments or who are carrying luggage or small children. No buses operating in Jakarta at present conform to this standard, but the need to replace ageing vehicles provides an opportunity to address this issue.

Also of concern is the mix of bus sizes, with the predominance of medium-sized buses. As a general rule, for urban bus services with high passenger volumes, the most efficient vehicle is the largest size that can be safely and conveniently used within the constraints of the road system. On several routes in Jakarta, including many which are operated by angkot or medium-sized buses, articulated buses carrying up to 200 passengers, including those standing, could be used safely, even on ordinary roads; on the majority of routes, 12m rigid single-deckers would be practical. Larger buses make more economical use of road space and require fewer drivers. In addition, the capital and operating costs per passenger-kilometre over the life of the vehicle, as well as exhaust emissions, are lower than those for smaller buses.

Again, the vehicle replacement process will enable smaller buses to be progressively replaced by larger buses, enabling the total number of buses to be reduced. There will continue to be a limited requirement for smaller buses, for example on routes where demand is low or road conditions are unsuitable for larger buses. Many people depend on small buses for their livelihoods, and it is important that the transition towards a smaller, more efficient vehicle fleet is managed sensitively and phased in order to minimise adverse social impact.

The role played by the commuter services operated by the national rail operator is also substantial. These heavy rail services will be supplemented by monorail and MRT systems, due to commence operation in 2016 and 2017 respectively. These new services will increase the capacity and attractiveness of public transport on their respective corridors, but existing modes will continue to cater for the majority of commuters throughout DKI Jakarta.

#### About the authors:

**Richard Iles** is a specialist in the planning, organisation and management of public transport systems, with nearly 50 years' experience in the road transport industry, both as a manager and a consultant. Based in the United Kingdom, he has worked in over 30 countries, mostly in the developing world. He has been involved in several transport consultancy projects in Indonesia, commencing with a national logistics study in 1975, and is currently working on an IndII project to assist DKI in the improvement of road-based public transport services in Jakarta. His book "Public Transport in Developing Countries" was published in 2005.

A self-described "public transport education enthusiast", **Rudi Wahyu Setiaji** consults with IndII. He started his career as a research assistant at the Highway and Traffic Engineering Laboratory at the Bandung Institute of Technology, where he specialised in traffic management, railroad operation and management, and public transportation planning. He also taught transportation planning at the Department of Urban and Regional Planning, Universitas Diponegoro, before joining the IndII program.

### TRANSJAKARTA: THE PERFORMANCE PROMISE

TransJakarta has yet to meet its potential to deliver safe, comfortable, reliable services that are well integrated with other modes of transportation and that contribute to reduced congestion in Jakarta. But a focus on proper planning, capacity development, investment, private sector involvement, and related strategies can help TransJakarta to fulfil its promise. • By Tom Elliott



The number of passengers using TransJakarta has not increased in keeping with the addition of more corridors, and in fact has declined in recent years. *Courtesy of IndII* 

Within the Jakarta public transport system, the 170km-long TransJakarta busway or BRT (bus rapid transit) system offers a partial solution to Jakarta's congestion problems. In 2013, more than 360,000 people travelled on the busway every day, according to the manual counts that are undertaken in TransJakarta's 270 shelters (see Figure 1).

This represents a very small proportion of the millions of trips people undertake in Jakarta each day to move around the city. For those who don't travel by car or motorcycle, there are *ojek* (motorcycle taxis), *bajaj* (three-wheeled, enclosed motorised rickshaws), *angkot/mikrolet* (9–14 seat minivans), and over 500 other bus routes – as well as trains, and by 2018, the MRT and monorail (see Jakarta's Public Transport System: An Overview on page 3). However, TransJakarta still commands more media attention than most other transport modes in Jakarta, and often for negative reasons.

The busway is now 10 years old. The number of passengers climbed steadily from 2004 to 2011, but only because new corridors were opened. There has been no significant growth in the number of passengers travelling on Corridors 1–9. Further, there has been no real shift by passengers from cars or motorcycles to TransJakarta. In fact, passenger numbers declined from 2011 to 2013 despite three new corridors being opened. This indicates systemic issues with the busway, its management, and its performance in terms of fulfilling its role in public transportation for one of the world's most congested cities.

Responsibility for managing and operating the system falls to the local transport regulatory agency (Dinas Perhubungan, or Dishub). Operating costs have increased significantly due to corridor expansion, annual service cost increases and the price of labour. In 2014, after projected ticket sales, TransJakarta will be subsidised over 75 percent of its operating costs. If passenger numbers remain static in 2014 at 360,000, each passenger trip will be subsidised at a level almost twice the price of a standard trip (Rp 3500). This creates an unsustainable financial position for the future.

Why is TransJakarta not attracting more passengers? A key reason is because Minimum Service Standards<sup>1</sup> on the busway are not being achieved. During peak demand periods, buses and shelters are overcrowded, creating a poor experience for passengers. TransJakarta is consistently unreliable for commuters trying to get to work on time. TransJakarta rarely, if ever, meets its goals for timely, regular arrivals of buses at shelters. The promise of a bus every two minutes between 6am and 10am on Monday to Friday along Corridor 1, for example, is not a reality. In the end, a motorcycle is a better option.

#### Key Points:

TransJakarta provides only a small proportion of the millions of trips people undertake in Jakarta. The number of passengers climbed steadily from 2004 to 2011, but only because new corridors were opened. Passengers have not made a significant shift from cars and motorcycles to relying on TransJakarta. In fact, passenger numbers declined from 2011 to 2013. This is largely due to problems with comfort and reliability.

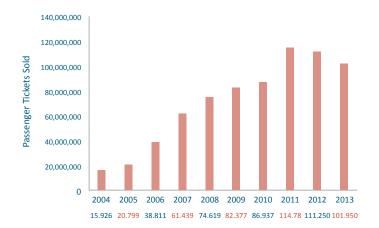
Responsibility for managing and operating the system falls to the local transport regulatory agency (Dinas Perhubungan, or Dishub). The system is heavily subsided, creating an unsustainable financial position for the future.

There are no quick fixes to improve performance of TransJakarta operations. Efforts to purchase more buses will help only if this is done in a well planned context with adequate investment in infrastructure and modern passenger ticketing systems.

Proposals for performance improvement address institutional, planning and investment, passenger and capacity development strategies. The solutions are simple in design but difficult to implement.

A target of around 650,000 passengers per day and large reduction in the subsidy are feasible by 2018 if marketing, investment and performance approaches that support the draft TransJakarta Business Plan are adopted. The decision to form a new government company to oversee TransJakarta's future services and development is a promising start to 2014.

The new TransJakarta Board will need to: invest in strategically placed government owned bus depots and proper fuelling facilities; develop alternatives to using scarce capital funds to buy government-owned buses; invest in corridor infrastructure; undertake proper planning; develop technical capabilities and skills in the new TransJakarta organisation; and regulate cars and motorcycle traffic by charging for road use along busway corridors and increasing parking costs in the city commercial centres.



#### **Figure 1: TransJakarta Busway Passengers 2004–2013** (Including passengers with free tickets and excluding December 2013)

#### What Can Be Done?

There are no quick fixes to improve performance of TransJakarta operations. Current efforts to purchase more new buses will increase bus capacity, but without other interventions, overall improvement is likely to be minimal. Smaller and larger buses are being used on the busway without proper planning. Adequate investment in infrastructure and passenger ticketing systems (see "Understanding Jakarta's Public Transport Fares and Ticketing Structure" on page 20) is needed if the increase in the number of buses is to have the desired affect.

The proposed strategies for performance improvement are simple in design but difficult to implement. They require strong leadership by Jakarta's primary stakeholders. Four strategies have been proposed for developing sustained performance for TransJakarta:

Institutional Strategy: Form a government owned and operated company based a strong concept of busway system management, inter-agency relationships and regulatory policy.

Planning and Investment Strategy: Develop and execute a five-year business plan underpinned by strong government capital investment in corridors, depots and transit technology, with performance targets and measurement systems for public accountability.

Passenger Strategy: Enforce measurable Minimum Service Standards that address six key areas of passenger need: Reliability/Regularity; Security; Safety; Affordability; Comfort and Ease of Use; and Equity.

Capacity Development Strategy: Develop managerial and operational systems. Upgrade the capacity of teams within TransJakarta to plan and manage services for passengers, and ensure that they can control day-to-day operational performance of the busway.

A conservative performance target of around 650,000 passengers per day and reduction in the subsidy to Rp 20 billion per annum (from its currently projected approximate level of Rp 83 billion in 2014) is a feasible target by 2018 if marketing, investment and performance approaches that support the draft TransJakarta Business Plan are adopted. Reviewing the approaches to bus operator contracts can also benefit passengers.

#### A Promising New Start

The decision to form a new government company to oversee TransJakarta's future services and development is a promising start to 2014. The new Board is expected to take control of the organisation by mid-2014. However, they will have some difficult challenges regarding short term community expectations and long term sustainable development. The following are some of the priorities the Board should consider in conjunction with Dishub:

Invest in strategically placed government owned bus depots and proper fuelling facilities. This will improve busway service efficiency and effectiveness, and is crucial to operational performance. It is estimated that over 200 in-service hours each day is lost as TransJakarta operators try to re-fuel CNG (Compressed Natural Gas) buses. Operators should lease back depot facilities as a part of a revised contract for service model.

Develop alternatives to using scarce capital funds to buy government-owned buses. Bus services can be contracted out to the large private sector bus industry in Indonesia – but including a capital component to allow private sector bus purchases (with specifications to ensure that the bus models are appropriate to the route length, expected number of passengers, and so forth) is a better option. The effect will be more capital to spend on shelters, busway lane upgrades, and passenger information systems. Further, operators will have more interest in ensuring their buses are maintained properly and are more reliable.

Invest in corridor infrastructure. This is crucial to long term performance achievement and increased service capacity. Steps to be taken include increasing the number of properly specified articulated buses capable of moving large numbers of people quickly; improving the quality of the busway pavement; widening busway lanes to allow buses to pass; providing bus priority at intersections; and upgrading shelters.

Undertake proper planning. Careful planning of investment and service improvement targets is essential for continuous improvement. Planning must be undertaken with DisHub to ensure that integration with other bus services and public transport modes can occur.

Develop technical capabilities and skills in the new TransJakarta organisation. This will ensure better agency relations, better planning, and ultimately better control of regular and reliable busway services.

Regulate cars and motorcycle traffic by charging for road use along busway corridors and increasing parking costs in the city commercial centres. This will continue the good progress made through regulation/increasing fines in order to "sterilise" the busway lanes. Planning the timing of these measures with increases in busway capacity, and working with other government agencies and the private sector bus industry is also essential for long term improvement.

#### Success Is Possible

TransJakarta performance is not about where TransJakarta is positioned relative to other BRT systems around the world. It's about establishing passenger targets, financial targets and service standards – and developing the managerial and operational systems to deliver the performance targets regulated by the government.

TransJakarta can deliver the performance desired by its stakeholders and the people of Jakarta, and fulfil its role as a part of the broader public transport system of the city. It will take time and patience, and strong leadership from the new company, transport planners and regulators, and on-going participation by the TransJakarta community.

#### NOTES

 Minimum Service Standards have been in existence for some time. However, they were recently re-written in the context of a new provincial regulation which is based on national Indonesian law. The new standards are now being used to underpin the quality of the services that passengers receive. They are a formal document with highly prescribed definitions, measures and targets.

#### About the author:

**Tom Elliott** is the current program leader of the IndII TransJakarta Improvement Program. This article is based on work undertaken for IndII by MRCagney Pty Ltd, transportation specialists based in Brisbane Australia. The regulatory and performance strategies and five year implementation plans were developed with TransJakarta by the on-site consulting team between November 2012 and March 2014.

### SO YOU WANT TO GO FOR A WALK?

Pedestrians in Jakarta literally face many obstacles. But research on "walkability" can help policy-makers to address this issue. • By Peter Midgley



Vehicles, vendors and pedestrians vie for limited space in a ctypical Jakarta street scene.

Photo by Rahmad Gunawan

Walking in most cities is not easy, especially in South-East Asia. But in Jakarta it is almost impossible. With road space at a premium, most of it is allocated to traffic, with the result that sidewalks are often few and far between as well as being too narrow (less than two meters wide) or simply not available.

The inadequate quantity of sidewalks in Jakarta is evidenced by the fact that there are 7,200 kilometers of road in Jakarta and only 900 kilometers of sidewalk. Those that are wide enough to walk on are rare, and can only be found along the main boulevards and within the recently constructed business districts. Unfortunately, these are areas where very few people actually walk.

Elsewhere, where people do walk, the few sidewalks that exist are often clogged with parked motorcycles and street vendors, forcing people to walk in the road (which reduces lane capacity). In most parts of the city, it seems that there is an unwritten rule that sidewalks are definitely not to be used by pedestrians but are designated places to park motorbikes and cars, or to set up street vending stalls. Everybody does it and many people earn a living by charging for the right to park or set up stalls.

Even worse, when traffic is at a standstill (which it often is) along the few roads that do have adequate sidewalks, pedestrians have to share sidewalks with motorcycles (and even cars) that drive along the sidewalks to avoid traffic jams.

Many footpaths are crumbling from lack of maintenance or missing concrete panels over the storm water system, making them dangerous to walk along, especially in the dark. Others are so cluttered with meaningless poles and broken pavements that even motorbikes are not parked on them nor are they used to bypass traffic jams – but they are un-walkable nevertheless.

Clearly walking is important and everyone – even car users and motorcyclists – walks at some point during their journeys in and around Jakarta. Walking provides access to and from public transport services. This is especially important for women who are more likely to rely on public transport. In addition, walking is the only means of mobility for the poor who often have no other alternative. It is therefore an essential mode of transport and needs to be catered for. See the box "An Initiative for Indonesian Walkability" for details on one initiative that is promoting walkability and encouraging pedestrian activity in Indonesia, www.jalan-kaki.org.

It seems as if the Governor of Jakarta, Joko "Jokowi" Widodo, agrees. According to the Jakarta Post<sup>1</sup> he described the condition of sidewalks as being "inhumane" and failing to provide adequate safety for pedestrians, adding that "repairs and construction would start soon". His administration has set a target of laying paved sidewalks alongside all roads in the city by the end of 2014 in a bid to provide security and comfort to pedestrians. This is an ambitious target especially as it seems the proposed sidewalks would be eight meters wide, with curbside trees and involve building small stores and providing benches.

#### Figure 1: Clean Air Asia Field Walkability Survey Parameters

No	Parameter	Description
1	Walking Path Modal Conflict	The extent of conflict between pedestrians and other modes on the road, such as bicycles, motorcycles and cars.
2	Availability of Walking Paths	The need, availability and condition of walking paths. This parameter is amended from the parameter "Maintenance and Cleanliness" in the Global Walkability Index.
3	Availability of Crossings	The availability and length of crossings to describe whether pedestrians tend to jaywalk when there are no crossings or when crossings are too far apart.
4	Grade Crossing Safety	The exposure to other modes when crossing roads, time spent waiting and crossing the street and the amount of time given to pedestrians to cross intersections with signals.
5	Motorist Behaviour	The behaviour of motorists towards pedestrians as an indication of the kind of pedestrian environment.
6	Amenities	The availability of pedestrian amenities, such as benches, street lights, public toilets, and trees, which greatly enhance the attractiveness and convenience of the pedestrian environment, and in turn, the surrounding area.
7	Disability Infrastructure	The availability of, positioning of and maintenance of infrastructure for the disabled.
8	Obstructions	The presence of permanent and temporary obstructions on pedestrian pathways. These ultimately affect the effective width of the pedestrian pathway and may cause inconvenience to pedestrians.
9	Security from Crime	The general feeling of security from crime on a certain stretch of road.

Jakarta's Department for Landscaping and Cemeteries has plans for carrying out improvements (see Box 2). But it is a daunting task to build new sidewalks, improve existing ones, and ensure they are not invaded by motorbikes and street vendors.

A comprehensive survey of current sidewalk conditions with respect to "walkability" is a valuable tool in meeting these objectives. Walkability is a measure of how friendly an area is to walking. This is achieved by undertaking "walkability audits" that collect both quantitative and qualitative data on the walking environment. One such audit method has been developed by Clean Air Asia<sup>2</sup>. It uses a field walkability survey to assess pedestrian infrastructure with high pedestrian volumes based on preparatory surveys and consultation with local stakeholders. Complete route assessments

(covering pedestrian counts, lengths of survey routes, infrastructure conditions, road width, motorised traffic characteristics, etc.) are conducted to provide a comprehensive overview of conditions and the field survey uses a uniform "walkability" rating system based on nine qualitative parameters (see Figure 1).

#### An Initiative for Indonesian Walkability

Alumni of the Australia Awards program – Indonesians who received highly competitive scholarships from Australia to further their studies related to Indonesian development at Australian Universities – have created a resource for everyone in Indonesia concerned with walkability issues. Their site, www.jalan-kaki.org, is an Indonesian language resource full of articles and information sharing research and promoting the benefits of walking. In addition to research and articles, the site offers encouragement to walkers, explaining the health benefits and offering tips on how to avoid boredom while walking.

The site was created by the Australia Awards Alumni Reference Group (ARG) Infrastructure Team. It is one of several activities they've undertaken, another being a study, designed to complement similar research done by the Asian Development Bank in other cities, regarding walkability and pedestrian facilities in Padang, Yogyakarta, and Mataram. (The study revealed that much needs to be done to improve the situation in all three locations.)

#### Jakarta's Strategies for Pedestrian Pathways

A document produced by Jakarta's Dinas Pertambahan and Pemakaman (Department of Landscaping and Cemeteries), Upaya Pemda DKI Jakarta Dalam Meningkatkan Fasilitas Pejalan Kaki di Jakarta, or Efforts of the Special District of Jakarta to Upgrade Pedestrian Facilities (available for download from www.jalan-kaki.org) offers insight into planned and completed improvements to pedestrian routes. It lists an overall development strategy of five components:

- I. Develop and add new sidewalks every year.
- 2. Make existing sidewalks wider, the ideal being four to eight meters.
- 3. Involve members of the community, especially owners of land directly adjacent to pedestrian pathways.
- 4. Improve the quality of the pedestrian path by adding supporting infrastructure such as signs, benches, and bollards (posts).
- 5. Improve the landscape along pedestrian paths by planting trees for shade and bushes for improved aesthetics.

According to this document, current and upcoming efforts undertaken include:

- Developing suitable pedestrian paths from the standpoint of function, aesthetics, and ecology
- Continuing activities to construct pedestrian paths in strategic areas, complete with access for persons with disability
- Installing signage to assist disabled pedestrians along Jalan Thamrin-Sudirman and surrounding areas, beginning on the west side and then continuing on the east
- Conducting maintenance on existing pedestrian pathways

As noted on the ARG website, the Australia Awards Alumni Reference Group – Indonesia (ARG) was launched in June 2010 and represents over 10,000 Government of Australia Awards alumni in Indonesia. The ARG provides input to the Governments of Indonesia and Australia to assist in future policy formulation.

Field surveyors are asked to rate the selected road stretches from 1 to 5 for each parameter (1 being the lowest, 5 being the highest) in each of the area types. The averages for each of the parameters are translated into a rating system from 0 (lowest score) to 100 (highest score).

The Clean Air Asia approach also uses Pedestrian Interview Surveys and Stakeholder Surveys. The former assess travel (mode, travel time, trip purpose, etc.), preferences (needs and desires along with concerns), and social characteristics of pedestrians that use the sidewalks and pedestrian facilities within the walkability audit areas. Stakeholder Surveys assess the main barriers to improving pedestrian facilities.

Clean Air Asia has developed a "Walkability App"<sup>3</sup> to enable anyone to carry out walkability audits and convey the results to the authorities. The app works on the Android and iPhone operating systems and the results are mapped using a Global Positioning System (GPS).

The results of these walkability audits provide invaluable information to decision makers on what, where and how to improve conditions for pedestrians and help establish priorities for investment in repairs and construction. Time to take a walk and a walkability audit!

#### NOTES

- 1. Pedestrians to enjoy city sidewalks next year, Jakarta Post, October 13, 2013.
- http://cleanairinitiative.org/portal/sites/default/files/documents/18\_Walkability\_Survey\_Tool\_20
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- 3. http://walkabilityasia.org/2012/10/03/walkability-mobile-app/#

#### About the author:

**Peter Midgley** is IndII's Urban Mobility Advisor and is the Team Leader of the IndII funded Surabaya Urban Mobility Project. He is also the Urban Mobility Theme Champion with the global Transport Knowledge Partnership (gTKP). Peter has over 40 years of experience in urban transport. He was a staff member of the World Bank for 25 years. He drafted the Bank's first regional urban transport strategy paper ("Urban Transport in Asia: An Operational Agenda for the 1990s") and was a member of the core team that designed and put into operation the World Bank's knowledge management strategy. He has supported the needs of sustainable urban mobility throughout his career.

# UNDERSTANDING JAKARTA'S PUBLIC TRANSPORT Fares and Ticketing Structure

Most public transport modes in Jakarta have an inefficient "flat fare" system. State-ofthe-art electronic ticketing systems will make it possible to introduce improved fare structures and make public transport easier for passengers. • By Richard Iles and Rudi Wahyu Setiaji



TransJakarta introduced e-tickets for passengers in January 2013. Passengers have to place their e-tickets in these turnstiles to enter the bus stop. *Courtesy of Richard Isles* 

Public transport fares can be a contentious issue. Passengers often think that they are paying more than they should, especially if service quality is considered to be poor – as is frequently the case. People on low incomes may suffer genuine hardship when expenditure on essential travel consumes a substantial proportion of their incomes – large families with several children of school age may be particularly disadvantaged.

The transport operators, on the other hand, frequently complain that their income is insufficient to cover their costs and provide an adequate return. They point out that fares have not increased at the same rate as the cost of their inputs, and say they cannot make enough to live on without cutting back on essential items such as maintenance: most cannot even contemplate replacing their old, worn-out vehicles with new ones, hence the all-too-familiar sight in Jakarta of decrepit, dangerous-looking vehicles belching out clouds of black smoke.

Subsidies are often seen as the solution, but this has pitfalls too. Apart from the cost to the taxpayer, and diversion of funds from other deserving causes, a subsidy can remove any incentive which an operator has to minimise costs: without effective regulation it can therefore encourage inefficiency and there is a tendency for expenditure on subsidies to increase while the quality of service actually declines. This is not sustainable.

In Jakarta, the TransJakarta Bus Rapid Transit (BRT) services are subsidised, but other road-based public transport services are not. The fact that the latter continue in business indicates that they must be covering their costs: but the price for this is the poor quality of service. However, another

factor in the equation is operational efficiency. Productivity is low: on many routes there are too many buses or *angkot/mikrolet* (9–14 seat minivans), resulting in long queues of vehicles at terminals awaiting full loads before departing. Scheduling services according to demand, so that only sufficient buses were operated to meet the demand, would reduce the fleet requirement further, with a commensurate reduction in cost. In addition, many of the buses operating in Jakarta are unsuitable for the services they are used for. Most are too small: fewer, larger buses would provide the same capacity, with lower capital and operating costs per passenger; they would also require less road space per passenger.

#### **Key Points:**

Public transport fares can be a contentious issue. Passengers often think that they are paying more than they should, especially if service quality is poor. Transport operators, on the other hand, complain that their income is insufficient to cover their costs and provide an adequate return.

When fares don't increase at the same rate as the cost of their inputs, essential maintenance is deferred.

Subsidies are often seen as the solution, but these remove operators' incentives to minimise costs, and therefore promote inefficiency. In Jakarta, the TransJakarta Bus Rapid Transit (BRT) services are subsidised, but other road-based public transport services are not. They are covering costs, but the price for this is poor service quality. Operational efficiency also suffers.

Another factor is the way fares are charged. Most Jakarta bus routes charge a flat fare irrespective of the distance travelled, although the amount charged varies according to the type of service, and sometimes from route to route.

The flat fare system has advantages in terms of simplicity, reduced boarding time, and preventing passengers from riding longer distances than they have paid for. But there are drawbacks too. Passengers on short trips have higher costs per kilometer, whilst those on longer journeys may end up changing buses more often because it is uneconomic for operators to operate longer routes.

If the fares charged were more closely related to the distance travelled, a more convenient network of routes could be provided, and operators could optimise their fare revenue. However, the more complex fare structure would in turn require a more complex revenue control or ticketing system. State-of-the-art electronic ticketing systems not only make it possible to introduce complex fare structures but can make the use of public transport services much easier. e-ticketing can also provide valuable data on passenger movements, which can be used for planning purposes.

Another factor is the way fares are charged. On most bus routes in Jakarta, the fare charged does not vary, irrespective of the distance travelled, although the amount charged varies according to the type of service, and sometimes from route to route.

Examples of fares charged in Jakarta are:

- Angkot or Mikrolet: Rp 2,500
- Transjakarta BRT: Rp 3,500
- Regular bus (medium sized or large): Rp 3,000
- Air-conditioned bus (medium sized or large): Rp 5,000

This is known as a "flat fare" system. It has certain advantages. Passengers cannot "over-ride", or travel greater distances than they have paid for. The conductor's task is simplified and boarding times are reduced if passengers pay on entry. The system can preclude the need for a ticketing

#### The "Setoran" System

At present, non-BRT bus and angkot services are operated on the "setoran" principle, whereby the driver is required to pay a fixed sum to the bus operator each day; after meeting certain expenses (including, typically, the cost of fuel, and the salary of the conductor, if carried), any surplus is retained by the driver as his income. It is an operating system found in most developing countries where regulatory and managerial capacity is limited.

The setoran system simplifies revenue control for the bus owner or operator, since he is guaranteed a predetermined income regardless of the patronage of the service. In particular, it eliminates the problem of pilferage of fare money, which is invariably faced by more formal operators, and requires robust measures to control it. Where the driver is required to pay for fuel from fare revenue, this eliminates another common problem for operators – that of fuel pilferage.

However, setoran has serious disadvantages. The nonuse of tickets makes a flat fare system almost mandatory; the information on passenger demand and travel patterns which can be obtained from a ticketing system is not available; and the driver, who has an incentive to maximise his revenue, may be tempted to drive dangerously and engage in other undesirable practices, such as obstructing competing vehicles or evicting passengers before reaching the end of the route in order to turn and pick up passengers waiting to travel in the opposite direction.

Unless services are strictly controlled, there is a tendency towards excess supply at certain times, and an unacceptably low level of service at times when demand is low. Complex scheduling procedures, whereby planned frequencies vary during the course of the day, on different days of the week, and on different sections of a route in order to optimise vehicle utilisation (and minimise costs), are not possible with the setoran system, since the drivers will not accept any controls which may result in some buses collecting more revenue than others.

The setoran system has no place in a formal, organised public transport system.

system and its attendant costs.

But there are drawbacks too. If all or a majority of passengers travel approximately the same distance, the fare can be set to reflect the cost of the average journey, and will be similar to what would be charged under a distance-based graduated fare system. This situation may arise where all passengers travel the full distance from one end of the route to the other, or where all travel short distances of similar length, with a high turnover of passengers along the route. However, where individual journey lengths vary widely, as is more usual, passengers travelling short distances will pay more per kilometre travelled than those travelling longer distances, and the disparity becomes greater as the route length increases.

On long routes in particular, therefore, flat fares may be considered inequitable. Moreover, routes where the average distance travelled by passengers is long can be uneconomic to serve with a flat fare system unless fares are set at a high level, but this is likely to deter all short-distance passengers who must pay a high fare for a short journey – and they will be attracted to cheaper alternative services, such as those provided by *ojek* (motorcycle taxis).

A flat fare system often has the effect of encouraging operators to run short routes, in order to maximise the revenue potential. Short-distance passengers are generally happy with the low fare, but longer-distance passengers are forced to interchange between two or more routes, thus in effect paying a distance-based fare, but also suffering the inconvenience of having to change between vehicles. However it is applied, unless there are heavy subsidies, the flat fare system inevitably acts as a constraint on the route network options, and often results in an inconvenient service.

If the fares charged were more closely related to the distance travelled, a more convenient network of routes could be provided, and operators could optimise their fare revenue. However, the more complex fare structure would in turn require a more complex revenue control or ticketing system. But this in itself would provide opportunities for improvement. State-of-the-art electronic ticketing (e-ticketing) systems not only make it possible to introduce complex fare structures but can make the use of public transport services much easier. For example, passengers may use the same ticket for travel on any bus, rail, or taxi service within a large area, merely by swiping the ticket when entering and leaving a station, and when boarding or alighting from a bus. There is no need to hand over cash, and opportunities for fraud are substantially reduced.

E-ticketing can also provide valuable data on passenger movements, which can be used by operators and regulators to plan and continuously monitor and fine-tune the services, to the benefit of all. Such systems are becoming increasingly common worldwide: examples near to home can be found in Hong Kong and Singapore.

In conclusion, with the right vehicles, operated efficiently, and an appropriate fare structure and effective ticketing system, the majority of public transport services in Jakarta should be able to operate without subsidy, at fare levels not dissimilar to those currently applied. However, it is important that fares are reviewed regularly and adjusted to allow for any increases in the costs of inputs. It is important that increases are "little and often" rather than applied infrequently as they have been in recent years. The longer an increase is delayed, the greater it must be when it can be put off no longer – and that invariably creates unrest. Another benefit of e-ticketing is that fares need not be tied to the denominations of coins or notes: any value can be applied if there is no need for cash to be handled, or change given. So increments or variations can be small and frequent, with minimal impact.

There is tremendous potential for improvement by overhauling the system of revenue control, which at present is based largely on the crude "setoran" principle (see box below). Basic e-ticketing systems are already in place on the TransJakarta and commuter rail systems. Eventually replacing these and the setoran system with a state-of-the-art all-mode network-wide ticketing system with more flexible fare scales and structures will play a vital part in the process of bringing Jakarta's public transport system into the 21<sup>st</sup> century.

#### About the authors:

Biographical information about the authors can be found on page 10.

# INVOLVING THE PRIVATE SECTOR IN THE DELIVERY OF PUBLIC TRANSPORT SERVICES

Transport services in Jakarta are provided by a disorganised mix of public and private, formal and informal operators. To ensure that citizens have access to safe, attractive services at affordable fares, Government must transform the current poorly regulated environment. • By Richard Iles and Rudi Wahyu Setiaji



Kopaja is one of several private bus operators in Jakarta. *Courtesy of Richard Iles* 

Many public and private organisations and individuals are involved in the delivery of public transport services in Jakarta, sometimes in an overlapping manner. For example, bus services in Jakarta are operated by both publicly and privately owned companies, and the district government (DKI) has become involved in the procurement of vehicles to be operated by private businesses.

Some functions are recognised internationally as being most effectively carried out by government, while others are most effectively carried out by the private sector. It has taken many decades to identify the most appropriate roles for both sectors. Since public transport services first began, the pendulum in many countries has been swinging between dominance by one sector and the other. This still occurs, but a consensus has been more or less reached as to the most appropriate roles for each.

It is generally recognised that functions such as the planning and regulating of urban public transport services and the provision of infrastructure are best performed by government agencies. Others, such as the ownership of vehicles and the actual delivery of the services, are more appropriately assigned to the private sector. But the distinction is not always clear-cut. For example, some government functions, such as vehicles inspection or route network planning, may be outsourced to the private sector, while some infrastructure (such as bus depots) may be owned by either private or public entities. But in broad terms, government should be responsible for regulating the transport services that are delivered by private sector operators.

#### **Key Points:**

Many public and private organisations and individuals are involved in the delivery of public transport services in Jakarta. Bus terminals are provided and funded by DKI (the Jakarta district government). Workshops and depots are owned by the larger bus operators.

Two of Jakarta's bus companies are publicly owned. DKI owns PPD, which runs large buses on ordinary routes. DAMRI, owned by the central government, operates some Bus Rapid Transit (BRT) services under contract to TransJakarta, which is to become a city bus company in 2014. PPD's market share has declined since private operators entered the market, and its bus fleet is elderly.

There are several private bus operators, some of which operate as cooperatives. Some operate BRT services under contract to TransJakarta, normally as members of consortia.

Within the private sector, a substantial portion of the public transport industry is informal and does not always provide safe and efficient service.

These roles need defining and reassigning so that both informal and formal sectors are responsible for the services they are most suited for. Government must transform the current informal, poorly regulated environment to one that encourages the development of an efficiently run private transport sector which can provide safe, attractive services at affordable fares. Where the capability of the private sector is limited, governments are often tempted to intervene and provide services directly, but this is rarely successful. State-owned transport companies worldwide, particularly bus companies, are rarely able to cover their costs, and tend to provide services which are inferior to those of their private sector counterparts.

In an ideal world, government, through appropriate regulations that are effectively enforced, would provide an environment in which private sector businesses can operate efficiently and profitably. Government may provide some or all of the infrastructure, but the private sector would normally be responsible for acquiring and funding all vehicles and equipment.

Bus terminals are typically funded by the public sector, as they are in Jakarta. Depots and workshops are often funded by the operators who use them, but since such infrastructure represents a long-term investment they are sometimes provided by government, which funds their construction but makes them available to operators on commercial terms.

Bus terminals in Jakarta are provided and funded by DKI. There are few bus depots or workshops, and all of them are owned by the larger bus operators, in both private and public sectors.

There are at present two publicly owned bus companies, namely PPD (*Pengangkutan Penumpang Djakarta*), owned by DKI, and DAMRI (*Djawatan Angkoetan Motor Repoeblik Indonesia*), owned by the central government. PPD runs large buses on ordinary routes; DAMRI operates some Bus Rapid Transit (BRT) services under contract to TransJakarta, which is to become a city bus company later in 2014 based on regulations developed by the Australian Government-funded Indonesia Infrastructure Initiative (IndII).

For many years, PPD had a monopoly on bus services in Jakarta. At one time it operated hundreds of routes with a fleet of over 2,000 buses. Since private sector operators entered the market, PPD has concentrated mainly on basic services for lower-income groups; its market share has declined steadily.

Currently, PPD owns 370 elderly buses, of which approximately 250 are operated daily on 32 routes. The average fleet age is 15 years, and the oldest buses are over 20 years old.

There are several private bus operators, of which the principal ones are Mayasari Bhakti, Metro Mini, Kopaja, Kopami, Steady Safe, Ratax, Pahala Kencana, Primajasa Perdanarayautama, Ekasari Lorena and Bianglala. Mayasari Bhakti is the largest of the operators of large buses; Metro Mini and Kopaja are cooperatives which operate large numbers of medium-sized buses. Several of these operators are also involved in running BRT services under contract to TransJakarta, normally as members of consortia.

Within the private sector, a substantial portion of the public transport industry may be classified as informal: individuals and small business owning one or two vehicles, which are rented to drivers and operated in a relatively disorganised manner. The lack of scheduling, and the deficiencies of the *setoran* system (under this system the driver pays a fixed sum to the bus operator each day and retains any surplus after meeting certain expenses; see the box on page 22 for more details) make proper service planning and control impossible, and militate against the provision of a safe and efficient service in tune with passengers' requirements. However, the informal sector does have a role to play, particularly in the provision of demand-responsive services such as those provided by taxis, *bajaj* (three-wheeled, enclosed motorised rickshaws) and *ojek* (motorcycle taxis).

These roles need defining and reassigning where necessary so that both informal and formal sectors are responsible for the services that they are most suited for. It will be necessary to reduce the role of the informal sector and formalise bus services. All scheduled services (mainly those operated by buses but including *angkot* or *mikrolet* (9–14 seat minivans) should be operated by formal, properly structured and managed organisations (such as companies or cooperatives). Demand-responsive individual services such as taxis, bajaj and ojek may be provided by informal operators, although there is no reason why formal companies should not provide such services if they wish.

Other than the buses operated on BRT services, the majority of buses and angkot are very old and in poor condition, and are long overdue for replacement. One reason for the lack of investment in buses by private operators in Jakarta is that the operating environment does not allow them to earn a return which is adequate to fund the proper maintenance and replacement of buses.

As a short-term expedient, DKI has opted to address the problem of a shortage of new buses by purchasing new buses itself: these are to be operated by TransJakarta, a public sector operator. But in the longer term, the solution is for Government to address the underlying cause of the problem, namely to transform the current informal, poorly regulated environment to one which encourages the development of a viable, efficiently run private transport sector that provides safe, attractive services at affordable fares.

This is much more difficult to do than buying buses, but it will produce longer-lasting benefits. The challenge facing government is to manage this transition – but it is a challenge well worth taking up. ■

About the authors:

Biographical information about the authors can be found on page 10.

### Fighting for Mobility: How People with Disability Experience Jakarta's Transportation System

Jostling crowds, high staircases, broken audio, and big gaps to step across are minor annoyances for the non-disabled. For persons with disability, they can make using public transport a huge challenge. • By Eleonora Bergita



Walking in Jakarta can take much longer for a visually impaired person, who can't see the obstacles and dangers that must be avoided. *Courtesy of Eleonora Bergita* 

If you have ever felt frustrated trying to negotiate Jakarta's public transport facilities, imagine what it would be like if you had problems seeing, hearing, or moving. For people with disability, travelling around Jakarta for everyday reasons like work and leisure can be difficult indeed. It requires courage to confront the challenges of using buses, trains, and other means of public transport. *Prakarsa* spoke with several individuals with disability who brave these difficulties on a regular basis, to gain insight into their experiences and find out what changes to the system would make their journeys easier.

#### **From Buses to Trains**

Ferry Jansen Situngkir, 41, works at Biro Pelayanan Penyandang Cacat (BPPC), the Disabled Persons Services Bureau established by the Archdiocese of Jakarta. He travels daily from his home in Bekasi to his office in Pasar Baru. For years he commuted by city buses, despite the many inconveniences and discomforts he experienced as a visually impaired person, because at least he was familiar with the routine. Only after 14 years, many problems, and encouragement from other people with visual impairment did he decide to switch to the commuter train (KRL) – a switch he is now glad he has made.

Ferry took the city bus from Bekasi to a stop approximately 100m from his office. Uncertain travel times made him late for work by as much as four hours on occasion. Sometimes he would stand for the entire journey, if no sighted passengers told him there was an empty seat available. After disembarking, the walk to his office – which would take a sighted person about 10 minutes – took another painstaking 30 to 40 minutes. Sometimes he bumped into a bus or other obstacle while trying to reach the sidewalk; always a challenge because his bus did not stop in the same spot every day. He traced the walk on the right hand side of the road with his white walking stick; on the left an assortment of motor vehicles idled as they waited for passengers. As a pedestrian in traffic he was always at risk of being struck by a vehicle. His most unpleasant memories are of times when the street was flooded and he had to walk through the water.

#### **Key Points:**

For people with disability, traveling around Jakarta for everyday reasons like work and leisure can be difficult.

Ferry Jansen Situngkir, who is blind, travels daily from his home in Bekasi to his office in Pasar Baru. For 14 years he commuted by bus, sometimes standing for the entire journey if no sighted passengers told him there was an empty seat available, then walking for another 30 to 40 minutes, bumping into obstacles and risking being hit by a motor vehicle. A switch to the commuter train has been a big improvement, as he is allowed to enter the station through a reserved entrance and is then assisted by train staff. He still faces difficulties, however, such as exiting crowded trains, climbing high staircases, and negotiating wide spaces that offer few cues to his location. He recommends more audio announcements of station stops, more effective priority seating for persons with disability, and special lanes and posts that can help visually impaired people to identify their location.

Ignatius Tuntas Wijaya (Wiwid), is also visually impaired and regularly uses TransJakarta buses. TransJakarta is actively making improvements so that its buses are more disability-friendly and this helps Wiwid feel comfortable using TransJakarta bus as he can usually make his way around bus shelters and bus personnel are often helpful in escorting him to a seat or out to his next mode of transport after he gets off the bus. But frequent lack of audio makes his journeys more stressful.

Cucu Saidah, who uses a wheelchair, is a member of Jakarta Barriers Free Tourism (JBFT), which advocates for more accessible transport and conducts public education on disability issues. Cucu notes that many new buses accommodate wheelchairs and feels that the attitude of TransJakarta bus personnel is often positive. But she has also had negative experiences, such as a stuck wheelchair.

For persons with disability, public transport can be not only arduous, but more expensive, since they have to rely more on taxis and similar modes of transport. Ferry estimates that he spends about one-third of his income on transportation costs. He hopes that Indonesia will reach a stage where disability-friendly designs, subsidies, and an educated public make public transport facilities affordable, accessible, comfortable, and safe for all.

Overall, the switch to the commuter train has been a big improvement. Ferry has a regular *ojek* (motorcycle taxi) driver who is allowed to enter the parking lot at no fee through an entrance for the disabled, making his walk to the train shorter and safer. He climbs the stairs, and is then escorted to the train platform by a friendly KRL officer. The officer usually asks Ferry about his travel plans, then relays this information to officers in the train carriage, who make sure he is seated in the area reserved for pregnant women, the elderly, and persons with disability.

Ferry reports that the train passengers seem friendlier than those on the bus. He often receives offers of assistance to manage the staircase at Juanda station, where he alights to go to work.

The trains still pose some challenges, however. At some stations, such as Klender, there is a high step between the platform and the train door. If he is in one of the back carriages, it is impossible to exit, so he and the other passengers have to walk to the front. During peak hours the train is very crowded, which makes the walk difficult.

It's also difficult to get out at the Kranji Station in Bekasi on his way home. It is a long walk with several stairways to the station exit. In front of the station is a wide open space with many obstacles and moving vehicles. This is a tricky setting for a blind person. As Ferry explains, "We are good at passing through a hallway, because we can feel both sides with a cane, but it becomes very problematic when we are in an open place, because we lose our sense of direction."

#### **Suggestions for Improvement**

Ferry, whose wife is also visually impaired and who shares his frustrations with public transport, knows what would make his travel safer and easier. One option is special lanes marked with poles or similar objects to help blind people enter and exit the train station safely and independently. Without such aids, he has occasionally become disoriented and hit his head. Sometimes he asks a fellow passenger to tell him where things are, but since commuters are often rushing to their destination, this is not always possible.

Ferry also notes that an audio announcement of upcoming stops would mean that he wouldn't have to rely on counting the station stops to be sure he doesn't miss where he intends to get off. Although he has been satisfied with the services of the train attendants, he says there is room for improvement in areas such as communication between officers on the train and at the station to let staff know that there are blind or disabled persons in particular train cars. This would facilitate getting off the train when it is very crowded. As Ferry notes, it can be hard for him as an able-bodied person; for a physically disabled person, perhaps using crutches, it could be harder – especially if passengers are pushing and shoving from behind without realising someone disabled is in front. Ferry hopes that in the future the train company will consider setting aside special carriages for people with disability, similar to those that are set aside for women.

Ferry is happy when he can share his knowledge of how to use public transport with others who are visually impaired. Tips from another blind person are more useful than suggestions from a sighted person. "Fellow blind people can provide the information that other blind people need, such as noting that there are eight flower pots between the train stop and the exit; a sighted person wouldn't know that." Right now, Ferry is helping his brother-in-law to learn how to get to work by train.

#### Using TransJakarta

Ignatius Tuntas Wijaya, 30, known as Wiwid, is another visually impaired user of public transport. Since he started working as an employee at several offices in the areas of Pacenongan and Kuningan, Wiwid has been using Jakarta's Bus Rapid Transit system TransJakarta, which is making improvements so that its buses are more disability-friendly. Wiwid is active with BPPC and is now working with online media. He feels comfortable using the TransJakarta bus because, when he needs to change to another bus corridor, there is always a facility that connects the bus stops so he can find his way around. He also appreciates help from the bus personnel, although there are not always enough officers on duty at the counter to escort him. But they often help him to reach an ojek or other mode of transport to continue his trip when he gets off the bus.

Inside the bus, an attendant often helps him find a seat. This is useful because, although he can stand easily, he is always carrying a number of items such as his walking cane. Persons who cannot see also lose their balance more easily when standing on a swaying bus, since they can't rely on visual cues to remain steady.

Wiwid is mostly happy with TransJakarta facilities, with some exceptions such as the lack of audio information about bus stops. The audio is often broken or unused, replaced by music, which is very frustrating and can lead to problems. One day Wiwid got on the wrong bus, thinking he was headed to Kampung Rambutan; in fact he was on his way to Cibinong. He did not get home until nearly midnight.

#### **Barriers Free Tourism**

Cucu Saidah is the Technical Coordinator of the Australia Indonesia Partnership for Justice and a member of Jakarta Barriers Free Tourism (JBFT). JBFT, which was established in March 2012, advocates for more accessible transport and conducts public education on disability issues. The group holds monthly outings that attract dozens of participants – including, in July 2013, Jakarta Governor Joko Widodo, who accompanied the group on a trip via TransJakarta. Among other activities, JBFT has provided training to public transport personnel (for more about JBFT, see their Facebook page).

Cucu, who uses a wheelchair, notes that many new buses accommodate wheelchairs. She also feels that the attitude of many TransJakarta bus personnel is positive when serving persons with

disability. "For example, there is a helpful officer at the ticket counter who will ask us how they can assist," said Cucu. But she has also had negative experiences, such as a harrowing instance when the wheelchair of a JBFT participant got stuck while trying to exit a bus shelter.

It's not just blind people, or those with mobility impairments, who face problems. Sometimes personnel in ticket booths are not clearly visible, making it hard for deaf customers to gain information from lip-reading.

In other cases, useful facilities have been built but are in disrepair, unused, or poorly designed, such as elevators at some bus stops that are hard to reach. Some bus stops have doors suitable for wheelchairs, but they are blocked by vending machines. Likewise, when the entrance for wheelchair users is unusable/unable to be opened, some passengers have to be picked up and carried across the entry gate, which is an uncomfortable experience.

In other cases, staircases have high, difficult steps. Suitable wheelchair ramps would be a solution, but some of the existing ramps are too steep and/or slippery.

#### The High Cost of Travel

For persons with disability, public transport can be not only arduous, but expensive. Time is lost to slow travel. When a stop is missed and the traveller has to backtrack, the cost of the fares is higher. The need to use an ojek or other private transport because walking is impractical adds to the expense.

Cucu affirms that people with disability pay more for travel than others, because even if they use the same bus or train as others, they rely much more heavily on feeder transport vehicles, such as taxis, to complete their journeys. Says Cucu, "We want to be productive and to contribute to society. Disabled people also pay taxes, and we are also entitled to good public services."

Ferry estimates that he spends about one-third of his income on transportation costs. This is because, although he uses the KRL every day for a return trip, he has to use an ojek on either end.

Ferry hopes that one day Indonesia will replicate conditions he has heard about in other countries, where disability-friendly designs, subsidies, and an educated public culminate in public transport facilities that are affordable, accessible, comfortable, and safe. This supports mobility and independence for disabled people, helping them to be fuller participants and contributors to society.

#### About the author:

**Eleonora Bergita** (Gite) is IndII's Senior Program Officer and Event Manager. She is an experienced writer and event organiser with more than 10 years of experience in journalism and event management. Her previous background includes work with a German NGO, an Indonesian magazine, and a PR company. Gite graduated from the University of Indonesia, majoring in German Literature.

# MANAGING URBAN TRANSPORT FINANCE: A Challenge for Local Government Leaders

Local Government leaders are under pressure to finance various infrastructure programs and to improve municipal services. Constraints in the urban transport sector and the availability of central government funding mean that it is necessary for them to find innovative ways to fund their transportation programs. • By Danang Parikesit



A high level of expenditure would be required to fully rationalise the public transportation system in Jakarta. This scene near a bus terminal shows several of the modes that citizens currently rely on, including motorcycles, *bemo*, *bajaj, kopaja*, and *ojek*. *Courtesy of Annetly Ngabito* 

Transport is a sector that is often under scrutiny by media and expert analysts. In cities large and small, transportation issues continually arise and the public puts pressure on their Local Government (LG) leaders to respond. As a result of more available information and bettertrained government officials (after 10-15 years of postgraduate programs in transport), mayors, district heads and governors should have enough insight to start developing infrastructure policies and programs. Professional organisations like the Indonesian Transportation Society (MTI) and the community of transport users can help the government identify policy issues and develop needed action plans. Most cities and towns have Tataran Transportasi Wilayah (Tatrawil) and Tataran Transportasi Lokal (Tatralok) as guiding documents for provincial/local public transport planning. Through local regulation, some have made these documents a legal basis for planning programs or activities; others use them as a reference. This constitutes significant progress after the 1998 reformation. With various revisions on the decentralisation law and the issuance of Government Regulation no. 38/2007 on the Division of Responsibilities between Government, Provincial Government and Local Government, it has become clearer how LGs are to manage and fund local programs.

Through the Ministry of Transportation (MoT), the Central Government has given support for Tatrawil and Tatralok studies, and has provided grants for public buses to certain cities. MoT's programs encourage urban transportation strategies like TransJogja, TransMusi, TransKawanua

and other "Trans". The success of TransJakarta has inspired a revival of public transport in urban areas. Some of these programs suffer from bureaucratic obstacles and some are not well planned, so the public doesn't fully utilise them. However, they clearly show public support for funding allocations by central and local legislatures to urban transport programs. The concept of government obligation in the administration of public transport has resulted in those LGs that have a "Trans" program allocating 2–-3 percent of their local funding (APBD) to urban transport subsidies.

#### **Key Points:**

Legislation, public scrutiny, planning documents, higher education in the transport sector, and input from transport associations have all helped to make it clearer how Local Governments (LGs) should manage and fund local programs.

Public expenditure survey studies show that infrastructure receives 5–7 percent of the funds allocated from the local budgets. Around 3–5 percent is used to fund the road sector. Regions have a strong incentive to promote vehicle ownership. It is not easy to respond to this challenge.

Development expenditure for the transport sector is small. The Center for Transportation and Logistics Study (PUSTRAL)/Bina Sistem Transportasi Perkotaan (BSTP3) has estimated that the budget required for urban transportation in Indonesia is at least four times more than what has been planned by the Ministry of Transportation.

Some areas are trying to share the cost of infrastructure and public transport services with the private sector, for example to Giwangan Terminal in Yogyakarta and the two monorail corridors being built in Jakarta. The Jakarta administration and the people of Jakarta have been waiting 24 years for Mass Rapid Transit (MRT) construction to begin. It has been predicted that MRT Jakarta will become the most expensive urban railway system in the world.

The opening of fiscal space due to the reduction of fuel subsidies in July 2013 should be a chance to push fiscal decentralisation in the transport sector. The central government should focus on policy and implementation guidance for urban transport. Decentralisation of funding for urban transport will strengthens LGs' capacity to self-finance their own programs.

Staff expenditure reduction through outsourcing and the opening of new fiscal space must be tasks for the LGs. If budget flexibility is obtained, then 5–15 percent of the APBD budget for the transport sector will provide more room for transportation and public works agencies to fund pedestrian facilities, terminals, and bus shelters, along with road safety and congestion control measures.

Restructuring LG's revenue to raise the contribution of property-related taxes and reduce reliance on vehicle-related taxes should be a long-term priority. There could also be competitive grants for sustainable transport that reward innovative cities committed to sustainable development.

The government needs to develop a risk guarantee scheme for private sector initiatives in the transport sector. Local development banks should be encouraged to take advantage of savings not only for consumer lending (e.g. for motorcycles and cars) but also for the kind of lending that would stimulate local infrastructure development.

A public expenditure survey study by the World Bank shows that infrastructure receives 5–7 percent of the funds allocated from the local budgets (*Anggaran Pendapatan Belanja Daerah*). Around 3–5 percent is used to fund the road sector. Public transport takes a smaller share. Clearly, regions have a strong incentive to promote vehicle ownership rather than to suppress it in favour of public transport.

It is not easy to respond to this challenge. Development expenditure for the transport sector is small and is often squeezed by the claims of other priority sectors that also need funding. Meanwhile, the main sources of development funding are still the general allocation grant or DAU (*Dana Alokasi Umum*), which focuses on routine staff expenditure and government services, and the special allocation fund or DAK (*Dana Alokasi Khusus*) for specific needs. At present, DAK for infrastructure is only used for the road sector. It does not appear that DAK for urban transport, initiated by the Minister of Transportation in 2008–2009, will make progress anytime soon. Regarding development expenditure needs, the Center for Transportation and Logistics Study (PUSTRAL)/Bina Sistem Transportasi Perkotaan (BSTP3) has estimated that the budget required for urban transportation in Indonesia is at least four times more than what has been planned by the MoT. Most LG transportation agencies make a pitch for less than they actually need because they realise that funding limitations make it unlikely that legislature (DPRD) will allocate sufficient budget for this sector.

Some areas such as Yogyakarta, and of course Jakarta, are innovating to try to involve the private sector in sharing the cost of infrastructure and public transport services. Yogyakarta has invited the private sector to finance the construction of Giwangan Terminal in the southern part of the city, while DKI Jakarta is permitting a private sector initiative to build two monorail corridors in the heart of Jakarta's business district.

#### **Developing Terminals and Monorail**

Yogyakarta decided to build a Type A Terminal using the Public Private Partnerships (PPP) approach, allowing the private sector to manage the terminal and commercial buildings inside the terminal area in the form of a Build, Operate and Transfer (BOT) concession. The terminal building was built at a price cheaper than the owner's (government's) estimate and with a higher level of productivity. The concessionaire successfully built the infrastructure, but unfortunately suffers financial losses. The LG and private sector failed to manage the risk of receiving lower revenue due to the other government policies that are beyond their control.

PT Jakarta Monorail (JM) recently started reinvesting in Jakarta after years of hiatus. By working with the new investor ORTUS, JM was able to redesign the company's revenue management thanks to the new license: it no longer has to guarantee a minimum passenger revenue level, as was required by the initial agreement. The company recognises that fare revenues would not be enough to cover the cost of investment, maintenance, and capital incurred. JM will use the station areas as commercial property, which is expected to deliver more income than the

revenue from passengers. This entrepreneurial spirit is commendable, since the private sector does not receive any guarantee from the government.

The Jakarta administration and the people of Jakarta have been waiting 24 years for Mass Rapid Transit (MRT) construction to begin. It has been predicted that MRT Jakarta will become the most expensive urban railway system in the world. Although the Government of Indonesia, in this case the Ministry of Finance (MoF), has the legal obligation to repay a Japanese government soft loan, the Jakarta provincial government is obliged to repay 51 percent to the central government. It looks as if the Jakarta administration has no risk, but the truth is that it has to bear the subsidy if tariffs are controlled by the government and the DPRD.

#### **Decentralising Funding**

Public sector spending scrutiny is an important policy intervention. I am one of those who believe that strengthening the role of LG in planning and implementing development, including in transport sector, has to be accompanied by an adequate and appropriate funding allocation. The opening of fiscal space due to the reduction of fuel subsidies in July 2013 should be a chance to push fiscal decentralisation in the transport sector. The central government, in keeping with its responsibilities, should put more focus on preparing policy and implementation guidance for urban transport. The regional bus grant program should be accompanied by greater regional capacity to increase the transport fleet through private sector investment. Fund decentralisation for urban transport will become an instrument that strengthens LGs' capacity to self-finance their own programs, and not to depend on the funding allocation by MoT, which has many other priorities.

Staff expenditure reduction through outsourcing and the opening of new fiscal space must be tasks for the LGs, with fiscal regulation provided by MoF. Efforts to limit staff expenditure and official travel to a maximum of 50 percent of the APBD (at the moment it is approximately 60–70 percent) should be supported. If budget flexibility is obtained, then 5–15 percent of the APBD budget for the transport sector will provide more room for innovative transportation and public works agencies to fund such infrastructure as pedestrian facilities, terminals, and more modern and better maintained bus shelters. Increased sums can also be invested in better road safety management, including Area Traffic Control Schemes and surveillance cameras for more responsive congestion management.

Restructuring LG's revenue to raise the contribution of property-related taxes and reduce reliance on vehicle-related taxes should be a long-term priority. In general, in Indonesia, the ratio between the two is 30:70 percent – quite different from other developed countries that support LGs to develop new areas, revitalise older parts of the city and integrate housing, office and transport developments. The more that LG revenues come from property tax and "value capture tax", as in Japan, the more that LGs will be eager to develop profitable commercial areas and "liveable" cities.

One current thought is to provide competitive grants for sustainable transport. With the introduction of "supporting NAMAs" (Nationally Appropriate Mitigation Actions) funded by Germany and the United Kingdom in a few cities in Indonesia, this concept can be an example of future grant allocation to the regions. These programs can be combined with other P2KH (Program Pengembangan Kota Hijau or Green City Program), driven by the Ministry of Public Works. It is time we encourage cities that show passion on sustainability issues to innovate, and reward them with a grant from central government.

Learning from risk management of PPP projects documented by the Indonesia Infrastructure Guarantee Fund, the government needs to develop a risk guarantee scheme for private sector initiatives in the transport sector. In the future this sector could attract private sector cofinancing of projects that help increase mobility. A fairer concession agreement, a tariff system that reflects consumer purchasing power, property management incentives to mitigate revenue risk and a sensible process of land acquisition are factors that will encourage more opportunities for PPP.

#### **Promoting Creative Financing**

The finance and banking sectors have expanded very well in Indonesia. Some local development banks also can extend credit to investments. They should be encouraged to take advantage of savings not only for consumer lending (e.g. for motorcycles and cars) but also for the kind of lending that would stimulate local infrastructure development. Local obligations are one of the potential financing options, although caution is needed to avoid the kind of malpractice that has been experienced in some Latin American countries. An existing financing scheme using PIP (Pusat Investasi Pemerintah or Government Central Investment) needs to be socialised too: it has an attractive interest rate and supports regions that have reliable financial reporting.

Optimism is needed in developing financing capability for future transportation programs. Without that belief, it will be hard to achieve the transportation systems that will promote people's welfare. ■

#### About the author:

**Prof. Dr. Danang Parikesit** is a Professor of Transportation, Universitas Gadjah Mada, and the President/Chairperson of the Indonesian Transportation Society. Since 2010 he has worked as a policy adviser for the Ministry of Public Works. He is also the Chairperson of the International Forum for Rural Transport and Development, an international development NGO based in the UK. He is a Member of the Board of Directors of the Eastern Asia Society for Transportation Studies, which is an academic society based in Japan with a goal of promoting new scientific theories and approaches for Asia's transportation system. He currently serves as an independent and non-government Board Member of the Indonesia Infrastructure Initiative.

# Briefing Note: FINANCING SANITATION

### **THE ISSUE**

The Government of Indonesia (GoI) is committed to meeting the Millennium Development Goals for sanitation. However this is proving to be an elusive goal despite progressively higher sanitation budgets by the GoI. A number of factors are working against reaching this goal. By far the most telling is the lack of any significant engagement by Local Government (LG) to invest in sanitation infrastructure. This lack

of engagement is a serious failure because sanitation is an obligation of LGs and has been so since the decentralisation laws of 1999 and 2004, more than a decade ago. What has gone wrong?

Achievement of MDGs and other targets is lagging because of disengagement by LGs. Non-inclusive funding mechanisms are a factor in LG indifference towards investment.

The evidence suggests that LGs are disengaged not by choice, but by the non-inclusive funding mechanisms in the sector. The same observations can be made for other decentralised functions, public works, health, and education. LGs say they have been tasked but not given the means to execute these tasks. Is this true? If we compare the budgets for sanitation of central ministries, they are eight to ten times as large as the funding provided directly to LG through DAK (*Dana Alokasi Khusus* or Special Allocation Funds). Since sanitation is for an obligatory function of LG, it seems that

The historical lack of commitment by government to funding for sewerage has resulted in a severe backlog.

funds have not followed function and that LG may have a case to prosecute. How did the Government arrive at this funding regime?

#### WHAT HAS HAPPENED SO FAR?

Historically, the Government has relied on households to provide their own sanitation facilities. This was an acceptable approach when urban densities were low. Unfortunately, investment for municipal sewerage infrastructure has been progressively deferred in preference to individually provided facilities for the last 25 years. As a result only 11 of 500 LGs have municipal sewerage. This level of service coverage is less than 1 percent of the urban population and puts Indonesia second from last in the service index scale of South East Asian nations. More recently, the Government has announced a policy of more aggressively pursuing municipal sewerage investment mostly through external funding. This is a part of the program to accelerate sanitation development, or PPSP (*Percepatan Pembangunan Sanitasi Permukiman*). The target is to

construct new municipal sewerage facilities in five LGs. Programs are in

Funding for sewerage requires commitment from LGs, but this is not forthcoming to any significant extent.

preparation for external loans from JICA to develop sewerage in Jakarta and for ADB in four other cities in Indonesia. However, the funding capacity of LGs to contribute to the investment is the main constraint in determining the size of the proposed schemes. Quite simply, LGs do not have the budgets to support these investments. The PPSP roll-out plan has estimated a total investment requirement of USD 7 billion during the five year period 2010 to 2014. This is approximately USD 1.4 billion investment each year. Is the government able to finance these?

#### **IS THERE A WAY FORWARD?**

The Government, in announcing a more aggressive pursuit of sanitation goals increased the budget of the Ministry for Public Works by approximately 100 percent for the five year devel-

Central and local budget allocations for local functions are mismatched. Greater leverage is achieved through direct grants, compared to central funding which has an opposite effect.

opment period 2010–14. This budget is approximately A\$ 380 million per year. By comparison, DAK for sanitation to all LGs is A\$ 45 million per year. Two things are immediately obvious: first, the total funding identified is far short of requirements; and second, one would expect that direct funding to LGs for municipal service functions to be higher than central funding. In fact, the decentralisation and fiscal balance laws require a progressive devolution of funding from central government to LGs. This has not happened. Poor accountability and transparency in the use of DAK funds is one reason cited for this slow transition. Notably, the sectoral ministries have been the most vocal in criticising the DAK as poor performing. As a result, central government has lagged in transferring funds directly to LG, preferring the *Tugas Pembantuan* (TP) channel under which Ministries "assist" LGs to fund their obligatory functions. However, running counter to this view, recent analyses of spending on infrastructure show that despite its lack of transparency and accountability, the DAK leverages more funding from LG than does TP. In fact, TP results in substitution effects. This means for every unit of TP funding, LG reduces its own funding by half a unit. Imperfect as it is, DAK at least leverages 10 per cent from LG.

DAK (specifically allocated) funding is better than central funding, but not as good as the Hibah for leveraging LG funds. Improving the DAK mechanism is one solution. Another is to apply the Hibah more widely. Clearly, increasing the performance of DAK funding should result in a net increase of LG funding. The World Bank is supporting just such an initiative through the Local Government and Decentralisation Project. An even better option may be to look at other grant mechanisms made possible through recent regulations, which increase accountability and leverage. This is the Hibah which has been implemented in pilot format during IndII Phase 1 and scaled up in IndII Phase 2.

#### WHAT IS DIFFERENT ABOUT THE HIBAH?

The Hibah is a grant to LGs that is administered through a legally binding grant agreement between the head of the LG and the Minister of Finance. The Grant Agreement specifies what the LG must do with the grant funds, how the work will be verified, and how the funds will be paid. This mechanism lends itself to output based modality which adds an extra layer of accountability over the process. By comparison, once the DAK allocation is determined by parliament it becomes a budgetary entitlement of LG with little scope for intervention and review by central government. The IndII phase 1 Water and Sanitation Hibah leveraged an estimated 60 percent of the grant as contributions from LGs. Central government widely acknowledges this level of efficiency. Scaling up the Hibah in phase 2 of IndII includes governance targets and performance linkages to other GoI programs to increase the impact and

penetration of the Hibah. The logical next steps are for Government to accommodate the Hibah mechanism into the financing mainstream and to link it to performance improvements by LGs.

Hibah is a legally binding, accountable, and transparent funding mechanism. Mainstreaming the Hibah is logical next step.

#### **MAINSTREAMING – NEXT STEPS**

At the start of this Briefing Note we reviewed the obstacles to achieving sanitation targets by identifying weaknesses in the funding mechanism. Central

A first step may be to apply loan funds to the Hibah. This has been done for other infrastructure loans.

government implementation of LG infrastructure acts as substitute financing, reducing the level of commitment of LGs. Grant financing to LGs through the Hibah leverages funds, increasing the level of commitment. Achieving the MDGs and PPSP targets requires greater commitment from LGs. Government may be divided on the readiness to use APBN (*Anggaran Pendapatan Belanja Negara*, or National Budget) funds for the Hibah, citing technical reasons. However the letter and intent of the decentralisation legislation is to devolve continuing TP funding to the LGs. A first step towards this might be to allocate part of the loan funds for sewerage from the forthcoming JICA and ADB loans through the hibah channel. This has been done for other infrastructure loans including the loan for the DKI Jakarta Mass Rapid Transit (MRT) Project and World Bank Irrigation loan. Such a move would generate more LG funding overcoming the present lack of commitment and engagement of LGs.

#### FURTHER LONG-TERM BENEFITS

Greater engagement of Local Government will result in more sustainable sanitation services. Under the Hibah funding, LGs will have ownership of the assets and will retain sole responsibility for the maintenance and upkeep of these assets in accordance with prevailing government regulations. Infrastructure constructed under TP funding is transferred to LGs for them to use. Since central government retains ownership of the assets, LGs are under no pressure to maintain them. On the

As assets accumulate, the burden for maintenance, refurbishing, and replacement of assets overtakes the cost for new assets. It is essential to have proper ownership and responsibility for assets invested over time to retain their long term service. contrary there is a perverse incentive to save money and allow the infrastructure to depreciate since the historical evidence is that central government will likely replace it. The burden of

maintenance, refurbishing, and replacement becomes increasingly important as infrastructure assets are accumulated. If infrastructure assets are going to accrue and grow to meet the projected sanitation service targets, the beneficiaries and operators of the assets should shoulder the responsibility of ownership. At one stroke the Hibah mechanism binds the LG into a legal obligation for maintaining assets and service levels long after the grants have been disbursed. Further long term incentives can be leveraged by linking the Hibah to achievement of minimum service standards as stipulated in government regulation PP 65/2005 for LG obligatory functions, and assessed through government regulation no. 6/2008 which describes how to evaluate LG performance towards achieving the minimum service standards.

– Jim Coucouvinis, IndII Technical Director – Water and Sanitation

# Briefing Note: IMPROVING TRANSPORT SERVICES BY PAYING ATTENTION TO GENDER DIFFERENCES

#### WHY CONSIDER GENDER DIFFERENCES AND TRANSPORT?

Transport contributes to an individual's quality of life by enabling access to health care, education and employment. This leads to greater productivity and economic growth. Everyone wants high quality transport systems which maximise effectiveness, efficiency and sustainability. But to create these systems, planners and operators have to be responsive to the needs of their consumers. While transport is seen as gender neutral – as benefiting everyone equally – studies in both developing and developed countries show that, in comparison with men, women have much more complex transport needs which have to be addressed. Responses

Efficient, effective and sustainable transport infrastructure and services are those which respond to the different needs of women and men. are required which are innovative and thoughtful and which develop attractive transport systems that both women and men enjoy using.

#### WHAT ARE GENDER DIFFERENCES IN THE USE OF TRANSPORT SERVICES?

Women make more non-work-related trips and have distinct travel patterns compared with men because of their different responsibilities. In comparison with men, women perform multiple roles as income earners, home managers and carers, and in the community. They may

carry bulky loads or have small children or elderly relatives with them. Women are more likely to take shorter, more frequent, and more dispersed trips throughout the day. Some

Women have more complex transport needs than men because of their domestic, social and work-related travel; and they are more dependent on public transport to meet these needs.

women work late at night or early in the morning in occupations such as maids and nurses. They are more likely than men to make complex "chain trips" where, for example, they travel from work to the shops, then to a parents' house, before returning to their own home. These travel patterns mean that women require flexibility in the timing and routes of transport services available. A further influence on travel patterns is vehicle ownership and use. Men are more likely to own a motorbike or a car which they use for travel than women who are more highly dependent on public transport services to meet their specific needs.

In comparison to women, men's transport needs are simpler, less likely to involve "chain trips", are mostly work-related, and more often involve the use of their own vehicle.

#### WHAT ARE WOMEN'S TRANSPORT CONCERNS?

There is little research regarding gender and transport in urban or rural settings in Indonesia. This is a large gap which needs to be filled. Nevertheless, research worldwide and information from other sources in Indonesia, such as the media, provides pointers to areas which are of concern to women:

• Women appreciate efforts to ensure their safety and security and protect them from harassment, such as the provision of lighting, links to feeder transport so that they don't have to walk far, and facilities which are open, not enclosed. One of the features women

liked about IndII's Bus Improvement Project shelters was that they were open, so that other people could see what was going on in the shelter. Women are reluctant to use transport services which they feel expose them to danger, and may forego trips or seek alternatives which are less efficient or more costly. Concern with safety includes measures such as hand rails, non-slip surfaces and tactile markings to ensure pregnant women, those who are elderly, women carrying heavy loads, or those with small children, don't fall.

- Space between themselves and men is an important issue for women. Overloaded buses, trains, and even gangplanks, mean that men can be close to and touching women.
- Transport facilities need to take into account women's smaller stature compared with men. Women have more difficulty with high steps and gaps between a platform and a bus than do men. Seats and overhead passenger handles (*pegangan*) need to be at an appropriate height for women.
- Routes, timing and frequency of services need to suit women's distinct travel patterns, such as providing regular services to shops, health clinics, schools and work places. Privatising public transport can lead to a lack of interest in servicing the less lucrative routes in which women are interested.

Data is lacking on Indonesian women's particular transport needs and concerns. Security and safety; sufficient space; consideration of the limitations of women's smaller stature; routes, timing and frequency of services; comfort – especially for pregnant women and women with small children; affordability; and employment opportunities are important concerns for women.

- Pregnant women and women with babies and small children need facilities which are easy to access and provide sufficient, comfortable seating.
- Affordability needs to be considered. Women generally have less money available for their use than men because, on average, they are in lower income positions, or only have access to housekeeping monies.
- Transport systems offer many opportunities for employment but these are dominated by men. Women may feel hesitant to apply for work in this less traditional area but, with encouragement, obtaining work in transport increases their employment options.

### HOW CAN THE MINISTRY LEAD THE WAY?

IndII's Gender Mainstreaming Scoping Study identified a number of valuable opportunities to improve the way gender is addressed by the Ministry of Transportation (MoT). Three strategic measures are:

- Substantially increased, tangible support from senior personnel in MoT for gender mainstreaming efforts in planning and implementation and the activities of the gender mainstreaming working group, for example, by issuing instructions and formal letters to require personnel to support gender initiatives, and attending gender-related meetings and workshops personally.
- Collection, especially by the Government's Research and Development Divisions (Litbang), of gender disaggregated information, analysis of gender issues, and application of their

Effective attention to gender issues in MoT requires increased tangible support from senior personnel; data collection and analysis to identify gender issues in transport; and the integration of gender issues into policy and planning documents with capacity building for personnel to implement them. findings in transport policy, planning and programs. This includes ensuring women consumers and organisations have opportunities to provide information, are consulted about their needs, and participate as members of any transport forum or consumer group which is established.

 Policy and planning documents, such as RENSTRA, in which gender issues are integrated to meaningfully address the different concerns of women and men, together with supporting gender mainstreaming capacity building of the Gender Mainstreaming Working Group (PUG) and relevant personnel to enable them to implement them.

- Gaynor Dawson, Gender Specialist

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# Working Hard to Provide Potable Water in Klaten



Courtesy of Eko Setyo Utomo

"I want employee welfare to increase by up to 20 times. This is what spurs me to achieve, and I certainly have to work hard."

Those are the words of **Ambar Muryati**, 48, the Managing Director of the local water company (PDAM) in the District of Klaten, Central Java. She has worked in Klaten's PDAM for 29 years, beginning her career as a bookkeeper. She is also on the board of six social and sports organisations in Klaten and at the provincial level in Central Java. She is a former member of the board of PERPAMSI (the Indonesian Water Supply Association).

Few high-achieving women hold strategic positions in the field of infrastructure, a sector known for being male-dominated. Ambar is one of them. **Prakarsa** interviewed Ambar to discover her inspiring story of how women's leadership can bring about meaningful progress and how community relations are key to PDAM progress.

# Not many women are leaders in the infrastructure sector. This is an impressive achievement. How did you get to where you are today? What was your childhood like?

As a child, I lived in an environment where little girls were not encouraged to have high aspirations, and access to education for girls was not as good as it was for boys. I am thankful that I was raised in a very disciplined family. My parents were determined that their children would obtain higher education, exceeding their own. From a young age, I had very high aspirations and I thought about how to achieve them. My parents were poor, but each child was encouraged to go to school and achieve much. We also became involved in our parents' work; from the second grade, I helped them to make ends meet and to pay for tuition. I worked on the farm and sold food to earn money for school and to generate savings.

#### What's your take on the PDAM leadership in Klaten? What is needed?

Generally, leadership in a PDAM is the same as leadership in other institutions. Regardless of the leader's own strengths and weaknesses, PDAM Klaten needs leadership that can advance the company and ensure the welfare of its employees. Leaders should inspire trust and motivate subordinates to follow their direction. During my tenure in Klaten's PDAM, I have experienced three changes in the directorship. I have learned many things about loyalty, dedication, and growing the company. I have been inspired about how to act when faced with a difficult situation. The point is, I learned that to become a leader, one needs to work hard and be disciplined to become a role model for subordinates.

#### What's your vision for leading PDAM Klaten?

It is in line with the Klaten District's vision: to bring about first-class potable water service and a financially healthy and independent company – a healthy company with big dreams. The PDAM can fulfil principles of Good Corporate Governance. I want this company to be a big company that can provide satisfaction to customers and improve employees' welfare.

#### What principles guide your work and leadership of the company?

There are many things that I believe in when it comes to work principles.

First, be open and positive. As a PDAM Director, I try to apply an inclusive leadership principle, building close relationships with all employees. I try to be open to criticism, accept inputs, and speak directly to employees about our priorities. Positive thinking helps to elicit effective work performance by employees. Then employees will trust their leader, and they will strive to create an open and positive workplace.

Second, stress discipline and hard work. To me, leading a company that has gone through a difficult period requires hard work and discipline. It also needs commitment so that it can be trusted by the government and by employees. It takes dedication and loyalty to enable the company to experience rapid progress.

Third, be honest and accountable. If something is asked of me, I try to do it well, in accordance with the rules and regulations. I am accountable for all my work, whatever it is. Then we can achieve one of the important principles of Good Corporate Governance: transparency.

#### What do you think about women working in the infrastructure sector?

To me, men and women are the same. Actually, women everywhere bear a greater burden, because they have the role of educating their children and maintaining the family. But to me, work and family are two things that can go hand in hand. I am fortunate to have a husband who is willing to share the load of taking care of the household. In the past, when I had a lot of work and had to stay late at the office, my husband was the one who usually took care of the children.

Women in the infrastructure sector are beginning to flourish. As long as we are willing to work hard, be disciplined and not become spoiled, we will be able to assume the roles that we hope for.

#### How is your relationship with PDAM staff?

I treat my staff and employees as my friends. To me, this creates a more comfortable work relationship with no distance, while still being professional. I treat them as friends so that I can encourage them in a more flexible way. Providing motivation to work hard and achieve targets is easier to do in a friendly atmosphere.

#### What do you do to build networks and relationships with external parties?

The key to building networks is communication and lobbying. I believe that the PDAM should be able to develop communication channels and good relationships with various strategic parties, including the Local Government, the Local House of Representatives, the central government, and other stakeholders, including PDAMs in other areas, the community and even donor agencies.

#### What is your point of view on the role of the community in PDAM programming?

Our relationship with the community is an important part of our strategy. The progress of the company is tied to building good relationships with the community and potential customers. Hence, we work hard to interest the community in making connections to potable water supplies.

#### What has your hard work achieved? How many households have water connections now?

About seven years ago, the number of water connections was around 25,000. Now there are 35,000 households connected. This is in spite of the fact that community interest is still low, raw materials are still limited, and the condition of wells in the community is still pretty good. So the achievement is significant.

#### How do you and the PDAM build relationships with the community?

We at PDAM Klaten maintain our reputation in the community by giving proof of good products and services. This creates interest in being connected to the PDAM's potable water supply. Many people are reluctant to connect if they only listen to us talk, but they will quickly make decisions when they actually see the good quality of the water and the service we provide.

We have developed four approaches to support this:

First, establish reasonable, affordable tariffs for the community. The PDAM does not need to seek high profits by increasing tariffs because the most important thing is to maintain a continuous high number of customers. The set price should be affordable for the community.

Second, approach community leaders. This is a conduit for bringing the effectiveness of the PDAM program to the community and can simplify the complaint resolution process between the community and the PDAM. We try to identify one influential community leader in each village who can be a point of contact for communication between the PDAM and the community.

Third, offer speedy service. Customers' complaints should receive quick responses. Even if the problem can't be handled immediately, the most important thing is that the customer knows what is being done. PDAM Klaten applies the principle that the customer is king, and must receive 24-hour service.

Fourth, offer proof to the community of the high quality of the PDAM's product. The PDAM should offer good water pressure and a good quality and quantity of water. PDAM service should be of continuous high quality, so that the community will trust the PDAM and be interested in connecting to its potable water supply.

#### How do you manage human resources?

Despite management constraints, we try to build the capacity of our human resources. We have held various trainings, and junior and senior employees have attended training offered by external parties. As a company that is working hard to better organise itself, we know change cannot happen overnight. I acknowledge that there are still situations where human resource management is not optimal, for example in the case of uneven work delegation. Nevertheless, going forward we will apply a reward and punishment system effectively. The satisfactory assessment by the audit team from the local financial management board (*Badan Pengelolaan Keuangan Daerah*) in terms of employee management will motivate us to further improve our performance.

#### What innovations have you introduced to encourage better management?

We are making innovations related to our production systems and service. I want to make positive changes by adopting steps such as creating partnerships with the post office and banks to make it easier for customers to make account payments.

We are also developing a Management Information System that allows information, both technical and administrative, to be accessed and monitored online. However, this effort has not yet come to fruition because our human resources are not yet prepared.

### What is your take on the PDAM's financial management?

Financial management here is supervised strictly and meticulously. I always check the details. I am orientated to the principles of cost and benefit. Expenditures should be efficient and provide maximum benefit, but should not be a burden for the community.

The result can be seen in the audit assessment that found that our financial management is without exception efficient, fair, acceptable and reasonable. Billing and payment are also considered good.

#### What's your message to women and young people so that they can be good leaders?

Keep on working hard and be disciplined. Be a person with honesty and tenacity. I think young people today have more opportunities to advance because they have more options. Good aspirations will find their way.

- This interview was conducted by Eko Setyo Utomo, IndII's Gender Mainstreaming Officer.

# The Expert View

## **Question:**

How do you see the efforts of your organization contributing to the achievement of overall urban mobility objectives?

## M. Akbar, MSc

Head of Dinas Perhubungan Propinsi (local transport regulatory agency), DKI Jakarta

"The policy of the DKI Jakarta Provincial Government (Pemprov) is to support urban mobility by prioritising and integrating mass transportation systems that are adequate to serve the needs of people travelling within Jakarta, as well as commuter movements between Jakarta and surrounding areas (Bogor, Depok, Tangerang, and Bekasi).

Transport development policy for Jakarta through 2020 is laid out in the Pola Transportasi Makro (Macro Transportation Patterns, or PTM), which is implemented through three strategies, namely: developing mass public transport, limiting traffic, and increasing network capacity. The development of mass public transit includes construction of bus rapid transit (BRT or busway), light rail, monorail, and the MRT (mass rapid transit).

The development of these four types of transportation undertaken by the Dinas Perhubungan (Dishub, or local transport regulatory agency) is expected to be finished in 2020. The busway has already been operational since 2004, and has reached the point where 12 out of the 15 corridors have been constructed, with a total fleet of 794 vehicles, with an addition of about 500 more units in 2014. Mid-sized buses (Kopaja and Metro Mini) have already been added to support busway service. They will be integrated with the busway and known as the Bus Kota Terintegrasi Busway (Busway-integrated city buses).

To give adequate public transport service for outlying areas that feed into Jakarta, since 2012 we have operated Angkutan Perbatasan Terintegrasi Busway (Busway-integrated outlying transport), which is now up to 13 routes with 143 vehicles. Aside from that Jakarta will also have an MRT, with the first phase going from Lebak Bulus to the Hotel Indonesia rotary. Work began in 2013 and is expected to be finished in 2016. Construction of a monorail that had been stopped has been started up again by the private company PT Jakarta Monorail, and it is planned to be finished in 2016.

Among the policies of the Jakarta provincial government that have been implemented to restrict traffic are three-in-one lanes [that require a minimum of three occupants per vehicle] in certain areas; control of on-street parking; construction of park-n-ride facilities at the Ragunan Terminal; and Electronic Road Pricing, which is in its first phase of development.

DKI Jakarta is also upgrading road networks by developing ATCS (Area Traffic Control System) and pedestrian overpasses that are integrated with train stations (at Tanjung Barat and Lenteng Agung). There are also plans for integrated facilities between busway bus stops and train stations (in the areas of Juanda and Manggarai), busway corridors that are integrated with other bus terminals, road construction, flyover and underpass construction, and pedestrian-only areas.

One of DKI Jakarta's policies, which is part of its non-motorised policies, is a bicycle lane of 16.4 km in Cipinang, 6.7 km in Pondok Kopi, and 9.7 km along Jl. Raya Bekasi Rorotan-Marunda. We expect these policies to be able to overcome traffic problems in Jakarta so that we can improve urban mobility. Community support and involvement play a significant role in the success of these policies."

## Azas Tigor Nainggolan, S.H., M.Si

Head of the Jakarta Community Council on Transportation 2006–2014

"There are several things we've done. First, we have conducted several studies about transportation problems in Jakarta. The main problem is congestion, which is caused by the poor state of the public transport system, which in turn leads people to choose private means of transportation.

Now the provincial government has implemented several ground-breaking steps, such as developing a BRT system. Even though this step is one of the approaches to overcoming the problem of poor public transport service in Jakarta, there are still a lot of other problems to address with regard to other forms of transport and integrating various modes.

A good transportation system needs to be developed so that people will want to switch from other modes to mass public transit. In this context it becomes the task of the Jakarta Transportation Council (Dewan Transportasi Kota Jakarta, or DTKJ) to conduct studies and provide input to the governor on transport policy.

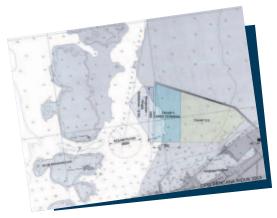
Along with that we are also trying to build community awareness in order to change behaviour, so people will rely less on private transport and move to mass public transport. We are conducting socialisation on Jakarta transport problems, taking complaints by phone, fax, and e-mail as well as social media, and creating a public dialogue with the community about issues we consider important. We also do media briefings, especially when we release a study, when we are addressing a particular transportation problem, or when we convey recommendations to the governor. We want the mass media to gain perspective and insight into transportation issues.

In addition to the above-mentioned efforts, we also conduct advocacy work. There are three local regulations that we successfully pushed for, for three years: one to transform TransJakarta from a Public Service Agency to a wholly owned DKI corporation, one on transportation regulation, and one on BRT. We help to lobby the Parliament (DPRD).

Although the tasks, principles, and functions of DTKJ are set out by the Dishub, we develop the scope of work ourselves. For example, when there is a complaint about a problem with the sidewalks, which falls under the authority of the Public Works department, we develop an approach with respect to accessibility for persons with disability. When we wanted to develop Corridor 13 with an elevated lane, there were no obstacles, because we advocated to Bappeda [the local development agency] and UKP4 (the Presidential Monitoring Unit). So we don't have a connection only to the Dishub, because transportation problems are not only problems of public transit, nor are they purely technical matters. In fact they relate more to non-technical concerns, like people's behaviour and political concerns. To talk about transportation is to talk about politics."

# Outcomes: MAKASSAR PORT PROJECT MOVES FORWARD

The goal of IndII's Pilot Port Public Private Partnership (PPP) activity is to improve port capacity and efficiency by supporting the development of port master plans and providing a model procedure for preparing a port development project with private sector participation. The activity is divided into two phases. Phase 1 achievements are now paving the way for undertaking Phase 2. As part of the first phase, the Ministry of Transportation (MoT) issued a decree, KP no. 1304/2013, to authorise the Technical Team, which consists of representatives



from MoT, Bappenas, the Coordinating Ministry for Economic Affairs, the Indonesia Investment Coordinating Board (BKPM), Makassar Port Authority, and the Local Governments of South Sulawesi province and Makassar City. Subsequently, the Makassar New Port Master Plan and pre-feasibility study were assessed. In addition, port personnel were trained on project preparation in two capacity-building workshops. Additional stakeholders who have been involved in activity discussions include the Ministry of Finance, Indonesia Infrastructure Guarantee Fund (IIGF) and PT Sarana Multi Infrastruktur. Their support will be vital as the activity makes progress toward developing a feasible and bankable PPP project with all needed government and guarantee support approvals.

To read more about this and other IndII activities, view the Activity Updates on our website at: http://www.indii.co.id/publications.php?id\_cat=57

# IN OUR NEXT ISSUE: LOCAL SERVICE DELIVERY

An American politician once famously said, "All politics is local." This observation could be equally well applied to delivering services in sectors such as water and sanitation. Particularly in the post-decentralisation era, effective service delivery relies on good governance arrangements at the local level: buy-in from Local Government officials, involvement by the community, and accountability by the parties who provide services. The July 2014 edition of *Prakarsa* will examine the topic of local service delivery through the lens of IndII's work, describing the dynamics surrounding the Water and Sanitation Services Index, the development of local service standards, and the involvement of Community-Based Organisations in providing water services.