# COMMUNITY INVOLVEMENT FOR SURABAYA'S PUBLIC TRANSPORT MANAGEMENT

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### **ABSTRACT**

This paper will examine the correlation between theories and researches on community involvement with the planning for Surabaya's public transport network. This departs from the idea of including affected community to join in the planning and designing process and one of the decision maker, rather than just a passive consumer, using researches related to participatory development on urban design practices. This paper will start from the idea of engaging communities in urban planning and development process to create a more resilient community and look for its examples in the city of Surabaya, Indonesia. Afterwards, this paper will observe the importance of effective and efficient transport management and the conditions of Surabaya's recent transit network and the efforts to improve it by implementing reports on rail-based transport. These two aspects, community involvement and provision of new public transport system then merged. The expected results are that the development of urban areas should be taking into account its surrounding neighbourhood, district, or corridor. In the end, this paper will generally recommend what steps should be taken, either for the transport management or the community involvement effort.

Keywords: community involvement; participatory design; transport management; Surabaya

#### I. INTRODUCTION

Transport as an important and vital aspect for the accelerator of economic and regional development [1], [2] should be taking into account its surrounding affected areas to ensure the effectivity and efficiency [2]. Transport development in the urban areas in developing countries on the few last decades has been focused on mostly expanding the automobile network, which leads to the use of private motorised transport as the main travel choice. This type of travel choice then leads to unequal and unsustainable transport provision.

Reviewing on the transport management, with taking the perspective on developing countries, it is important that planning and constructing a transport infrastructure have to fulfil people and/or communities that were affected by it. Social, political, and civil

rights movements in the 1960s and 1970s triggers the emergence of community consciousness that the community itself should be involved in the process of making decisions in a planning process that affect them, because of the beliefs that the environment will work better if those citizens are active and involved in its creation and management, rather than just being passive consumers [3], [4].

The observed area for this article is in Surabaya, Indonesia. With the population of more than 2.9 million, about half of its populations are live in informal settlements called Kampung [5]. Looking at the context of urban life in Indonesia with the existence of kampungs, it is important to recognise kampung as an inseparable part of the city. Kampungs located in the centre of Surabaya, Indonesia have been existed for centuries and integrated with the city life itself so it can be directly affected by transport development.

This paper will discuss the importance of community involvement in transport management in Surabaya. It is also will interrogate on how transport planning and management is or will be working in Surabaya, regarding its future planning on transport provision. Afterwards, this paper will look for the slice between the community involvement and its role in the existing transport planning and management for Surabaya. This slice itself can be turned into recommendations on how Surabaya should plan its transport development, without setting aside the community's importance.

#### II. LITERATURE REVIEW

### A. Community Involvement in Urban **Development**

Involving the community in the decision-making process has been happening in a long time, mainly in the United States, where it has been a democratic tradition [6]. In the United States, historically, it has been rooted deep in the minds of Americans as the right to make the decision, but due to the increase of the population and there were difficulties to involve all of the decision maker elements, the system then turned into delegation, by electing representatives of each region.

But the implementation in this contemporary era did not emerge until the social, political, and economic change in the mid of the 20th century that brings community consciousness, which leads to more direct involvement from the public that demanding increased saying in the decision-making process by collective action through shared interest and values, which will increase citizen empowerment, social capital, and sense of community. [3][4].

In the context of urban design, it has historically been exclusively a domain for the professionals in the field of design and planning due to the belief that it is very complex projects and policies to construct that it requires special knowledge so that it should not be consulted to the public [6]. The development then sparks criticism and debates on the designer and planner, mainly towards the impacts it generates, mostly on the large-scale developments such as city centre demolition for freeway construction.

Planner-designer-centric development did not take into account the impacts experienced by affected communities, such as gentrification and displacement of the vulnerable. There are also proofs that using

community participation approach can generate improved designs or policies that provide multiple needs and/or interest. Otherwise, the poorly managed public process can result in dissent, protests, legal challenges, project delays, and rising construction cost [6].

Today, participation is seen as a necessary and unavoidable part of urban design practice today. According to [6] and [7], there are various practices that commonly run for community involvement of urban development, such as legal mandates and process (proposition, initiative, and civic leadership), public review (invitation to public places for hearing, reviews, and comment), visioning exercises (widescale invitation of a certain project), simulations (modelling activity to explore implications of policy and decision-making processes), advocacy (creating a neighbourhood agency to influence and shape decision making), and direct actions (influencing design neighbourhood and urban spaces).

### **B. Public Transport Management in Developing Countries**

Most urban transport mode in the developing countries are still depended on private motorised transport, as a result of decades of automobilefavoured transport management. On the early postcolonial era, due to the strict budgeting, most spending usually went to the aspects deemed as immediate and essential. This made the development of new formal, rail-based urban public transport network at that time unnecessary [8]. But the demand for new road increasing as the automobile become less expensive and more affordable, which then leads to the extensive road network and create a city sprawl. This type of "new normal" then leads to the negative effect such as the deterioration of existing public transit network, leading some network to be closed due to poor maintenance and little refurbishment [9].

Although proper transport management, even the automobile-based one, helps to trigger economic growth and supporting developments [2], the automobile-based transport system and management brings the negative side, mainly for the disadvantaged groups (physically, socially, and economically disabled) such as:

- Reduction of social interaction and racial segregation [10][11]
- Displacement and gentrification that leads to

- environmental injustice [12]
- Lack of accessibility and mobility to the opportunities [12][13]
- Health problems, due to less physical activities, traffic incidents, and air pollution [11][14]
- Severe oil dependency that contributes to global warming [11]

By the end of the 20th century, the problems of delivering effective public transport management for the developing countries started to find a light. The mass rapid transit in the form of the bus (Bus Rapid Transit, BRT) was introduced in Curitiba in 1974, as the cheaper alternative to rail-based transport infrastructure. It did not directly gain interest until the same system was launched in Bogota in the year 2000.

In Indonesia, the development of public transport was merely the same as other developing countries, which dominated by cars and motorcycles. On the case of Jakarta, the city was heavily depended mostly on road-based public transport such as buses and informal transport dubbed as paratransit, which has a more extensive network mainly at the narrower streets unreachable by bus [15][16]. Despite many studies on mass rapid transit has been conducted since the 1970s, only little of it was implemented [17]. Due to the significant interest in BRT, Jakarta started to construct its system in 2003 and inaugurated the first phase on the next year. Today, Jakarta has one of the largest BRT systems in the world and served 370,000 daily passengers [18].

#### III. METHODOLOGY

This paper adopts secondary data and mostly employs qualitative analysis rather than quantitative analysis. The qualitative analysis consists of the literature review that related on community involvement in the form of participatory design, transport management and its implementations on developing countries, the importance of kampung in Surabaya from its formation, characterisation, and the example of community-led designs, and the transport planning for Surabaya. Quantitative analysis of this paper consists of statistics on population and transport usage.

Besides discussing participatory design, this

paper will also take the light on the recent condition of the urban public transport system in developing countries. Afterwards, this paper then will describe the cases of community involvement in designing and transport management in developing countries. Surabaya as the centre of attention will employ its kampung and its transport conditions and planning.

Based on theoretical approach on participatory design and existing transport situation, it will look for what type of participatory approach on transport planning, and then interrogate it with the existing situation and planning for Surabaya's kampung so that the recommendation can be gathered to improve the planning for Surabaya's transport in the future.

# IV. REFLECTIONS ON SURABAYA A. State of the Kampungs

Kampung, which is a major urban agglomeration of the rural village has been a vital asset for Surabaya's urban poor. It serves as the informal settlements with mixed social economic groups of low and middle income, although its inhabitants are primarily from low-income group. It basically formed as a rural village that experienced transformation, gradual expansion, and consolidation through the self-build process. It is also strategically located in the city centre and generates home industries, providing access to opportunities for mixed skills and knowledge [5].

The involvement of kampung's community in their neighbourhood development has been run since 1968 on various programmes as explained by [19]:

- Kampung Improvement Programme (KIP), 1968-1993, a government programme on upgrading community level basic infrastructure to enhance physical and socioeconomic conditions, expanding productive capacity, and reducing socio-economic life disruption
- Comprehensive KIP (C-KIP), 1995-2008, a continuation of KIP that focused on physical environment improvement, community development, housing improvement, and land management
- Surabaya Green and Clean, 2005 onwards, a competition held by the city government to encourage kampung community to improve their own neighbourhood on its garbage and waste management, sanitation, and greenery and the winning neighbourhood will get

incentives to initiate further improvement.

Despite the outcome of KIP and C-KIP are smudged by negative evaluation such as unsatisfactory cost recovery, maintenance, conflict resolution, and lack of creativity [19][20], those programmes have prevented gentrification, preserved liability, and strengthen community empowerment for development implementation [5].

## B. Surabaya's Transport: Its Management and Plans

Surabaya's recent transport management is still heavily depended on road-based transport that dominated by private transport mode, mainly motorcycle and cars. There are also public transport options such as bus, taxis, and paratransit such as ojek and bemo, which all managed by different companies. The result of this dependency is the same as other major cities in developing countries that in the end favours road development and expansion over public transport improvement that leads to frequent traffic in the city centre, despite the effort to ease up the existing road and extending road network throughout the city. Recently, the government have utilised a plan to improve the public transport condition by reintroducing rail-based transport of trams, once one of Surabaya's main transport mode, and monorails, which later altered into overhead light rail transit (LRT). This trams will follow most of the old tram's route, with some adjustments. The report that published in 2014 [21] involved various stakeholders, civic leaders, academicians, and professionals in delivering mass rapid transit for the cities.

Using the approach of transit-oriented development, trams involves Surabaya's kampungs as an integrated part of its development. The report then delivers plans of kampung improvement that being affected by tram development and specify some focal recommendations, such as:

- Encouraging further incremental growth and development
- Enabling small public space and low rise mixed use edifices
- Working with kampung communities
- Generating feeder pathways to tram stations and improve it, such as bike network, street furniture, and façade improvements
- Building the kampung market as the socioeconomic centre of the neighbourhood

#### V. ANALYSIS

The approach of transit-oriented development in the urban public transport development and planning should encompass the entire neighbourhood, district, or corridor surrounding a station due to its radical physical change in the form of construction of new transitsystemandexpectation of a private development, which is immediate and may be intrusive [22]. Polyzoides expects that the design of the station itself must be put through a community process so that the affected neighbourhood community can discern the mobility, economic development, and other benefits. This process has to be transparent, participatory, and engaging all constituents, either public or private sectors to create a specific area master plan for the neighbourhood [22]. Relating back to [6] and [7], common practices are the key to ensure the active community involvement in the development process (in this term, transport development). If this stage really goes well, it should bring positive impact, such as improved decisions quality, minimizing cost and delays, consensus building, avoiding "worst case" confrontations, and developing public expertise and creativity [3]. This will surely improve the transport system to make it more efficient and effective to grow the economy and supporting developments [2]. From the analysis of six common practices that correspond (or not correspond) to the report's recommendations for Surabaya's kampungs, two practices are available on the report, which is the project design and direct actions. Regarding the project design practice, the report has been publicly published so that everyone can gather the information to observe steps and design ideas in transit planning. On the direct actions, the report already encourages community to improve the streets or pathways leading towards the station to ease access and walkability. One of them is the art project to beautify the facades of the pathway.

#### VI. RECOMMENDATIONS

This part will be divided into two: recommendations for transport management and community involvement. For transport management in today's state, it is required to introduce a new mode of transport that can carry more people efficiently. The most inexpensive mode of transport is should be BRT, just like what other cities in Indonesia have

been implemented. The government estimates the BRT system can carry up to 3800 people per hour per way [23]. But this article was published in 2012, two years before the 2014 report. In the 2014 report, there is no mention on the BRT system, but only states on how the bus and bemo should be improved. The BRT system should be the first to implement since it is less expensive and can be executed as a trigger for people to use public transport mode. There is also the concern of disintegrated companies on transport usage. It should be integrated into one authority board to minimise conflict and creating an effective and efficient network of transport.

On community involvement, it shows that there are already recommendations being mentioned on this tram and LRT project, but since it is only recommendations of the experts, it goes back to the government as the last decision maker on how to execute the project. The steps on acknowledging kampung and its potentials and the effort to publish the report for the public are highly appreciated, but it needs to be ensured that if the government wants to construct this, they have to engage with kampung's community as a part of the participatory design. There are also concerns on this project if the government does not intend to include the public on this transport project, as follows:

- Budget issues will always be a highlight when constructing new public transit network so perhaps, due to the strict budget, the only thing being built is the station infrastructure without taking into account the surrounding impacted neighbourhood, especially the kampungs.
- There might be some dissents or protests if the development proved does nothing to the community or if the plan does not concern the community affected
- Gentrification, due to the increase of private developers that wants to build properties adjacent to the station that can increase land values around their neighbourhood.
- Recommendations for community involvement are as follows:
- Publish the project to the public and give a specific period to gather public reviews and comments on how it should be executed or what details should be added or altered.
- On the early steps of designing, engage

- affected communities, public and private, to a communal meeting to expressing preferences through some options, either its public forum, simulations, workshops, focus groups, or workshops to ensure all inputs for the project to generate ideas and bring public consensus.
- Direct actions from the public, which already stated in the report, should be implemented to make the transport mode runs effectively and minimising gentrification effects.

### VII. CONCLUSIONS

Surabaya's recent transport management that still relies on a private mode of transport should be altered by using policies to encourage people to use public transport more rather than private ones. Implementation of rail-based transport, as done in the 2014 report also should take into account the importance of kampung community that will be affected by the new transport system and treating them as an integrated part of Surabaya's transport system, rather than being mere passive consumers. Common practices on participatory design seem fit with the social character of kampung community. By integrating them into the system through participatory processes, the neighbourhood will strengthen its initiative, creativity, and independence.

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