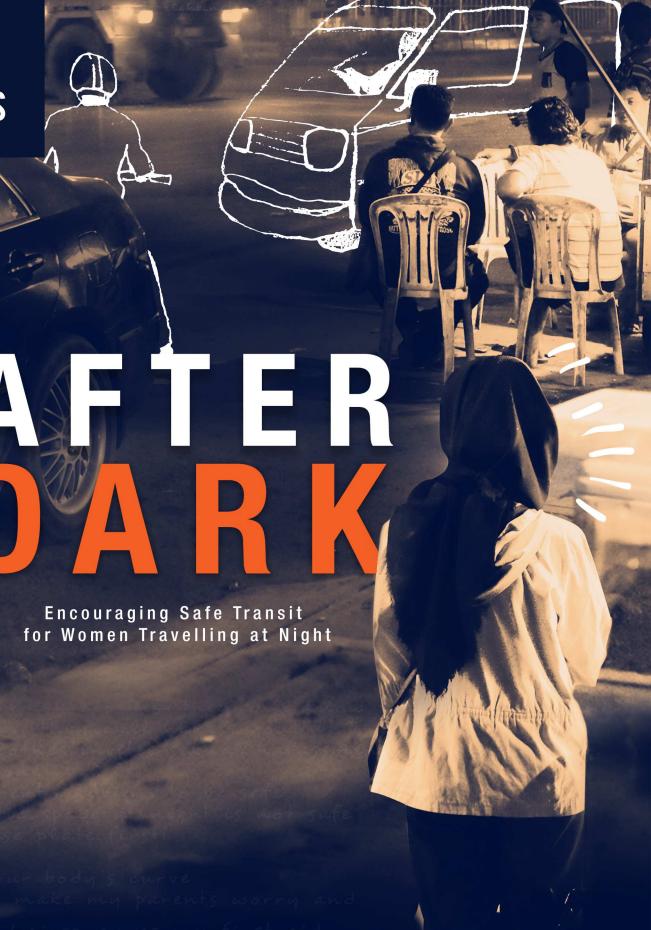


PULSE STORIES













ACKNOWLEDGEMENTS

After Dark: Encouraging Safe Transit for Women Travelling at Night was a research project conducted by Pulse Lab Jakarta in collaboration with The United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) in Indonesia, with the support of the Australian Department of Foreign Affairs and Trade (DFAT). Pulse Lab Jakarta combines data science and social research to help make sense of our interconnected, interdependent and complex world. The Lab is a joint initiative of the United Nations and the Government of Indonesia, via United Nations Global Pulse and the Ministry of National Development and Planning (Bappenas) respectively.

This After Dark research dovetails with UN Women's Safe Cities and Safe Public Spaces Global Initiative, which was launched in 2010 to encourage innovative, locally-owned and sustainable approaches to prevent and respond to sexual harassment and other forms of violence against women in public spaces. We benefited tremendously from UN Women's feedback and recommendations throughout the research design, fieldwork, ideation, synthesis and report writing process, all of which ensured that the research was based on a thorough understanding of gender dynamics, including the many factors that influence women's safety.

The Institute for Transportation and Development Policy was generous in sharing their knowledge and offering support with the research design, which contributed to our understanding about public transportation services in Indonesia. We were particularly grateful to representatives from the Institute who participated in the co-design workshop and shared inputs that supported the analysis and synthesis phase of the research.

Special acknowledgement to Iriantoni Almuna and Riana Nedyawati from UN Women, as well as to Visi Dikara and Atik Widyastuti from Pulse Lab Jakarta for their kind contributions during the field research. We'd also like to recognise Deepakshi Rawat from Pulse Lab Jakarta who reviewed and offered feedback on earlier drafts of this report. This research would not have been possible without the guidance of local fixers in Medan, Semarang and Surabaya who arranged many of the activities on the ground beforehand.

Finally, we'd like to express sincere thanks to the respondents from the three cities who shared their experiences with us and undertook four consecutive days of diary studies. Ranging from their anecdotal stories to thoughtful discussions about the various challenges and ways to address them going forward, we are indebted to these respondents for their contributions that have helped us to understand the experiences of women using public transportation at night.

As part of the 2030 Agenda for Sustainable Development, SDG 11 is focused on building cities that are inclusive, safe, resilient and sustainable. This includes providing access to safe, affordable and accessible transport systems for all - with special attention to the needs of women, children, persons with disabilities and the elderly. This After Dark research is not only aligned with this goal and its focus areas, but it also provides meaningful insights that are useful to a range of stakeholders for future development agendas.

Publication Date

This report was published in May 2019 and is available for public access through pulselabjakarta.org

Researchers

Iriantoni Almuna, Maesy Angelina, Mellyana Frederika, Lia Purnamasari, Rico Setiawan and Aaron Situmorang

Visualisation

Visi Dikara, Alfian Maulana Latief and Lia Purnamasari

Photo Credit

Unless otherwise specified, all photos in this report were taken by members of Pulse Lab Jakarta's Social Systems Team.

Rights and Permission

This work is licensed under Creative Commons Attribution 3.0 IGO License. To view a copy of this license, visit http://creativecommons.org/licenses/by/3.0/igo/







TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
SETTING THE CONTEXT Can Smart Cities be Safe Cities for Women? Safety and Mobility for Women Night-Shift Workers Our Approach: Human-centered Design Fieldwork in Numbers What You Will Find in This Pulse Stories Edition	7
FOUR AFTER DARK PERSONAS The Overprepared Strategist The Anxious Newcomer The Moonlighter The Female Warrior	17
NEVERTHELESS, SHE PERSISTED Key Insights	35
FROM CHALLENGES TO OPPORTUNITIES Five Ideas Emerged Next Steps	45
GLOSSARY	56
REFERENCES	57
ANNEX 1: Applying Human-Centered Design to Understand Women's Travel Experience at Night	59
ANNEX 2: Designing a Do-lt-Yourself Diary for Our After Dark Fieldwork	63
ANNEX 3: After Dark Co-Design Workshop	66



EXECUTIVE SUMMARY

ity governments nowadays are adopting sophisticated technologies and near real-time data to improve planning and service delivery to enhance citizens' quality of life. Known as the smart city approach, much of the discourse regarding women has focused on improving mobility. To navigate these fast-advancing urban cities that are ubiquitously equipped with new technologies, women sometimes have to develop their own safety mechanisms because smart cities do not always mean safe cities.

As part of the UN Women's Safe Cities and Safe Public Spaces Global Initiative, in 2017 UN Women in Indonesia conducted a safety audit in Jakarta. The safety audit revealed that women are vulnerable to verbal and physical harassment in public spaces, and the risk of these encounters tends to increase during evening hours. Pulse Lab Jakarta thus teamed up with UN Women to understand the mobility patterns and safety perception of women who travel at night.

Whereas the safety audit examines the forms, risk factors, impact and efforts to prevent and respond to sexual harassment and sexual violence experienced by women and girls in Jakarta, one of the broader objectives of this After Dark research is to understand what "being safe" means for women travelling at night, including learning about the thought process and emotions that influence their travel decisions.

This research sought to expand the understanding about women's safety and mobility in urban areas in Indonesia beyond the Greater Jakarta locale. Medan, Semarang and Surabaya are three of the most populated Indonesian cities and have modern public infrastructure and transportation systems, namely the Bus Rapid System in Semarang and Medan, and Suroboyo Bus in Surabaya.

Women often migrate to these cities in search of better job opportunities. While many of them end up securing employment at city centers in business districts, their places of abode are normally on the outskirts where living accommodation is more affordable. Acknowledging that women should have the right to safely experience the cities they live in - and access the resources they have to offer - to realise their full potential, this research was conducted to gain insights about every aspect of a woman's travel experience from the first mile to the last mile and every stop in between.

In this research, we identified various factors that influence women's perception of safety while travelling at night; certain challenges women encounter when travelling at night; and how these facets impact their mobility and travel choices.

Methodology

Complementing the safety audit conducted by UN Women, this After Dark research focuses on understanding the unique experiences of women who travel at night using public transportation; the focus was not necessarily on uncovering systemic factors. To connect with the respondents in a wholehearted way, a certain degree of empathy was paramount. Human-centered design is an approach that requires researchers to set aside preconceived notions and beliefs in order to come up with practical and inclusive interventions. This was the approach applied to gain a deeper understanding about women's individual travel experiences rather than arriving at blanket generalisations.

Throughout the three cities, 37 women respondents took part in the research. These women recorded their travel experience for four days in a diary, which served as a springboard for conducting further in-depth interviews. As part of the research, a few of the respondents were shadowed on their

journey home at night, which provided researchers with an actual, real-life context to analyse findings. The preliminary findings from the fieldwork were shared in a co-design workshop with a diverse group of participants to obtain feedback and elicit ideas for intervention opportunities. This report describes the insights that were uncovered following rounds of synthesis and analysis sessions conducted based on the information collected during both the field research and co-design workshop.

The goal of this research was not necessarily to arrive at statistically representative findings; instead its overarching objective was to glean and mine insights to fill the knowledge gap about the experiences of women who travel at night using public transportation. The insights are also intended to complement existing studies and inform alternative intervention designs.

What does it mean to feel safe and how do women perceive safety in public spaces, especially while transiting using public transportation at night?

We acknowledge that 'women' is not a uniform category. Although the respondents shared similar demographic characteristics, their experiences travelling with public transportation at night were shaped by a set of distinct habits, needs, challenges and beliefs. To portray the different behavioural patterns we identified throughout our research, we characterised a set of personas. Each persona is a fictional archetype based on what we learned about the women respondents travelling at night, including their specific motivations, expectations and goals.

These personas can serve as a design guide in shaping practical interventions, which can have a meaningful and positive impact on the lives of women travelling at night. They also highlight tactics women employ to keep themselves safe, as well as how women interact with their surroundings.

The four personas include:

- The Overprepared Strategist: a woman who spends considerable amount of time coming up with defence strategies. This persona helps us to observe the range of skills and strategies that women use to protect themselves while travelling at night.
- The Anxious Newcomer: typically a young woman who
 has recently migrated to the city. For these young migrant
 workers, they see the challenges that come with travelling
 at night as part of the bigger challenge of moving to a big
 city in search of better opportunities.

- The Moonlighter: a woman who juggles multiple jobs to stay afloat. Her travel experience at night involves multiple transits, as she skips between different locations and modes of transportation.
- The Female Warrior: a woman who prioritises her job above her own safety. Her travel experience is as safe as she has accustomised it to be.

Despite the nuances in these women's stories, there's one common thread - regardless of how unsafe these women perceived travelling at night to be, they all acknowledge it as part of what they have to deal with to earn a living. Most of the respondents we met with believe job options are limited, and are of the opinion that it is better to have a regular income from working evening shifts than earning nothing at all.

Below are seven key insights we identified from the fieldwork and co-design workshop:

INSIGHT 1:

Beyond an intuition, being safe also demands a certain skill set.

For the respondents, travelling at night comes with a feeling of being unsafe. However, these women aptly described that feeling safe is on a continuum -- it is not dichotomy of safe and unsafe. Threats are present from the first mile to the last mile and feeling safe, these women believe, come from their ability to shield and protect themselves. Rather than

limiting their mobility, the women employed a set of skills to safeguard themselves. Some of which include being a good observer; preparing for the worst case scenario; preserving anonymity and being low-key; becoming familiar with a travel route; and taking advantage of other factors that can enable safeguarding, such as building companionship with other commuters.

INSIGHT 2:

Women adjust their safety parameters based on their familiarity with an environment.

Insufficient street lighting, hazardous walkways and absence of security posts typically limit women's mobility and travel choices at night. This however is not generally the case for women, such as the respondents, who must travel at night to earn a living. Their safety parameters are not merely based on the availability and quality of infrastructure; their sense of familiarity with a place and people they see is a contributing factor.

INSIGHT 3:

Women's perception of safety is more shaped by personal stories than the news.

The women we met were more inclined to heed stories shared directly by family members and friends (from online articles or personal anecdotes shared through social media or private messaging channels) than the news. Fact checking the information is not a priority for them, because they automatically interpret it as trustworthy since it's coming from people who care about their well being. Family members and friends are therefore reliable channels for sharing safety information.

INSIGHT 4:

Does reporting an incident make any difference?

The women respondents had knowledge about call centers and helplines that are established for reporting incidents of harassment. They don't always know the exact number to call, but they had at some point or another seen advertisements about the helplines, or were informed by friends and relatives. However, none of the respondents expressed a willingness to file a report. For them, it is less about the shame or fear of their identity being revealed, but more based on doubts about whether there will be follow up action from the authorities.

INSIGHT 5:

Angkot drivers are seen as both enablers and inhibitors of women's safety.

Angkot, a privately-owned minivan type of transportation, operates on set routes and adheres to government regulations, but they are neither hired by the Government nor are they affiliated with private companies. The drivers don't wear uniforms with any affixed identification, nevertheless the women respondents are familiar with their faces and have studied their driving patterns. The women acknowledged that some drivers might not always be responsible, but that in certain predicaments they can be an ally (for instance warning



about pickpockets). As passengers, the women generally hope that *angkot* drivers would respect their safety by not driving recklessly.

INSIGHT 6:

Bystanders sometimes want to help, but they are not sure if intervening is the best course of action.

There are several ongoing campaigns focused on transforming passive bystanders into active allies when women are facing harassment in public spaces, especially teaching bystanders how to identify activities that may be considered harassment. Many of the bystanders we spoke to throughout the cities mentioned that while they were able to recognise acts of harassment, they were hesitant about taking action out of fear that intervening might make the situation worse for the victims. For these bystanders, finding a more subtle way to intervene in these situations without causing a stir is a challenge.

INSIGHT 7:

Waiting zones like an *angkot* stop are not just transition points, they are 'safety assessment' points.

We found that at night women rarely wait for public transportation at designated points (such as *angkot* stops or *halte*). They prefer to wait in areas where there are activities, such as where street vendors are present. While waiting, they encounter faces of regular passengers and companions travelling similar routes. The waiting time is used to make a quick safety assessment of factors that might affect their experience travelling home at night.

From Challenges into Opportunities



Organda-Lead *Angkot* Reformation



Reimagining Designated Angkot Stops



From Street Vendor to Street Warden



Anak Rantau (Newcomer) Starter Pack



Enabling Bystanders To Take Action

Over time, the women respondents built their own protection mechanisms to avoid relying too much on others when travelling at night. With the need to prioritise their employment, these mechanisms help to keep them going. The challenge that has emerge is how to reduce the burden placed on women to keep safe while travelling at night, and how to provide a strong support system to build safe and inclusive cities. Based on the fieldwork and co-design workshop, we've identified five opportunity areas for intervention:

ORGANDA - LEAD ANGKOT REFORMATION

Organisasi Angkutan Darat or ORGANDA is a land transportation organisation which was established by a Ministerial Decree in 1963. The association caters to the needs of land transportation operators and maintains relationships with the city government and law enforcement, whereby it steps in as an intermediary actor in the case of traffic offences and accidents. There are merits to revisiting the Decree to improve the quality of service holistically for all those involved, especially as many angkot owners typically become members of a transportation related association such as Organda.

Potential solution partners: Organda, drivers, city governments and *angkot* passengers.

 How might we incentivise Organda to become a safety enabler?

Revising Organda's Role as an Operator Association

As one of the key players providing services, there are benefits to reforming *angkot* services by repositioning Organda's function and role as an association that implements and monitors vehicle and driving guidelines to meet safety standards.

 How can we improve the behaviour of drivers as service providers?

Safe Driver Identification

To provide screening and recruitment of competent drivers, drivers can be provided a unique digital identification as part of the accountability mechanism and passengers can offer grading feedback. With a digital system in place to assess such grading, drivers can be rewarded or reprimanded for following or not adhering to the standard operating procedures.

 What data can be harnessed to better design routes and timetables?

Subsidise Selected Evening Routes

To better allocate funds, city governments can leverage non traditional data sets and advanced data analytics to strategically identify which evening routes to subsidise. This approach can be complemented through dialogue with an association such as Organda to explore business models to increase commercial activities along those routes with the aim of making sure activities are ongoing during nighttime travel.

REIMAGINING DESIGNATED ANGKOT STOPS

Angkot drivers in practice usually stop anywhere along a route for picking up and dropping off passengers. Based on the demand, these stops tend to be at busy intersections or street corners. These locations do not have signs, a place to sit or proper lighting, but there's a general sense of where these stops are based on the presence of parking lot attendants, street vendors and other waiting passengers. For passengers, these stops are seen as relatively safe waiting spots especially at night. For angkot drivers, these stops are potential spots to get more passengers. Overall, these are undesignated yet socially known angkot stops where drivers wait for passengers and vice versa.

Potential solution partners: local designers and architects, transportation practitioners and the transportation department within the Government (*Dinas Perhubungan*).

 How can we establish a set of safeguarding guidelines that are tailored to a local context and aligned with how women perceive safety when travelling at night?

Halte Umum (General Public Transportation Stop) Design Guideline

By facilitating local co-design and co-creation sessions

to identify safe waiting points, city governments can gain insights about informal safety factors that might be necessary for designing standards and guidelines. Crowdsourced data regarding the public's perception of safety in certain areas can also be incorporated.

FROM STREET VENDOR TO STREET WARDEN

In the context of safe travel at night, women tend to view a street vendor as an ally. They see them as workers trying to make ends meet, just like themselves. It is not unusual for women to wait for an angkot near to where street vendors are located. In some cases however, street vendors are seen as a disturbance, especially when their stalls are blocking pedestrian walkways. The city government every now and then will conduct raids, forcing these vendors to move to other areas. This is a unique opportunity area in which civil society organisations, local urban designers and community organisers can explore the role of integrating workers from informal sectors to become eyes-on-the-street to help provide safe public space for women travelling at night.

Potential solution partners: street vendors, local civil society organisations, community organisers, as well as the micro and small medium enterprise department with the Government (Dinas UMKM).

 How might we establish rules to regulate street vendors as part of a safe designated angkot stop?

Street Warden

City governments can work together with local civil society groups and law enforcement to develop a guide for interested street vendors who are willing to go through a vetting process to become street wardens.

ANAK RANTAU (NEWCOMER) STARTER PACK

Night-shift jobs that pay minimum wage are not necessarily the employment women who travel at night dream of. In reality though, these are typically the jobs that are available for young women who do not hold a higher education degree and are looking for better opportunities in big cities. For these young migrant workers, the challenge of travelling at night is part of a bigger challenge of being a new migrant. They know they have to work harder and be willing to endure tougher conditions than people who are not newcomers. To transform this challenge into an opportunity area, young migrant workers may need an induction starter pack to help them become more quickly acquainted with the city. This induction starter pack would provide the necessary safety information on how to navigate and overcome some of the challenges of working and travelling at night.

Potential solution partners: young migrant workers, NGOs, tech communities, designers and labour-related departments within the Government.

 What technologies can be harnessed to help prepare young migrant workers for living, working and travelling in a new city?

Know Your City App

An application designed for new migrant workers, allowing them to digitally document places they visit and their experiences as a way to familiarise themselves with a new city.

 How might we enable peer to peer support for young migrant workers?

Teman Pulang (Travel Companion) Campaign

By kickstarting a campaign at the city level to promote knowledge sharing, new migrant workers can connect with other individuals who may be living or working in the same building or living in close proximity to each other. The goal would be to ultimately develop a companion system for group travelling.

ENABLING BYSTANDERS TO TAKE ACTION

We acknowledge that efforts have been made by grassroots organisations, women empowerment groups and the UN to encourage bystanders to take action. However, as we've observed in this research, bystanders are often hesitant to act out of fear that they might misinterpret a situation, especially at nighttime when it's dark and interpreting certain gestures may be difficult. Therefore, bystanders usually wait for a victim's response, instead of acting at the first glimpse of what might be a perpetrator's advances. Based on the atmosphere at transit points, bystanders such as drivers may worry about retaliation from perpetrators, since there's always the possibility of running into them again. Thus, these bystanders - though willing to help - prefer to do so in a subtle way that does not jeopardise their own safety.

Potential solution partners: Non-government organisations, community organisers, local designers, transportation operators and city government.

 How might we enable more subtle and tactical bystander interventions?

A Safe Carriage for All

Organda in consultation with other community organisations could participate in the selection of a number of *angkot* minibuses to be designated safe carriages. These vehicles would be equipped with clear signage for passengers, as well as features to encourage bystanders to take action. These features may include, but are not limited to, tips on how to recognise uncomfortable body language and render subtle assistance, in addition to what can be done to empower drivers to act. These would not be women-only carriages - but carriages that are open to all passengers.

Next Steps

This **After Dark: Encouraging Safe Transit for Women Travelling at Night** research sought to compliment the UN Women safety audit conducted in 2017 by:

- a) focusing on the experiences of women from a lower socioeconomic class, especially those who are working in the informal sector;
- expanding the understanding of women's safety and mobility in major cities in Indonesia beyond the Greater Jakarta area; and
- c) complementing the findings by focusing on the individual experience instead of the systemic factors and delving into what "being safe" means for women who regularly travel at night (including learning about the emotions and beliefs influencing their travel decisions).

Moving forward with the above-mentioned opportunity areas, it is worthwhile to consider other key initiatives under the **Safe Cities Global Initiative** that encourage innovative, locallyowned and sustainable approaches to prevent and respond to sexual harassment and other forms of violence against women in public spaces.

These opportunity areas are meant to be explored alongside key stakeholders, such as transportation related government entities, infrastructure development companies in the private sector, grassroots communities, activists and global organisations that are all working to create a safe city for all.

It is imperative to undertake a series of experiments that demonstrate the suitability and efficacy of these ideas and test them in the particular city context such as Medan, Semarang and Surabaya or any other area where these ideas would be useful. This experimentation requires ongoing collaboration to engage users and communities in the change process.

Pulse Lab Jakarta together with UN Women encourage interested organisations to make use of the insights from this research to develop ideas that can be transformed into tangible prototypes. We believe, through a consolidated effort, these opportunity areas for intervention in service delivery, transit improvement, stronger social support and campaign for active bystanders can become closer to reality.

This is an open invitation from us.







CAN SMART CITIES BE SAFE CITIES FOR WOMEN?

y 2030, the number of people living in urban areas across Southeast Asia will have surged from an estimated 280 million today to about 400 million (Florida and Fasche, 2017). To accommodate this rate of urbanisation, city governments are turning to sophisticated technologies and near real-time data to improve planning and service delivery that can enhance citizens' quality of life. This is commonly referred to as a smart city approach, which may be relevant for other issues of inclusivity, for example making cities safer for women.

The discourse in this area, however, has largely focused on developing better infrastructure and harnessing technologies that are expected to improve women's mobility. The *Safe and The City¹* and *BSafe²* mobile applications are two examples. Women though are often excluded from the city

development planning process, and therefore resort to each other for support. This may include coming up with their own mechanisms to navigate fast-advancing urban cities that are ubiquitously equipped new technologies, such as the likes of sensors, ride hailing applications, among others.

Previous research on gender and mobility in urban cities has underscored that the issue of safety also affects women's access to and ability to make use of opportunities a city has to offer, in relation to education, livelihood and self-fulfillment. One study by ITDP and WEDO (2017) has indicated that public transportation planners tend to discuss public transportation in terms of the typical 9 a.m. to 5 p.m. workday, which in some cases are likely to carry a bias towards the needs of middle class men.

As part of the UN Women's Safe Cities and Safe Public Spaces Global Initiative, UN Women in Indonesia conducted a safety audit in Jakarta in 2017. The safety audit revealed that women are vulnerable to verbal and physical harassment in public spaces, and the risk of these encounters tends to increase during evening hours. Having to cope with the feeling of being unsafe, some of the women in the study expressed anxiety about taking public transportation, few of whom have chosen to avoid using public transportation altogether after dusk.

Safe and The City is a London-based crowdsourcing application that aims to provide safe routes to avoid crimes and sexual harassment. The crowdsourced data collected through the application is intended to be used to inform decision making.

² BSafe is a mobile application that provides multiple emergency aid mechanisms in sexual harassment situations.



Despite these realities, there are many women who still have to travel in the evening to night hours to earn a living. Many of these women work in the service industry, for instance working as shopkeepers, restaurant servers, call center operators and cleaning staff, and depend on affordable public transportation to get home at night. Considering the risks: how do these women navigate public transportation after dark?

SAFETY AND MOBILITY FOR WOMEN NIGHT-SHIFT WORKERS

UN Women Indonesia and Pulse Lab Jakarta set out to understand the mobility patterns and perceptions of safety among women workers who regularly travel at night. In undertaking this collaborative study, we aimed to complement the safety audit mentioned before in the following ways.

Studies regarding women's safety while using public transportation in urban areas often focus on the experiences of women who are either middle-class employees in the formal sector (such as office workers travelling during peak hours) and women from a lower socio-economic background who are working in the informal sector (ITDP and WEDO, 2017; ADB, 2013). Not much attention is given to women who work night-shifts in small retail industries. From an Indonesian perspective however, this is of much significance as women make up 40 percent of this sector's workforce (Indonesia Ministry ofFinance, 2012). This study therefore first sought to fill that gap in the existing literature, by uncovering insights relating to the experiences of women who may be working as shop attendants, cashiers, private tutors or servers at shopping malls, restaurants, call centers, and corner shops, and in other small business enterprises.

Second, this research sought to expand the understanding about women's safety and mobility in urban areas in Indonesia beyond the Greater Jakarta area. Medan, Surabaya and Semarang are among the largest Indonesian cities in terms of population size (Indonesia Ministry of Home Affairs, 2017). These cities all have modern public infrastructure and transportation systems, namely the Bus Rapid System in Semarang and Medan, and *Suroboyo Bus* in Surabaya (ITDP Indonesia, 2017; Fani, 2016; Farmita, 2017). Local migrant workers in particular frequently move to these locations in search of better job opportunities. While many of them end up working at city centers in the heart of each city's business district, they normally live on the outskirts of the city in more affordable locations.

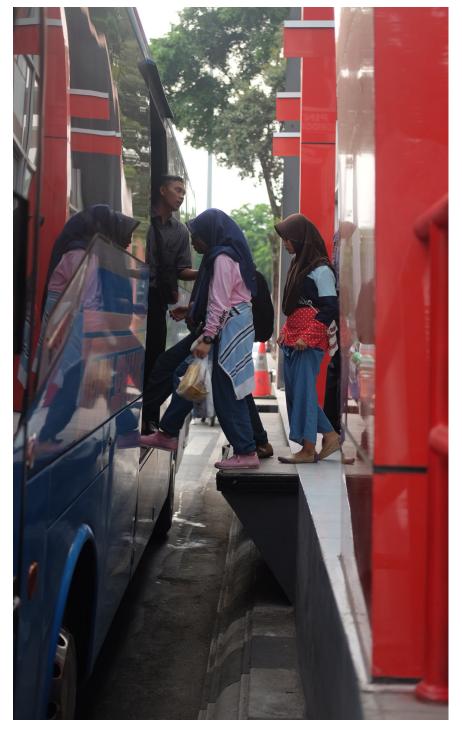
With regards to harassment and violence against women in public spaces, the 2017 safety audit identified the forms, risk factors and impact, and elaborated on the underlying social norms and beliefs that influence women's safety in public spaces. The audit also proferred a set of recommendations to address the overarching issue, which includes improving public infrastructure (such as ensuring better lighting is in place, installing CCTVs at strategic locations and redesigning walkways), as well as kickstarting campaigns to promote behavioural change, in terms of social norms and attitudes that tend to normalise violence against women.

Third, this After Dark research sought to complement the findings from this audit, by focusing on the individual experience rather than the systemic factors; delving into what "being safe" means for women who regularly travel at night; and learning about the emotions and beliefs influencing their travel choices. We approach this research with the understanding that a woman's mobility, for instance returning home from work at night, should not be fragmented into safe and unsafe dilemmas—every part of the journey should be safe. We believe that women should have the right to safely experience the cities they live in and access the resources a city has to offer in order to reach their full potential as citizens. The research is thus designed to gain insights about every aspect of a woman's travel experience from the first mile to the last mile; and every stop in between.

This After Dark research was guided by the following questions:

- How do women perceive safety when travelling with public transportation at night?
- What factors influence women's perception of safety while travelling at night?
- What challenges do women encounter when travelling at night? How do these challenges impact women's mobility and travel choices?
- How can transit systems be improved to engender a sense of safety for women travelling at night?

The insights from this research are expected to close information gaps in the existing literature on women's safety and mobility in urban areas. It is our ambition that these insights become useful for a range of stakeholders such as urban planners, policy makers and transit oriented developers who are responsible for designing interventions to improve the safety of women and girls in public spaces.







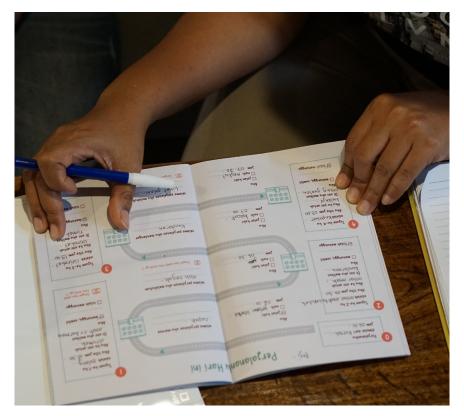
OUR APPROACH: HUMAN-CENTERED DESIGN

Issues concerning women's safety and mobility when travelling at night are not always openly discussed. Therefore, research of this kind necessitates a certain degree of empathy to connect with respondents in a genuine and wholehearted way. Researchers also have to be willing to suspend their presumptions in order to come up with practical and inclusive interventions. Human-centered design (HCD), which is also known as 'design thinking', is a qualitative research approach that allows researchers to uncover meaningful insights. HCD's origins are in the private sector where it was largely applied, but in recent years it has increasingly been applied to generate ideas to address social development issues (Tooley, 2017).

HCD can be applied to develop strategies that are responsive to the needs of users based on a particular problem. The approach is anchored in immersion and empathy to gain deep insights on users' motivation, pain points, desires and latent needs. Insights from the research conducted then become the basis of ideas for solutions that are developed, tested, and iteratively refined together with the users (O'Grady, 2017).

Although HCD shares similarities with conventional qualitative research that is generally intended for social and behavioural change interventions, HCD is distinct with its emphasis on action. HCD does not aim for statistical representation of a certain demography, nor does it specifically aim to add knowledge for the scientific community. Its inquiries instead are exploratory in nature and are intended to gain actionable inspirations from personal stories for a fresh perspective in delivering products, services or policies that can genuinely meets users' needs. As such, HCD can complement existing social and behavioural research (which several existing research on women's safety and mobility are based on).

The first step in the HCD approach is getting to know the 'users' - in the case of this research, these are the women who travel and use public transportation at night. Women, as this research highlights, is by no means a uniform category. We recognise that women's experiences are shaped by diverse factors, such as class, ethnicity, race, religion, education and physical ability. Given the scope of this research, the experiences of women living with disabilities; women who are from ethnic minority groups; and women who may be marginalised by society in other ways were not be accounted for but have been acknowledged as part of the limitations in the research analysis.



To gain a broader understanding of the topic in question, we began by reviewing existing literature on women's safety and mobility; interviewing experts who have worked on related women's issues; and scanning the media for reports on women's safety and public transportation usage from Medan, Semarang and Surabaya. We also partnered with local recruiters in each city to help identify possible respondents, focusing on women who work night-shifts to earn a living, as well as women who travel irregular hours during evening to nighttime hours.

Respondents were asked to document their travel experiences for four days in a diary (which we provided) at the start of the field research. We were able to collect information on places they visited, their means of transport, their thoughts and feelings while onboard, as well as details about their clothes and accessories. The diary was useful in documenting useful information, which would have been difficult for respondents to recall if they were asked to do so during face-to-face interviews. The diary study was followed up with indepth, semi-structured interview, which allowed the researchers to probe further into the thought process, emotions and underlying beliefs behind the information they logged.

Pulling from the recommendations that came out of the safety audit, we presented some of these ideas on a set of cards and asked the respondents to provide feedback on how they believe these interventions may (or may not) be helpful. To get a sense of what the respondents experience during their travels, we journeyed with selected respondents on their journey home in the night. We were able to uncover insights that were overlooked in both the diary study and in-depth interviews, which helped to further contextualise our understanding of the respondents' experience. Aside from the women who travelled at night using public transportation, we also interviewed security guards, street vendors and parking lot attendants to help shape our understanding of the bystander perspective.

After the fieldwork in Medan, Semarang and Surabaya, we organised a co-design workshop in Jakarta. This workshop was attended by 24 participants, which included government officials, women's rights activists, transportation operators, transportation and urban planners, communication practitioners and designers. The workshop was intended to present the preliminary findings; obtain feedback on actionable





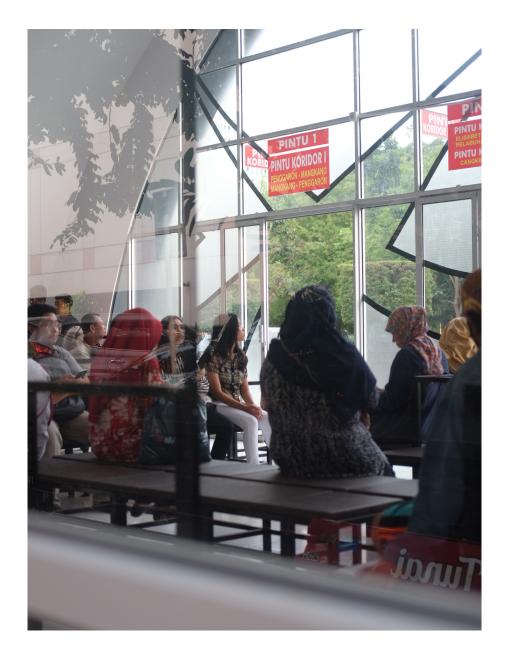


insights; and elicit ideas for intervention opportunities. We incorporated the results from the co-design workshop into subsequent analysis workshops, which were then developed into the insights that are presented in this report.

We recognise that the topic of women's safety requires sensitivity, care and reflexivity from researchers throughout the HCD process. Therefore in line with Pulse Lab Jakarta's research ethics practice, the research team participated in a series of gender sensitivity training organised by UN Women; introduced researchers and the research topic to respondents in multiple stages to ensure informed consent; paid close attention to gender dynamics throughout the field research to respect respondents' limits and comfort zone; created pseudonyms to protect the respondents' privacy; and liaised with UN Women for expert peer review in the drafting of the report. More information about our research ethics and methods are available in Annex 1.

WHAT YOU WILL FIND IN THIS PULSE STORIES EDITION

In this Pulse Stories, we share the stories of 37 women we met in Medan, Semarang and Surabaya. We highlight several behavioural themes and patterns from our interviews and field observations, which we then translated into personas (which are fictional characters inspired by actual women we met in the field). These personas (discussed in Chapter 2) are intended to build empathy with the respondents and develop insights regarding the human dynamics to inform the design process for delivering better services. Chapter 3 highlights the key insights that were gathered on women's mobility and travel choices in urban areas, and is followed by the closing chapter in which the challenges and opportunities for systemic changes are examined.





FIELDWORK IN NUMBERS

37 RESPONDENTS*















3 CITIES



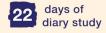
Medan

Semarang

Surabaya

METHODS









hours of shadowing



bystanders

hours of interview



24 CO-DESIGN WORKSHOP PARTICIPANTS

11 men 13 women

- 6 transport planners
- designers
- urban planners
- 2 communication practitioners
 - 6 gender specialists





























































*all names used are pseudonyms

OCCUPATIONS

Teacher: · Reporter: 1 Receptionist: 2 • Freelancer: · College Student: 8 Customer Service · Shop Attendant: 15 2 Officer: · Waitress:







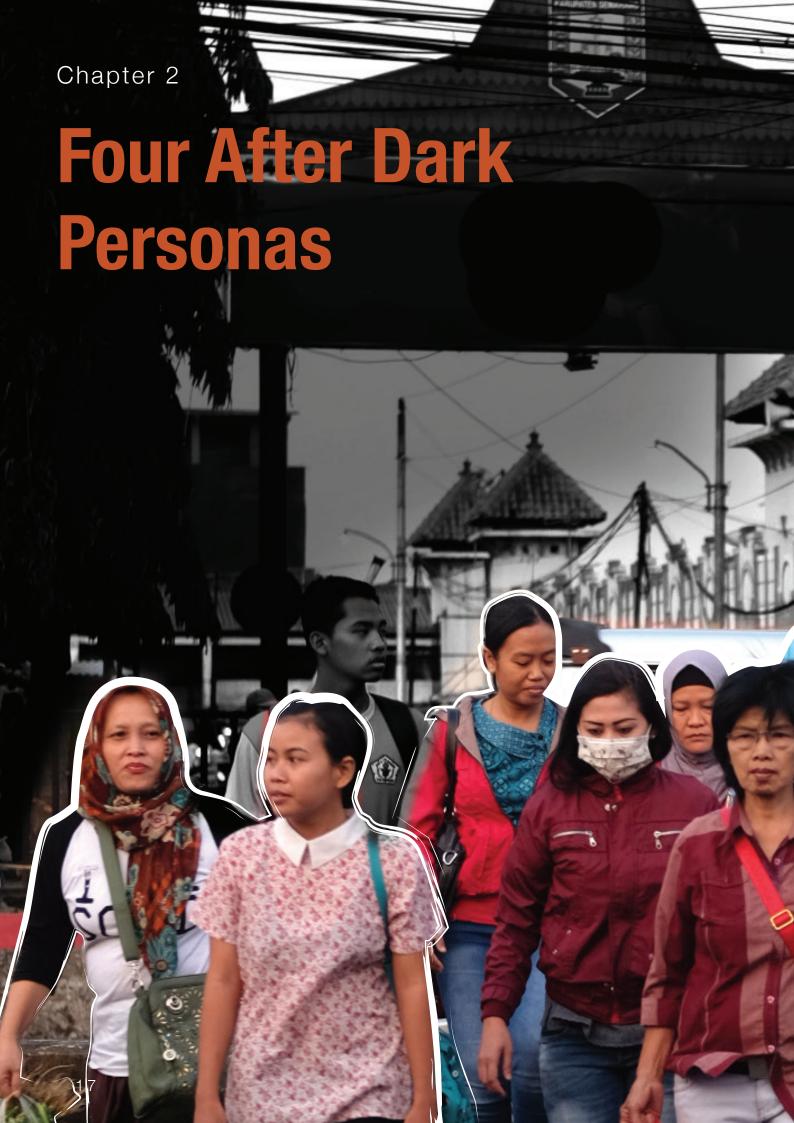














e acknowledge that women' is not a uniform category. Although our respondents share similar demographic characteristics, their experiences travelling with public transportation at night are shaped by a set of distinct habits, needs, challenges and beliefs. Instead of providing a quantitative breakdown of their characteristics, we identified four types of personas (fictional archetypes) based on what we learned about the women respondents travelling at night which explain specific motivations, expectations and goals (O'Grady, 2017). Each persona is a composite of quotes and stories from several respondents, and the name of each of these personas does not necessarily represent a particular category of women travelling at night.

We met with 37 respondents, from whom we gathered insights that were synthesised and characterised into four personas³. Each persona portrays distinct behavioural patterns that we identified throughout our research, and sheds light on the emotions and thought process that respondents can relate to. Building a nuanced understanding about the experiences of women using public transportation at night is *the raison d'etre* for the construction of these personas.

These personas reveal the different needs and underlying beliefs behind a woman's choice of transport and travel pattern. For instance, what are the factors influencing a woman's decision to travel by either angkot (minibus), ojek online or taxi at night? These personas provide useful descriptions that can help a range of stakeholders (who may not directly interact with these women on a regular basis but are responsible for formulating policies) assess services that directly affect these women's lives. Furthermore, these personas can serve as a design guide in creating interventions that can have meaningful and positive impact on women's lives (US Department of Veteran Affairs Center for Innovation, 2014) as they also highlight tactics women employ to keep themselves safe, and how they interact with their surroundings.

The first persona is the woman who spends considerable amount of time coming up with defence strategies, The Overprepared Strategist. The second persona is the young woman who recently migrated to the city, The Anxious Newcomer. The third persona

is the woman who juggles multiple jobs to stay afloat, The Moonlighter. The fourth persona is the woman who puts her work above her own safety, the Female Warrior. With these stories, we hope to give a glimpse of what it is like to walk in these women's shoes.



A description on how the personas were created can be found in Annex 1: Ethics and Quality Research

In 1998, Alan Cooper introduced the use of personas as a practical interaction design tool. A persona is a fictitious, specific and concrete representation within a targeted demographic group that might be useful for a product or service. Each persona is designed based on real-life

stories, however certain attributes are made up, such as names given and caricatures used. Therefore, a persona is not any one individual *per se*, but it may represent an individual throughout the design process. A persona is defined by motivation and goals. (Cooper, 1998)

MEET THE PERSONAS

.. THE OVERPREPARED STRATEGIST ..



.. THE ANXIOUS NEWCOMER



THE BIG CITY IS SO SCARY...

She just graduated from high school and moved to the big city to work. Everything seems so unfamiliar and scary, especially since she's constantly reminded by the advice she got from people in her hometown to not put her trust in people easily when living in the city.

WHAT'S IN HER BAG?



THE MOONLIGHTER ..



ONE JOB IS DONE ANOTHER ONE TO GO.

To help her family and her younger siblings, she is always willing to take whatever jobs that come her way. Most opportunities require her to work in various places with working hours that are not fixed. Coming home late every night comes with the jobs she takes.

WHAT'S IN HER BAG?



.. THE FEMALE WARRIOR ..



DON'T WORRY I GOT THIS!

She is an experienced worker and can always be relied on by her friends, family and work colleagues. Travelling with public transportation is how she gets around even though she knows it is not always safe.

WHAT'S IN HER BAG?







The Overprepared Strategist

Occupation:

Shop attendant in a Batik store

Travel time:

1.5 hours

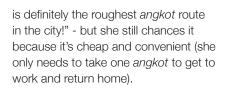
Working hours:

14.00 - 22.00

The Overprepared Strategist is a middle-age mom who often works night-shifts. She used to be a migrant worker overseas before her parents asked her to return home. After returning to her hometown, she discovered that job opportunities were limited due to her age. "Shops these days tend to hire younger people. I am no longer young. However, I was fortunate to know the owner of the shop that I now work in, which was how I got the job." Getting the approval from her family before taking the job took a bit more effort; she had to convince them that coming a job as good as the one she was offered is not common. She is willing to work night-shifts because she likes her job and the owner treats her well. Whenever her parents are not available to babysit her kids, her boss allows her to bring the kids to the shop.

She uses angkot⁴ to commute since it is typically cheaper than public buses and taxis. A family member usually gives her a ride to a main intersection, where she waits to catch one. Returning home, she hops off at the same intersection and waits for her family member to pick her up and then continues the journey home. The angkot minibuses that operate on her preferred route are notorious for being unsafe - "This

an abbreviation of angkutan kota, angkot is a type of transportation that transports passengers in the city area with the use of small buses and passenger cars that have fixed and regular routes with the nature of commuting. (Government Regulation No. 41 / 1993)



As a safety precaution, she makes it a habit to check her outfit before departing from her workplace. She wears a jacket and a mask, and even thinks about small details such as strategically positioning the pins on her headscarf so they can be used in defense in an emergency. Recalling that "I was once robbed", she wears her backpack in front of her when she's walking. She walks quickly and is always on the alert: "I need to be careful while on the pedestrian walkways, because motorcyclists also tend to use the same path."

Like other commuters, she waits for an angkot at an intersection near her workplace. "It's not a formal bus stop, but everyone waits for an angkot there." Here she screens incoming angkot to identify whichever one is going her way, typically boarding the first one that approaches. If for some reason she has to wait longer than usual, she remains vigilant and holds her bag tightly on her person. She is familiar with the drivers' faces and pays attention to any distinct appearances of the vehicles. If at all possible, she will avoid angkot drivers who drive slowly, because she prefers getting home in the quickest time possible.

She knows that she cannot fully rely on a driver for her safety, yet it's crucial for her to get a general sense of each driver's attitude and personality. Whenever she is alone and worried, she will try to get a seat next to the driver. She pointed out that some drivers are helpful and will give signals to passengers whenever a pickpocket is onboard. But, she also acknowledges that there are some drivers who are not so kind. While there's a fixed price system, there's usually a bit of leeway in payment for shorter distance travelled. Some drivers however often aggressively toss money back at passengers who pay lower than the expected fare. There are some drivers who drive recklessly without concern for passengers' safety. Unfortunately, even if her angkot driver is intoxicated, she will often still chance the journey, because at night the number of angkot minibuses operating is limited.

Everything considered, The Overprepared Strategist tends to be more afraid of fellow passengers than the behaviours of drivers, mostly because of the underlying belief that many pickpockets disguise themselves as passengers. She has learned to familiarise herself with fellow passengers, most of whom are frequent travellers on the same route. The last stretch of the journey before she reaches home is perceived as dangerous. For this reason, a family member picks her up when she gets off the angkot. Sometimes, she will sit towards the back of the vehicle where she can send WhatsApp messages to her family discreetly to let them know she's close to home. This ensures that she doesn't have to wait too long after getting off.

This is a snapshot of her everyday travel experience in transit. Although living abroad feels safer, she embraces the reality that this city is her home.















THE OVERPREPARED STRATEGIST'S J

WORKPLACE

21:15

FIRST MILE

21:25

Walking to transit spot

Let me text my husband so that he knows that I am finished with work. TRANSIT

21:30

Waiting for angkot

This is unfortunate but it's better to wait for the next one rather than risk my safety by getting into this terrifying angkot. ANGKOT

21:45

Riding angkor

I can never be too careful, right?









EMOTION

CALM AN

ANXIOUS

ANXIOUS

ANXIOUS

UNDERLYING BELIEFS

Her safety is her responsibility. She is the best person to protect herself. She strategically places her accessories, clothes and bag on her body to keep herself safe. She continously communicates with her family to inform them of her whereabouts.

While she waits for an angkot, she quickly and efficiently scans her surroundings for safety threats. She draws from her previous travel experiences to identify the regulars, the reckless drivers and suspicious passengers. Ultimately, she prefers to wait at the safest possible spot.

She understands that ever situation, there are exter beyond her control. This is important in a closed spacangkot. She remains vig maintains continuous comwith her family

OURNEY

SAFETY TIPS

- You can never be too careful!

 Avoid using your phone in public.

 Don't be too kind to strangers in public places.

 Shield yourself: put on a jacket, always place your bag in front of you. If you can, sit near the angkot driver.
- Don't take public transportation, if you are the only passenger onboard.

TRANSIT

22:30

Waiting for a ride home

Why is he always late?

LAST MILE

Riding motorcycle

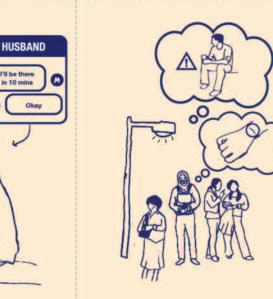
I am with my husband. I can endure for a few more minutes.

HOME

23:00

Arrived

This is a part of my normal routine. I have to do this again tomorrow.







ANXIOUS

Late at night, the drop off point tends to be quiet and dimly lit. Although she tries to get off at a spot with good lighting, it is still a daunting experience. She doesn't have much choice, this is the closest stop to her house.

CAUTIOUS

Being in the company of her family, makes her feel safe as she knows that they will always protect her.

RELIEVED

She understands that travelling at night poses safety threats and therefore, she employs various strategies to counter them. It is a tiring trip, but coming back to her family at the end of the day makes it worth the effort.

in a familiar nal factors particularly e such as an ilant and munication



THE ANXIOUS NEWCOMER'S

WORKPLACE FIRST MILE TRANSIT 22:00 Walking to transit point Waiting for ojol Finally, Okay, the plate number and display picture Don't stand out. it's time to go the app. CALM **ANXIOUS ANXIOUS**

UNDERLYING BELIEFS

As a newcomer, it is important to blend in. She hopes people don't recognise that she is new to the city, which reduces the possibility of being tricked into an unfamiliar situation. At this hour, there is no public transportation available. Therefore, she to rely on ojol. Ride-sharing applicatio are cheap and provide the drivers' iden and a clear route of the trip. There is als feedback mechanism to report and rate drivers. This gives her a sense of secur

JOURNEY

SAFETY TIPS

- Ojek Online is your go-to choice; it is affordable and will take you door to door!
 Don't go out by yourself if you're not fully familiar with the route to your destination
 If you must ask for directions, it may be best to ask someone you know.

OJOL

Riding ojol

This is uncomfortable. These questions are too personal.

LAST MILE

Walking to home

I wish those catcallers would leave me alone.

HOME

Arrived

Home, at last.











SUSPICIOUS

IRRITATED

RELIEVED

has ns tity o a the

ity.

match

Being low-key is important to her. This way, strangers will not know that she is new in town. She believes that personal questions will reveal her identity, and causie her harm.

The neighborhood that she lives in is affordable but has many catcallers. Although they bother her, she is afraid to confront them, and chooses to ignore them instead.

This is a safe place and she can relax.

The Anxious New Comer

Occupation:

Kiosk attendant in a department store

Travel time:

40 mins

Working hours:

10.00 - 21.00

She recently completed high school in her hometown, which is located three hours from the city she lives in now. She relocated following graduation after a distant relative who lives in the city told her about a job opportunity. "My family doesn't have enough money to pay for my university, so I took the offer." She works from 10 in the morning to 9 at night each day as a kiosk attendant in a department store. It's a full-time job with no options to alternate shifts.

The Anxious Newcomer sees herself as a small town girl in a big city. She often feels anxious because everything in the city is new and unfamiliar to her. The way people communicate in this big city is different from her hometown, often making her feel out of place. Making a decision not to take any unnecessary

risks, she rents a room in the same areas where her relative lives - the only person she personally knows in the city. The downside is that this location is quite far from where she works. To get to work, she has to transit twice with an *angkot*, which is costly. "Where I live is far, but I like the area. At least my relative also lives there."

She feels lucky that ojek online⁵ called ojol exists which with discount can be more affordable than other available modes of transportation. A single ride from work to home normally costs around 8,000 IDR, and with promotional offers can be as little as 1,500 IDR. "Ojol brings me straight to my destination

so I don't get lost anymore." For her, ojol feels safer than traditional public transportation options, because it provides the driver's identity and a clear route of her trip.

Despite the benefits of using ojek online, absolute safety is not guaranteed when commuting. Some drivers ask intrusive questions, such as whether she has a boyfriend. There are even instances when drivers have contacted her via WhatsApp with similar suggestive comments after trips have been completed. "I don't mind small talk during a trip, but personal questions just makes the trip awkward and uncomfortable."

Her commute is mostly between home to work. On her days off, she rarely goes out because she is still not fully acquainted with the ins and outs of the city. Her work is tiring, but she is glad that she is no longer a financial burden to her family. She still maintains communication with her family in her small town to let them know that she is doing OK; however at the same time, she also makes sure that her family doesn't find out about the realities of her struggles in the big city.

She is still generally afraid, but puts on a confident-looking face to try and hide her fears. Her mantra is: "Be brave, or at least try to look brave."



















Motorcycle taxi ride-hailing services offered via a mobile application

The Moonlighter

Occupation:

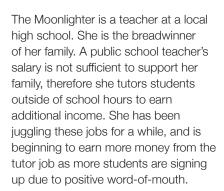
Teacher and private tutor

Travel Time:

2.5 hrs

Working hours:

10.30 - 21.30



Being a homeroom teacher requires her to be present at the school from morning to afternoon every day. After the school day ends, she heads directly to the home of the student she's scheduled to tutor. In a single day, she conducts anywhere between one and three tutor sessions which also require her to travel. On some days, the hops between the homes she has to visit are near, and on other days they are a tad



far. The number of hours she spends doing her tutor gig depends on the number of sessions that are confirmed and how far she has to travel.

She relies on angkot to get to work in the morning. It takes her around five minutes to walk from her house to the angkot pickup point, which drops her off in front of the school. "Using angkot is easy, convenient and cheap. The school is located near a busy intersection." She is quite familiar with the angkot routes, although most of the vehicles don't display signs with travel route information. "I think drivers assume people already know, so why bother having a sticker?" Before boarding any public transportation though, she always confirms whether the driver is heading her direction.

In the evening hours, she has fewer public transportation options to choose from. She often needs to transit on a different *angkot*, depending on where her students' homes are located. She has learned that it's best to get off at places that make her feel safer, such as at a busy street or intersection area, preferably with good lighting or a nearby 24-hour convenience store. She would love to use *ojol* services in order to rest during the ride home, but she finds it expensive.

She has made it a habit to observe people in her surroundings and identify familiar faces, especially muggers that other persons have warned about. She avoids these people at all costs while waiting for an *angkot*. Her biggest worry is being dropped off in the middle of nowhere, especially in the night when there aren't many passengers onboard. "So I usually ask the driver to drop me at a busy spot or at least wait until I get another *angkot* before driving off."

She tries to update her family regularly throughout each trip, but knowing that they may come to her aid in the case of an emergency alone does not make her feel safer. Her bag was once stolen from her and feeling traumatised after the encounter, she asked her mother to accompany her until she felt confident enough again to go around by herself. In her view, the risk of using public transportation is worth the extra income that her family depends on.





















THE MOONLIGHTER'S JOURNE

STU

Too

tell me

to g

C

When wit clier

can't

think a

journ

hon

rely

her

client

home

is of

on time. After

all, this is work.

rather than missing her

destination stop.

knows

WORKPLACE TRANSIT ANGKOT 17:30 17:40 17:55 Waiting Riding angkot Walking for angkot That last class It's better to ask Will he remember Is this the the driver rather right street? was tiring. my stop? than taking a wrong route. BLOK AA NO.6 ACTIONS CALM WORRIED CAUTIOUS CAUTIOUS For a new Although the drivers client, she have good intentions, UNDERLYING BELIEFS travels to an some of them are Drivers are good unfamiliar place. focused on getting people and they know She has to more passengers and the routes. Therefore, therefore might forget make sure that they can give reliable she reaches the her request. It's better information. correct address to remind the driver

SAFETY TIPS

- 1. If possible, schedule your hours carefully with your clients to avoid travelling too late.
- 2. Be ready to think on your feet; angkot can often be unreliable at night!
- 3. Befriend the angkot drivers, they are your allies.
- 4. Never wait for public transportation in a dark place, instead wait at a nearby 24-hour convenience store.

DENT LAST MILE TRANSIT ANGKOT HOME USE 1:00 20:40 21:00 21:20 21:40 22.00 Walking Waiting Riding angkot Walking home Arrived for angkot It seems like no bad her one is waiting for Where is this angkot here, I don't use angkot?! I've been should walk a bit They can't These people So good to Home sweet waiting for 15 if there will further to that seem nice, I should be back in a home. minutes and not convenience be fine. a single angkot ble for me store. I better neighbourhood. has passed by. check with that o home. woman about it. CAUTIOUS **ANXIOUS** CAUTIOUS **ANXIOUS** RELIEVED working She knows that at night, Her h new drivers often drop neighbourhood its, she passengers off in the is a familiar help but The longer she middle of their routes, place. Even if about her waits in an especially if there are only there are ey back unfamiliar place, a few passengers onboard. incidents of e. She the greater the It is her responsibility to petty crime she can't risk of getting ensure her own safety and in her on her harassed or therefore she insists that neighbourhood, s to give getting raped. the drivers drop her at her she still feels a drive destination or at least, safe because and she leave her at a busy and she knows her ay with well lit point. way around.

hat.



THE FEMALE WARRIOR'S JOU

FIRST MILE WORKPLACE TRANSIT 22:15 22:20 22:35 THINKING Walking to Waiting for angkot transit spot My boss would be That's the street I don't know w Yes, the angkot is happy to know that vendor from whom I coming. I should take it. safe because today's revenue is usually buy food. Let's larger than yesterday's, wait with him. Hi, going home already? Wait! Hi, Pak I'm coming ľm **EMOTION** CALM ATTENTIVE **ATTENTIVE** She knows that at UNDERLYING BELIEFS night, public Street vendors are transportation good people as they For her, going home options are few and are on the streets to late is not a problem All women are h far between. It is earn their livelihoods. as long as her work help each better to take the Therefore, they strive is done well. first angkot that to keep their area comes without safe to attract thinking too much. customers.



SAFETY TIPS

- 1. As long as you have self confidence, you'll be fine.
- 2. Help others if you can, there is safety in numbers.

ANGKOT

22:50

Riding angkot

thy she looks afraid. I hope she will feel there are quite a few women in here.

LAST MILE

23:20

Walking to home

It's quiet and dark as usual. Wait, did I hear footsteps? I hope not. Okay, it's better if I don't run but walk faster to avoid arousing suspicion.

HOME

23:30

Arrived

My landlord is so kind. She's waiting for me.



ATTENTIVE

er allies and she believes that they should other out in unsafe circumstances.



ANXIOUS

This is her neighbourhood and she is comfortable navigating her way through the alleys. Even if there are instances when she feels scared, she believes it is important to maintain her composure and to not project fear.



RELIEVED

Ultimately, the late journey back is worth it because her work is so rewarding.

Occupation:

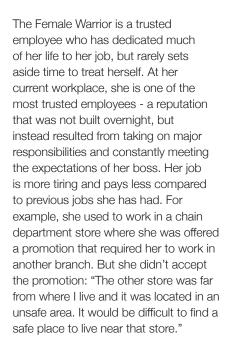
Waitress in a restaurant

Travel Time:

30 minutes

Working hours:

13.00 - 22.00



She uses public transportation to get around, in particular *angkot* which she

considers to be her cheapest option. Ojol is available but will cost her twice as much, and more traditional door-todoor transportation such as becak or bentor (cycle rickshaw) is even more expensive. There are several angkot routes for her to choose from when going back home after work. She often opts for one with fewer passengers, because then she does not have to deal with overcrowdedness. For the most part, she believes she is safe because she doesn't travel with a lot of valuables. She prefers to sit at the back of the vehicle, where she can observe the behaviours of other passengers and help out fellow women passengers when they need it. "If I notice a woman looks uncomfortable sitting next to a man, I would ask her to sit next to me instead. This gives the woman an excuse to switch seats."

From the angkot drop off point, she needs to walk about 10 minutes to reach home. During the daytime, the area is busy with patrons going in and out of shops and restaurants, but at night in the hours she's heading home from work, everything is closed and the area is scanty. There are no houses, just a row full of shops. "Even though it is dark and quiet, I still feel fine because I know the streets well." She is familiar with the homeless man who sleeps in one of the corners. She used to be scared of him because he was always catcalling her, but she maintained her composure with a pleasant face in response. With time, she got used to him: "Don't worry. He never tries to make any advances".

In her opinion, the city can be a dangerous place at any time of the day - both during the daytime or during the night - but that does not affect her mobility much, because she believes she can protect herself. She prefers working at night because the relative ease of travelling means she can make it to work on time, even if she oversleeps by a few minutes. What's important is that she lives and works in a comfortable place, and that she has a good relationship with her landlord and her boss. With perseverance and a go-getter attitude, she believes she can survive living in the city despite its many ills.

When we shadowed her on the journey, we came across the path that she mentioned was dangerous. There are no street lights - the only glimpses of light are from nearby homes. The walkways are in bad condition, notably with uncovered holes which are hard to spot in the dark. We walked in the middle of the street during heavy rain to avoid the unsafe walkways. All the houses and shops are closed up and there are no windows facing the street. We observed more to the journey than she had previously explained. She knows the street well and walks briskly without overthinking. Her benchmark for safety differs from those who are not familiar with the street. It is not her intention to play down the situation; rather she's build an internal mechanism to cope with it. Shadowing helped us to put the information from her diary into context and get further clarifications.









The women we met during our research share several demographic characteristics in common. Their ages range from 19 to 40 years. They have blue-collar jobs in the city center and work night-shifts that end around 10 pm. They rely on the most affordable and convenient transportation options to get home. They generally perceive travelling at night to be unsafe, but their attitudes, preferences, and pain points differ from one to another - these differences are some of the nuances we highlighted with the four personas.

	THE OVERPREPARED STRATEGIST	THE ANXIOUS NEWCOMER	THE MOONLIGHTER	THE FEMALE WARRIOR
WHY WORK NIGHT SHIFT?	No better choice, I am older now and need to make a living.	The only choice; it's my first job.	I need extra income for my family.	I tend to function better later in the day.
THREAT?	Everything! This thinking is a default.	Everything! I am a stranger.	Yes, a few bad people.	Everything can be a threat if you let it, so don't.
MOST UNSAFE SEGMENT	From first to last mile	During travel	Transit	Last mile
MAIN STRATEGY	Shield yourself; be prepared for the worst case scenario, always communicate with your family.	Take o <i>jek online</i> so you can travel door-to-door.	Observation skills	Be confident in yourself.

Overview of Public Transportation Routes in Medan, Semarang and Surabaya

Medan: There are 133 public transportation routes, consisting of *angkot* and regular buses that are run by 23 operators (including both private and state-owned companies). This city has the highest number of routes compared to Semarang and Surabaya. The Institute for Transportation and Development Policy stated that Medan has one of the strongest public transportation operator organisations in Indonesia. *Angkot* are popular and operate 24 hours in Medan (Meeting Notes with ITDP, 2018).

<u>Semarang:</u> The city government launched a bus rapid transit system called BRT Trans Semarang⁶ in 2009. Long before the government-owned BRT began operating, the privately-owned buses, minibuses and *angkot* had been serving the demands of urban commuters. *Angkot* operates on 23 routes with an estimated 2600 units in operations and 5 routes are served by regular buses. These numbers however do not reflect the actual number of vehicle operating at day time.

<u>Surabaya:</u> *Angkot* minibuses in the city operate on 59 routes with nearly 6,000 units in operation, and there are 270 regular buses operated by DAMRI⁷ on 19 main road routes (Transport Department of Surabaya City, 2012).

The Availability of Public Transportation at Night

Finding public transportation is one of the main challenges for women travelling home at night. From the three cities we surveyed, only respondents from Medan confirmed using public transportation at night.

Women in Medan rely on *angkot* to go home as it is often the cheapest option available. In whichever case, *angkot* is not always reliable at night, because the frequency at which they operate is not the same as day time. There is also a possibility of getting dropped off in the middle of nowhere, if there is only one or two passengers remaining in the vehicle. This is a challenge women travelling with public transportation at night in Medan must face.

In Semarang and Surabaya, there are limited (if at all any) options for public transportation at night. Therefore, it was a challenge to find women respondents who use public transportation at night in these two cities. The initial research plan was to specifically gather respondents who take public transportation, but given the reality on the ground we had to make adjustments. In the absence of reliable public transportation, alternative modes of transportation such as *ojek online* are becoming popular and gaining more ridership in these cities. We decided to look at women who use public transportation regularly but had to use *ojek online* at night due to the absence of public transportation during nighttime hours.

Ojek Online

Unlike the emergence of ride-hailing services in the United States, in Indonesia, *ojek online* was inspired by an already well-known informal motorcycle taxi service called *ojek*. This approach thus made ride-hailing motorcycle taxi more popular than ride-hailing cars (Gao, 2017). Notwithstanding, Indonesian Law No. 22/2009 on Road Traffic prohibits motorcycle taxis from serving as public transportation. In fact, "*Ojek online* are often also found in violation of various road traffic, safety and environmental rules" (Gao, 2019). This is often the most feasible option for women travelling at night, but not for everyone as some respondents from a lower socio-economic background still cannot afford the fare. *Ojek online* is increasingly becoming a crucial part of women's daily travel.

BRT (Bus Rapid Transit) is a local, state-owned public transportation.

DAMRI (Djawatan Angkoetan Motor Repoeblik Indonesia) is a state-owned company that operates ground transportation such as bus, truck and other motor vehicle.

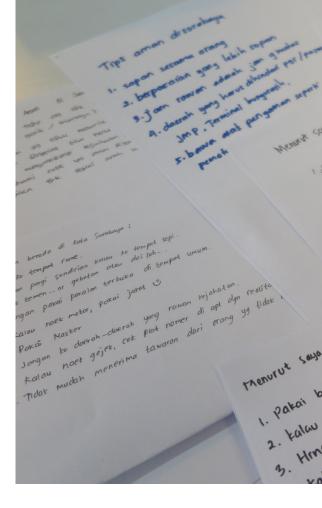




n the previous chapter, we described the journeys of four personas travelling at night. The journeys reveal emotions and underlying beliefs that influence their travel decisions as they go from their place of work to home, as well as every stop in between. Despite the nuances in their stories, there's one common thread - regardless of how unsafe these women perceived travelling at night to be, they all acknowledge it as part of what they have to deal with having to work night-shifts. For most of the respondents we met with, they believe job options are limited, and so it is better to earn a regular income working at night than earning nothing at all.

So, how do women perceive safety in public spaces, especially travelling at night? What does it mean to feel unsafe? Though they may share similar travel patterns, the four personas experience different emotions and filter their understanding of a situation through different personal lens. For instance, a woman's decision to wait a while longer for another *angkot* instead of boarding the first incoming one is often connected to how safe she perceives it to be at that moment. Which factors, seen and unseen, are important to consider with reference to women's safety? What are some of the challenges women have to face when travelling at night? How does the experience differ when travelling during the day? Do these challenges affect women's mobility? How can transportation services at night be improved to make women travellers feel safer during their commutes?

These are the insights we uncovered during the fieldwork and codesign workshop.





I RELY ON MYSELF

[TO STAY SAFE]; WE

CAN'T ALWAYS RELY ON

OTHERS. I AM AFRAID,

BUT I TRY TO PUT A

BRAVE FACE ON SO AS TO

NOT SHOW IT.

(DEWI)





KEY INSIGHTS

INSIGHT 1:

Beyond an intuition, being safe also demands a certain skill set.

All the respondents pointed out that travelling at night comes with a feeling of being unsafe. From the first mile, which begins the moment a woman steps out of her workplace, to the last mile, before she arrives home, women tend to accept that there is always the possibility of facing sexual harassment, violence, crime and other uncomfortable encounters. They recognise these as ever-present threats, and therefore have identified a set of safeguards to consider in their journey home from work.

Despite feeling unsafe, to continue working and securing their livelihoods, the women we met employ a set of skills to limit the possibility of various forms of harassment - rather than choosing to limit their mobility at night. These skills include a range of abilities and actions, such as knowing how to blend in with their surroundings; making a conscious choice to wear plain clothes that do not attract attention; putting on a mask

to conceal their identity; making sure personal belongings are secured on their persons; and making sure mobile phones are accessible so that they can update their families about their whereabouts and in emergencies. Some women even take the time to develop an emotional armour. which helps them to not expose their fear and anxiety during uncomfortable encounters. For them, safety is more about having a skill set that can decrease their chances of falling in harm's way, than simply a feeling of being safe. After all, traveling at night is only a small portion of their day, but indeed part of their everyday reality.

Feeling safe, as these women have aptly described, is on a continuum -- it is not a dichotomy of safe and unsafe. The feeling of being safe also comes from a woman's ability to shield and protect herself.

Travelling at night and remaining safe is about learning to a) be a good observer, b) prepare for the worst case scenario, c) preserve anonymity and be low-key, d) familiarise oneself with a travel route, and e) take advantage of other factors that can enable safeguarding such as building companionship with other commuters.

CHAPTER 3

INSIGHT 2:

Women adjust their safety parameters based on their familiarity with an environment

There is a connection between women's perception of safety and the environment and settings in which they have to travel at night. Certain features of an environment such as poor lighting and narrow walkways make an area more susceptible to crime (Loukaitou-Sideris, 2014). The UN Women safety audit in Jakarta highlighted that improvement in infrastructure such as street lighting, walkways and security posts - which were developed based on women's safety audit parameters8 - would positively change women's perception of safety and consequently increase women's presence in public spaces at night (Women's Safety in Jakarta City 2018, p19). Inversely, safety parameters that are below standard may limit womens' mobility.

This however, does not always relate to women whose livelihoods depend on travelling at night. In locations that lack proper lighting, pedestrian-friendly walkways and security, women's safety parameters are influenced by the presence of other women and based on how safe they perceive a location to be.

Although the women respondents who work at night generally have limited options for safe transportation, finding a safe place to live is not usually an issue. The women we met with prioritised living in a comfortable area, though getting to such a location may mean passing through narrow, lonely and poorly lit walking paths. One of the women we shadowed on her journey home pointed out that she doesn't mind going through the dark, empty alley with holes in the sidewalk, because she is already familiar with the neighbourhood. She only becomes suspicious if she notices unfamiliar faces and out of the ordinary activities.

THE WALK TO THE ROOM I RENT
IS QUIET AND DARK. ALL THE
FOOD, CLOTHING AND MECHANIC
SHOPS ARE CLOSED. I USED TO GET
SCARED BUT NOW I AM USED TO IT.
I DON'T WANT TO FIND ANOTHER
ROOM TO RENT. I LIKE MY
LANDLADY, SHE UNDERSTANDS
AND CARES ABOUT ME.

(RIZKA)





One of the earliest women's safety audit was conducted in Canada in 1989 by the Metropolitan Toronto Action Committee on Violence Against Women and Children (METRAC). Since then, the safety audit tool has been widely used both nationally and internationally, and has evolved today from its original form. Today, this tool exists in many different formats and has been applied to a range of situations. In this research, these parameters refer to Safetipin application parameters: transport, lighting, openness, visibility, walkways, security, crowd, gender usage and feelings.





MY FRIEND
HEARD ABOUT THE
RECENT MUGGING
INCIDENT THAT
TOOK PLACE NEAR
THE MALL. THERE'S
A WHATSAPP
GROUP THAT STORE
EMPLOYEES USE TO
SHARE THIS KIND
OF INFORMATION.
(RIRIS)



INSIGHT 3:

Women's perception of safety is shaped more by personal stories than the news.

The women who participated in our research admitted that they're mostly informed about what is happening in their surroundings via sources other than the news. Information about crimes that take place in their city is passed on through word of mouth. During our fieldwork in Medan, some women warned us about begal, robbers who would attack and steal from drivers and passengers, while in Surabaya and Semarang the women were especially aware of gendam⁹. Only one of the respondents expressed concerns about information she received on the news on crime and harassment.

The women we met were more inclined to heed stories shared directly by family members and friends (from online articles or personal anecdotes shared through social media or private messaging channels) than the news. For them, verifying the information is not a priority; their first instinct is to trust it as factual because it's coming from people who they believe care about their well being. Family and friends are therefore reliable sources for sharing information about safety.

In terms of trusting personal anecdotes, the respondents recognise that other women, as they themselves do, prefer to share their experiences with harassment encounters or other types of crime in private. They tend to only share their uncomfortable encounters with close friends and trusted family members to avoid embarrassment, feeling ashamed, or in some cases to avoid being told to stop working at night. These stories and tips are passed on from one woman to another as a safety precaution, which in turn shape these women's perception of safety.

Fraud by hypnosis, this is an illegal practice that is common in Southeast Asia, where individuals are tricked into giving money to strangers. While typically performed over the phone, gendam can take many forms, but the outcome is generally the same.



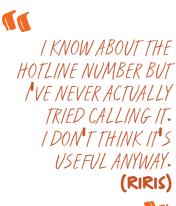
INSIGHT 4:

Does reporting a case make any difference?

The women respondents had knowledge about call centers and helplines that are established for reporting harassment incidents. They don't always know the exact number to call, but they had at some point or another seen advertisements about the helplines, or were informed by friends and relatives. However, none of them expressed willingness to report incidents. According to them, this is less about shame or fear of their identity being known, but more based on doubts about whether there'll be any follow up action from the authorities.

Helplines for them are seen as useful for major cases of violence, such as rape; but they are not so relevant for the kind of dilemmas they face on a daily basis when using public transportation at night (for instance to report a theft or being catcalled). Whether it is to address their particular case or respond to a more general concern or feedback (such as placing more security quards in areas reported to be unsafe), the women had no confidence that their reports would be followed up with concrete action from the authorities. Some women expressed doubts that their reports would actually be read or their stories listened to at all. This may be partly due to the often missing or ineffective feedback loop in public reporting mechanisms.

We found that in cities with lower crime rate such as Semarang and Surabaya¹⁰, the women tend to have more trust in authorities. In their view, these authorities are mostly identified as men in official uniforms, such as police officers and security guards. They believe that these uniformed authorities are more willing to give them the help they need on the spot, or help to prevent an incident before it happens. In Medan which has a higher crime rate, the women complained that news of crimes and incidents of harassment often appear in the news, but women rarely hear about what actions are being taken to prevent crimes from recurring.









Crime statistics are not available at the city level, therefore we used Statistics Indonesia Criminal Statistics from 2017 as proxy. Based on these figures, Sumatera Utara Province has the highest number of reports on crime. Medan is the capital of Sumatera Utara.

CHAPTER 3

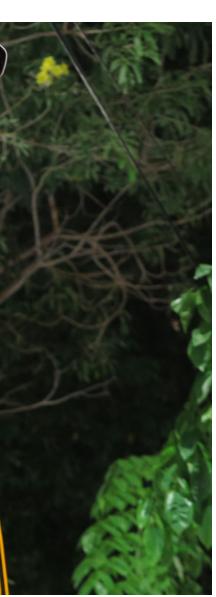




IF I'M THE ONLY FEMALE
PASSENGER IN THE BACK
LOF AN ANGKOT, I WILL
MOVE TO THE SEAT NEXT TO
THE DRIVER. A GOOD DRIVER
WILL REMIND ME NOT TO
PLAY WITH MY CELLPHONE
TO AVOID BEING MUGGED.
BUT SOMETIMES ANGKOT
DRIVERS ARE DRUNK. YOU
CAN SMELL THE ALCOHOL. I
GET SCARED BUT IT'S OFTEN
DIFFICULT TO FIND ANOTHER
ANGKOT AT NIGHT.

(DESITA)





INSIGHT 5:

Angkot drivers are seen as both enabler and inhibitor of women's safety.

Although the women we met have fairly established opinions about authorities, their impressions of angkot drivers are different. Unlike buses or ojol drivers, angkot drivers are neither hired by the Government nor are they partners with private companies. They do not wear any uniform that identifies their affiliation, therefore they are seen by women as independent workers without support from a more formal institution. In reality though, angkot minibuses are actually supervised by driver cooperation organisations such as Organda.

As passengers, the women generally hope that *angkot* drivers would respect their safety by not driving recklessly. However, having observed some of these drivers overpacking their vehicles, ignoring traffic lights, yelling at passengers, and sometimes driving under the influence of alcohol, they are aware that their safety is not always guaranteed. Still, some of the women we met are sympathetic

with the drivers. They pointed out that angkot drivers generally face the same, if not more precarious, safety risks as passengers. They drive through the same route every day, meet the same preman (people who engage in criminal activities), and can be easily identified by thugs and robbers. According to some women, if a driver kicks a pickpocket off his angkot, the very next day the same pickpocket can find the angkot driver and retaliate. So, these women understand that angkot drivers cannot always protect their passengers from criminals who come onboard because doing so would also pose a risk for these drivers.

The majority of the women we met who frequently take angkot expressed that the drivers can be an ally and a protector. We heard stories about angkot drivers who would signal women passengers if a known thief came onboard, by making an announcement to passengers to mind their belongings or telling women passengers to move to the seat at the front if only few passengers remain at the end of an evening route. These gestures are very much appreciated by women.



INSIGHT 6:

Bystanders want to help, but they are unsure if intervening is the best course of action.

In her journey home at night, a woman meets different kinds of people, ranging from other workers and public transportation operators (such as drivers and timers¹¹) to street vendors. She learns to scan her environment and distinguish between people who may pose a threat from those who could help if she faces trouble.

There are several ongoing campaigns focused on changing passive bystanders into active allies when women are facing harassment in public spaces. These campaigns often focus on raising awareness based on the assumption that many bystanders are not able to identify the range of activities that may be considered as harassment. When we spoke with bystanders - street vendors, parking attendants and commuting passengers who are waiting for public transportation - throughout the cities, we found that many of them who recognise acts of harassment are still hesitant about taking action, fearing that intervening may make the situation worse for the victims.

In some cases, bystanders hesitate to render assistance because there is no explicit cry for help from the victim. In some cases of harassment, bystanders are unsure whether their intervention will be welcomed by the victim, who may at times prefer to handle the situation in her own way. In other cases, bystanders may be afraid of misinterpreting a situation, particularly if it takes place at night, when there is low visibility. Bystanders also expressed concern about their own safety, especially if they sense that they are facing the same threat as the victim. The common thread in all these stories is that bystanders feel that intervening require them to take bold gestures that may create unwanted attention, therefore increasing risks of the victim or themselves being harmed.

Some bystanders circumvent these situations by taking actions that are more subtle. One of the respondents explained that on one occasion she pretended to be friends with another woman passenger in an *angkot* to trick the pickpocket into believing she wasn't travelling alone. Street vendors would suggest to women who are waiting for a motorcycle taxi by the roadside to stand close to their stalls if there is a suspected thug nearby. Overall, bystanders need to develop a set of subtle tactics that can be used to intervene without causing a stir.





A MALE PASSENGER ONCE BOARDED THE ANGKOT AND STARTED TO LOOK AROUND IN A STRANGE WAY. I MADE EYE CONTACT WITH ANOTHER FEMALE PASSENGER THAT WAS ONBOARD AND THEN WHISPERED ABOUT WHAT WE¹D DO IF HE TRIED TO MAKE ANY INAPPROPRIATE ADVANCES.

(ZULFA)



We were told by one of the women street vendors in front of a mall that the area is generally considered safe. When we probed further however, she shared more specific tips on parts that are safe, unsafe and somewhere in between. She has been selling food for years in the area and is well familiar with the everyday activities, both good and bad. She gave us a heads up about which areas we should avoid. During our conversation, one of the street thugs who is known for being mischievous approached the vendor's stall, but she quickly chased him away, warning him not to provoke her customers. Local wisdom about an area is a culmination of careful observation and experience built over several years. This is not merely a guick judgement made based on one's physical appearance. Street vendors, like the one we met, don't tend to reveal this information easily unless they think it is necessary. Knowing "who is who" in the area is part of the mechanism to stay safe, not only for bystanders like street vendors but also women travelling at night.

A person who informally manages the circulation of public transportation vehicles at a terminal or transit point. The task is done in exchange for payment, for example from angkot drivers who are waiting for passengers at these locations.







I ALWAYS WAIT FOR THE ANGKOT IN THAT INTERSECTION, JUST LIKE EVERYONE ELSE. I PREFER TO STAND CLOSER TO THAT FOOD STALL, SO I CAN BE SAFER. (NUR)



INSIGHT 7:

Waiting zones like an *angkot* stop are not just transition points, they are 'safety assessment' points.

In this After Dark research, we defined the term transit as a point where passengers wait to board a mode of transportation. Women generally prefer a shorter waiting time and favour locations that have proper lighting, which allow them to see individuals, such as *angkot* drivers, the timers and other passengers. In this waiting space, a woman seeks to establish a sense of safety based on regularity and familiarity.

The public transportation available in Medan, Semarang, and Surabaya do not have fixed schedules, although they operate in patterns that resemble a routine. Women are familiar with this informal schedule and make the effort to arrive at transit points in time. If they happen to be late, there is a chance they may have to wait for the next option to arrive, thus creating an extended waiting period and this is seen as a risk. In addition, there is also the possibility of being dropped off on the roadside in the middle of nowhere if they are the only remaining passengers in the vehicle. Consequently, their ability to foresee this by knowing which passengers tend to have similar routes and knowing which drivers are kind enough to take them to their destinations is crucial.

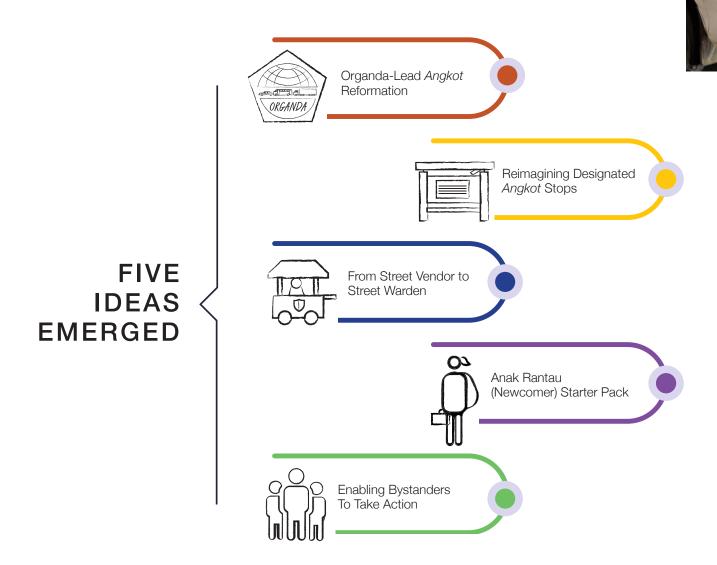
We found that at night women rarely wait for public transportation at designated points (such as angkot stops or halte). The waiting points they choose may seem random to someone who is not familiar with the area. but the choices are actually based on the presence of friendly strangers that are often present in these locations, for instance street vendors that usually greet them with a smile or parking lot attendants that have warned them about pickpockets. Although there is usually no permanent sign that indicates it is a pick up point, passengers tend to know that it is one based on routines. Furthermore, while there are designated transit bus stops that have been built by city governments and are based on standards from the Ministry of Transportation, some of these standards have vet to take into account factors that contribute to women's safety. Our research indicates that there is a difference between factors that the Government believes are important for women's safety and how women themselves perceive safety.





he respondents' perceptions of safety exist on a continuum - it is not simply a dichotomy of being safe or unsafe. Their nighttime travel experiences are influenced by several factors, but the quality of infrastructure and public transportation services stand out. Notwithstanding, for these women, familiarity plays a key role in ensuring a safe journey. With time, they've developed their own shield and protection mechanisms so that they don't feel the need to always rely on others. All in all, these efforts are to ensure that they continue to work and travel safely at night. The main challenge is two fold: it is about how to reduce the burden that is placed on women to maintain their safety, and what steps can be taken to build safe and inclusive cities.

In this section, we highlight a few opportunity areas which we identified based on our understanding of the challenges women who work night-shifts and use public transportation at night have to face.







ORGANDA-LEAD ANGKOT REFORMATION

At night, angkot is typically the mode of public transportation that is most likely to be available. Angkot transportation is privately owned, but the city government regulates its routes and pricing system. The norm is for angkot owners to become members of an organising associations such as Organda, which then serves as a supervising entity as well. The association maintains relationships with the city government and law enforcement, and steps in as an intermediary actor in cases of traffic offences and accidents.

Ranging from scenarios described where angkot drivers dropped off passengers before arriving at their final destination to reckless driving and unreliable timetable, these anecdotes paint a picture of a less than positive image of angkot services. But at the same time, a driver can be a potential ally for women travelling at night. Considering that drivers face similar risks as passengers, these women - who are also understanding of their predicaments - appreciate whatever subtle gestures or advice drivers offer for safeguarding.

As one of the key players providing services, there is the potential for Organda to play a significant role in collaborating with relevant city government departments to improve services. Organda was established by a Ministerial Decree in 1963. The registry of this decree was not available at the time of this writing, but there are benefits to revisiting the decree and repositioning the role of Organda. This would provide an opportunity to reform the operationalisation of angkot to improve the quality of services. Being an already established association catering to the needs of land transportation operators, an even more extension role could help to further bridge the relationship between drivers and the government regulators. Organda want passengers to have more trust in using angkot services, but also recognises that improving the quality of services goes hand in hand.

- How might we incentivise Organda to become a safety enabler?
- How can we improve the behaviour of drivers as service providers?
- What data can be harnessed to better design routes and timetable?



POTENTIAL PARTNERS

Organda, driver, government and angkot passengers.



REIMAGINING DESIGNATED ANGKOT STOPS

Angkot drivers in practice usually stop anywhere along a route for picking up and dropping off passengers. Based on the demand, these stops tend to be at busy intersections or street corners. These locations do not have signs, a place to sit or proper lighting, but there's a general social sense of where they are based on the presence of parking lot attendants, street vendors and other waiting passengers. For passengers, these stops are seen as relatively safe waiting spots especially at night. For angkot drivers, these stops are potential spots to get more passengers. Overall, these are undesignated yet socially known angkot stops where drivers wait for passengers and vice versa.

City governments that are tasked with building and maintaining bus stops can explore this opportunity area to complement the Ministry of Transportation's guidelines and standards. The presence of people gathering at undesignated *angkot* stops can be factored into a safety support system design, which takes into account the wisdom of local players, including bystanders, passengers and transportation operators. This opportunity area can also be expanded in conjunction with transit oriented development initiatives to ensure that the local context is put into consideration, in particular informal elements that tend to be classified as negative facets instead of part of the solution.

- How can we establish a set of safeguarding guidelines that are tailored to a local context and aligned with how women perceive safety when travelling at night?
- How might we leverage local wisdom (for example on pick up and drop off points, unspoken safety rules, etc.) to guide the design of designated angkot stops?



POTENTIAL PARTNERS

Local designers and architecture, transportation practitioners and the transportation department within the Government (Dinas Perhubungan).









1AIN ST

FROM STREET VENDOR TO STREET WARDEN

For women travelling at night, a street vendor is often considered as an ally. They see them as workers trying to make ends meet, just like themselves. It is not unusual for women to wait for an *angkot* near to where street vendors are located. These areas tend to be busier and women can get safety tips from vendors, for instance about pickpockets. Unfortunately, street vendors are often seen as a disturbance, especially when their stalls are blocking pedestrian walkways. The city government every now and then will conduct raids, forcing these vendors to move to other areas.

This is a unique opportunity area in which civil society organisations, local urban designers and community organisers can explore the role of informal sectors in urban issues. For instance, with a properly integrated system, street vendors could play a role in becoming the eyes-on-the-street 2 as an integral part of providing safe public space for women travelling at night. Beyond street vendors, this idea could be expanded to include other players in the area such as timers, parking attendants and shop attendants.

- What rules can be established to include street vendors as part of a safe public space design?
- How might we design areas to enable street vendors who sell at night to become street wardens?
- What should be done to harness street vendors' local wisdom to improve the safety of women travelling night?



POTENTIAL PARTNERS

Street vendors, local civil society organisations, community organiser, as well as the micro and small medium enterprises department within the Government (Dinas UMKM).

Jane Jacobs wrote 'The Death and Llfe of Great American Cities' in 1961. One of the key concepts is the value of "eyes on the street" for improving safety. People generally observe what's taking place on the street not because it is their duty, but because they are naturally drawn to the human interests and activities.



ANAK RANTAU (NEWCOMER) STARTER PACK

Night shift jobs that pay minimum wage are not necessarily the employment women who travel at night dream of. In reality though, these are typically the jobs that are available for young women who do not hold a higher education degree and are looking for better opportunities in big cities. Some of our respondents, characterised by the Anxious Newcomer persona, moved to these cities to explore job opportunities that they've been informed about by relatives. Their parents often insist that they stay with a family member for safety, as well as to avoid big expenses that they'd have to foot alone. Those without family members though normally end up renting a small room and maintaining a frugal lifestyle in the big cities.

Employment in the agriculture industry, where people living in rural communities once heavily depended on to earn a living, has been declining. Migration to urban areas now provides promising opportunities for women to access the resources they need to make a living. However, the conditions under which women live and work in these urban surroundings limit their choices, therefore often preventing them from fully exploring their opportunities. Another research conducted in Ghana revealed that some women were still willing to migrate to new locations - despite being aware of the risks and challenges that they could be exposed to in the migration process (Pickbourn, 2019).

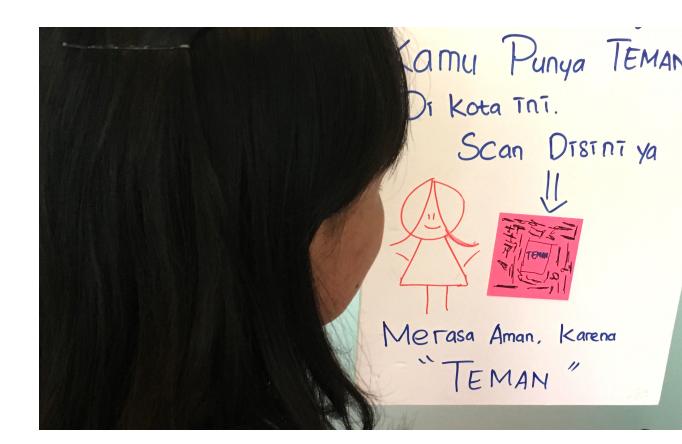
For these young migrant workers, the challenge of travelling at night is part of a bigger challenge of being a new migrant. They know they have to work harder and be willing to endure tougher conditions than people who are not newcomers. To transform this challenge into an opportunity area, young migrant workers may need an induction starter pack to help them become more quickly acquainted with the city. This induction starter pack would provide necessary safety information on how to navigate and overcome some of the challenges of working and travelling at night.

- What technologies can be harnessed to help prepare young migrant workers for living, working and travelling in a new city?
- How might we enable peer to peer support for young migrant workers?
- How can we redesign the journey of nighttime travel to make it a more relaxing and safe experience?



POTENTIAL PARTNERS

Young migrant workers, NGOs, tech communities, designers and labour-related departments within the Government.









ENABLING BYSTANDERS TO TAKE ACTION

We acknowledge that there are ongoing efforts to promote active bystander interventions. Led by grassroots organisations, women empowerment communities and UN agencies, at both the local and global levels, they've come up with a series of guidance and intervention training to encourage bystanders to act instead of being a passive observer.

Bystander, as we've observed in this research, are often hesitant to act out of fear that they might misinterpret a situation, especially at nighttime when it's dark and reading certain gestures may be difficult. Therefore, bystander usually wait for a victim's response, instead of acting at the first glimpse of a perpetrator's advances. Based on how these transit points are designed, bystanders such as drivers and timers often worry about retaliation from perpetrators, since there's always the possibility of running into them again. Thus, these bystanders though willing to help, prefer to do so in a subtle way that does not jeopardise their own safety. This is an opportunity area for local authorities to examine in order to enable bystanders to take action.

- How can we design more subtle and tactical bystander interventions?
- How might we promote an environment in which bystanders can act without fear of
- What features should be included in the design of a public transportation system to educate and encourage active bystanders?





POTENTIAL PARTNERS

Non-government organisations, community organisers, local designers, transportation operators and city government.

Ideas on How to Encourage Safe Transit for Women Travelling at Night

HOW MIGHT WE INCENTIVISE ORGANDA TO BECOME A SAFETY ENABLER?

Revising Organda's Role as an Operator Association

There are potential merits to reforming *angkot* services by repositioning organda's function and role as an association that implements and monitors vehicle and driving guidelines to meet safety standards.

Inspirational example: Bus Users is an organisation that represents the interests of bus passengers outside of London, including developing good practice guide to better bus services. https://www.bususers.org/about-us/

HOW MIGHT WE WHAT DATA CAN BE HARNESSED TO BETTER DESIGN ROUTES AND TIMETABLE?

3) Subsidise Selected Evening Routes

To better allocate funds, city governments can leverage non traditional data sets and advanced data analytics to strategically identify which evening routes to subsidise. This approach can be complemented through dialogue with an association such as Organda to explore business models to increase commercial activities along those routes with the aim of making sure activities are ongoing during nighttime travel.

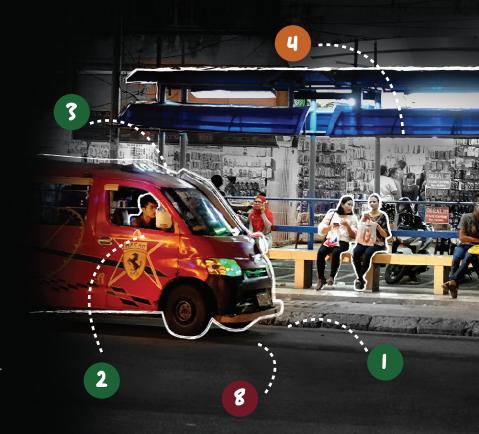
Inspirational example: Seoul Government uses big data to develop a transport system for low-income workers who commute late at night. http://blogs.worldbank.org/transport/what-does-big-data-have-do-owl

HOW MIGHT WE IMPROVE THE BEHAVIOUR OF DRIVERS AS SERVICE PROVIDERS?

2) Safe Driver Identification

There are benefits to screening and recruiting competent drivers. These drivers can be provided a unique digital identification, in which as part of the accountability passengers can offer grading feedback. With a digital system in place to assess such grading, drivers can be rewarded or reprimanded for following or not adhering to the standard operating procedure.

Inspirational Example: Different ways to use digital identity and verification. https://urjanet.com/blog/solidifying-digital-identity-sharing-economy/



HOW CAN WE ESTABLISH A SET OF SAFEGUARDING GUIDELINES THAT ARE TAILORED TO A LOCAL CONTEXT AND ALIGNED WITH HOW WOMEN PERCEIVE SAFETY WHEN TRAVELLING AT NIGHT?

4) Halte Umum (General Public Transportation Stop) Design Guideline

By facilitating local co-design and co-create sessions to identify safe waiting points, city governments can gain insights about informal safety factors that might be necessary for designing standards and guidelines. Crowdsourced data regarding the public's perception of safety in certain areas can also be incorporated.

Inspirational Example: Train services can be improved by understanding the behaviours of passengers disembarking and boarding. https://www.stby.eu/2013/06/13/working-with-ns-and-prorail-to-improve-services-for-traintravellers/

Service Transit Social Support Campaign	
---	--

HOW MIGHT WE ESTABLISH RULES TO REGULATE STREET VENDORS TO BECOME PART OF A SAFE ENVIRONMENT FOR DESIGNATED ANGKOT STOP?

5) Street Warden

City governments can work together with local civil society groups and law enforcement to develop a guide for interested street vendors who are willing to go through a vetting process to become street wardens.

Inspirational Example: A guide for New York City street vendors. http://candychang.com/work/street-vendor-guide/



6) Know Your City App

An application designed for new migrant workers, allowing them to digitally document places they visit and their experiences as a way to help them familiarise themselves with a new city.

Inspirational Example: An application providing safe information for migrant workers. https://asiafoundation.org/2016/05/25/new-app-provides-nepali-migrant-workers-safe-migration-information/

HOW MIGHT WE ENABLE PEER TO PEER SUPPORT FOR YOUNG MIGRANT WORKERS?

7) *Teman Pulang* (Travel Companion) Campaign

By kickstarting a campaign at the city level to promote knowledge sharing, new migrant workers can connect with other individuals who may be living or working in the same building or living in close proximity to each other. The goal would be to ultimately develop a companion system for group travelling.

Inspirational Example: Chicago Public Schools place hundreds of adult chaperones along the routes children travel to and from their schools as part of an effort to ensure a safe journey. https://edition.cnn.com/videos/us/2016/09/07/chicago-safe-passage-protects-children-jpm-orig.cnn/video/playlists/violence-in-chicago/



HOW MIGHT WE ENABLE MORE SUBTLE AND TACTICAL BYSTANDER INTERVENTIONS?

8) A Safe Carriage for All

This campaign would focus on promoting safe and inclusive transportation carriages. Organda in consultation with other community organisations would participate in the selection of a number of *angkot* minibuses to be designated safe carriages, that would be equipped with clear signage for passengers, as well as features to encourage bystanders to take action. These features may include, but not limited to, tips on how to recognise uncomfortable body language and render subtle assistance, in addition to what can be done to empower drivers to act. These would not be women-only carriages -but carriages that are open for all passengers.

Inspirational Example: When a campaign failed to reduce noise pollution caused by honking, Bleep conducted an experiment using simple button to nudge driver's behaviour. http://www.brief-case.co/projects/behavioural-design/invention/2/14/2/honk-reduction-system.html

NEXT STEPS

This *After Dark: Encouraging Safe Transit for Women Travelling at Night* research sought to compliment the UN Women safety audit conducted in 2017 by:

- a) focusing on the experiences of women from a lower socio-economic class, especially those who are working in the informal sector;
- b) expanding the understanding of women's safety and mobility in major cities in Indonesia beyond the Greater Jakarta area; and
- c) complementing the findings by focusing on the individual experience instead of the systemic factors and delving into what "being safe" means for women who regularly travel at night (including learning about the emotions and beliefs influencing their travel decisions).

Moving forward with the above-mentioned opportunity areas, it is worthwhile to consider other key initiatives under the **Safe Cities Global Initiative** that encourage innovative, locally-owned and sustainable approaches to prevent and respond to sexual harassment and other forms of violence against women in public spaces.

These opportunity areas are meant to be explored alongside key stakeholders, such as transportation related government entities, infrastructure development companies in the private sector, grassroots communities, activists and global organisations that are all working to create a safe city for all.

It is imperative to undertake a series of experiments that demonstrate the suitability and efficacy of these ideas and test them in the particular city context such as Medan, Semarang and Surabaya or any other area where these ideas would be useful. This experimentation requires ongoing collaboration to engage users and communities in the change process.

Pulse Lab Jakarta together with UN Women encourage interested organisations to make use of the insights from this research to develop ideas that can be transformed into tangible prototypes. We believe, through a consolidated effort, these opportunity areas for intervention in service delivery, transit improvement, stronger social support and campaign for active bystanders can become closer to reality.

This is an open invitation from us.

GLOSSARY

After dark: after nightfall - the onset of night.

Angkot: an abbreviation of *angkutan kota, angkot* is a type of transportation that transports passengers in the city area with the use of small buses and passenger cars that have fixed and regular routes with the nature of commuting. (Government Regulation No. 41 / 1993)

BRT: an abbreviation of Bus Rapid Transit, a high-quality busbased transit system that delivers fast, comfortable, and costeffective services at metro-level capacities. It does this through the provision of dedicated lanes, with busways and iconic stations typically aligned at the center of the roadway, with offboard fare collection, and fast and frequent operations. (ITDP)

Begal: a term that refers to a specific type of robber who operates on the streets. A begal, a Javanese word, traditionally lurks around on foot in deserted places with the aim of robbing passersby using a weapon. The term has been included in the official Indonesian lexicon and in contemporary usage refers to a robber who goes around on motorcycles armed with bladed weapons or guns. They usually corner their victims and steal their belongings, with the highest-value item being a victim's motorcycle, hence the term begal motor. Because of the rise of violent motorcycle thefts across the country committed by begal, the term has risen in popularity, and sometimes is used inaccurately to describe other types of robbers such as *jambret* or *maling*.

Bystander: someone who is present at a location but does not play an active role. In the context of sexual harassment and sexual violence, a bystander is someone who is present when an incident of sexual harassment / violence occurs but does not take any action.

First Mile Last Mile: an expression that refers to the beginning or the end of an individual's journey, generally using public transportation, for example the segment where an individual gets off a bus and then walks home.

Gendam: described as fraud by hypnosis, this is an illegal practice that is common in Southeast Asia, where individuals are tricked into giving money to strangers. While typically performed over the phone, gendam can take many forms, but the outcome is generally the same.

Halte: a designed spot along a travel route for passengers pick up and drop off.

Ojek Online: a motorcycle ride-hailing service that is available through mobile application.

Persona: a persona is a fictitious, specific and concrete representation within a targeted demographic group that might be useful for a product or service.

Prototype: a prototype is a simple experimental model of a proposed solution used to test or validate ideas, design assumptions and other aspects of its conceptualisation quickly and cheaply, so that the designer/s involved can make appropriate refinements or possible changes in direction. (interaction-design.org)

Public Space: public spaces are places which are accessible and enjoyable by all without a profit motive and take on various spatial forms, including parks, streets, sidewalks, markets and playgrounds. (UN Habitat)

Public Transportation: a system of vehicles such as buses or trains that operate at regular times on the fixed routes and used by the public. (Cambridge Dictionary)

Safetipin: SafetiPin is a social enterprise providing a number of technology solutions to make our cities safer for women and others. It uses apps to collect information and engage with individuals, and provide back end solutions for large scale data collection and analytics.

Sexual Harassment: unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature.

Sexual Violence: any sexual act, attempt to perform a sexual act without consent, unwanted sexual comments or advances or otherwise against a person's sexuality using coercion. This is irrespective of a person's relationship to the victim, in any setting, including but not limited to home and work.

Transit: refers to a transition point -- an intermediate stop where there's a change in mode of transportation. Transit can be both formal (such as designated bus stops) and informal (undesignated spots anywhere along a route for instance where angkot minibuses stop to drop off and pick up passengers).

REFERENCES

- Action Aid. (2014). Safe Cities for Women: From Reality to Rights. Action Aid
- Asian Development Bank. (2013). **Gender Tool Kit: Transport-Maximizing The Benefits of Improved Mobility for All.** Mandaluyong City, The Philippines:
 Asian Development Bank
- Both, T. (2018). *Human-Centered, Systems-Minded Design*. Retrieved Monday, January 21st 2019, from https://ssir.org/articles/entry/human_centered_systems_minded_design
- Bopal, S., Secondo, D. and Kane, R. (2017). **System Thinking: A View From The Trenches.** Retrieved on December 26th 2018, from https://ssir.org/articles/entry/systems_thinking_a_view_from_the_trenches#
- Cooper, A. (1999). **The Inmates Are Running The Asylum.**Macmillan Publishing Co., Inc.
- Fani. (2016). **Medan 'Direct Service' BRT Project**. ITDP Indonesia, February 23rd 2016. Retrieved on Friday, February 8th 2019, from http://www.itdp-indonesia. org/what-we-do/medan-direct-service-brt-project/
- Farmita, A. (2018). Walikota Surabaya Tri Rismaharini Luncurkan Suroboyo Bus. Tempo.co, April 7th 2018. Retrieved on Monday, February 11th 2019 from https://nasional.tempo.co/read/1077209/wali-kota-surabaya-tri-rismaharini-luncurkan-suroboyo-bus/ full&view=ok
- FIA Foundation. (2016). Safe and Sound: International Research on Women's Personal Safety on Public Transport. FiA Foundation. Retrieved on Monday, February 11th 2019, from https://www.fiafoundation.org/media/224027/safe-and-sound-report.pdf
- Flick, U. (2014). **An introduction to qualitative research 5th ed.** Thousand Oaks, CA: Sage Publications Ltd.
- Florida, R. and Fasche, M. (2017). **The Rise of Urban Creative Class in Southeast Asia**. Martin Prosperity
 Institute. Retrieved on Monday, February 11th 2019
 from http://martinprosperity.org/media/Rise-of-the-Urban-Creative-Class-in-Southeast-Asia.pdf

- Gao, Y. (2017). Mobility App and Citizens. Views from Jakarta. Research Project Report to IDIN. Retrieved on Thursday, January 31st 2019 from http://www.idin. org/sites/default/files/resources/Gao_innovation_in_informal_transport_IDIN_f.pdf
- Happer, C. and Philo, G. (2013). The Role of the Media in the Construction of Public Belief and Social Change. Journal of Social and Political Psychology, 2013 Vol. 1(1), 321–336
- IDEO. (2015). *The Field Guide to Human Centered Design*. Retrieved Saturday, January 19th 2019 from http://www.designkit.org/resources/1
- Institute of Transportation and Development Policy and Women's Environment and Development Organization. (2017). Access and Gender: Sustainable Urban Mobility with a Gender Equality Lens. Institute of Transportation and Development Policy. Retrieved on Wednesday, January 16th 2019 from https://wedo.org/wp-content/uploads/2018/05/access_for_all_series_Fl-NAL-FOR-WEBSITE.pdf
- Institute of Transportation and Development Policy Indonesia. (2017). *Penandatanganan MoU dengan Kota Semarang dan Seminar "Semarang Urban Mobility Initiative"*. Retrieved on Friday, February 8th 2019, from http://www.itdp-indonesia.org/news/penandatanganan-mou-dengan-kota-semarang-dan-seminar-semarang-urban-mobility-initiative/
- Indonesia Ministry of Finance. (2012). Laporan Tim Kajian Profil Sektor Riil: Sektor Perdagangan, Hotel, dan Restoran. Retrieved on Thursday, January 31st 2019, from https://www.kemenkeu.go.id/sites/default/files/profil%20sektor%20riil.pdf
- Indonesia Ministry of Home Affairs. (2017). *Data Pokok Kemendagri Tahun 2017*. Retrieved on Friday, February 8th 2019 from https://www.kemendagri.go.id/media/documents/2018/08/5def011bdb8fd276af06f86c27e-b69e6.pdf
- Loukaitou-Sideris, A. (2006). Is it Safe to Walk?1 Neighborhood Safety and Security Considerations and Their Effects on Walking. Journal of Planning Literature J PLAN LIT. 20. 219-232.

- O'Grady, J. V., and O'Grady, K. V. (2006). A Designer's Research Manual, 2nd edition, Updated and Expanded: Succeed in design by knowing your clients and understanding what they really need. Massachusetts: Rockport Publisher
- Pickbourn, L. (2018). Rethinking Rural–Urban Migration and Women's Empowerment in the Era of the SDGs: Lessons from Ghana. Sustainability, MDPI, Open Access Journal, vol. 10(4), pages 1-18, April.
- Skogan, W. G., & Maxfield, M. G. (1981). Coping With Crime: Individual and Neighborhood Reactions. Newbury Park, CA: Sage Publications.
- Syabri, I., Soegijanto, B. (2013). Embracing Paratransit in Bandung Metropolitan Area, West Java, Indonesia. Case study prepared for Global Report on Human Settlements 2013. Retrieved on Wednesday, February 13th 2019 from https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case_.Study_.Bandung. Indonesia.pdf

- Tolley, E.B. (2017) **Traditional Socio-Behavioral Research and Human-Centered Design: Similarities, Unique Contributions and Synergies.** Report submitted to
 CAMI Health/ IMPT Secretariat/ Public Health Institute.
 Retrieved on Wednesday, February 6th 2019 from
 https://www.theimpt.org/documents/reports/Report-HCD-BSS-Research.pdf
- Turner, J. (2013). **Urban Mass Transit and Social Sustainability in Jakarta, Indonesia**. UN Habitat Global Report on Human Settlement
- UN Women. (2017). Scoping Study: Audit Keamanan di Tiga Wilayah Jakarta.
- Yavuz, N. & Welch, E. (2010). Addressing Fear of Crime in Public Space: Gender Differences in Reaction to Safety Measures in Train Transit. Urban studies (Edinburgh, Scotland). 47. 2491-515. 10.1177/0042098009359033.

ANNEX 1:

Applying Human-Centered Design to Understand Women's Travel Experience at Night

In this After Dark research, we applied human-centered design (HCD) to uncover an in-depth understanding about how women who travel at night perceive safety. Human-centered design approach is premised on empathy, allowing researchers to uncover insights relating to the needs, challenges and desires of the people that interventions are being designed for. Considering the nuances of women's safety (informed by existing literature and consultations with domain experts), coupled with the objectives of our research, HCD was chosen as an appropriate research approach.

We were able to glean information from in-depth interviews we conducted with a group of women in three cities to help us understand their travel experiences. Unlike quantitative studies that put emphasis on the statistical representation, our approach focuses on forming a detailed understanding of the issue by delving into the respondents' stories and identifying challenges and opportunity areas.

We acknowledge that the topic of women's safety requires sensitivity, care and reflexivity from researchers involved in the HCD process. In this annex, we describe the steps we took to ensure that our research methods, processes and analyses were conducted with ethical integrity and rigour.

Developing the Conceptual Framework

During the design phase of the research, the research team sought to enhance their contextual understanding on the issues of safe cities, transportation, and women's mobility by surveying existing literature. The researchers consulted with UN Women (the main research partner), as well as experts from the Institute for Transportation and Development Policy in Jakarta to validate the team's understanding of the issues prior to finalising the research design.

UN Women's 2017 Safety Audit report was used as the main springboard for designing the research. This report and other supporting literature helped with building the hypothesis and identifying gaps that were to be followed up in the research. As the Safe Cities programme has been around for 20 years, there were valuable stories and lessons to be learned from participating cities to inform the research design. The literature review was crucial to help with identifying existing knowledge gaps, shaping actionable insights and to ensure the research was not simply a reinvention of the wheel.

Several sources described 'women' as a unified, undifferentiated group with respect to women's experiences in public spaces, especially when using public transportation. By applying HCD, we challenged the notion of a common women's view, and instead set our conceptual framework to

focus more on individuals rather than finding common views that represent a particular group. In our study, we aimed to gain an in-depth and nuanced understanding about the specific needs of the women the interventions would be designed for.

The conceptual framework further served as a guide in preparing the research tools for this study, which included a diary study, semi-structured interview guides, observation guides, and sacrificial concepts. These research tools were tested before the fieldwork and revised based on feedback received. HCD helped with designing a framework which served as a rigorous guidance tool for conducting this research, but at the same time allowed for flexibility based on interactions with respondents (for example from open ended, semi structured questions) and other developments throughout the fieldwork.

Research team training and preparation

Addressing the issue of women's safety while using public transportation and travelling at night requires a range of domain expertise. The researchers that were assigned to this study are experienced human-centered design researchers, some of whom have substantial track records working on issues related to urban planning and women empowerment.

Given the sensitivity of the topic, the research team took the opportunity to participate in a three-day Safe Cities training organised by UN Women in Jakarta. The researchers participated in training sessions about inclusive cities, safety audit, and gender along with other UN Women partners. The research team also scanned social media for public information on the three selected cities to understand trending topics and ongoing discussions in the areas. These efforts complemented the internal rounds of informational briefing held for all the researchers in order to ensure a mutual understanding of the research's objectives, research tools, situational context and aspects to consider when interviewing respondents.

Recruiting study participants

The fieldwork was conducted in three cities: Medan, Semarang and Surabaya. These cities were selected based on consultation with UN Women and domain experts working on transportation issues, urban planning and women planning. All three cities are major metropolitan areas keen on developing public infrastructure and transportation systems. Women from the lower income bracket often migrate to these cities in search of better job opportunities and they are the focus of this research.

A total of 37 respondents participated in the course of the research, which included four days of doing a diary study and a contextual interview. The research team spent three weeks collecting data across the three cities. The respondents were women who either work night-shifts or regularly get off work in the evening, many of them employed in the central business district areas. Their places of abode are typically located on the outskirts of the cities. A conscious decision was made to recruit women who work in the central business districts, considering the amount of commercial activities and the number of women who take on night shift jobs in these locations. More broadly, this decision was based on UN Women's 2017 Safety Audit report which found that women travelling at night are more likely to encounter safety risks.

We chose respondents who were from a low socio-economic bracket, because it is generally understood that women within this cohort have limited access to the use of privately-owned vehicles, making them regular public transportation users. A lack of access to resources is an essential facet that aligns with this research since it contributes to a greater feeling of vulnerability and fear (Yavuz and Welch, 2010).

From the group of respondents, thirteen of them had a fixed night-shift job, such as working as a shop attendant and waitress (which is usually done through a formal employment contract). Twelve of the total respondents had a more flexible night shift job, as they are employed within the informal sector, such as working as a freelance tutor and an attendant at a snack booth. The rest of the respondents were occasional night travellers - their job and activities do not always require them to travel at night, such as university students who occasionally take a night class or participate in extracurricular activities. These distinct occupation categories allowed us to investigate information about how time, flexibility and frequency affect women's perception of safety.

The respondents' choices on what mode of public transportation to use also vary. Thirteen respondents used angkot to travel at night, 18 respondents travelled by ojek online, three respondents preferred city bus or bus rapid transit, and three respondents alternated between angkot and ojek online. Apart from personal preferences, their selections are also based on the availability of public transportation in each city.

We partnered with local recruiters who actually live in the three cities to recruit the respondents. They all have significant amount of knowledge and experience living in these cities, and in particular are familiar with the local culture and language.

The local recruiters were provided with a detailed guideline about the study and instructions on how to recruit the respondents. Based on the requirements provided, the local recruiters provided a list of candidates. As a final step in recruiting the respondents, the research team, together with the local recruiters, met with the candidate to build rapport, explain more about the study, discuss expectations, address participants' concerns or questions, and finally gain their written consent once they confirmed their willingness to take part in the study.

Efforts in gathering quality insights

In conducting human-centered design research, it is important that data are gathered in a systematic way and efforts are made to minimise any biases that may occur during the research. To ensure that the method we applied and data we collected were not compromised by any cognitive bias, several measures were taken, ranging from the comprehensive literature review and mixed background makeup of the research team to being reflexive and performing triangulation assessment.

The fairly mixed background of the research team helped with countering any potential bias that might come with each researcher's unique background and expertise. Furthermore, dividing the researchers into 2-3 groups allowed for critical enquiry and peer analysis of each group's findings and data collection process by other team members.

Reflexivity is an essential aspect of our research process. A qualitative approach takes a researcher's interaction within the field and with team members as an explicit part of knowledge building (Flick, 2014). The subjectivity of the researcher and the respondents become part of the research process. Our researchers' reflections on their actions and observations in the field, impressions and feelings, also become data in their own right, thus aiding with the interpretation. By being reflexive, we were able to acknowledge the inputs that the researchers had in actively interpreting and representing the respondents.

Designing the interview guides and using sound interview techniques were also important to minimise any biases that researchers might have. We prepared a set of research tools and questions that were open-ended with the nature of a conversation to ensure that questions would not only lead to single-word responses.

Triangulation allows researchers to take different perspectives on an issue being studied or on answering research questions (Flick, 2014). It facilitates validation of data through cross verification from more than two sources and tests the consistency of findings obtained through different instruments. For the After Dark study, triangulation and quality assurance steps were designed from the beginning and translated through the methodology and selection of research tools applied during the study. In this research, we used a diary study, contextual interviews and shadowing as research tools to collect data from the field.

We used a diary study to gain an understanding about the safety perceptions by asking the respondents to record their experiences, behaviours, emotions and thoughts when travelling at night. Respondents were asked to log their trips for four days in a diary study, documenting information about the places they visited, the means of transportation they used, their thoughts and feelings while onboard, and the clothes and accessories that they chose to wear. The diary is useful for collecting information, which would have been difficult for the respondents to recall during face-to-face interviews.

After the respondents completed their diary entries, we followed up with in-depth interviews. This step was crucial to clarify entries in the diary and to gather more background details about how the respondents' mobility is influenced by their safety perceptions.

Shadowing was the third method we applied, where we selected a few respondents to follow on their trip home to get a firsthand experience of the respondents' journey travelling after dark. Through this attempt, we managed to gain critical information that were sometimes overlooked in both the diary study and in-depth interviews. Shadowing also provided a context for the researchers to better interpret and understand the findings.

As part of the triangulation assessment, bystanders in the three cities where the research was conducted were interviewed. These bystanders comprised of security guards, small stall-keepers and residents. They were asked about statements previously mentioned by the respondents concerning safety conditions in certain areas, and asked to give their opinion about the safety of women travelling at night.

The interviews with the respondents, shadowing of respondents, and interviews conducted with bystanders all provided an opportunity to validate the entries and information that the respondents provided in the diary.

Recording of data

Each interview session was voice recorded and we went back to each recording whenever the time came to download the interviews. This helps to avoid memory bias, for example when doing an interview and taking notes at the same time. While recording data is important, keeping the data secured is also essential. We saved the information we collected from the field, including interview notes, pictures and consent form on a password protected Google drive, which can only be accessed by the research team. We also ensured that the fieldwork data are filed using pseudonyms to protect the privacy of the participants.

Persona

We analysed information from the diary study, shadowing and interviews to create a travel journey for each respondent. We used a simple framework to help uncover patterns and to group the respondents. First, we mapped out regular versus occasional night travellers as well as respondents with strong versus weak social support.

We then supported this framework by mapping the personas using the following factors:

- Access to transportation
- Aspiration/ motivation to work
- Exposure to the city
- Social network
- Experience regarding crime, harassment and violence
- Confidence
- Independence

During the first iteration, we identified six personas: the overprepared strategist, anxious newcomer, the moonlighter, the female warrior, the happy-go-lucky and the commoners. We wanted to focus on more vulnerable groups and therefore decided to do another iteration focusing on groups with specific needs. We selected four out of the six personas. We abandoned the commoners persona as their characteristic can be found in women in general. We acknowledged that the happy-go-lucky has distinctive characteristics, but they are coming from different socio-economic backgrounds with better education and access to the use of private vehicles.

Despite our efforts to select respondents that fit into our research design, we still found women from a higher socio-economic background who take public transportation at night. These women are not included among the personas, because their motivation and needs are different. They generally have access to safer modes of transportation either in the form of personal, family vehicle or support from their employers in the form of evening transportation provided. Four respondents belonged to this group.

There is no perfect persona nor is there a spot on representation of the respondents. Personas are intended to serve as narratives to empathise and make sense of the rationale behind the actions and travel patterns of certain group of women.

Synthesis, Analysis and Reporting

During the data collection period, the research team gathered at the end of each day for a debrief about the day's activities and discussed lessons learned to improve the fieldwork the following day. Each session was attended by researchers (usually consisting of seven to eight researchers that are divided into two to three teams). This routine was consistently done throughout the fieldwork in Medan, Semarang and Surabaya.

After fieldwork in the three cities were completed, we held several synthesis sessions which involved the researchers responsible for data collection in the three cities. The aim of these synthesis sessions was to identify patterns and derive insights, which would lead into opportunities for action. We also held sessions with UN Women to present our preliminary insights, feedback from which informed the next rounds of synthesis.

Three weeks after wrapping up the fieldwork, we organised a co-design workshop with 24 participants, including transportation operators, urban planning practitioners, communication practitioners and designers, as well as representatives from government institutions and women organisations. The workshop served the purpose of presenting our preliminary findings, obtaining feedback on actionable insights (in essence a kind of peer review) and eliciting ideas for intervention opportunities.

Based on the feedback received, a final round of synthesis was conducted before we began drafting the report. The draft of the report was written collectively by our research team, reviewed by each researcher involved in the study, and peer-reviewed by UN Women.

Ethics

Pulse Lab Jakarta recognises the importance of protecting the privacy and well being of its qualitative research respondents. Our qualitative research work abides by the principles and guidelines of design research ethics beginning from the planning and preparation stage (this includes framing the research to ensure that the objectives and methods protect respondents' current and future well being as well as providing accurate and truthful information to research stakeholders); information gathering stage (this includes practicing informed consent, honouring respondents' limits and valuing their comfort); to the information use and sharing stage (this includes safeguarding raw data by anonymising data processing, protecting respondents' recognisability and traceability when presenting insights and only sharing insights instead of raw data or unedited materials).

In conducting this research, everyone on the research team firmly abided by the principles mentioned above, from the planning phase to the final stage of the study¹³. After explaining the objective and nature of the research to each respondent, we confirmed each participant's willingness to participate in the research. We also protected the identity of the respondents by using a pseudonym to record field research data and in all publications related to this

study. Finally, we respected the well being of our women respondents by acknowledging the sensitivity of the topic, and therefore made an attempt to balance the gender makeup of the research team who interviewed the respondents. We also developed a protocol for interviews in which male members of the research team are required to leave interviews when study participants present signs of being uncomfortable or when the conversation steers into sensitive topics like experience with harassment.

Limitation of study

Given the specific scope of our study, it is essential to acknowledge limitations that may be relevant for interpreting the findings of this research. The data was collected in a three week period. The research was conducted in three major Indonesia cities that have unique characteristics and different levels of development compared to other cities in Indonesia. It is important to underscore that the research focused on a particular group of respondents, which may not represent the women community as a whole. The 37 respondents who participated in this research are from a lower socio-economic background, and regularly travel from 7-10 pm. They also mostly work in business districts where city centres are located. Therefore, it is probable that the findings described in this report might not be universally applicable. Lastly, our research approach focused on identifying and informing design opportunities, and consequently does not place an emphasis on pointing out systemic, underlying causes of violence against women (a topic which previous studies have analysed thoroughly).

The research team applied the practical steps of upholding design research ethics articulated in IDEO's Little Book of Design Research Ethics. The guide, which integrates advice and recommendations from external sources (including ethicists) and from existing codes of ethics in related professions (such as journalism and market research), is widely referenced by HCD practitioners. The guide is accessible here: https://lbodre.ideo.com

ANNEX 2:

Features of the After Dark Fieldwork Do-It-Yourself Diary



Front Cover

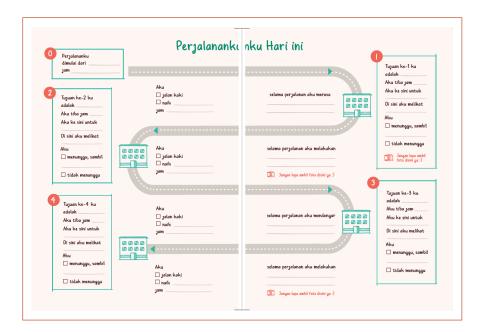
Among the research methods we applied for this After Dark Research is a diary study. The diary helps to uncover insights about women who travel at night using public transportation. It serves as a useful tool to record their emotions, activities and experiences in transit. This section of the report looks at the features of the diary.

The diary is developed into four sections:

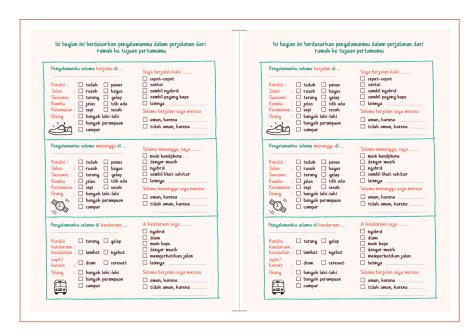


Snapshots of the Diary

The first section is a travel plan. This plan details information about places the respondents intend to visit and the means of transport they plan to use throughout the day.



The second section is designed to record brief details of the respondents' actual journey during the day, including the means of transport used, transit points and destinations, their awareness of the surroundings (what they see and hear), as well as their perception of safety while travelling.



The third section allows for a more detailed assessment of the respondents' surroundings, covering everything from the first mile to the last mile of their journey in a given day.



The fourth section provides a space for respondents to reflect on stories or experiences related to their safety. In particular, it reminds the respondents to document what they chose to wear that day and the contents of their bag (knowing this information can help us assess whether safety concerns are associated with choice of outfit or based on items carried around).

The Challenges - and what to do about them

Ensuring that all respondents complete their diary entries, fully and accurately, is one of the main challenges with doing a diary study. But our experience in the field using this research approach taught us a few things:

First, not all participants will be overly motivated or immediately understand how to use the diary. Therefore, we used the initial briefing session with the respondents as an exercise to introduce the diary and walk them through how to fill it out. This session also gave our field researchers a chance to clarify the research objectives and become acquainted with the respondents. Getting to know the respondents upfront was even more useful when the time came for in-depth interviews.

Second, encourage respondents to use a snippet recording technique when logging their entries. We realised that many of the respondents had busy schedules in the night hours, and it was not realistic to ask them to completely fill out the diary at one time. It proved more convenient for the respondents to first record only snippets whilst travelling, then add more details to the log later when they have more time.

Third, some respondents don't see their stories and experiences as unique. Explaining to the respondents that their stories are important for other women to hear and sharing how these stories can help to improve women's safety while travelling after dusk was useful in securing their participation, especially in reminding them that their individual experiences matter regardless of how common they might be. Fourth, regularly nudge participants to remind them to log

their entries. This task was a necessary yet tedious one for our field researchers. Several reminders were sent out via digital communication platforms, such as WhatsApp messenger. This enabled quick and easy communication and for some respondents, it was an opportunity to discuss any challenges they were encountering with filling out the diary.

Fifth, a bit of incentive can be a game changer. Committing to the research tasks, for not just one but over a few days, is not always guaranteed. After meeting with the potential respondents and getting a sense of whether they'd be willing to contribute to the research, we disclosed a set of incentives for participating in this study. In some cases, this strategy was a way to secure initial commitment as well as ensure commitment for the full course of the field research. Announcing the incentives however was done only after determining which participants genuinely already had "one foot in" the research.

Sixth, a cute design printed on fancy paper can be an inhibitor in the field. One thing we didn't foresee was that some respondents would see the pages of the diary as "too-nice-to-write-on". Therefore in the briefing session, we had to convince some respondents to go ahead with fiddling around and marking up the diary -- reminding them the information jotted down was more important than overall neatness. For future research, we may want to consider printing the diary on recycled or lower-quality paper and going much simpler with the visual elements.

Complementing the Diary Study

Reviewing information collected from the field, we believe the diary was helpful for recording the experiences, behaviours, emotions and thoughts of respondents travelling at night. The diary was particularly useful with documenting details, which would have been difficult to recall if only asked during verbal interviews.

The diary also gave the research team information about the respondents' travel experience which was beneficial for preparing discussion questions for the in-depth interviews. With that information in hand, the interview sessions were more productive and time-effective, benefiting both the field researchers and respondents.

In a bigger picture, the diary was a way to build rapport and establish trust with the respondents -- these women were personally allowing us to journey with them and experience several days of their lives through their diary records. We should note that less than 10 per cent of the respondents did not complete the diary entries all the way through to the finish, but this was due to personal reasons (not related to the design of the diary itself).

The diary nevertheless should not be seen as a standalone research tool. After the respondents completed most of their logs, we invited them for in-depth interviews, allowing more detailed discussions and time to follow up and clarify the diary contents. These interviews were effective in getting answers to the "how" and "why" behind each diary entry. The interview was an opportunity to document photos and videos of the respondents who gave us consent.

ANNEX 3:

Afterdark Co-Design Workshop



Shortly after wrapping up the fieldwork in three cities in Indonesia, we organised **a co-design** workshop to present our initial findings from the field; to obtain feedback to shape the insights from the research; and to brainstorm about concepts for future intervention that can help to improve women's safety when travelling at night.

This Annex describes the prototypes that the participants came up with during the co-design workshop. We also provide the insights that the participants gathered, key elements of the prototypes, future iterations needed, and potential partners for developing the prototype.



Workshop Participants

We invited a mixed-group of 24 participants, including transportation operators, urban planning practitioners, communication practitioners and designers, as well as representatives from government institutions and women organisations.

Areas of Opportunities

During the workshop, participants were

assigned into several groups based on the three areas of opportunities:

- 1) on bystander
- 2) on public transportation services
- 3) on law enforcement

These three areas are important for creating an environment that promotes safe transit for women using public transportation at night.

THE BYSTANDER DESIGN



TWO PROTOTYPES WERE INSPIRED BY THE QUESTION: "WHAT FACTORS PREVENT BYSTANDERS FROM TAKING ACTION!"

Two types of bystanders were identified: those who do not know what is happening; and those who may know but are reluctant to take action. Ranging from a lack of consciousness about what activities are considered harassment or violence, to the fear of retaliation if one becomes involved in an altercation, the discussions among the workshop participants and information gathered from doing rapid interviews revealed several **insights**:

First, bystanders fear misinterpreting a situation and therefore often need support from other passersby to take action. **Second**, bystanders need to come up with subtle tactics to intervene without attracting more attention than necessary, because in many cases they believe that becoming too involved can cause more harm than good. **Third**, a woman's sense of self and awareness about her surroundings need to be reinforced which can further encourage bystanders to intervene.

PROTOTYPE 1 - **GERBONG AMAN** =



"Gerbong Aman" meaning safe carriage was the first prototype the bystander design team came up with. This prototype focuses on designing a safe train carriage, equipped with tools and tips that bystanders can use to take subtle actions if they choose to intervene.

Key Elements

- Campaign to provide information on how bystanders can help victims
- Specialised train carriages with features such as emergency button, CCTV camera and security officers

Future Iterations

- Test the concept within particular city contexts
- Expand the concept to other modes of transportation

Potential Partners

MRT Jakarta, TransJakarta, Commuterline Indonesia, and LRT

PROTOTYPE 2 -

"DRIVER FOR SISTER"



This prototype sees the large group of active *ojol* (*ojek* online) drivers as an opportunity for intervention. The idea of this design is to have built-in incentives for drivers to render assistance whenever a woman activates the panic button through the mobile application.

Key Elements

- Capacity building for the drivers
- Training and workshop materials
- Features on the online ojek application
- Incentive scheme for the drivers to provide assistance on victims

Future Iterations

- Identify suitable incentives to encourage drivers to provide assistance
- Forge a relationship between the police, online ojek companies and the community

Potential Partners

Grab and Gojek

THE PUBLIC TRANSPORTATION SERVICES DESIGN

The discussions ranged from lax policies that regulate public transportation services to the inefficiency of existing infrastructure. The group eventually narrowed the scope to focus on bus stops, known locally as *halte*. The **insights** highlighted that:

First, women rarely wait for public transportation at designated points (i.e. bus stops or terminals). The pick-up points they choose may seem random, but the choices are actually based on the presence of friendly strangers that are often in these locations, for instance street vendors that usually greet them with a smile or parking lot attendants that have warned them about pickpockets. **Second**, city governments build designated transit stops based on standards from the Ministry of Transportation, but some of these standards have yet to take into account factors that contribute to women's safety. In other words, there is a difference between the factors government believes constitute women's safety and how women themselves perceive safety.

PROTOTYPE 3 - "HALTE IDOL" =



Halte Idol prototype is a competition that calls for community members, heads of sub-districts, and private companies to participate in the identification of safe public transportation transit points.

Key Elements

- Awareness campaign
- Crowdsourced data
- Neighbourhood planning
- Public participation

Future Iterations

- Come up with incentives to encourage community participation
- Develop a strategy to ensure the sustainability of the transit points after the competition

Potential Partners

City government, sub-district government, Dishub, public transportation service providers and social media influencers



THE UNDERLYING ASSUMPTION WITH THIS DESIGN IS THE IDEA THAT REGULATIONS, CRUCIAL FOR ENSURING WOMEN'S SAFETY IN PUBLIC PLACES, ARE NOT FUNCTIONING WELL.

PROTOTYPE 4 -

"SAFE AND COMFORTABLE PUBLIC TRANSPORTATION DESIGN GUIDELINE"



This prototype seeks to establish a set of guidelines for designing public transportation infrastructure, especially bus stops, that is tailored to a local context and aligned with the perceptions of what safety means for women travelling at night.

Key Elements

- Design guidelines for public transportation pickup and dropoff stops
- Spatial and transportation planning
- Community participation

Future Iteration

- Explore crowdsourcing methods to gather relevant data on bus stops
- Develop a dashboard to visualise information gathered from the community

Potential Partners

City government, Dishub, public transportation service providers, Grab, Gojek, and Public Transportation Planners

THE LAW ENFORCEMENT DESIGN

For instance, while several reporting channels are available for women victims, these channels tend to lack integration between civil society groups and formal institutions. The **insights** that the group gathered were:

First, victims of violence and criminal are unaware about the existing reporting system provided by the authority. This obstructs them to report. **Second**, existing reporting system is unintegrated with other existing services related to sexual harassments reporting. **Third**, most people, including police officers, are not aware of the types of sexual harassments, thus making the reporting experience difficult for victims.

After getting a better sense of the issue through interviews with users, the group agreed that while regulations are still essential, an intervention with faster impact may be more dire. Thus, they decided to focus on closing the knowledge gap pertaining to reporting channels available.

THE UNDERLYING
ASSUMPTION WITH
THIS DESIGN IS
THE IDEA THAT
REGULATIONS,
CRUCIAL FOR
ENSURING WOMEN'S
SAFETY IN PUBLIC
PLACES, ARE NOT
FUNCTIONING WELL

PROTOTYPE 5 - "TEMAN!"



Teman! is a one-stop reporting application that allows victims of harassment or violence to file a report through various channels, in addition to accessing information about sexual harassment and city-related safety tips. The application is also designed for a bystander to file a report as a witness.

Key Elements

- Features that raise awareness about:
 - the types of sexual harassment
 - the reporting mechanisms (including steps to take and the related stakeholders)
 - City information from the perspectives of women
- Features which enable people to confidentiality file a report with authorities
- Integrated reporting system
- Use of QR codes for user friendly experience (such as placing QR codes on flyers in public areas with an attractive design)

Future Iterations

- Refine the design to improve the user experience for victims, bystanders and other users
- Incorporate features in the app to meet the needs of disabled persons

Potential Partners

P2TP2A (Kementerian Pemberdayaan Perempuan / related Dinas), Unit Perlindungan Perempuan dan Anak Kepolisian Republik Indonesia (Polsek) and NGOs working on issues related to women and children.

How to cite this document:

Pulse Lab Jakarta and UN Women, After Dark: Encouraging Safe Transit for Women Travelling at Night, Pulse Stories 2019.

How to contact us:

Pulse Lab Jakarta: pjl@un.or.id

UN Women: info.indonesia@unwomen.org





PULSE STORIES

After Dark : Encouraging Safe Transit for Women Travelling at Night





