"Transport in Asia and the Pacific faces a web of issues that need a strategic solution... Countries across the region have to contend with road safety, air pollution, social sustainability, climate change impacts, lack of public financing, decrepit infrastructure, and even cross-border bottlenecks, among others."
- **James Leather**, *Co-Chair,* ADB Transport Community of Practice

Hoping to improve the worsening traffic situation in Jakarta, Sutiyoso—then Governor of Jakarta—bit the bullet and pushed for the construction of the Jakarta Bus Rapid Transit (BRT) system in 2001. With worsening traffic congestion and growing population of 8 million in 2000, BRT was thought as the ultimate solution to the traffic woes of people in the capital of Indonesia.

The BRT masterplan is projected to have a busway network consisting of eleven corridors. The system is a closed trunk system without a functioning feeder system. The first corridor of Jakarta's BRT of around 12.9 km, essentially consisting of a dedicated lane and loading platforms for large buses in the inner side of city streets, began operations in early 2004. Initially, the system ran well and showed good results—patrons' travel time was reduced by an average of 20 minutes through a clean and convenient transport system that had longer operating hours. Pre-launch objections from affected bus operators and the driving public had disappeared. However, problems on the operational and managerial aspects of the project began to crop up a few months after the BRT was launched.

Months after the BRT launch, Governor Sutiyoso—then governor of Jakarta—listened intently at the problems presented by the various stakeholders of Jakarta's Bus Rapid Transit (BRT) System. Those who participated in the dialogue were the bus operators, Transjakarta (the agency Sutiyoso put in charge of the BRT), the Jakarta Transportation Agency (in charge of Jakarta's transport system), and the driving and riding public, as well as representatives of related national agencies.

The governor had now to contend with new complaints and issues facing the project. In fact, Governor Sutiyoso wanted to get a sense of the overall costs and benefits of the BRT project to the city so far.

Governor Sutiyoso was aware that many of the problems the BRT encountered since it was launched in 2004 were the outcome of poor decisions made earlier in planning, organizing and implementing the project. He not only wanted to correct the situation but also make sure that future public service innovations like the BRT would be managed better.

Transforming Jakarta's Transport System: Promise of the BRT

Former Bogota mayor Enrique Peñalosa, Chairman of the Board of Directors of the Institute for Transportation and Development of New York explained:

* This case study was developed by Prof. Nieves Confesor, Asian Institute of Management, for the Asian Development Bank.

"BRT is not just cheaper but it can be better than subways in many ways. First of all, it's much better to have public transportation on the surface. Why do we put passengers like rats underground so that people who use cars can use the road and enjoy the sun?... There are more advantages to the BRT. If you have to move 10,000 passengers in one hour, you will need four trains every 15 minutes. Or you need 120 buses every 20 seconds. That means the waiting time for buses is much shorter"[1].

[1] JP Handayani. "BRT remains the only solution for Jakarta: Peñalosa". *Jakarta Post.* 23 December 2013.

BRT - A PRIMER

The Bus Rapid Transit (BRT) system can be defined as "a flexible, rubber-tired form of rapid transit that combines stations, vehicles, services, running ways, and information technologies into an integrated system with strong identity. Complete BRT systems offer fast, comfortable, and low-cost urban mobility"[2]. It has different forms and modalities of implementation. This was popularized as a distinctive transport solution in the late 1990s with models in Bogota, Colombia and Quito, Ecuador exhibiting higher degrees of reliability. In fact, the Bogota model, became the basis for a Latin American BRT model, promoting a set of common technical, financial, and institutional characteristics. The Bogota model has been shared and was emulated by countries like China, India and Indonesia. Earlier literature points towards the customer-orientation and high service quality of a BRT because it provides comfortable, cost-effective and supposedly fast urban mobility (Wright, 2003).

BRT is a system that stresses priority for and rapid movement of buses by securing segregated busways[3]. It is a high quality, customer orientated transit that delivers fast, comfortable and cost-effective urban mobility[4].

Levinson et al. (2003) state that BRT systems are designed to be appropriate to the market they serve and their physical surroundings, and they can be incrementally implemented in a variety of environments.

BRT is now considered worldwide as a separate mode of transportation with unique features, highlighting its ability to transport high passenger demand with a reliable service.

Governor Sutiyoso was mesmerized and holding to this promise of a better transport system when he envisioned to build the Bus Rapid Transit System in Jakarta, Indonesia. The BRT he felt would help alleviate the worsening traffic condition in Jakarta brought about by growing population.

[2] Hidalgo, D. (2013). "Bus Rapid Transit: Worldwide History of Development , Key Systems and Policy Issues." In Ehsani, M. et al. (2013). *Transportation Technologies for Sustainability*. New York: Springer.

[3] Matsumoto, N. (2006). *Analysis of Policy Processes to Introduce Bus Rapid Transit Systems in Asian Cities from the Perspective of lesson-drawing: Cases of Jakarta, Seoul and Beijing*. Tokyo: IGES.

[4] Wright, L. and L. Fulton. (2005). "Climate Change Mitigation and Transport in Developing Nations". *Transport Reviews*, 25 (6): 691-717.

Transjakarta BRT, drawing inspiration from Bogota's Transmilenio, is touted as one of the best solution for the transport conundrum plaguing Indonesia's capital, Jakarta. It is a realization of initial plans based on a 1989 World Bank Study delving into bus and urbanization.

Governor Sutiyoso was at the forefront when he introduced the initial phase, starting in 2002, resulting in 15 planned corridors. He insisted that at least half of the number of corridors be built before the end of his term, and by January 2004 the first corridor already kicked off. Governor Sutiyoso has been sold-out to the idea of developing the "BRT" because it can be easily built and expanded quickly in response to increased motorization and ever worsening "traffic" condition in the Jakarta metropolitan area.

Initially, the planning and development of TransJakarta perhaps did not create many upper level controversies as compared to the MRT and monorail. The BRT development plan is highly endorsed by academicians, the Indonesian Transport Society, and other government technocrats and international consultants as it is deemed cheaper but could perform as efficient as an underground or elevated metro system.

Even though during the planning phase there were little controversy, smooth operation was not guaranteed. Under Governor Sutiyoso's command, some sectors believe that the first corridor was constructed rather hastily, resulting to current management problems. In addition, the Jakarta Busway Regulatory (BLUD) seemed to show favoritism, as it assigned consortiums based on a contract without any standard operating procedure (SOP) for performance evaluation and tender offer requirements. With the hasty construction of the corridors, the apparent lack of high level of service contributed to the growing discontent of other stakeholders as well. It also became more controversial to the public stakeholders, with bus operators and drivers, other formal and informal transport service providers as well as non-commuters – especially elite private car owners - complaining about routes and space. In addition, members of civil society organizations raised their concerns; for example, non-government organization Pelangi Foundation lamented that the BRT service still lacks supporting facilities and policies like park-and-ride, electronic road pricing scheme as a disincentive for private vehicles, and proper sidewalks in all the already built corridors.

Points of Contention and Agreement: A Look at Different Actors' and their Viewpoints

Bus Riding Public

"Every morning from my home on the city outskirts I am faced with the decision of what mode of transportation to choose – the ultra-cheap but infamous trains, even more infamous buses, or the relative comfort of an air-conditioned busway feeder… this morning I chose comfort over cost, and rode on the Rp 10,000 (about US$1) busway feeder that would drop me in front of the the Ratu Plaza in South Jakarta"[5], explained Trantri Yuliandini, a BRT patron.

[5] T. Yuliandini. *Jakarta Post*, June 2004.

But not all BRT patrons are like that, as people perceived that there would be increase in bus fares because of the new BRT feeder system. Before the introduction of the BRT, fees currently range between Rp 3,000 for non-air conditioned buses to Rp 5,000 for air conditioned ones. The fare matrix will change; this will have an effect on passengers and would eventually translate to discontent.

Non-Bus Riding Public

The Jakarta Post reported: "Rich people in Jakarta, for example, don't want to give space to buses. They don't like public transportation; they don't like anything except their own cars and a few cars of their friends. Not allowing motorcycles on toll roads also means that it is not democratic." Because there were problems in the integration of the feeder service that was initially planned, many vehicle owners are not keen on leaving their cars or motorcycles at home.

In an interview in Jakarta Post, Marrosti, who works in a private company in North Jakarta noted: "I only used the busway once. I was going to attend a job interview in Harmoni, Central Jakarta, and so I went on the bus from Jl. Gajah Mada". With the initial investment for the BRT project, one of Sutiyoso's main concern was how to close the large and growing gap between the increasing demand and actual number of riders able to take the Jakarta BRT daily.

Public and Private and Companies

Buses are owned and operated by state-owned bus company PPD and private companies PT Mayasari Bhakti and PT Steady Safe. Large buses are for long distance trips, covering one large station point to another, through main thoroughfares and major arteries, including that along the inner ring road. Unlike the PT Mayasari Bhakti and PT Steady Safe, which are trying to expand their businesses by joining BRT consortium, PPD has been mismanaged and is on the brink of bankruptcy.

Generally, route licenses or franchise to operate are valid for five years and can be proposed by state-owned and private companies, cooperatives, and individuals at supposedly no cost. In terms of policy and regulations, tender process has not been clearly defined in granting these licenses, prompting in an uncontrolled service quality and most often overlapping routes among different service providers. With the initial implementation, around 17 routes with 179 buses would be affected by the opening of Pulogadung-Harmoni busway corridor, while the Harmoni-Kalideres route will make 12 routes served by 123 buses obsolete.

At the onset of the initial implementation of the BRT system, Usman - owner of the PT Maysari bus company recalled: "Most of the bus drivers are afraid of losing passengers to the busway. I fear this condition could escalate into a violent clash". Bus drivers are considered as important actors. They are treated as employees of the respective bus companies and are receiving monthly salaries. However, in practice, there are tendencies where some drivers rent

out the buses to illegal drivers.

Bus Drivers

Ambela, a bus driver interviewed by The Jakarta Post, complained that: "My superiors haven't given us any notification… I have no idea about the rerouting plan". The introduction of the TransJakata BRT was considered a sudden change with stakeholders like bus owners and drivers as not being informed about the changes. Furthermore, like other stakeholders, the BRT change felt as something being rammed towards the stakeholders without consideration of its effect. "At Pulogadung alone, more than a hundred of buses was affected by the new busway route," Ambela continued, "… our company alone has 17 buses."

In addition to the lack of information on which routes to ply, and the subsequent changes caused by the new TransJakarta Bus Rapid Transit System, bus drivers are wondering how this would affect their income especially with some routes becoming shorter.

Other Actors in other Modes of Transportation

With the buses plying mostly major roads in Jakarta, urban transport is connected to other transport services like micro-buses and minivans. Unlike large buses with designated routes, these minivans and micro-buses tend to stop on call from passengers or in spots agreed by the cooperatives. Micro-buses are under PT Metro Mini and cooperative Kopaja (with other 3 small operators). Their services, which started in the 1980s, are intended to provide public transport in narrow streets that large and medium buses could not enter.

Aside from the bus that ply the BRT, *bemos* (minivans) and *becaks* (pedicabs) are also affected. Minivans ply the City streets and narrow alleys in Jakarta. There are door-to- door transport services in Metropolitan Jakarta ranging from exclusive taxis to the limited number of remaining *becak*s in the suburb and bicycle taxis in North Jakarta. Taxi services are provided by private companies, with PT Blue Bird being the largest; total number of registered taxis reached 1,000 as of 2006[6]. Bajaj (motor-operated pedicabs), a replacement to old becaks, are 3-wheeled vehicles plying the periphery of the city; around 14,000 in number, they are typically found in Central, South and West Jakarta queuing in front of traditional markets within the urban area.

People involved in these unregistered micro-buses as informal modes of transportation considered the rerouting as a potential risk with things being unpredictable on their end. Aside from this, their passengers seem worried as they are used to door-to-door transfers through these modes of transport.

[6] BPS. (2007). Jakarta DalamAngka 2007. Jakarta: Biro PusatStatistik.

Concluding Paragraph

In integrating a transport system, it is critical to understand that everything is planned and implemented by people and for people. Transport systems like the BRT, presents a special complex system as the means by which all social activities as people traveling and goods conveying occur. In the Jakarta Metropolitan Region, the lack of coordination with stakeholders and appropriate governance resulted in sometimes paralyzing traffic jams at the metropolitan scale that cannot be resolved by a single entity like the TransJakarta BRT.

At the core of the challenges encountered by the Jakarta Bus Rapid Transit are maybe the lack of interaction, coordination, and cooperation of a multitude of different stakeholders, ranging from local and regional authorities to private entities and citizens. Understanding how the urban transport system can be better planned and developed meet the needs of different stakeholder groups, to address the increasing demand of the community in pursuing all their activities. To solve this, the case presented a number of measures and challenges faced by Governor Sutiyoso as he tried to introduce the BRT and at the same time, venture towards increased stakeholder engagement and management. Aside from the stakeholders mentioned in the case, are there other stakeholders and stakeholder segments that were not completely considered? What underlying interests do they represent and how can Sutiyoso address their needs?

Annex A

Overview of Jakarta's Urbanization Problem

JAKARTA AND URBANIZATION

Jakarta, the capital of Indonesia has a population of some 9 million people, with an additional 2 million commuters from its suburbs[7]. It is listed by the United Nations as the 16th largest urban agglomeration in the world, and was projected to grow to as the 5th largest by 2015. [8]The shape of Jakarta's urban transport network could also be ascribed to Indonesia's role as manufacturing base for Japanese car companies and other multinational companies. As the center of Indonesian economy, Jakarta catered to domestic and foreign financial institutions, multinational company headquarters and other service businesses. Back then, it has almost 20% share of Indonesia's Gross Domestic Product, with around 70% and 50%, foreign and domestic investments respectively[9]. Aside from the rapid population growth, the economic growth has also contributed to Jakarta's urban quandary.

In line with population and economic growth, the number of motor vehicles also shows a rapid growth[10]. In a 2001 study funded by the Japan International Cooperation Agency (JICA), growth in motorization has been attributed to increased car ownership. The research reveals that at a household level, the average number of cars owned per 100 households is 20.7 and the average number of cars owned per car-owning household is 1.2, which is relatively the same with or even higher than developed countries during that period[11]. Findings are generally in line with the increased car ownership in Jakarta and the growing influx of people migrating and working from nearby suburban areas and provinces.

[7] Japan International Cooperation (JICA). The Study on Integrated Transportation Master Plan for Jabodetabek (Phase II), Final Report, Japan International Cooperation Agency, Jakarta, 2004.

[8] United Nations. World Urbanization Prospects: The 2003 Revision. Population Division. Department of Economic and Social Affairs. ESA/P/WP.190, 2004.

[9] Spreitzhofer, G. (2003). "From Farming to Franchising: Current Aspects of Transformation in Post-Crisis Metro- Jakarta". *Asien, 87 (*2/03).

[10] Susilo, Y. et al. (2007). "A Reflection of Motorization and Public Transport in Jakarta Metropolitan Area". IATSS Research, Vol. 31.

[11] Japan International Cooperation Agency (JICA) – Badan Perencanaan Pembangunan Nasional (BAPPENAS). The Study on Integrated Transport Master Plan for JABOTABEK (Phase 1), Volume 1: Summary Report, Pacific Consultants International and ALMEC Corporation, Jakarta, 2001.

Metropolitan Jakarta is considered as among the world's top ten largest urban agglomerations. At least seven (7) neighboring local areas viz., Bogor Municipality and Regency, Depok Municipality, Tangerang Municipality and Regency, as well as Bekasi Municipality and Regency spans the core of what is considered the Metropolitan Jakarta area, covering an area of more than 600 square kilometers with a population that differs to that of 12 million during daytime[12] and 9 million at night time[13].

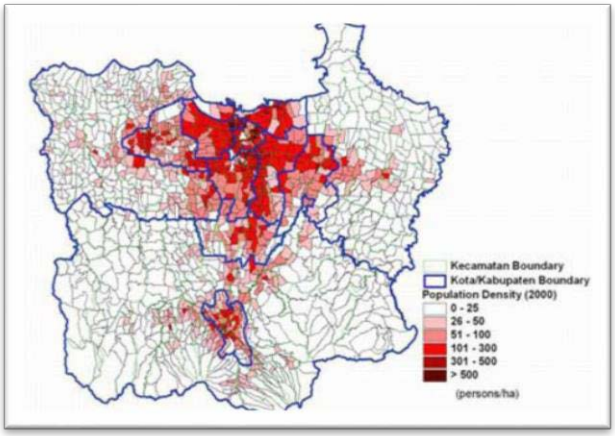


Figure 1.0 Jakarta Population Density 2000[14]

Various models for addressing urban transportation problems

The local government of Jakarta concentrated on different models and efforts to address problems in the transport system. As previously mentioned, the BRT was deemed as the primordial solution to all these urban transport woes. It provided an exclusive right-of-way for city buses that was supposedly integrated with feeder services, park-and-ride facilities, as well as other non-motorized lanes. It was primarily adopted from Bogota's Trans Millenio. The introduction of the first corridor of BRT kicked off in 2004, and the service is envisioned to 10 more corridors.

In the meantime, initial plans for a train system—an integrated subway and monorail system—are on the way after a decade of delay. While securing funding sources for the future monorail and subway is already a challenge, a greater one awaits as to how the city will integrate the different systems in the existing urban public transport network of Jakarta.

[12]Japan International Cooperation (JICA). The Study on Integrated Transportation Master Plan for Jabodetabek (Phase II), Final Report, Japan International Cooperation Agency, Jakarta, 2004.

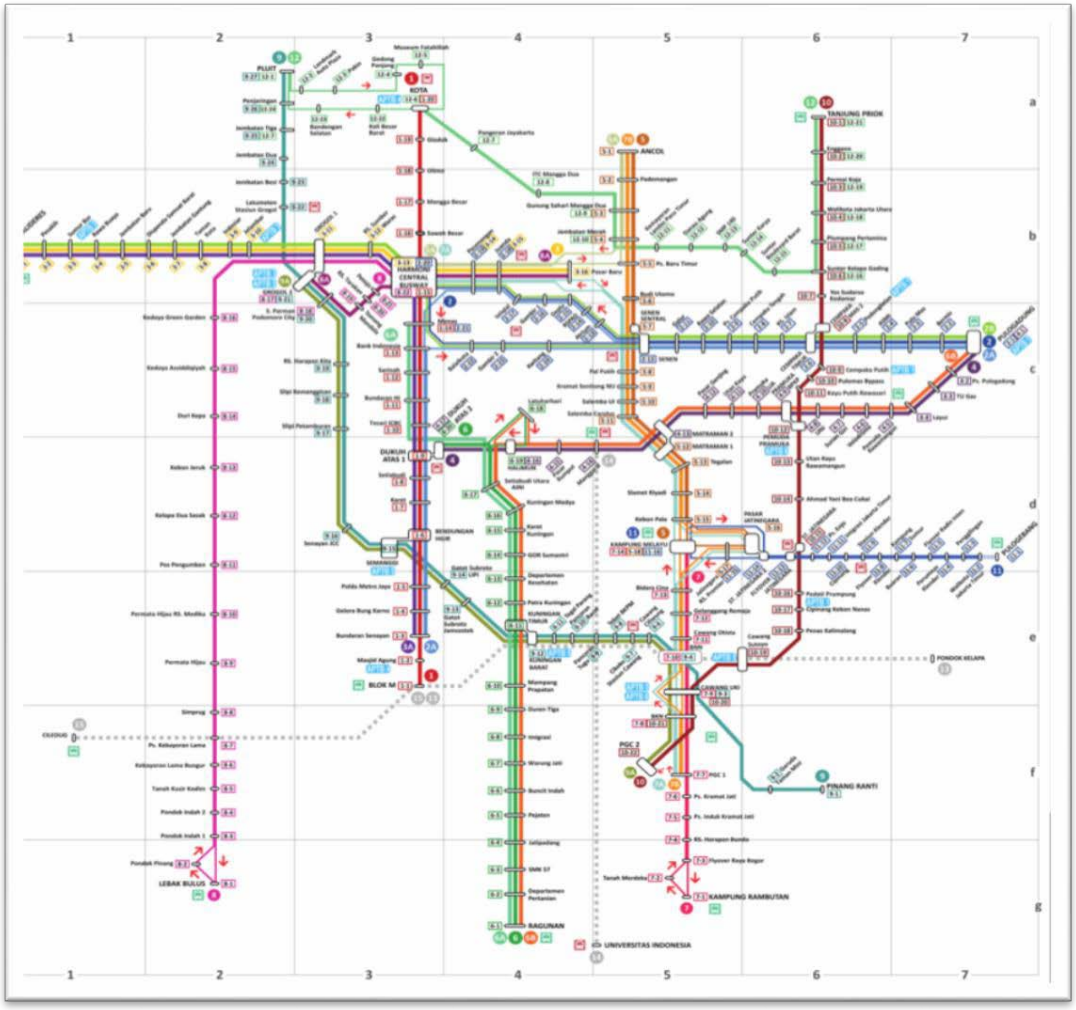
[13]BPS. Jakarta DalamAngka 2007. Jakarta: Biro PusatStatistik.

[14]Japan International Cooperation (JICA). The Study on Integrated Transportation Master Plan for Jabodetabek (Phase II), Final Report, Japan International Cooperation Agency, Jakarta, 2004.

Jakarta's existing public transport is currently operating in a semi-institutionalized fashion as all the new transport changes gradually being introduced. These new modes of urban transport systems seem to bear the features of a disaggregated paratransit, with some new functions as several rerouting and integration of large bus companies into the BRT consortia are being introduced. Even with these changes, Jakarta's streets are still shared by a rich array of private and public transportation modes, including door-to-door paratransit service of three-wheeled *Bajaj*, bicycles, cars, motorcycles and taxis that ply the routes of its main thoroughfares and side streets.

Annex B

Transjakarta BRT



Source: TransJakarta Website

BPS. (2007) Jakarta DalamAngka 2007. Jakarta: Biro PusatStatistik.

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