

## ROAD-BASED PUBLIC TRANSPORTATION REFORM: COMPARATIVE STUDY BETWEEN SEOUL AND JAKARTA

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### Abstract

In July 2004, the Seoul Metropolitan Government introduced a wide range of reforms to its public transport system: The most significant change Seoul considered while restructuring the bus system in 2004 was the implementation of a joint public management system. The partnership that formed between the Seoul government and private bus companies resulted in many benefits for everyone involved. The implementation of transportation reform helped Seoul establish a human-oriented transportation system as shown in the modal split of its public transport reaching 64.3% (2010), stepping up the city's transportation and global competitiveness. Inspired by the success story of the bus reform policy in Seoul, Jakarta Capital Government initiated the bus reform in 2017. The implementation of the policy is challenging, the progress is very slow and the actors are blaming each other in causing the slowness. However, an early evaluation of the current progress of the bus reform policy in Jakarta is satisfying both users and operators. This paper will describe the public transport reforms in Seoul using a qualitative case study method, assess their impacts on Public Transport services based on the guidebook in evaluating the public transportation, indicate the key success of the reform by deepening observations and to what extent Jakarta can adopt it. The research will also examine the bus reform policy in Jakarta using the stages of the policymaking process. The writer expected a result of finding significant steps of Seoul experience in public transport reform, describe the current policy in Jakarta's bus reform and construct a package policy recommendation for DKI Jakarta's government in public transport reform to optimize the impact of the policy.

**Keywords:** Jakarta, public transportation reform, public transport services, Seoul experience

## I. INTRODUCTION

Jakarta as a capital city of the country also plays a role as a main actor in economic activities for the nation. These two conditions are a main reason for why Jakarta suffering a lot of urban problems within the city. With the 661.5 km<sup>2</sup> in size which is the smallest province in Indonesia (BPS, 2019), Jakarta should afford more than 10 million people to live in and should afford twice from its population in the weekday. The data of total population for Jakarta greater area made the city as a second world largest agglomeration in the world as released by Demographia World Urban Areas (2015):

Table 1. 10th Largest cities in the World

10 Largest Cities in the World: 2015						
Rank	Urban Area	Population Estimate	Land Area: Square		Land Area: Km2	
			Miles	Density	Km2	Density
1	Tokyo-Yokohama	37,843,000	3,300	11,500	8,547	4,400
2	Jakarta	30,539,000	1,245	24,500	3,225	9,500
3	Delhi, DL-UP-HR	24,998,000	800	31,200	2,072	12,100
4	Manila	24,123,000	610	39,500	1,580	15,300
5	Seoul-Incheon	23,480,000	875	26,800	2,266	10,400
6	Shanghai, SHG-JS-ZJ	23,416,000	1,475	15,900	3,820	6,100
7	Karachi	22,123,000	365	60,600	945	23,400
8	Beijing	21,009,000	1,475	14,200	3,820	5,500
9	New York, NY-NJ-CT	20,630,000	4,495	4,500	11,642	1,800
10	Guangzhou-Foshan	20,597,000	1,325	15,500	3,432	6,000

Sources: Demographia World Urban Areas (2015)

The urbanization is an inevitable condition for the developing countries that still struggling in making more significant income distribution. This problem occurs as said in World Development Report: Reshaping Economic Geography (2009): "No country has grown to middle income without industrializing and urbanizing. None has grown to high income without vibrant cities." The uncontrollable urbanization and high level of commuters tailored a tremendous number of travel

demand not only inside the city but also in out from it. Beginning in the 1990s, economic growth and the popularity of owning a car led the number of personal cars on the road to soar and consequently to ever more serious traffic congestion. The condition leads to the reduction of the mode share of public transportation. A massive growth of the vehicle population impacts the mobility of the city. Inadequate of public transportation services was making traffic congestion worse.

Jabodetabek Transportation Authorities had mentioned in the odd and even report book (2018) that there are 47, 5 million trips a day in Jakarta and its greater area. However, in adequate condition of public transportation in Jakarta greater area made the traffic condition become worst. At daily view, the capital's streets are hit every workday by almost 10 million cars, motorcycles, trucks and other vehicles, according to the Jakarta Transportation Agency. Nearly two million of these are driving in from neighbouring municipalities in the provinces of West Java and Banten.

In 2018, Jakarta administrator launched the Jaklingko program that replace the former program Ok O Trip, this program aims to integrated all public transportation operated by Local owned companies (LRT Jakarta, Trans Jakarta dan MRT Jakarta) in term of payment system, management and services network. The idea of this integration was initially come from the successful reform of public transportation in the city of the world, especially which already did in Seoul, South Korean.

One of the key successes of the public transportation reform in Seoul is their partnership formed between the Seoul government and private bus companies which resulted many benefits for everyone involved. This successful result in Seoul's bus reform was inspire Jakarta Government to do the reform in its public transportation especially in the road-based transportation. The first thing to be learn is what are the stages, on road-based transportation reform policy and the key success of implementing it. After learned the key success factor of bus transportation reform in Seoul. It is necessary to also evaluate bus reform in Jakarta.

However, before that, we should know why Jakarta eventually need to bench mark of Seoul? And the factual answer is because we are having common features and challenge regarding the transportation and city character. The common characteristics and similar challenges on transportation and mobility provided at figures below:



Figure 1. Common figures of Jakarta and Seoul

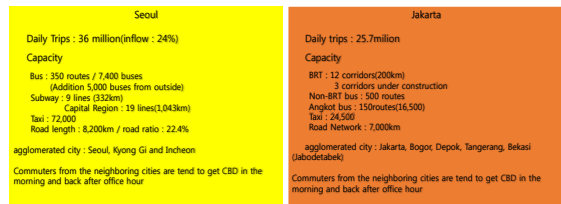


Figure 2. Common Mobility Challenges between Seoul and Jakarta

After identified those common features and challenges, it is necessary to know the enabling environment as a prerequisite in designing policy to be implement in Jakarta. The author defines the research questions as mentioned that will cover the aim of the research. Here are the research questions of this paper: 1) What are the key success factors of public transport reforms in Seoul? 2) What is the policy framework of bus reform in Jakarta? 3) What are the recommendations for Jakarta Government?

## II. LITERATURE REVIEW

### Public Policy Making

The policy making process is normally conceptualized as sequential parts or stages. These are (1) problem emergence, (2) agenda setting, (3) consideration of policy options, (3) decision-making, (5) implementation, and (6) evaluation (Jordan and Adelle, 2012). In addition, there are many theories of public policy making which consists of several steps form policy formulation to evaluation. These tools are required in order to keep the policy on target and generate the relevant impact. One version of stages in public policy making also came from James E. Anderson (1974) who said that the public policy making has the following stages:

1. Agenda setting (Problem identification) – The recognition of certain subject as a problem demanding further government attention.

2. Policy formulation – Involves exploring a variation of options or alternative courses of action available for addressing the problem. (appraisal, dialogue, formulation, and consolidation)
3. Decision-making – Government decides on an ultimate course of action, whether to perpetuate the policy status quo or alter it.
4. Implementation – The ultimate decision made earlier will be put into practice.
5. Evaluation – Assesses the effectiveness of a public policy in terms of its perceived intentions and results. Policy actors attempt to determine whether the course of action is a success or failure by examining its impact and outcomes.

### Public Transportation Reform

There are many bad impacts of congestion that can be described, start from cost burden at the congestion until health issues. Congestion is typically in Jakarta, a mega city with more than 10 million people. As suggests by previous research about Jakarta as Mega City (JMA) held by Firman (1998): The economy of JMA is sensitive to the decision making of transnational corporations. Therefore, the development of this metropolis in the future, just like other cities in the developing world, will be highly affected not only by national and local events but also increasingly by global economic forces (see also Douglass, 1989). Up until recently, one could think that the process of urban restructuring in JMA described above is inevitable and seems to continue in the near future. From a development policy perspective, consequently, what is urgently needed is to be able to take advantage and to manage this process for the benefits of national, regional and urban development. There is a need to create a favourable business climate, for instance, by improving the urban infrastructure and the quality of urban amenities. There is also a need to improve the local government capacity to manage urban development and to provide better public services to the citizen.

Therefore, providing better public services is needed to fulfil the requirement of massive development in Jakarta. One of the aspects which need to make betterment is public transportation. Public transit (also called public transportation, public transport, mass transit and urban transit) includes various transport services available to the general public including vanpools, buses, trains, ferries, and their variations. These services can play various roles in a modern transport system and provide various benefits, including direct benefits to users and indirect benefits that result if transit helps reduce automobile travel or create more compact (Litman, 2010).

Jakarta administration is currently trying to reinvent their public transport services by engage the private operator in order to deliver better public transportation services. Gebauer et al., (2010) mentioned that the role of sustainable public transit systems is to develop services and provide mobility that is comfortable, economical, integrated, orderly, efficient, safe, smooth, affordable and effective by the community. To fulfil the goals of sustainable public transit, this research put the role of innovation. Sebhatu et al (2011) argued that innovations should aim to reinvent the way value is created. Hence, restore the truly function of public transport is attempting to provide sustainability as well.

The Public private partnership in public transport services was commenced in Seoul fourteen years ago and known as quasi-public bus system. As written by Joonho Ko (2014) we know that the core concept of the quasi-public bus system was to transform bus routes and operational system to serve public interests. The Seoul city government secured the right to adjust bus lines, and pursued the public welfare of bus services as well as the improvement at the service level. By jointly managing revenue and redistributing it based on operational performance, bus operation and revenue management were separated. The quasi-public bus system comprised three major components: public management, private operation and operational infrastructure. For this purpose, the Seoul city government established a fare settlement centre and other organizations taking responsibility for managing the bus operation revenue and bus operation information and providing subsidies.

The Seoul bus reform will also be learning as figure below:

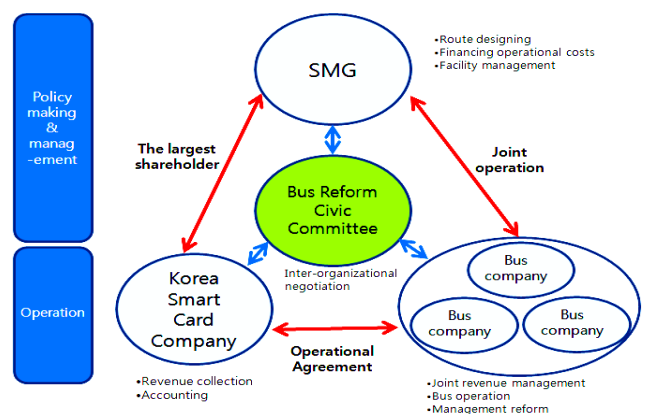


Figure 4. Seoul Bus Reform Policy  
Source: Seoul Metropolitan Government website – [www.seoulsolutions.go.kr](http://www.seoulsolutions.go.kr) (2019)

However, in order to evaluate the significant impact of the reform and get to know the key success of the reform we must evaluate the quality of the public transportation. Levinger and McGehee (2008) recommend that planners

optimize the following factors to improve transit services and attract new riders:

1. Ease. The public transportation must be easy to access, the route and the payment system are easy to understand and convenient.
2. Effectiveness. It is about the reliability of the public transport services in fulfilling the passengers need.
3. Comfort. It is not only safe but also enjoyment.
4. Aesthetics. Is it visually appealing? Transit examples: Are vehicles clean, outside and inside? Do the vehicles' temperature, fabrics, and hand-holds feel good?

Based on the Guidebook in evaluating the public transportation by Litman (2010), we can use the table as mentioned below:

Table. 2 Public Transportation Evaluation Guide

Category	Improved Transit Service	Increased Transit Travel	Reduced Automobile Travel	Transit-Oriented Development
Indicators	Service Quality (speed, reliability, comfort, safety, etc.)	Transit Ridership (passenger-miles or mode share)	Mode Shifts or Automobile Travel Reductions	Portion of Development With TOD Design Features
Benefits	<ul style="list-style-type: none"> <li>Improved convenience and comfort for existing users.</li> <li>Equity benefits (since existing users tend to be disadvantaged).</li> <li>Option value (the value of having an option for possible future use).</li> <li>Improved operating efficiency (if service speed increases).</li> <li>Improved security (reduced crime risk)</li> </ul>	<ul style="list-style-type: none"> <li>Increased user security, as more users ride transit and wait at stops and stations.</li> <li>Mobility benefits to new users.</li> <li>Increased fare revenue.</li> <li>Increased public fitness and health (by stimulating more walking or cycling trips).</li> </ul>	<ul style="list-style-type: none"> <li>Reduced traffic congestion.</li> <li>Road and parking facility cost savings.</li> <li>Consumer savings.</li> <li>Reduced chauffeuring burdens.</li> <li>Increased traffic safety.</li> <li>Energy conservation.</li> <li>Air and noise pollution reductions.</li> </ul>	<ul style="list-style-type: none"> <li>Additional vehicle travel reductions ("leverage effects").</li> <li>Improved accessibility, particularly for non-drivers.</li> <li>Reduced crime risk.</li> <li>More efficient development (reduced infrastructure costs).</li> <li>Farmland and habitat preservation.</li> </ul>
Costs	<ul style="list-style-type: none"> <li>Increased capital and operating costs, and therefore subsidies.</li> <li>Land and road space.</li> <li>Traffic congestion and accident risk imposed by transit vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Transit vehicle crowding.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced automobile business activity.</li> </ul>	<ul style="list-style-type: none"> <li>Various problems associated with more compact development.</li> </ul>

Source: Litman (2010)

Litman (2010) guide book in evaluating public transport remind us to calculate the benefits and cost of the public transportation policy reform. The indicators can be use as the tool to evaluate a transportation performance as well as the policy impact and assess the whether the project successfully met the target or not.

### III. RESEARCH METHODS

This paper has used a approach of deductive top down research in qualitative case study method. By fitting between theories and data collection, qualitative research tends to be associated with words or images as the unit of analysis. Qualitative research use to make description of data (Denscombe, 2007). The qualitative research involved the use and the collection of various empirical materials, like the case study, the personal experience, the biography, the interview, observation, the text of the history, interaction and visual: that picturing routine torque and problematic as well as his meaning in the individual and collective life (Denzin and Lincoln, 1994). Methodology of qualitative research is also used for methodological discussion and analysis of empirical study. In general, this

paper based on literature reviews and comparative studies about public transportation reform in Seoul and Jakarta.

The stages of collecting primary and secondary data, analyse data, and making comparison. The comparator for the Jakarta public transportation reform is Seoul which have been success and become as a benchmark of public transport reform in many cities in the world. The research in Seoul consists of how Seoul can develop transport policies and implement the quasi transportation (government and private collaboration). What are the key success factors of its reform and how Jakarta can adopt it? The result of data analysis, findings and comparison studies would be analysed to public transport reform in Jakarta.

### IV. RESULT AND DISCUSSION

This chapter contains the findings of the research using qualitative method with mixed data collection tools from depth interview, questioner survey as well as the report analysis of the bus transport reform that been held both in Jakarta and Seoul. The analysis of this combination of data collected will be describe below on the sub sections to answer the research questions. The primary data came from the depth interview to the several key persons the online surveys. Despite of that, there are secondary data gather from the project report in Jakarta and the Seoul experiences of public transportation improvement that had been released on the web page : [www.seoulsolution.go.kr](http://www.seoulsolution.go.kr) managed by Seoul Metropolitan Government (SMG).

#### Seoul Public Transportation Reform

##### Bus Policy Reform in Seoul

In order to construct a conclusion of key success factors in Seoul bus reform, the writer had a deep interview with one of the Seoul Metropolitan Government staff. According to interview, the writer constructs the bus reform policy in Seoul and describe it into three phase of policy making process cycle from policy formulation, implementation and evaluation.

##### Policy formulation

The significant growth of motorized vehicles and urban sprawl, made mobility in Seoul hampered. To overcome the situation the Seoul Metropolitan Government build many road to afford motorized vehicle and increase road length in a city. However, the situation didn't make congestion better. In 2002 , Seoul Major appeared with the package formulation on bus reform, that focused the target on shiftiness of the people from their private vehicles to public transportation.

The essential package policy of bus reform in Seoul and its actors, as shown on the diagram below:

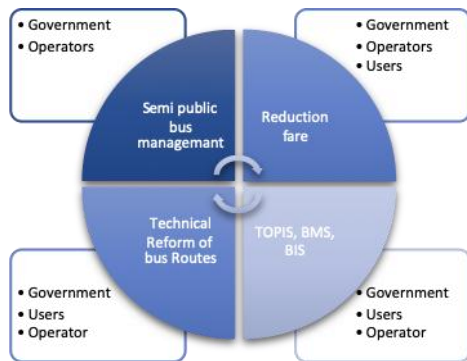


Figure 5. The Key Success Factor of Seoul Bus Reform

Source: Writer analysis from many resources (2019)

### Policy implementation

With a more detail preparations and more supports, the Seoul Metropolitan Government began the reform. The bus reform that initiated by the government consists of package policies that can be divided in four major programs, which are:

- **Semi-public bus system**

The semi-public bus system comprised three major components: public management, private operation and operational infrastructure.

- **Technical reform of bus routes**

The Seoul city government divided bus routes into trunk lines for inter-regional and medium- to long-distance journeys, and feeder lines for short journeys within each region.

- **Reduction of public transportation fare: from ride basis to trip-distance basis**

Before the reform, each public transportation means charged a flat rate per ride regardless of the traveling distance. The reform substantially lowered the average fare as it set up a system to charge passengers based on the combined distance travelled. To enable this, transfers from bus to bus and even to subways was allowed for free. With the introduction of this distance-based charging system, the citizens were found to pay about 30% less fares for public transportation service on average. Even if a passenger travels a long distance with multiple transfers, the system was designed to charge less than the old way of charging per each ride

- **Establishment of support system for public transportation operation and improvement of facilities and vehicles**

For the new public transportation system, a platform for traffic information was necessary. To integrate and process the information collected from related organizations, TOPIS (Seoul Transport Operation and Information Service) as well as BMS (Bus Management System) and BIS (Bus Information System) were established.

### Policy evaluation

Policy evaluation is related to the policy impact of the Seoul bus policy reform. Therefore, the writer will elaborate more about the policy evaluation in the next sub chapter.

### Impact of Seoul Bus Policy Reform

After eight years of implementation, in 2012, the Seoul Metropolitan Government released a policy impact of the public transportation reform. The impacts can be found as table below:

From the table above, we can describe the impact of Seoul bus reform policy and divided into 5 sector which are :

1. Improvement of public transportation service
2. Increase citizens satisfaction
3. Increase in transit ridership
4. Increase in driver wages, and
5. Environment improvement

### Lesson Learn from Seoul Bus Policy Reform

The interview came up with the conclusion that the success of the bus reform in Seoul was achieved with strongly will from the Government and build a trust by construct another third party as an objective side between government and operators. The bus reform is actually initiate to start in 2002. However, at the D day of trial there are technical error (the card reader that attached on bus was error) there are chaotic situation that had never been experienced before. This chaos last until two weeks, and the government postponed the bus reform policy for a year. The key of the success negotiation during the time is a presence of the mediator, as said by the Seoul's Government representatives:

“the government introduce “citizens community” as a facilitator to started dialogues with the stakeholders, this is very essentials on build trust and began the reform. Besides, the Mayor also offered public apology. And after two month of implementation the reform regard as a success program that everyone agrees to continue the process.” (Min Dong

Hwan, manager of Transportation Directorate – Seoul Metropolitan Government on interview chat to the researcher)

Besides, the writer also found the key success factors of the bus reform in Seoul, were also in the way they implementing the package policy parallelly which contains of: semi-public bus management, technical reform of bus routes and structure, reduction fares with implementation of bundling tariff and the infrastructure organization such as Electronic Fare Collection (EFC) and Bus Management System (BMS).

## Jakarta Public Transportation Reform

### Bus Reform Policy in Jakarta

In order to identify a framework of public policy, the research should approached the theory of public policy making process and its definitions. The public policy taken by government, its decisions are intended to solve problems and improve the quality of life for its citizens.

A policy established and carried out by the government goes through several stages from inception to conclusion. These are agenda building, formulation and adoption, implementation and evaluation. The process of public policy making usually make a cycling in a phase at consecutively form, as figure below:

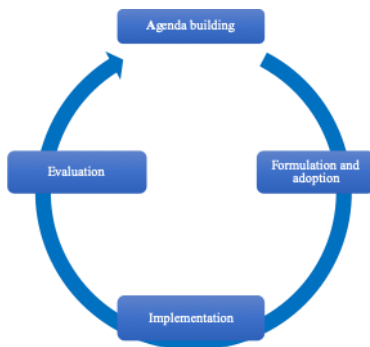


Figure 6. Policy Making Process  
Source: Adaption from many resources (2019)

Therefore, to design appropriate policy to Jakarta, the writer had to identify each phase of the stages. The identifying process can be described in this research after doing an in-depth interview with the key actors of transportation and bus reform.

### The Agenda Building

These key actors taken role as source persons that help writer gather the information and data to answer the research questions. The key persons divided from different perspectives which are regulator, operator and user. These three key

actors are having a similar agenda building in term of the current conditions of Jakarta’s public transportation. They said that Jakarta’s public transportation conditions is very treats as an impact of the death circle of public transportation, these circle told us the poor services of public transportation makes people shifted to the private vehicles, then it will gain the traffic congestion and which will also reduce the trips of the public transportation, then the result is the revenue cut of the operators that makes them could not afford a services standard and lessen their service performances. The death circle of public transportation as shown in the figure below:

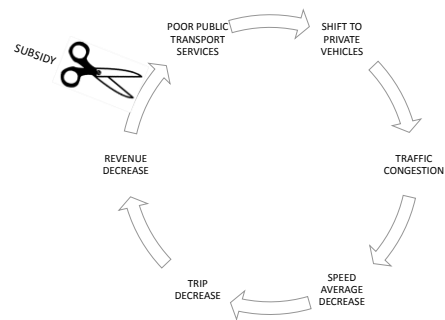


Figure 7. Death Circle of Public Transport Operation  
Source: Subarto (2013)

From the interview to the three of the key actors, they are all agreed with subsidy scheme as the only choice to cut of the death circle. Therefore, from 2016 DKI Government is implemented a subsidy scheme which regulated on Governor Regulation no. 62 year 2016 about subsidy on public services obligation in transportation sector.

However, this subsidy scheme was not had an impact on increasing the mode share of public transportation and weakly fight traffic congestion. Therefore, the situation asserted DKI Jakarta government to figure out the policy formulation to tackle the situation.

### Formulation and Adoption

The next phase on policy making process is formulation and adoption. The policy formulation and adoption regarding the bus transform in DKI Jakarta had been made and extract from lot of discussions, meetings and benchmarking to the several cities in the world, especially Seoul.

From the interview, writer knows that all of the close stakeholders are involved to design and formulate the policy. It is necessary, concerning this policy will change the whole organization of public transportation. There will be no longer conventional ways of organizing road-based transportation, because all of the process of it will

be re-regulate by government with the semi-public transportation system.

The operator and its organization are contrary with the policy on first place. However, with the intensive communication and study visit-training to the Seoul Metropolitan Government (which is the place that this bus reform policy is adopt), they finally agreed with the program at start to initiate the whole transition in organizing public transportation.

So, it is a good point knowing that all the public transportation operators and the representative user are involved in this policy formulation and adoption.

The formulation and adoption phase were finally drafted on the Governor Regulation No. 96 and 97 of year 2018. These regulations were described about the integration process of government and operators in order to implement the semi-public transportation. This form was the essential in bus reform policy regulation.

### Implementation

The next step is policy implementation, the implementation of bus reform in Jakarta sadly went very slow. There are multi sector of bus reform implementation in Jakarta which are have different challenges.

In this phase, there are very different answer and thoughts came in the interview. The regulator, Jakarta Transportation Agency (Dishub) found that the difficulties and challenges in the implementation process of bus reform policy came from the national regulation and the missed concept between the Trans Jakarta Company (as a government extension in this policy implementation) and the public transportation operators. This missed of concept impacted the ability to chasing the schedule and target of the integration between government (Trans Jakarta) and the Operators. Therefore, the implementation is slightly left behind the schedule and target. To know the gap of the implementation and target, here is the recent status of the bus reform policy in Jakarta:

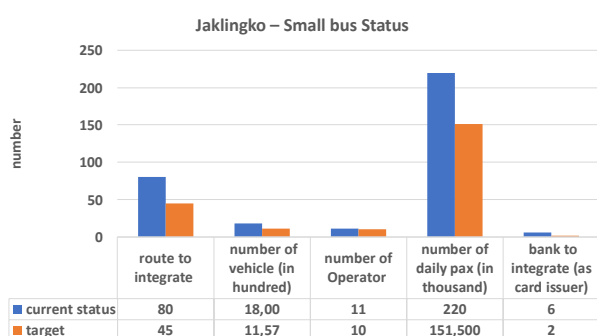


Figure 8. Jaklingko Status

Source: Trans Jarkarta Company – Monthly Report of Jaklingko, September 2019

The figure above is the status for small buses integration, the current progress and the target had a significant gap. The operators and Trans Jakarta’s source person have a different opinion regarding the gap, the response from the key stakeholders resumes that they are blaming each other for the slow implementation on integration. The operators said that Trans Jakarta is the one that causing this late process of integration, the interviewee also stated:

“they (Trans Jakarta company) do not have a Standard Operation Procedures for the integration process and have no time consuming for each phase of integration from the contract signed until the bus can operates on the street” (Lumumba Pardede, head of Komilet Jaya in interview with the researcher on October 4, 2019)

On the other hand, Trans Jakarta company said that the operators do not ready to facing the transform, and it is very hard to change their mindset and behaviour from their old style of managing public transportation to the reform. The trans Jakarta representative stated:

“The lack of awareness of operators and public transportation driver leads the slowly progress of the bus reform policy implementation. Their previous mind set of ‘setoran’ system hard to change to the contractual based system, this is the ultimate challenge for us” (Bano Yogaswara, Head Division of Integration of Trans Jakarta Company in interview with the researcher on October 20, 2019)

However, the bus reform in Jakarta already started, the reform and integration started for the small buses, and will also propagate to medium buses and large buses until it fully integrated which targeted in 2021.

### Evaluation

In a previous sub section, we know there is a gap in between target and the progress of policy implementation in Jakarta bus reform program. In conjunction with that, the writer had to also evaluate bus reform policy to enable construct the recommendations as one of the research questions in this paper.

### Impact of Policy Reform in Jakarta

Based on the Guidebook in evaluating the public transportation reform by Litman (2010) bus transportation reform can be evaluate in the four sectors which are: improvement in transit services, increasing in transit mode share, reducing automobile user and promote the Transit Oriented Development. The evaluating form can be defining as table below:

Table 3. Jakarta Bus Reform Evaluation

	Improve ment Transit Services	Number of User	Covera ge area	Promote Transit Oriented Developm ent
<b>Before reform</b>	Poor services, there is no service level agreement/minimum service standard in organizing public transportation	450.000 pax/day	40 %	0
<b>After reform</b>	Better services with SLA of operating and managing public transportation services based on the Governor Regulation No. 13/2019	950.000 pax/day	65 %	3 (three) TOD implem ented, and 5 more on plan

Source: Jakarta Transportation Agency – monthly evaluation report (2019)

In the context of evaluating bus reform policy in Jakarta, the writer also gathers the data from user via online survey and the interview to importance user community representative and the operators.

The interview deduces the result of positive voices from the users and operators’ representatives toward the bus reform policy, the same reactions are coming from the respondent of online survey with can be conclude as the support to the government in the bus reform policy. They are expecting a continuation of bus reform the get the maximum impact.

### Improving Policy Reform in Jakarta

In this final sub section, writer will construct some of recommendation to Jakarta Government. This will include the comparing result from what have been done in Seoul and the progress of implementing the bus reform in Jakarta and the recommendation to the Jakarta government in order to maximize the impact of the bus reform policy which construct from the interview method and the online survey data collected method.

When comparing the package of policy implementations of bus reform in Seoul and Jakarta, the writer found several gaps between policy implementation in both cities. However, the aims and the approach of the reform were same. The significant factor of the reform is the willingness and commitment of both governments to allocate subsidy to the operators in order to provide public goods (transportation services), this commitment shows the government existence in public services issues. The subsidy implemented in same mechanism with differ calculation,

nevertheless, if Jakarta wants to be more efficient, it is a recommendation to follow what Seoul done and recalculate dan reformulate the subsidy scheme. On the other hand, the policy of bus reform in Jakarta should have to be followed by other policy as a package to gain its benefit and optimize the impact. However there a sub policy that left and need to be implement parallel in Jakarta as Seoul did, as can be seen at the table below:

Table 4. Comparing Policy Between Seoul and Jakarta

Policy Program	Implementing Agenda	Seoul	Jakarta
Semi Public Bus Management	Contractual based	All Implemented/ Done	Done
	Revenue sharing / subsidy		Done
	Facilitating support/ infrastructure		Not yet
Fare Reduction	Bundling Fare		Not yet
	Electronic Fare collection		Not yet
	Fare Settlement Centre		Not yet
	E- Ticketing System		Limited implementation
	Share Revenue		Done
Route management	Route Efficiency		Limited Implementation
	Routes Classification		Not Yet
IT Infrastructure	TOPIS		No Yet
	Bus Management System		On Plan
	Bus Information System		Limited Implementation

Source: Writer analysis (2019)

In addition, the absence of the Electronic Fare Collection and IT Improvement in Jakarta are delaying the impact of reforming program. The impact result of the bus reforming program is not significantly hit the target, because it needs to be in line in between the policy formula package, one and another. The reform not only to integrated and jointly manage the operational of the buses but also enhance the services with real time information form customer (with BIS/BMS data cultivation). If the package is only half implemented then the result/impact of the reform will cannot be achieved.

Beside of that, the writer gathers the data from online survey media platform on public transportation topics, the survey was held via Google form in two days accepting response period which from September 30th 2019 to October 1st 2019. The questioner-survey was participated by 107 respondent form various layers of occupancy, ages and others demographic status.



According to the online survey result, the writer resumes the three most suggested policies to the Jakarta's Government in order to increasing the number of public transportation (especially buses) user, the recommendations are:

1. Increasing the coverage area of bus services. The result from the respondent survey recommended the larger bus area of services, which is related to the bus routes restructuring which in line with the policy package of Seoul public bus reform.
2. Increasing the service quality of the bus transportation. This is an ultimate point on the bus policy reform which should aim the impact on betterment of public transportation services.
3. The affordability and accessibility. It is a reason of why the bus reform policy needs to follow by fare reduction, because the affordability and the easiness of payment method are important to the communities.

All of the recommendation collected from the online survey had been done in Seoul bus reform and these are suggested to be implement in Jakarta.

## V. CONCLUSION

The poor services of public transportation, especially buses lead to traffic congestion and lessen the number of bus users. This situation is asserted by the government to make an aggressive change. One of the typical solutions that had been implemented in the cities around the world is public transportation reform.

Seoul Metropolitan Government is one of the most successful cases in implementing bus reform policy, the key success of the bus reform policy in Seoul can be found in the package of policy that parallely implemented at the same time. The package policy of bus reform in Seoul consists of: semi-public bus management (Seoul integrated version between government and private operators in organizing public transportation), technical reform of bus routes and structure, reduction fares with implementation of bundling tariff and the infrastructure organization such as Electronic Fare Collection (EFC), Bus Tracking System (BTS) and Bus Management System (BMS). The infrastructures built by the Government were enhancing and boosted the impact of the bus reform policy that should not be neglected.

Inspired by the success story of the bus reform policy in Seoul, Jakarta Capital Government initiated the bus reform in 2017. The earlier phase of the reform is full of rejection from private operators. However, after many discussions and meetings, these two parties are finally agreed with the bus reform and started to collaborate in managing the public transport operators. At the

same time, the Jakarta government also restructure the route and its services, to efficiencies the subsidy. The agenda-setting and the policy formulation of bus reform in Jakarta are very adequate with the involvement of the important stakeholders in transportation. However, the implementation of the policy is challenging, the progress is very slow and the actors are blaming each other in causing the slowness. The roots of the problems are in the differing point of view of private operators and Trans Jakarta companies. Intensive communications are needed to overcome the situation and accelerate the process of implementation. Furthermore, the earlier evaluation of the current progress of bus reform policy is satisfying both users and operators, and all of them are eager to continue the bus reform policy until its fully integrated which targeted in 2021.

This research strongly suggests the Jakarta Government to implement the package of the policy parallely with the establishment of infrastructure organization such as Electronic Fare Collection (EFC), Bus Management System (BMS) and Bus Tracking System (BTS) and also completed with the bundling fare implementation to make the public transportation services more attracted to the costumer. Besides - in this opportunity, the writer also recommends the Jakarta government to increase the coverage area of the services and integrated all of the public transportation mode as requested from the online survey respondent.

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