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City Report

(Draft)

<Surakarta City, Indonesia>

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Surakarta towards a City with Sustainable Transportation

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Surakarta as one of the popular tourist destinations in Central Java region, Indonesia. The city has several historical tourist area inside the city and nature tourism attraction in other districts surrounding the Surakarta areas. Surakarta are the city which rapidly developed as a tourism and trading city in Central Java Region either national level. This city get benefit according to geographic location, located in center of Java which all direction traffic in this land meets as a center island of economic activities in Indonesia. In regional level, Surakarta formed “golden triangle” with Semarang (as capital city of Central Java) and Yogyakarta and gives rapid economic sector development in this area.

Center activities Surakarta relatively centralized in the area of Jalan Slamet Riyadi, which serves as the main street which divides the city area. Development activities in the city are more dominant in the southern region of the city compared to the northern part of the city. Surakarta southern region has long evolved as well as a business center settlements that have been there since the past so it is relatively more densely populated. Meanwhile, in the northern part of the majority only functioned as a residential area with some land still abandoned.

Surakarta have access to adequate transportation and complete enough, so it easily accessible from the various city or direction. The city located in the middle of the path between the western and eastern part of Java makes Surakarta became a major crossing diverse ground transportation. Modes of transportation available in the city of Surakarta are public buses and trains. Adisumarmo International Airport is known as the airport serving the city of Surakarta, but located outside the administrative area, precisely in Boyolali.

Hereby we present data on progress, policies, achievements, including various challenges faced, that have been passed by Surakarta City to achieve sustainable transportation, by focusing on the following aspect:
A. The mayor challenges and constraints faced by Surakarta City in implementing sustainable transport policies and measures are:

1. The rapid growth of private vehicles in Surakarta City up to 7.5% per year
2. The rapid growth of private vehicles are not following by the construction of roads and transportation infrastructure (Figure 1)
3. Public awareness of road safety is still low
4. Public awareness to use public transport/switching from using private vehicles to public transport remains low
5. Public awareness to keep and use the supporting infrastructure of transport that should be used as is still lacking. (For example: City Walk in Slamet Riyadi Street that should be used to facilitate pedestrian is still used as a vehicle parking and street vendor selling, and the slow lane on Slamet Riyadi street that should be used for non-motorized vehicles such as bicycles and pedicab, is still used for parking of vehicles, street vendor selling, and used by motorized vehicles. (Figure 3)

B. Surakarta city has done some action to promote public transport, such as:

1. Providing public transport services that are safe, convenient, timely, and affordable, which is public transport service system based BRT (Bus Rapid Transit) which in Surakarta is known as BST (Batik Solo Trans) (Figure 4)
2. Create standard operating procedure (SOP) for Batik Solo Trans (BST), so that the operational / service can be controlled
3. Conduct socialization to the community about the positive values and the advantages of using Batik Solo Trans (public transport)
4. Conduct socialization to students to be able to use BST (public transportation), because it is more safe, convenient, timely, and affordable. As well as in general, the children in school age is not feasible to use motorized vehicle or a private vehicle, so encourages to use public transport.

5. Cooperation with schools (both junior and senior high school) as a pioneer of school traffic safety. On this program, the school should ban all student who under 17 years old to not use motorized vehicle/ private vehicle, so they will go to school using public transport.

C. Actions that have been done to promote non-motorized transport (for safe cyclist and pedestrian facilities) in Surakarta City, which is as follows:

1. Construct pedestrian facilities that are safe and comfortable (City walk in Slamet Riyadi Street which include green line, as well as lawn chairs to enhance the convenience of pedestrians.

2. Build facilities pelican crossing at some place point in Surakarta city that can support the safety and convenience factor for pedestrian (sidewalk).

3. Build modal integration facility at some place point in Surakarta City, which integrates the railway mode and bus mode, where the pedestrians is facilitated with a special place that can directly reach the railway station to the bus stop and vice versa.

4. Build a bike path facility equipped with bike lane signs in Slamet Riyadi street, so cyclists can be prioritized with a special line and can increase the convenience and safety for cyclists.

5. Held activities named Solo Car Free Day (SCFD) on the road Slamet Riyadi every Sunday starting at 5:30 to 9:00 AM. Solo Car Free Day provide a special place for people who want to exercise by walking or cycling, without being together with another motorized vehicle. Solo Car Free Day is one of the Surakarta City efforts to improve air quality in Surakarta City (clean air).

6. Conduct socialization to the community of Surakarta City about the negative effects or dangers of global warming, so they can reduce the use of motorized vehicle, by encourage to walk or by bicycle if the activity area is near.
D. The process of Surakarta City to develop a master plan of public transportation that is people and environment friendly, with special attention to the needs of those in vulnerable situations, women, children, person with disabilities and elderly.

1. Create a grand design study of the 8 bus corridor of Batik Solo Trans (BST) which can serve or accommodate the movement of people who pass through Surakarta City center, such as: offices, homes, schools, universities, shopping centers, trade centers, and tourism spot.

2. Create a grand design study of urban transportation that will serve as a Batik Solo Trans (BST) bus, to extend the range the serving area of Batik Solo Trans (BST).

3. At the bust stop of Batik Solo Trans (BST) has been equipped with plant in pot, it will be more environmental friendly because it can absorb pollution / carbon dioxide in the air.

4. The Detail engineering Design (DED) of bus stop of Batik Solo Trans, has been facilitated with disabled facilities, such as: Ram (flatness adjustment that can be accessible for the disabled wheelchair), guide rail in bus stop thereby facilitating the disabled (visually impaired) to enter the bus stop and get on the Bus. *(Figure 6)*

5. People with special attention to the needs of those in vulnerable situations has been facilitated to enter the bus stop and get on the bus by providing a special chair for the disable, pregnant women, and the elderly on the Bus.

6. Batik Solo Trans already through emissions testing before the operation, and there are periodic emissions testing every 6 months, so that the exhaust emissions of the bus can be controlled.

E. Surakarta city current parking policies and traffic restraint measures:

1. Parking policies in Surakarta City enforce parking by zoning system. Parking zone divided into five zones, ranging from the highest is zone A, B, C, D, and E. The parking zone system will regulated in Mayor Regulations (PERWALI) about Parking Zone. Due to local regulation mechanism must use the Mayor Regulation (PERWALI), the parking zone that applied in Surakarta City is only zone C, D, and E. Different zones will determine the parking rates.

*Figure 6 The Detail engineering Design (DED) of bus stop of Batik Solo Trans, has been facilitated with disabled facilities, plant in pot, and integrated with other mode*

*Figure 7 Signage of parking zone at culinary park Manahan*
For example, Zone C on the road Slamet Riyadi, the parking rates is IDR 3,000 for a car, and IDR 2,000 for a motorcycles, with progressive rate every hour IDR 1,000. The policy aims to vehicle parking will be more structured and properly managed.

2. On the Bus terminal and railway station of Surakarta City (Balapan St, Purwosari St, and Jebres St) is provided large parking area. It is intended as a parking lot for people who use “park and ride”

3. Surakarta City has had intelligent transport system, which at each intersection are installed cameras that can monitor the movement of vehicles. Surakarta city also has had area traffic control system, which through a central control room, that may intervene of control the traffic light system in field, according to the needs of the movement of vehicles. So with both systems, traffic control in Surakarta City can be controlled properly and well.

4. Surakarta city also implement traffic engineering management system, that imposing a system of traffic movement on a particular road, as well as the signs that direct or prohibit the movement direction of the vehicle, and the other regulations and signs that applied in road sections in order to improve traffic safety in Surakarta City.

F. Surakarta city steps in implementing the road safety polies and measures:

1. Compose a local regulations of Surakarta City number 1 year 2013 about the transportation in Surakarta City that have set the procedure to provide transportation, including arranging public transport problems and road safety.

2. Compose a mayor regulation (PERWALI) that include more detailed regulations of each part of the transportation system, so it is more applicable and understandable.

3. Compose a work plan that structured and scheduled, so it can directing to the important points in the implementation of sustainable transport policy and road safety in Surakarta City

4. Compose plan of budget needs that proposed each year, for to be able to develop better infrastructure, facilities, and transportation infrastructure in order to implement policies that have been determined.

5. Surakarta City has been doing the construction and development of transport infrastructure, transport facilities and infrastructure, to improve services, and create a safe transportation, and sustainable transport system

Of the challenges and constraints faced by Surakarta City in implementing sustainable transport policies and measures, Surakarta City is always evolving and improving itself. During the process, Surakarta also has assisted cooperation with various parties who have a vision in line with Surakarta City related to face climate change, and will always open for the other cooperation in future.

From the various policies and plans that have been developed, Surakarta city optimistic and will continue to do best to realize Surakarta as a city with sustainable transportation and contribute in efforts to improve air quality in the world.
The Number of Traffic Accidents in Surakarta City
Year 2011-2013

<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>The number of location</th>
<th>The number of traffic accident</th>
<th>The Number of victims</th>
<th>The cause of accidents</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dead</td>
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<tr>
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Source: Traffic Unit of Surakarta City

Surakarta success in realizing improvement in road safety, it have been shown by decrease in the number of traffic accidents and the number of victims caused by traffic accidents from 2010. It is showing that Surakarta has demonstrated its commitment to implement the principles that have been declared together in Bangkok in 2010. Bangkok Declaration for 2020–Sustainable Transport Goals for 2010-2020, has been one of the driving of Surakarta city to implement policies and development plans related to sustainable transportation as mentioned above.

Figure 9 The Number of Traffic Accident in Surakarta City Year 2011-2013