WOMEN ON WHEELS

Programs and Implementation





This report is produced by Kota Kita within the project Women on Wheels.

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CHAPTER 1 INTRODUCTION

1.1. Project Summary

Today, few modes of transportation are as sustainable, healthy and efficient as the bicycle. However, increasing motorization, the lack of adequate infrastructure, economic boundaries and other social and cultural constraints makes cycling unpopular in many cities. Women are particularly more vulnerable to the effects of these limitations. Through in-depth research and interactions with women from various backgrounds, we have also learned that the issues of cycling for women in cities also cut across issues of gender equality and economic accessibility.

The primary objective of Women on Wheels initiative is to empower women and increase their quality of life through non-carbon-based mobility and to achieve this through innovative, sustainable and scalable programs. Women on Wheels was initiated by Swedish NGO Living Cities together with Indonesian NGO Kota Kita. This project was funded by Swedish agency Vinnova through the Normkritisk Innovation program. In Indonesia, the initiative is premised on the idea that access to sustainable and affordable transportation for economically vulnerable women leads to improved mobility, independence, greater economic access and ultimately empowerment.

Over the period of three years, the Women on Wheels initiative In Indonesia encompassed a range of activities from baseline research to actual implementation of on the ground programs in the pilot city of Surakarta. Throughout the initiative, Kota Kita leveraged the knowledge developed during the participatory research phase to identify creative strategies to promote cycling in the city, particularly amongst women and girls.

Kota Kita started the initiative by conducting a feasibility study in order to better understand the potential of promoting bicycling for women in the city. The study was conducted between February – April, 2015 in two Indonesian cities; Surakarta (Solo) and Yogyakarta. The team identified why some women are only limited to riding the bicycles while others face barriers to their use. The unique combination of the city's characteristics, economic profile, legal and political context, as well as the recent rise in interest in bicycling make Solo a suitable city to develop the pilot project.

The second phase was focused on the program design in the pilot city of Solo - developing a set of tools and strategic actions to address the barriers and challenges of women on using bicycle. This was followed by the implementation of pilot projects in the city where Kota Kita team implemented the tools and strategies developed in prior stages to test their efficacy in incentivizing cycling. Summarizing the activities, achievements, challenges and recommendations of the project this report attempts to present a comprehensive picture of the process and experience of building a cycling culture for women in Indonesian cities.



1.2. Project Framework and Timeline

FEASIBILITY STUDY



To better understand the potential of promoting bicycling for women in Indonesian cities; Yogyakarta and Solo



- Desk-based research
- Focus Group Discussions
- Field Observation



- Middle class women
- Working class women



Feasibility study report.

Kota Kita finds that Solo is an appropriate city to launch the Women on Wheels pilot project.

PROGRAM DESIGN



2015-2016

Design of tools and strategic actions to promote the use of bicycles among women and girls in Solo city



- Focus Group Discussions
- Field Observation
- Desk-based research
- Individual interviews



- Junior and senior high school girls
- Women factory workers
- Solo's Department of Transportation
- Organized civil society groups



Program Design Report

A set of strategies to promote bicycling

as a form of transportation that is

cheap, environmentally friendly,

convenient, and flexible

Methodology





1.2.1. Project Framework

The project framework summarizes the phases Women on Wheels program in Indonesia. The diagram describes the various phases and the objectives, methodology, stakeholders and output of each phase.

TOOLBOX AND METHODOLOGY



Strategies and guidelines for stakeholders who are interested in implementing Women on Wheels in their city



- Focus Group Discussions
- Field Observation
- Desk-based research
- Transport marginalized analysis of Solo city



- Women cyclists and non cyclist from marginalized neighborhood in Solo city
- Solo's Department of Transportation



Toolbox and Methodology Report
A set of toolbox and methodologies to
promote bicycle for women that can
be adapted on local context

IMPLEMENTING PROGRAM AND SOLUTIONS IN PILOT CITY



Implementing the tools and strategies developed in prior stages and testing their efficacy in promoting cycling in a pilot city



- •Safety and Infrastructure Improvement
- Promoting Bicycling in the city
- Bicycle Advocacy Program with
 Government



- Women organization in neighborhoods (PKK)
- Students
- Public in general
- Department of Transportation
- Tourism Board Solo city
- Pro-cycling Groups



A series of programs and activities on the ground addressing issues of women and cycling in Solo city

1.2.2. Timeline

The project timeline provides an overview of the project activities from the beginning to end. In general, the project activities consist of three main phases; the feasibility study, developing program and solutions and the pilot project to implement the solutions.





Feasibility Study

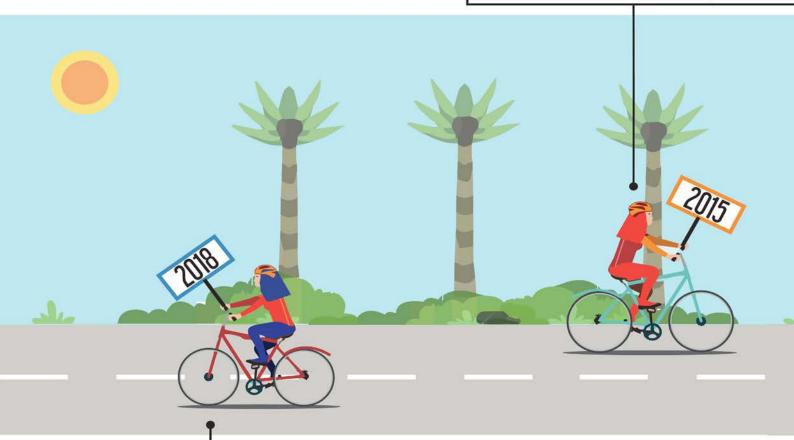


February until May





June until August



April

"Gowes Perempuan Berdaya" January until December

Flocktracker Mapping Infrastructure



February until March

Safe Cycling Video



July until December

Solo Bicycle Map















Gowes Persaudaraan

Toolbox/ Methodology

Solo Lestari Bersepeda



February until May



March until July



September





afety Riding ompetition



February until May

Banda Aceh Study



January until March

Bicycle Infrastructure Advocacy



April

Safety **Biking Campaign**



April & July

Bike Clinic For Women











BOX 1.

CONDUCTING BANDA ACEH STUDY AS A COMPARISON STUDY BETWEEN SOLO AND THE SHARIA CITY OF ACEH

Kota Kita expanded the research to Banda Aceh City as a comparative study to better understand the differences of women's mobility as well as their culture, behaviour and experiences towards cycling. Aceh, unlike other provinces in Indonesia, have a special constitutional system, based on the Sharia Law.

The Sharia Law had been implemented since 2002 as a feature of regional autonomy in Aceh Province. The state authority enforces the Sharia Law in both the private and public domains, and have had greater impact on women's lives (Theresa, 2007). Kota Kita investigates how this Islamic regulation impact women's life particularly in their mobility choices. Do women travel alone in the city? What is their pattern of mobility? Do women use bicycles in the city? What are the challenges and barriers to cycling? Is there any correlation between Sharia Law and women's mobility choice?

How Was the Study Conducted?

The preliminary study, conducted in February 2017, aimed to identify the target groups; local partners, women groups, government and related stakeholders to work with during the primary research. This was followed by a main research in May 2017 to gain a deeper understanding on women's mobility patterns, their culture, behaviour and experiences towards cycling in the city. In the process of investigation, Kota Kita leveraged various methodologies such as FGDs with groups of marginalized women, students, procycling groups and other women in general. We also

conducted individual interviews with male and female ulama, Sharia Law agencies, local government, and the elderly to get a better understanding on the local sharia law discourse in Banda Aceh related to women and cycling.

What Did We Find?

Bicycling is not a new to Banda Aceh. Like many other cities in Indonesia, the use of bicycle became marginalized with the rise in motorized transportation. However, there was a rise in bicycle use during the reconstruction period post-tsunami in 2004. The influx of foreign NGOs and aid organization workers that used the bicycle led to a renewed perception of cycling as a "foreign activity" local Acehnese. This contributed to the promotion of cycling in general amongst the locals as well and the rise in bicycle use continued to rise up till 2010.

There is no explicit cultural barriers to women and cycling under the Sharia Law. The restrictions on attire were only in line with the general Sharia Law and not explicit to cycling. Women in Aceh are required to cover their body with hijab with no tight outfits. The barriers to cycling for women wer e in fact similar to Solo - concerns about safety, poor infrastructures, affordability, and the increasing popularity of motorcycles.







CHAPTER 2 MAKING SOLO A CITY FOR CYCLING: IMPLEMENTATION OF PROGRAMS AND SOLUTIONS IN A PILOT CITY

After a deep dive into the issues of women and cycling in the city of Solo, we developd several on the ground programs in Solo to promote the use of bicycles for women. These programs were meant to be progenitors of future actions in the city - to cultivate the culture of cycling and institutions that can support the adoption of equitable sustainable transportation.



The programs implemented in Solo involved a diverse set of groups in the city; women factory workers, female students, cyclist group women, women from marginal neighborhoods, group of cyclists, government officers, bike shop owners, and many other parties to examine issues faced by women cycling Solo city. As previously outlined, women's imperative challenge towards cycling is safety and inadequate infrastructure that accommodates bicycles. Women feel unsafe to bike in roads dominated by motorized vehicles. The bicycle itself is largely marginalized as a form of transportation and does not readily enter into the public imagination let alone the imagination of public infrastructure planning. This creates a vicious cycle in which the lack of support infrastructure drives the demand and interest towards cycling. Despite the challenges of infrastructure which may require a longer timeframe, capital investments and multi-stakeholder coordination, promoting bicycle as attractive, fun and interesting is viable and necessary to ignite the conversation towards mainstreaming cycling as a primary mode of transportation. Given the challenges at hand, we saw an opportunity in developing a movement to promote cycling - through raising awareness through cycling events, presentations and forums, and creating innovative promotion tools.

The activities were based on the findings and recommendations of the previous phases with a deeper understanding of the local context of Solo. The process was certainly fluid, engaging multiple stakeholders and designing the programs in collaboration with local institutions and organizations.

Mainstreaming cycling into the urban culture requires active collaboration between citizens, government and civil society organizations (CSOs). Local government bodies has the capacity to improve infrastructure, cycling facilities and establish pro-cycling regulation, while CSOs can collaborate with and continue advocacy programs for the local government to support planning and program implementation. Kota Kita worked together with local Solo city government to propose pro-cycling programs through participatory processes. The programs developed emphasized the strengthening of collaboration between government, CSOs, and procyclist groups. This chapter covers the various programs implemented in Solo that aimed to promote women and cycling. We divided the programs into three main categories based on the objectives of activities; "improving safety and comfortability", creating a culture of cycling" and "bicycle advocacy program."

Stakeholders Involved during the Implementation Program



Department of Transportation (Solo City)

Department of Tourism (Solo City)

Department of Public Work (Solo City)



GIZ SUTIP

Bike to Work

Bike to School



Onthel Lawas Solo (Vintage Bike) group

Seli Solo Raya (Folding Bike) group

BMX group

Low Rider group

Solo Ngepit group

Surakartek

Solo Last Friday Ride Initiators

Bike 2 Works

Other individual that support NMT campaign



51 representative of PKK cadre from neighborhoods of Solo

35 group of women cyclists (140 participants) from different neighborhoods of Solo



Students from University of Muhammadiyah Surakarta



Youth group "Karang Taruna" from Kelurahan Jebres

As a primary local government champion, the DoT was Involved in various program implementations; Safety riding campaign, Bike clinic, Safety riding competition, Flocktracker; bike infrastructure mapping, Bicycle Map, Solo Lestari Bersepeda, and bicycling advocacy programs

Published and printed the bicycle map developed by Kota Kita, and promoted it to Solo citizens and visitors

Provided input on the Flocktracker survey and bicycle infrastructure mapping process

Supported various program implementations; Safety riding campaign, Bike clinic, Solo Lestari Bersepeda, and Gowes Persaudaraan event

Supported various program implementations; Safety riding campaign, Bike clinic, Safety Riding Competition, Solo Lestari Bersepeda, and Gowes Persaudaraan event

Participated in Safety riding campaign, Bike Clinic event and Gowes Perempuan Berdaya event

Participated in safety biking campaign

Participated in Flocktracker survey - mapping bicycle infrastructure in the city

Helped in organizing the safety riding competition

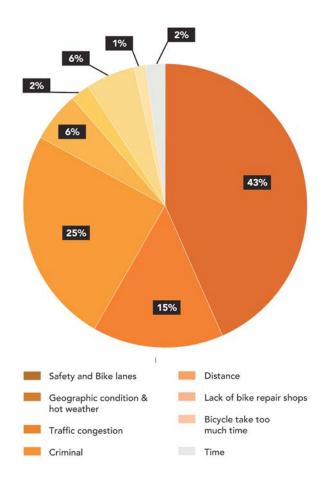
2.1. Improving Safety and Comfortability

Increasing traffic congestion, pollution, and poor road conditions are main factors that inhibit women and girls cycling in Solo. The majority of the women we interviewed and discussed with felt strongly that there is a need to maintain the slow lanes for bicycles. The slow lanes should be "enforced by the law in order to make slow lanes for cyclist not for motorcycle or vendors." In the discussions, many of the female cyclists feel physically alienated from the roads in their city. The relatively slow speed of bicycles often make them feel defenseless while cycling alongside fast moving vehicles.

Another major safety concern for women is their susceptibility to crime and harassment during their travels. Many of the participants had been victims of crime in the past or know of other woman who had been. From our discussion with women from Joyotakan neighborhood, they mentioned that "women who go to the market in the early morning gets robbed if they travel alone". A woman from Sangkrah believes that for women on bicycles are more vulnerable especially in quiet areas. In addition to physical crime a problem, many women have also experienced harassment on the streets. These concerns of crime and threats from harassment should be considered in road safety policies.

Based on our FGDs with women from the neighborhoods, most argued that safety issues and poor slow lanes conditions are the major issues contributing to barriers towards cycling. Next to it, many also believe that traffic congestion discourages the women from using the bicycle. The third most acknowledged barrier is the city's geographic condition and hot weather.

Within the rubric of safety and comfortability, we developed three distinct activities. We created a Safe cycling campaign to disseminate educational tools and practices of safe cycling. In the process, we developed a safe cycling video in two languages to further disseminate the best practices. As a second activity, we conducted a Women's Bike Clinic - an event that teaches participants necessary skills and basic knowledge to fix their bicycles in order to make them feel more at ease on the road. As a third complementary activity, we developed a campaign that uses a smartphone based geo-tagging tool to develop a community-based crowdsourced road suitability mapping process.



Women barriers towards cycling

2.1.1 Safe Cycling Campaign

What Is the Safe Cycling Campaign?

The Safe Cycling Campaign provided educational tools to participants that addresses safe cycling practices. The campaign also focused on changing people attitude towards cycling - increasing their confidence and sense of security on the road. The campaign integrated a curriculum on safe cycling practices such as obeying the traffic rules, sharing the road, proper usage of hand signals and wearing appropriate safety gears.

Who Participated in This Program?

The campaign was conducted in collaboration with the Department of Transportation (Dinas Perhubungan Kota Surakarta) and pro-cycling groups in Solo. The target beneficiary and participant of the campaign were women from various neighborhoods and women associations (PKK - Pembinaan Kesejahteraan Keluarga). As a city wide campaign, the department of transportation invited two representatives of PKK cadres from all the neighborhoods (kelurahans) in Solo.

Where and When Was It Conducted?

The Safe Cycling Campaign for women was held twice in April 2017 and 2018. It corresponded with Kartini Day - a national women's day on April 21st to celebrate heroines that fought for women's rights. In 2018, the event was held in the community hall of kelurahan Manahan in Solo, organized as a collective celebration of Kartini Day.

How Was the Program Implemented?

Selecting the Target Group or Beneficiaries of the Program

Apart from deciding on what programs to implement, the final beneficiary also needed to be well considered. Before the idea of a safe cycling campaign came about, we investigated many different groups of women in the city as potential beneficiaries of our intervention; women in marginalized neighborhoods, factory workers, students and women peddlers involved in the informal sector - peddling to sell vegetables or other goods from market to neighborhood and from school to school.

Given the diversity of the social locales or economic activities of the women, how do we engage all of them equally in our programs?

In Indonesia, every city neighborhood (kelurahan) is mandated with forming a women's organization called PKK (Family Welfare Guidance Programme/ Pembinaan Kesejahteraan Keluarga - PKK). PKK organizations of Solo city are often involved government-based social welfare campaigns. They are funded by these programs as a channel of welfare distribution. The members of PKK are typically diverse as membership is based on participation and initiative rather than pre-determined qualifications. The women come from different backgrounds such as housewife, factory worker, civil servant, trader, and others. In order to fulfill the brief of scalable programs, the network of PKK members and organizations was invaluable. In addition to its pre-existing city wide network, the nature of PKK membership contributes to the need to engage with a diverse group of women in the events.

Inviting Committed Stakeholders to Collaborate

To create a mass movement in promoting cycling in the city, we believe that it is necessary to involve as many stakeholders who carries a similar vision and can help champion the cause. One of the key stakeholder groups in the city are community pro-cycling organizations. However, it is not enough to only find champions. Strategic alliances with the local government bodies such as the Department of Transportation is necessary to develop ownership over the issues and also to maintain the visibility of issues around cycling. Kota Kita collaborated with both the Department of Transportation (DoT) Solo city and pro-cycling groups to implement the safe cycling campaign.

Previously the Solo DoT had organized a safe cycling campaign that targeted students as the beneficiaries, but did not specifically involve women. In Indonesia, women play a major role in the family as well as their environment, particularly in the neighborhoods where they live, in aspects of education and welfare. We convinced the DoT to involve women as the beneficiaries

of the program so that the knowledge from the learnings from the campaign can be disseminated to their family and peers.

Practices of safe cycling in Solo or any other Indonesian cities is a relatively limited knowledge unlike other bike friendly cities, where signalling codes and cycling etiquettes are generally established between the cyclists and other vehicles that share the road. To develop the safe cycling curriculum for Solo, we consulted experienced procycling groups to create ideas and approaches to promoting safe cycling.

• Program Activities

The Safe Cycling Campaign began with an introductory presentation concerning safety aspects on the road by a Department of Transportation officer. The presentation outlined the basic road rules, safety aspects while biking, along with explaining the facts and risks when the road users do not obey the traffic rules.

The second presentation by Kota Kita covered the do's and don'ts of cycling. It covered the functions of the different bicycle parts, simple methods of bike maintenance and even recommended attires. Kota Kita employed different methods of explaining the do's and don'ts while cycling in both campaigns. In 2017, a female member of Seli Solo Raya (Folding Bike) group explained her cycling experience directly to the participants. In 2018, we produced an educational video that outlines basic tips for cycling in the city. The video was important as a more effective dissemination tool beyond an event.

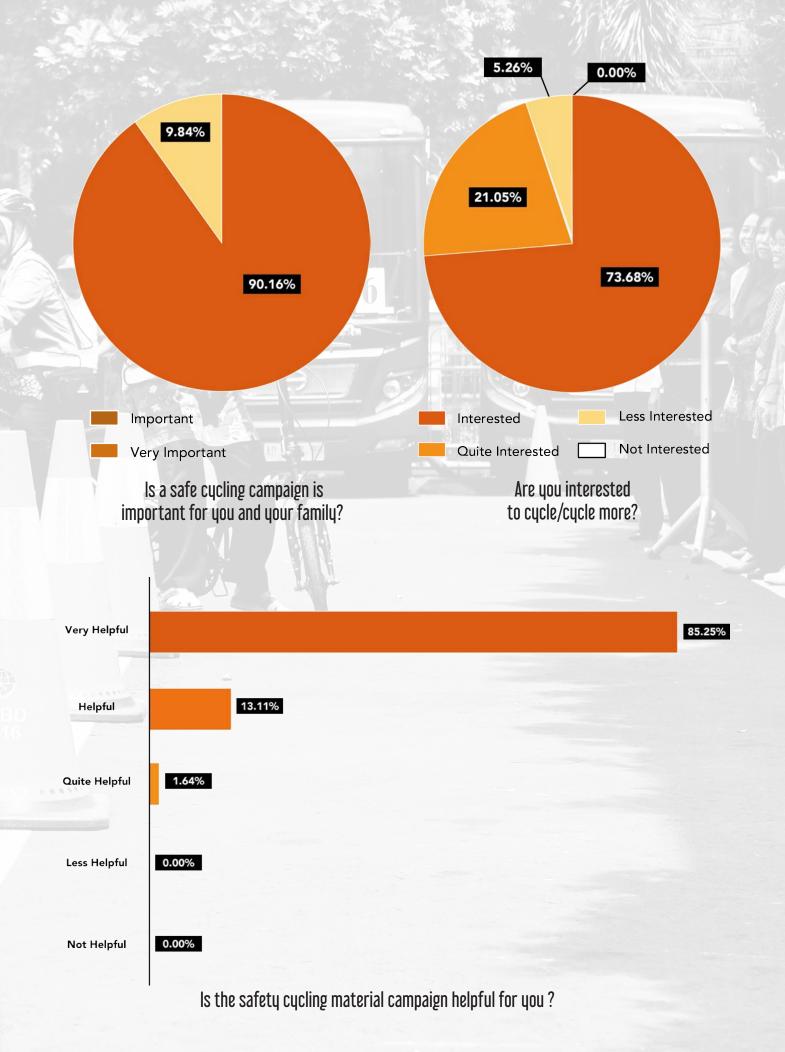
As a final exercise, participants were encouraged to practice their knowledge, by cycling outdoors in an area equipped with an artificial traffic light, road signage and other road markings. The pro-cycling group, Seli Solo Raya, Bike to Work and Onthel Lawas Solo collaborated on the simulation process. They voluntarily share their experiences on how to bike safely on the road such as using hand signals, obeying the rules and some tips on peddling the bike.



What Is the Output of the Program?

all 51 kelurahans in Solo city participated over the two campaigns. The safe cycling lessons from the campaign are intended to be disseminated further by the women representatives in their own communities. The development of bicycle safety educational materials is a critical component to ensure that cyclists in the city understand how to use and interact with different types of infrastructure, sharing the road in a safe manner.

An evaluation survey after the safe cycling campaign was conducted, indicated that most of participants satisfied both with the event and the knowledge we shared. We compile the main result from the survey as below:



2.1.2 Women's Bike Clinic

What Is the Women's Bike Clinic?

The Women's Bike Clinic is a do-it-yourself bicycle workshop initiative to provide tips for women cyclists on how to maintain and fix their bicycles for minor damages. As we discovered from our focused group discussions, one of the major inhibitors of cycling amongst women and girls was the ability to feel at ease during their travel. The ability to repair minor damages during the travel will increase their confidence on the road, encouraging more frequent cycling as well as cycling over longer distances in the city.

Who Participated?

• The beneficiaries:

In the bike clinic we engaged with three different target groups. In the bike clinic event we focused on inviting women cyclists from neighborhoods of Solo as well as a cadre from neighborhood women organizations (PKK). As we saw the opportunity to involve the public in general, the bike clinic was conducted during the Car Free Day.

The collaborators

The bike clinic could not have happened without the support from the Department of Transportation Solo city and local pro-cycling groups (Bike to school, bike to work, Onthel Lawas Solo, Solo Raya Folding Bike and BMX community).

When and Where Was It Conducted?

The first bike clinic event was conducted in 2016 - a collaboration between Kota Kita, Department of Transportation and a number of pro-cycling groups (bike to school, bike to work, Solo Raya Folding Bike, Solo Onthel Lawas and BMX).

In 2017, two bike clinic events were held, one in Kelurahan Manahan involving women groups, and the other on a Car Free Sunday to involve the general public and to celebrate non-motorized transportation in Solo. The last event held in 2018 involved women cyclists from the different neighborhoods of Solo that represented from women PKK cadre of neighborhoods level.



How Was the Program implemented?

 Selecting the target groups and collaborators (see opposite table)

Program activities

One of the key messages that we wanted to deliver in the program, is that cycling is simple and minor problems are easily manageable. We focused on teaching the skills to the women themselves, to increase independence and self-confidence. The program started by introducing bicycle component, tips for bicycle maintenance developed by the procycling groups. The participants also get a free live bicycle servicing lesson from the pro-cycling groups.

What Is the Output of the Program?

This program was very helpful for those who have little knowledge on bicycle maintenance. The practical knowledge the participants gained from the live lessons and demonstrations, help build their confidence to cycle in the city.

TARGET GROUPS Beneficiaries	MOTIVATION AND OBJECTIVES
ACTIVE WOMEN CYCLISTS FROM KELURAHAN MOJOSONGO AND KELURAHAN PAJANG	During the FGD in the kelurahan of Mojosongo and Kelurahan Pajang, active women cyclists in the neighborhood were inspired to form a cycling group to participate in the activities organized by Kota Kita
	The bike clinic was meant to address their concerns that their limited skills to repair minor damages and maintain the bicycle form barriers to cycling daily
WOMEN CYCLISTS FROM NEIGHBORHOOD OF SOLO	The second target group was women cyclists in Solo in general that may not necessarily be active or have organized cycling groups
	We invited members of PKK in the neighborhoods of Solo who cycle to attend the bike clinic program
	The PKK cadre were involved not only to educate themselves but also to disseminate the knowledge they acquired to their family and peer groups
PUBLIC IN GENERAL	To promote cycling while providing new knowledge on bike safety and maintenance to the public in general
	To test our bike clinic methodology more broadly

COLLABORATORS	MOTIVATION AND OBJECTIVES
DEPARTMENT OF TRANSPORTATION (DOT) SOLO CITY	As the main collaborator of Women on Wheels initiative, including the bike clinic program, the DoT facilitated the permits to conduct the program
	The partnership of the Department of Transportation is important in legitimizing the promotion of cycling in the city
PRO-CYCLING GROUPS	We collaborated with pro-cycling groups in the city such as Seli Solo Raya (Folding bike) group, Onthel Lawas Solo (Vintage bike) group, bike to work, bike to school, and BMX group
	The pro-cycling groups helped to develop the curriculum of bike maintenance and safe cycling

2.1.3 Safe Cycling Competition

What Is Bike Safety Riding Competition?

This event is a continuity of safe cycling campaign program, while safe cycling educate women to bike safely, this competition is an opportunity for the participating women to practice their skills on the road in safe manner. Through this activity we want to promote cycling as a potentially fun activity, inviting other women to use the bicycle as an alternative transportation mode in the city.

How Was the Process Conducted?

• Pre-event Preparation

Recruiting the participants

The promotion of the event was spread through online and offline media campaigns. We deployed offline posters in kelurahan offices, government offices and other public spaces in the city. Online, we promoted through twitter, facebook, Instagram and other online media platforms. Groups of 4 have to register for the competition. 35 groups, a total of 140 participants, registered and participated in the safe cycling competition. Most of the participants were women groups from the neighborhoods of Solo, along with members of women's organization (PKK).

Preparing the site

In addition to the consolidated venue site, we prepared five bicycle routes of 8 - 10 kilometers in length for the competition event. This was done to reduce potential congestion and also to prevent the coordinators from clustering in one area. The routes created by considering several aspects; the traffic conditions, shades, length of the routes and the road width.

















• Cycling Competition Event

The cycling competition was inaugurated by the Secretary Officer of Department of Transportation Solo City on the 30th of June 2017. In each route, there is some of youth voluntary monitor and control the participants. The winner of competition was based on criterias of safe cycling such as completing the correct route, obeying the rules of the road without violations, using the right hand signals and finally, the cohesiveness of the group.

This event was attended by 140 participants from 35 groups of women around Solo city.

COLLABORATORS Department of Transportation (Solo city) Karang Taruna (Youth Organization) of Kelurahan Jebres Onthel Solo Lawas Community Solo Ngepit Community		
Solo Seli Raya Community		
Bike to School Group		
PARTICIPANTS		
Gowes Jajar 1	PKK Kelurahan Setabelan	
Gowes Jajar 2	Sekar Mayang	
Gowes Jajar 3	Moeder Fountein	
Ngudi Sehat	Srikandi Mawar Puri	
Seger Waras	Papijoya	
Kantil	Pedalista Harmoni	
Srikandi Onthel	Sehat Bugar club	
Mawar Gowes	RW 20 Kadipiro	
Anggrek Gowes	Sehat Ceria group	
Melati Gowes	Penumping Gowes	
Dahlia Gowes	Sehat Ceria	
Sibat Sewu	Gajah Gembira	
Ceria group	Sibat Sewu	
Sembodro Trengginas	Srikandi Gowes	
Gowes Dora Club	Gowes Sejahtera	
Limbuk Gesit	Srikandi RW 18 Kadipiro	

What Is the Output of the Program?

The safe cycling competition was attended with high enthusiasm from the participants and generated discussions about continuing with future events. One of the successes of the event was to address both the gaps in knowledge about cycling safely in cities while mainstreaming cycling as a mode of transportation, legitimized by the Department of Transportation themselves.

While the event was well attended by active PKK women, there was a challenge in engaging the youth and female students as it requires a different approach and potentially event format. There were also a need to improve the format of the competition in the next iteration. In some neighborhoods, some interested women were unable to organize a team and were unable to register as individuals.

The competition generated a lot of buzz and enthusiasm amongst the participants who, came with well prepared costumes or team uniforms. There were 35 groups of 4 in total from all over Solo city. After the event, many provided positive feedback, urging Kota Kita to conduct more events and engage more people in the future.

In the process, we also recognized the importance of initiating a fun and engaging event to the participants to sustain interest. This provides an alternative way of mainstreaming the agenda without following standard advocacy protocols that may be cumbersome and prohibitively bureaucratic. Therefore, it is essential that the campaign towards a culture of cycling is publicized with creative city events.





2.1.4 Flocktracker: Mapping Bicycle Infrastructure Condition of Solo

As one of the major obstacle to cycling is the condition of the infrastructure, there is a need to develop a means by which the conditions are assessed, quantified and integrated into the considerations of planning and budgeting process. Combining our interest in improving government processes and campaign for cycling infrastructure, we leveraged a digital platform to conduct crowd-sourced road condition reporting. We want to encourage citizens to be active in demanding for improvements in the city's infrastructure while simultaneously collect information on infrastructure conditions efficiently at scale. The mobile app compiles, analyzes, and using geotagged, time-based survey, to report the situation on the roads, like potholes, signs, road condition, shades and others.

Flocktracker is a data collection platform that allows users to collect data by themselves. Kota Kita collaborated with the Department of Urban Studies and Planning MIT (DUSP MIT) and Daniel Hariberto, a Master Student of DUSP-MIT, to create a survey in Solo.

The application was launched on April 21st together with the safe cycling event for women. The application was also promoted and disseminated in University of Muhammadiyah Surakarta, Solo City, in an event with 150 students, as well as on Car Free Day which occurs every Sunday morning on the main arterial road, Jalan Slamet Riyadi.

As we see a potential in using digital devices to crowdsourced information, we are in the process of iterating the product and approaches for users. This is an ongoing initiative to develop data collection methods and mapping that will inform future policy making and planning process in the city.



Flocktracker campaign tool





2.1.5 Creating a Safe Cycling Video

What Is the Safe Cycling Video?

There is little or no documentation on cycling etiquette in Indonesian cities. Most cyclists or motorists are not aware of the basic rules for sharing the road or hand signals from cyclists. Building on our campaign to improve safety and comfortability for cycling, we produced the Safe Cycling Video to fill this knowledge gap - a simple documentation of the do's and don'ts of cycling in an Indonesian city. The decision to produce a video was deliberately chosen over other mediums because of its longevity and capacity to reach a wider audience.

When and Where Wwas the Video Created?

The video was produced between the period of February to March 2018 and published online.

What Was the Process?

• Directing the Video

From our research activities, we gathered that students and women were the main subject of the safe cycling campaign. Representing the general public was also important in order to engage the target audience. We selected two primary actors in the video; a female and male cyclist. While the male was depicted as a student going about his daily routine, the female was the narrator

and cyclist. We also produced in two languages, using two different female narrators in english and in Indonesian. The video transcript was developed in-house based on our previous input from the Safe Cycling Campaign in 2017.

Producing the Video

The video demonstrated a daily routine of a student and a woman starting from the house - inspection of the bicycle, exiting the neighborhood into a main road, at school and coming home at night. With this simple concept, the video was able to consolidate all the tips needed for day to day cycling around the city. The video also emphasized that the bicycle is an affordable and democratic mode of transportation. We particularly chose typical neighborhoods/kampungs in Solo, depicting a common narrative for the citizens and target audience. Lastly, the role of the female narrator as a role model is important to instill confidence amongst women in cycling.

What Is the Output?

We produced two videos in each language - Indonesian and English. The video is currently available to the public on Kota Kita's Youtube channel. The launch of the video corresponded with other Women on Wheels activities and the safe cycling campaign on Kartini Day 2018.



Extract from the Safe Cycling Video

2.2. Creating a Culture of Cycling in the City

Cycling and access to affordable, sustainable transportation is in fact an intersectional issue. In order to champion for the rights of women, in the context of cycling, a broader movement to champion cycling in cities is needed. A movement cannot be created in a single program by a single organization, it requires collaboration from multiple stakeholders and a continued effort to highlight an agenda. With the experience of Women on Wheels, Kota Kita was able to get together with other partners in the city to help ignite a cycling movement. Collectively, we promoted cycling by performing creative campaign activities, talks, presentations and other public speaking engagements in order to mainstream the use of bicycle, particularly for women in the city. We want to leverage these activities to raise awareness towards the promotion of bicycle use as well as to convince the general public to recognize the rights of cyclists in sharing the road. In addition to women or women groups, the activities involved different stakeholders such as male cyclists and the public in general.

2.2.1 Formalizing the Image of Cycling in the City

The promotion of cycling in a city requires more than just events and education. A strong identity and information is necessary to make the issue visible and also to garner support. Like many other cities that embrace cycling, one of the primary tools to mainstream cycling is the bicycle route map. With in-depth analysis and intensive collaboration with city partners, Kota Kita produced an unprecedented Solo Bicycle Map. It's launch and dissemination was coordinated with the events in the city, particularly Gowes Perempuan Berdaya (Cycling for Women Empowerment)

to also highlight the objectives of the initiative.

Solo Bicycle Map

Kota Kita developed the first bicycle map for the city of Solo. Prior to this, there bike routes were typically shared amongst hobbyists and pro-cycling groups but never formalized. Kota Kita saw the opportunity to combine the ongoing urban regeneration programs aimed towards tourism in the city with the promotion of cycling. In Solo, there is yet a formalized or dedicated bicycle lane. The bicycle map is intended to generate a campaign to formalize bicycle routes in the city - a tool for advocacy to encourage the government to provide a safer cycling infrastructure.

As an initial step in the process, the routes in the map has to provide a safe and comfortable path given the existing conditions on the road. The routes determined considered pragmatic aspects of safety, vegetation, shade, lighting, quality of the road and traffic conditions. More importantly, the routes determined were not only optimized for connectivity but chosen for its inherent cultural significance. The routes were designed to promote the various cultural trails and attractions of the city and connect them, participating in the city's efforts in developing the tourism industry. The target audience was not only commuters and cycling hobbyists but also visitors.

The bicycle map consisted of three main routes - heritage route, craft route and park route - that focuses on the cultural assets of the city in art, history, and the local culture. The heritage route traverses various heritage buildings and historic places around the city like museum, Kasunanan and Mangkunegaran palaces, and Benteng Vastenburg. The craft route passes along cultural craft kampongs, like kampong blangkon (a javanese traditional headgear), kampung laweyan (a kampong of batik manufacturers), and the keris (a javanese traditional sword) museum. Finally the park route that connect the park areas in the city such as Manahan park, Banjarsari park, Sriwedari park, and other public spaces.

In the focus group discussion, some women expressed interest in this map as it will motivate them to go to places they have never visited with a bicycle.

How to create the map?

Collecting Data on Safety and Comfortability of Cycling

Kota Kita collected data from various sources to measure how friendly the road network is for cyclist in Surakarta primary data from the field and secondary data is mainly from Department of Transportation.

The safety of the road network could be measured by analyzing traffic activities in the city. These metrics include traffic volume in peak hour, percentage of heavy vehicles, condition of road pavement, geometry of road network, the existence of a bike lane, average speed of motorized vehicles, and parking activity on the streets.

High traffic volumes, higher number of parking on the street, and high speed of traffic increases the risks for a cyclist. Similarly, the quality of the pavement can affect the comfortability for cycling. The road geometry affects the safety of cyclists on the road and at the intersection. In roads where a solid separation exists between slow lanes and the main lane, the cyclists are less impacted by other vehicles. Kota Kita also considered comfortability by collecting data on slope, shade provided by trees, travel time, and attractions along the route.

Analyzing the Best Route for the Bicycle

Kota Kita identified how friendly the city's road network is for non-motorized transportation by using multimodal level of service measurements on the arterial roads in Surakarta. The road network will be evaluated with Level of Service (LOS) grade from A (best lane for cyclist) to F (worst lane for cyclist). The criteria of evaluation includes data such as traffic volume, road pavement quality, parking activities on the street, and road geometry. These criteria are based on the multimodal analysis methodology from the Highway Capacity Manual 2010. This table outlines the definition of the level of service grading:

LOS	Bicyclist Perception Index	Comments
Α	> 4.0	Optimum conditions, ample ability to absorb more riders
В	> 3.5 - 4.0	Good conditions, some ability to absorb more riders
С	> 3.0 - 3.5	Meet current demand, marginal ability to absorb more riders
D	> 2.5 - 3.0	Nearing functional capacity
Е	> 2.0 - 2.5	Functional capacity
F	< 2.0	Significant user conflicts and diminished experience

Table of LOS from Kittelson and Associates, Inc.

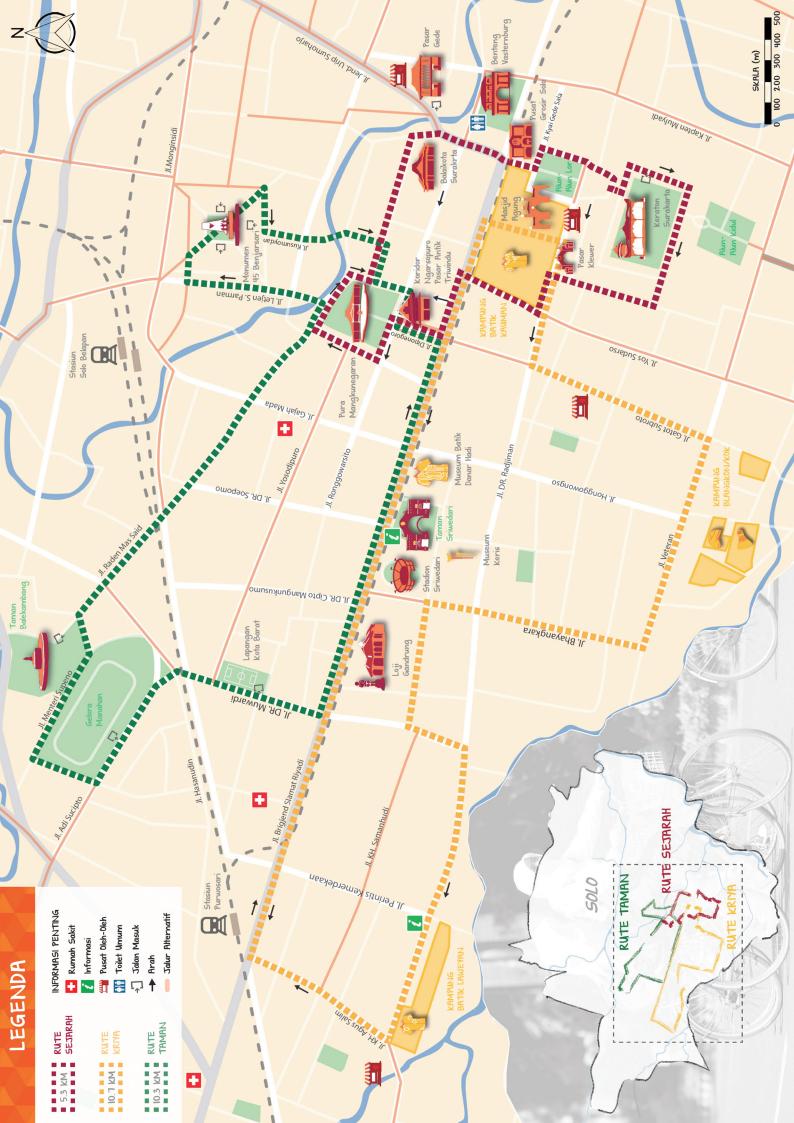
Based on the survey, most of the road network in Surakarta falls under the C grade. It indicates that Surakarta's road network is convenient and comfortable enough for cycling but requires ample improvements. The roads with LOS grade A have a separated lane while the roads with level of service E to F are found to be heavy vehicle networks with high speed without a separated lane.

We overlayed the network with good LOS with frequently used roads by cyclists in Surakarta. The roads frequently used by cyclists indicate that they have a high level of trust towards the safety of the road. In order to ensure comfortability in the convenient cyclist road network, Kota Kita added other indicators such as slope, shade, and the fastest travel time and attractions.

Finally, with the cultural destinations and tourism in mind, Kota Kita developed three thematic routes that can promote the image of Surakarta - the historic route, the craft route, and the park route.

Designing the Map

The design of a physical bicycle map is crucial in its ability to garner support. While a digital platform is yet to be created, a physical tangible and The design process is important to make the product of bicycle map easy to read and interesting. Kota kita arranged Solo's bicycle map in A3 size that can be fold to the pocket size to be more handy. In order to ensure the cyclist safety, Kota Kita asked the cyclist to open the map in the side road to check their position. Kota kita also provided short explanation about the destination includes the time to visit and the position of souvenir shops to support the local economy.



• Disseminating the Bicycle Map

To promote the bicycle map to women and the public in general, Kota Kita created 5 different meetings with women PKK cadre from all districts (kecamatan) in Solo city. The objective of the meeting was to introduce the bicycle map. The map was also shared with Department of Tourism, Solo city to promote the use of bicycle as non-motorized transportation while simultaneously promoting the city's tourism destinations highlighted along the routes. The bike map was well received and Kota Kita will continue to work with the Department of Tourism in Solo to improve on the map and further the dissemination to not only citizens but visitors of Solo.

Gowes Perempuan Berdaya (Cycling for Empowered Women)

• What is Gowes Perempuan Berdaya?

In line with Kartini Day celebration and the Safe Cycling Campaign , Kota Kita and Department of Transportation (DoT) Solo city created a bicycle event for Women called Gowes Perempuan Berdaya (Cycling for Empowered Women). We invited women to experience cycling in Solo city, and to test the bicycle map that we have created. This event was attended by women, most of them between the age of 25 - 55, from different neighborhoods of Solo.

• When and Where Was the Event Held?

The event was held on 22 of April, 2018 as a celebration of Hari Kartini. Together with the participants and lead

by a Department of Transportation officer, we cycled around the city - a route of approximately 10km. The extensive route generated a buzz in the city. It was also significant because it showcased the coalition between cyclists, particularly women cyclists, and the department of transportation.

Through this event we want to encourage participant's confidence in cycling, demonstrating that women cyclists exist and they have the right to share the road with others. From our evaluation form 73.68% participants confirmed that they are really excited join this event and require the same event in the future. Kota Kita will work towards a sustained momentum in the future by conducting the event regularly.

2.2.2 Generating a Discourse

To mainstream the issue of gender and cycling in Indonesia, Kota Kita organized a number of activities to generate conversation around the issues. During three years of project implementation, the activities organized included public speaking engagements, presentations to the general public, media coverages, focus group discussion and others. The primary objective is to raise awareness on the issues of bicycle and women, informed by the knowledge obtained from the prior phases of the Women on Wheels initiative.





Creating a Panel Discussion in Urban Social Forum 2016

Urban Social Forum is an annual forum in Indonesia that provides an open and inclusive space for exchanging of knowledge, debating ideas and networking between civil society, activists, academics and students that work on urban issues. As a panelist on this forum, Kota Kita invited participants to openly discuss the ideas of promoting non motorized transportations in the city. This discussion allowed participants to share their opinion on walking and cycling in the city; how they perceive the capacity of the city's infrastructure to support those activities; as well as discussing gender perspectives on cycling. Kota Kita also shared our experienced on Women on Wheels program initiatives in Solo, while the two other speakers who were transportation expert and women cyclists who shared their knowledge and experience on the topic. The forum was held on December, 20th 2016 attended around hundred of people who came from different parts of the country.

Creating a Panel Discussion in Urban Social Forum 2017: *Ensuring Road Safety: Planning, Innovation and Implementation*

In Urban Social Forum 2017, we focused our discussion on how to ensure road safety for cycling in the city based on our findings. In this panel we discussed and shared our experienced on promoting bicycle for women and enforcing bicycle infrastructure improvement by approaching government and other civil society groups. In this discussion we also emphasize the support from experts and academics are also essential in helping the government create safety-conscious transportation plans. We also highlighted the critical role of pro-biking groups and civil society organizations in helping raise the awareness on the ethics of sharing the roads with other vehicles to a wider audience.

Jagongan Media Rakyat 2018 Event: Biking to Create Just Transportation in the City

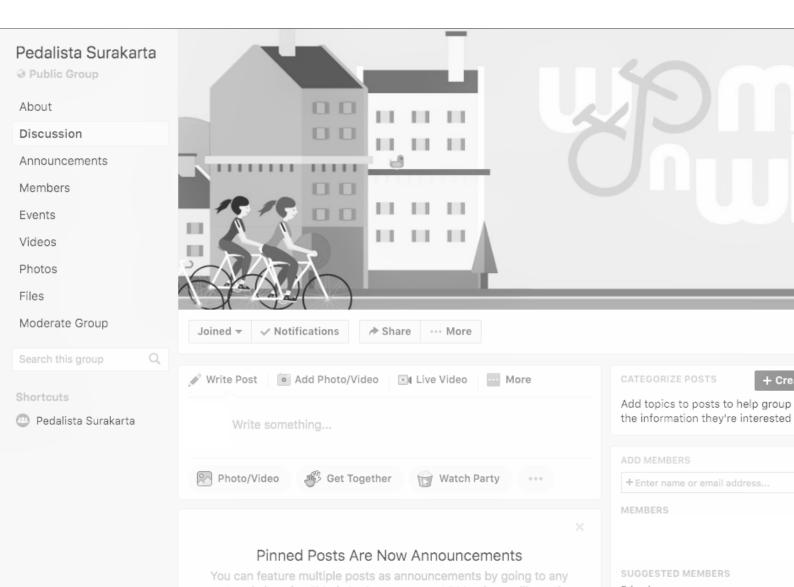
Jagongan Media Rakyat is a biennial civil society event to discuss and share information about civil society work around Indonesia. Kota Kita was invited to attend this event on May, 2018, to share our current work related to the theme of "inclusivity". Kota Kita shared the experience on promoting bicycle as an inclusive and just transportation in the city through Women on Wheels project.

The presentation emphasized the issues of sharing the road with other road users between cyclists and motorized transportation users. We wanted to drive the point that all road users have the same rights to use the road - both cyclists and non-cyclists have to respect one another. As a mode of transportation, the bicycle tends to be disregarded by other road users making cyclists

vulnerable to road incidents. Similarly, there has to be a greater awareness amongst cyclists about the rules of the road and best cycling practices. This discussion held on March, 2018 attended by cyclists, transportation experts, women activists, and public in general.

Pedalista Surakarta Forum

Pedalista Surakarta is an online platform to share cycling experiences among women cyclist in the city. Every women who joins this Facebook group could share their cycling activities, posting photos and videos as well as sharing inspiring practical experiences, tools, and tips while biking. As a growing digital community, Pedalista's members have formed into closely knitted groups that empower one another also with huge potential to inspire larger groups of women cyclists in Solo and anywhere in the world.



2.3. Bicycle Advocacy Program

To complement the more grassroots efforts in building a culture of cycling in Solo, advocacy at the level of the government equally important for long term adoption of and support for cycling in the city. With our focus on institutional change, Kota Kita engaged the government as both the primary collaborator as well as target beneficiary for the cycling advocacy activity. The activities aim to support policy, regulation, and other legal challenges towards cycling in the city by advocating the bicycle infrastructure, public awareness, as well as increasing government and public support for bicycling.

2.3.1 Encourage City's Policy Regulatory on Solo's Bicycling Conditions

The activities conducted during the Women on Wheels initiative can also be seen through the lens of advocacy. In Indonesia, Musrenbang is a participatory budgeting platform where communities or the general public can provide input on what the city can or should prioritize in their budget plan. While the approval process can be rengthy, it is important to develop an advocacy process that is in line with planning processes in the city. In our advocacy effort, we continually develop strategies that integrate with the local planning processes to ensure effectiveness:

Safety Riding Campaign for Women

We encouraged DoT to also target women as the beneficiaries of safety riding campaign in the future, in addition to their ongoing campaign for students. Although Kota Kita initiated the safety cycling campaign for women in 2017, the DoT have a commitment to continue promoting this program in the future. This continued support is the beginning of a meaningful change towards a the promotion of cycling and women empowerment in the city.

• City Bicycle Master plan

Through our continued relationship with the DoT and advocacy efforts, we had recommended the DoT to produce a bicycle master plan. This was received well by the DoT and had been integrated into their 2018 budget plan.

Encouraging Bicycle Infrastructure Improvement

Our advocacy program also extended to proposing infrastructure improvements for cyclists. Furthermore, our collaboration with DoT is not only on the implementation of programs and proposed some future programs through Musrenbang mechanism, but we also intensely discussed on bicycle improvement including infrastructure improvement. As the DoT controls budget allocations on infrastructure improvement mainly for signage improvement on the road, Kota Kita recommended that DoT improve the bicycle signage in the city. In order to improve safety and comfortability of cyclists on the road, we proposed bicycle box in intersection, bicycle signage in the road and bicycle parking in several public spaces in the city. These infrastructure improvements have since been implemented by the DoT in 2017 and 2018.

We participated in the city-level DoT Musrenbang to introduce ideas for bicycle infrastructure improvements, advocating for cycling facilities in the city such as bicycle box in intersection, bicycle signage in the road as well as improvement in some path of slow lanes. Through this activity, we had proposed the following:

- Bicycle box in one of intersection in Kelurahan Gilingan
- Bicycle sign improvement along slow lanes in Jl.
 Slamet Riyadi
- Bicycle parking in several public spaces in the city such as; PGS shopping center, BTC shopping center, and traditional market. This idea come out after we had FGDs with women cyclists that requested bicycle parking in market places as their most places to visit.

2.3.2 Promote Government - Civil Society Collaboration

Kota Kita believes that institutional transformation is key to the success and longevity of programs. The programs implemented for the Women on Wheels initiative focused on cultivating collaboration between committed stakeholders in the city; government, civil society groups, and public in general. Kota Kita saw this as a key to promoting cycling at scale. Together with pro-cycling groups in the city and the government, Kota Kita had created a number of collaborative activities within the promoting bicycle for Solonese.

Solo Lestari Bersepeda

Solo Lestari Bersepeda means Sustainable Solo Cycles. This 2 day event was conducted as a joint collaboration between Bike2Work group, Kota Kita, Department of Transportation, Solo Seli Raya, Solo onthel lawas, BMX, Low Riders and many other bike groups in the city to promote bicycle for all of citizens. This event targeted students and the public in general as the primary beneficiaries in mainstreaming safety biking in Solo city while simultaneously strengthening the collaboration between government and civil society.

• First Day: Ternak Gopit

Ternak Gopit is a portmanteau of Anter Anak Kanggo Pit (Javanese) (Mengantar Anak Pakai Sepeda (Indonesian)/ Send your children with a bicycle). The objective of the event is to encourage parents to cycle with their children to school, in turn, encouraging the students as well. This is to address the issue of underaged motorcycling, rampant in Indonesian cities. The Mayor of Solo, symbolically accompanied students from one of the junior high school from the Mayor's house to the school on a bicycle.

Second Day: "Sustaining Bicycling Culture in Solo" - a Discussion

We invited the Head of Department of Transportation Solo City, Bike 2 Work Indonesia, and a representative from the Swedish Embassy to discuss the opportunities of sustaining and promoting the bicycling culture in Solo. The representative of the Swedish Embassy shared the experience of promoting bicycles in Swedish cities and its

transformation, inspiring the local government to further invest in cycling. The discussion concluded that bicycling is still a possible alternative mode of transportation in Solo. The government and pro-cycling group reaffirmed their commitment to sustain the promotion of cycling in the city.

Gowes Persaudaraan

• What Is Gowes Persaudaraan?

Gowes Persaudaraan means Cycling Together. The campaign aims to cement the value of collaboration between committed stakeholders on the issue of cycling in the city. Together with pro-cycling groups, Kota Kita created a bicycle event reclaiming the use of slow lanes for cyclists. This event campaigned for the slow lanes that currently exists in the city to be made for bicycles. Currently, the slow lanes are typically claimed by street vendors and unregulated private parking. In addition, a large portion of the slow lanes in the city are in poor condition, with cracks and potholes, limiting its use even as a normal transportation lane. As a symbolic act of reclaiming its function as a bike lane, the collective cycled together on the slow lane despite the inhibiting conditions.

• When and Where the Event Was Conducted?

The event was conducted on January, 2016 by cycling together in slow lanes of Solo City for a length of 28km.

• Who Participated?

This event initiated by pro-cycling groups; Solo Seli Raya, BMX group, Onthel Lawas Solo, low rider group, bike to school and bike to work community, Kota Kita and the DoT. The event was also attended by the public in general; male and female, children were participated. In total, there were around 150 people who participated.

How the Program Was Implemented?

Invited pro-cycling groups to initiate this program

Prior to the program design phase, we had conducted a number of discussions with pro-cycling groups in the city to better understand their challenges and barriers to promoting cycling in Solo. From the discussions, a number of possible activities came about as an opportunity for a joint collaboration amongst Kota Kita, the pro-cycling groups and the local government. As we defined the target beneficiaries of the activities, it was evident that cycling was an intersectoral issue and had to be promoted to the general public not just for women. As one of the activities that can accommodate the public in general, we proposed to reclaim the slow lanes in the city, a preexisting urban asset, through Gowes Persaudaraan.

Inviting public in general by promoting the event on social media

We leveraged social media such as facebook and twitter that was further disseminated by partners through their own promotional platforms.

Cycling together along the slow lanes

On the day of the event, pro cycling groups, DoT, Kota Kita and other public participants gathered in Sriwedari Park as a starting point of the cycling tour. The pro-cycling groups led and supervised the safety of the activity. The collective cycling was done along 28km of slow lanes around the city of Solo.

• Output of the Program

The program demonstrated the potential for a collaborative collective action amongst civil society groups and the government. This points to alternative formats for advocacy beyond the meeting room. As a direct contribution, the activity helped to mainstream the idea of Solo's extensive slow lane system as a potential bike lane in the near future.









CHAPTER 3 CONCLUSION

In this final chapter we look to share the lessons learnt, limitations, challenges of the program implementation, and general reflections on the activities after our three years experience with Women on Wheels Indonesia pilot project in Solo.

3.1. Lesson Learnt

- A local strategy and a local approach is needed for effective advocacy. Whether it is advocacy or campaigns, it is important to understand the local context, local actors and champions. While it is necessary to borrow ideas or learn from other cities to promote cycling, the ability to interpret and adapt it to the local culture and planning process is important. In WoW, we leveraged existing institutions from procycling groups, to Musrenbang and to the ubiquitous women's organization in every kelurahan.
- The role of leaders, particularly women, is significant in encouraging the bicycle use. The leadership of the mayor in Yogyakarta in supporting policies and regulations for cycling made a big difference and inspired a powerful movement from citizens to use the bicycle. In Solo, the leaders of the women organizations (PKK) can encourage bicycle use amongst women and other members of the neighborhood.
- In Solo, along with other cities in Indonesia, cycling
 is mainly seen as a recreational and sports activity,
 rather than a mainstream mode of transportation.
 This is due to the fact that most Indonesian city
 governments still focus on supporting motorized
 transportation system.
- Building coalitions with committed stakeholders with a common purpose to promote the use of bicycle can help to promote the bicycle at scale. During the project implementation, we focused on joint collaboration involving many stakeholders in the city. Our work was to convince them and galvanize around a common goal and set of activities. We collaborated with Department of Transportation of Solo city, local universities, civil society groups, procycling groups, different women groups in the city in our activities to promote bicycle use and raise

awareness on mainstreaming gender perspectives on bicycling.

- In Indonesia, there are no explicit cultural barriers that inhibit women from cycling. However, there are economic-cultural factors where the mobility of women are inhibited as they have to fulfill domestic responsibilities. Safety and comfortability, was a main concern amongst women, but also a fundamental issue for the public in general.
- Cycling is a cross-cutting issue. To support the rights
 of women in the context of cycling in cities, other
 alliances and stakeholders need to be involved.
- Current city infrastructure paradigm marginalizes the bicycle. The city's default transportation planning paradigm focuses on providing infrastructure and facilities for motorized vehicles. The benefits of cycling needs to be mainstreamed, more efficient investments, space saving opportunities, as well as less dependence from non-renewable resources. There is a need to continue advocating for more bicycle infrastructure improvements such as bicycle parking, slow lanes improvement, bike signage as well as better regulations that support cyclists.
- Improving and enforcing regulations to protect cyclists. Establishing policy and regulation to ensure safety for cyclist is equally as important as the promotion of cycling. There are several policies and regulations that can improve the safety of cyclists such as prohibiting minors from riding motorcycles illegally, establishing a safety campaign, and many more. Government, police and school authorities can work together to monitor and enforce the regulations while simultaneously invest in cycling infrastructure. This can also encourage students to use bicycle, reducing their exposure to accidents and road hazards.
- Creative and integrated pro-cycling educational campaigns that target both cyclist and non-cyclists contribute to common understanding on how to respect one another and share the road. Campaigns to promote the bicycle should also involve other

road users or non-cyclists. This can build a culture of respect amongst all road users.

- by collaborating with other CSOs and procycling groups. Currently, pro-cycling groups, local government and other related stakeholders have their own bicycle campaign agenda. All the initiatives can benefit by being integrated and synchronized, adding legitimacy to a city-wide campaign.
- encourage stakeholders to adopt the activities, improving opportunities to scale the solutions. The local government is inspired by our programs for Safe Cycling Campaign and Safe Cycling Competition and intend to replicate it in the future. One of the outcomes of the Women on Wheels initiative is the lesson on developing creative advocacy programs. Non-traditional activities outside of meeting room and white paper advocacy can leverage the power of citizen participation to generate discussions and ultimately enable change.



3.2. Reflections on Women on Wheels Project in Indonesia

This a reflection on the limitations and challenges in implementing the Women on Wheels initiative. These reflections can form a basis for future program implementations.

- The issue of gender should also be considered from all angles not just women. Throughout the program, we focused on involving mostly women in the discussion around cycling and the city. However, it was important to gain the perspective of men and other demographic sectors, in order to better understand the issues related to women.
- Leadership capacity of communities to selforganize around events and cycling activities
 vary amongst neighborhoods. Participation in the
 programs was dependent on the capacity of the
 communities or groups to organize. While the design
 of the programs cannot accommodate everyone,
 it was important to understand the dynamics of
 community self-organization in order to maximize
 participation.
- Community leadership affects the rate of participation in the programs. In the neighborhood where the women leader is actively engaged, the participation of women organisation members is also high. For instance, in Kelurahan Pasar Kliwon, when the leader has no interest to engage, there was little participation from the neighborhood women.
- Participation from individuals of lower economic capacity can be inhibited by their needs to fulfill their own livelihoods. In some cases, participation is limited as the community members do not have the luxury of time to participate in the FGDs or the

promotional events. To some, the promotional events do not seem important as they are already using the bicycles routinely. Their needs and expectations should be considered in the design of future programs.

- There is a mismatch of interests between national and local government mainly on maintaining the slow lanes in Solo city. While the National government intend to remove slow lanes in Indonesian cities, the local government of Solo wants to preserve it.
- Finding local champions at strategic levels of the government and communities is necessary to ensure the success of the programs. It is important to not see the government as a monolithic institution. In our work, specific individuals in the government that champion the agenda of cycling in the city became strategic partners in having the DoT support our programs. Similarly, at the level of the neighborhood, community leaders can become a champion that encourage other members to be actively engaged in our programs.
- There is a need to disseminate the research and the lessons learnt to a wider audience, beyond the programs that we have implemented, through more creative and formalized channels.
- There is a need to broaden the network of stakeholder groups, particularly amongst the various overlapping departments in the local government. For example, the solo bicycle map needed the support from Department of Public Works as well as the Department of Tourism, in addition to the Department of Transportation.
- The time needed from advocacy to implementation extend beyond the program timeframe, it requires a continued effort.
- When it comes to cycling, the issue extend beyond socio-economic boundaries. Upon reflection, we felt that the program could have accommodated more target groups such as university and school students in Solo.

3.3. Future Projects and Initiatives

One of the main takeaways from the Women on Wheels experience is that, while the gender issues exist, promoting sustainable transportation requires a wider alliance. Kota Kita is committed to sustain the agenda on promoting bicycle and non-motorized transportation in Solo city. We believe that a sustainable and inclusive transportation system require an integrated planning that accommodate both non-motorized and motorized users equally. Most of all, it also requires a close collaboration between governments, civil society groups, community and other committed stakeholders to build a transportation system that is not only sustainable but also an inclusive transportation system.

To continue the effort, Kota Kita is committed to developing several programs and initiatives in the future to promote cycling in Solo city.

Solo Bicycle Map

Kota Kita has developed a bicycle map which consists of three different routes; park route, heritage route and craft route. This map is intended to support Solo's tourism activities while promoting the implementation of a bicycle infrastructure in the city. We intend to continue this effort with the following activities:

- Maintain the collaboration with Solo's Department of Tourism to promote the use of bicycle map more broadly, for the citizens of Solo and for visitors alike. We intend to work with the Department of Tourism of Solo city who is interested in popularizing the bicycle map in tourist destinations across the city such as hotels, restaurants and other tourism spots.
- Create an online platform for the bicycle map. The digital platform is intended to be a campaign tool, in addition to being purely informative. A web presence

is important to generate discussions more broadly about the effectiveness of the routes. We intend to continue our engagement with pro-cycling groups and local government to refine the routes.

 We intend to participate in a continued advocacy from bike map to physical routes.

Community-Based Road Quality Data Collection Towards Public Works Improvement

Previously, we have developed the Flocktracker - a community crowd-sourced reporting platform - to survey bicycle infrastructure conditions in Solo city. Kota Kita will improve the methodology on conducting crowd-sourced data collection. More importantly, we will take necessary steps to streamline the effort with government programs on improving the road conditions in the city. Kota Kita will strengthen the collaboration with Department of Public Works and develop future activities in line with the goal of data collection of road conditions.

Piloting a Bicycle Route in Kali Pepe Area

As an addition to the existing bicycle map routes, we intend to pilot a new route along Kali Pepe. Kali Pepe is a historically significant river that runs through the center of the city, passing through 16 neighborhoods of Solo city, and significant public spaces and tourism destinations. Currently, the government had developed the riverbank area to integrate setbacks and pedestrian right of way. The adjacent community also utilize the riverfront areas for many kinds of activities; kiosk, playground, gazebo, for cooking places and other communal activities. With this in mind, there is an opportunity to promote non-motorized transportation with tourism based developments along the river. A feasibility study to identify the viability on conducting this project on that areas will be developed in the near future.

Encouraging Non-motorized Transportation System in Kampungs (Neighborhoods)

In many neighborhoods in Solo, internal roads are still largely inaccessible by large vehicles. There is an opportunity to develop these small streets for community based non-motorized transportation systems. Kota Kita plan to create a small scale bike and peddycab sharing at kampong or kelurahan level that can be used by communities both for inter and intra kampong mobilities.











