



ELLA SE MUEVE SEGURA

A study on women's personal safety in public transport in three Latin American cities

Title

Ella se mueve segura (ESMS) – A study on women’s personal safety
in public transport in three Latin American cities

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Acknowledgments

This report and toolkit, entitled *Ella se mueve segura*, is the result of an interdisciplinary study of the issue of women's personal security in public transport in three Latin American cities: Quito (Ecuador), Buenos Aires (Argentina) and Santiago (Chile). It brings together published information on the subject and the results of the study, presenting them in a modular format accessible to a wide audience so that they can be applied and used to address this issue in different cities and transport systems.

The research teams are grateful for the financial support provided by the FIA Foundation and CAF – Development Bank of Latin America. Special thanks are due to Angie Palacios from CAF for her inputs and her continued support during this study. Thank you as well to Nicolas Estupiñán from CAF and Sheila Watson of the FIA Foundation for their guidance. In addition, the teams would like to recognize the additional support provided to each of them, especially by Dr. Andrea Gutiérrez, Coordinator of the Transport and Territory Program (Programa Transporte y Territorio) from the Buenos Aires University (UBA) and the Centre for Sustainable Urban Development (CEDEUS). As well as the BRT Centre of Excellence, and the Department of

Transport Engineering and Logistics at the Pontificia Universidad Católica de Chile (Santiago).

Special thanks are also extended to the national ministries and city administrations who engaged in the study and supported the international conferences, in particular to those city officials who have taken this issue forward and are using the outputs to frame their policies and actions on gender. In addition, our thanks goes out to all the women and men who participated in the focus groups, interviews, analytical workshops and seminar series. They all helped to enrich our understanding of this issue and contributed greatly to the conclusions and guidance proposed in this toolkit.

This toolkit has undergone internal and external reviews by all the study teams, their advisory councils, and other experts. The views expressed in this toolkit and the accuracy of its findings are matters for the authors and do not necessarily represent the views of, or confer liability on, the FIA Foundation or CAF and, while care has been taken in the development of this paper, any errors and omissions are the responsibility of the authors.

Presentation

Personal safety and security is just one of the barriers that prevent women from taking advantage of the opportunities offered by the city. Therefore, it is necessary to understand the problem through a comprehensive outlook, in order to effectively work on promoting gender inclusion and equity within the framework of sustainable transport policies.

In the development of this work, CAF - Development Bank of Latin America and FIA Foundation joined efforts and resources to analyze the problem of women's safety in public transport. Throughout the use of mixed methods and its application in three cities of the region, valuable knowledge was created on the urban social realities women experience in the cities under analysis. One of the results of this effort was the promotion of good practice exchanges within the cities of the study, including know-how on the inclusion of the gender perspective in transport and public space planning as well as piloting interventions to improve the security of women in transport.

CAF - Development Bank of Latin America, in its commitment to sustainable development, offers technical and financial support to the region in response to its increasing urban growth, in which transport acts as a decisive enabler for creating

sustainable cities. CAF's regional strategy on sustainable urban mobility has evolved in accordance with new global and regional sector standards that call for user-based planning and design, beyond the mode of transport and/or the infrastructure project. Under this approach, in the last decade, CAF has promoted several urban mobility and infrastructure programs that contribute to improving accessibility in Latin American cities. Transportation planning and mobility with a gender perspective and an inclusion and social equity approach is an integral part of this work.

The FIA Foundation is an independent UK registered charity, which supports an international program of activities promoting road safety, the environment and sustainable mobility, as well as funding motor sport safety research. Our aim is to ensure 'Safe, Clean, Fair and Green' mobility for all, playing our part to ensure a sustainable future. The FIA Foundation Research Paper series seeks to provide interesting insights into current issues, using rigorous data analysis to generate conclusions that are highly relevant to current global and local policy debates



STUDY PARTNERS



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Glossary

City – refers to the geographical location of the city, not the administrative or political boundaries unless specified otherwise (as with Buenos Aires).

Civil Society Organizations (CSOs) – are organizations of active citizens working on specific issues relevant to the common good and/or their collective interests.

Community-based organizations (CBOs) – tend to be larger, more heterogeneous membership groups, such as neighborhood associations, cycling groups, etc.

Gender – In this study, the use of the word ‘gender’ refers to the differences that exist between men and women which distinguish their economic and social roles and responsibilities. It encompasses cultural norms, values and other complex components that constitute differences between men and women especially in relation to class, race, ethnicity, income, education, religion, and geographic location. Gender is used to define how males and females are expected to act, dress and behave, and includes their conduct while travelling and their travel patterns.

Equity and Equality – these terms are more fully defined in Section 1. Equality means providing equal levels of access while equity represents fairness, or what may be termed as the equality of outcomes. This involves factoring in different aspects to respond to the needs and particular disadvantages for certain groups, so everyone starts with the same possibility of success, but may receive different support along the way.

Femicide – is the killing of a woman or girl, in particular by a man, on account of her gender.

Inclusive growth – economic growth that is distributed fairly across society and creates opportunities for all (OECD, 2018).

Insecurity/ Security – *secure* has its roots in the Latin words *securus*, “without care, free from” and *cura*, “care”. Both insecurity and security are hard to define precisely, but most definitions point to them being some form of threat to cherished values. Security is not an independent concept and is always related to individual or societal value systems. There is a distinction between security in an ‘objective sense’ (absence of threats) and in a ‘subjective sense’ (absence of fear) (Wolfers, 1952). In this study, the following definition was used as the base for interpretation: “Security is defined as the state of ‘being free from danger or threat’, thus it is the basic right to be able to travel without fear of being a victim of some form of attack. Public transport security refers to measures taken by a transit operator to ensure that its passengers and employees are protected from intentional criminal or antisocial acts, to protect equipment and belongings, and to ensure other violations do not occur (see safety). As both insecurity and security are based on emotional reactions, they are subjective to the interpretation of individuals (depending largely on the situation, time of day, and personal reactions)” (Wikipedia contributors, 2018).

Harassment – to harass means to annoy or bother (someone) in a constant or repeated fashion, causing alarm and distress. In the context of this study, harassment is any unwanted, unwelcome and uninvited physical or non-physical action that targets women because of their gender, making them uncomfortable or fearful for their own safety and personal security. The actions involved range widely, from leering, staring, and stalking; to verbal innuendoes, unwanted and uninvited touching, and actual sexual assault. It usually takes place in a public place between two strangers (unlike domestic violence). In the majority of cities, harassment in public space is not a criminal offence, unless it is extreme, while theft of property is. It is thought that this is one of the main reasons why harassment is underreported unless it is verging on levels which are considered to be criminal.

Non-governmental organizations (NGOs) – are groups of likeminded people working on specific issues of interest to the group, which may be international, regional or local. Such organizations may be formal and organized to lobby governments/authorities for change (such as Greenpeace) or informal created around a specific action and be of a more temporary nature (such as a food or safety issue).

Poverty – wellbeing is frequently defined by income (UNDP, 2016; UNESCO, 2017). However, for this study, taking income/financial poverty as the sole interpretation of poverty was found to be insufficient, and poverty was considered as multidimensional. This included taking an assets-based approach, where poverty is defined as a deprivation in assets and entitlements essential to life. This includes income and financial poverty, deprivation in terms of assets and entitlements essential to life, and time poverty. Time poverty, in particular, is an issue for many women as they balance their caring and income generating roles. Even if they do not work for payment, family care responsibilities, especially for the very young and the old, generate a time burden, creating a double or triple burden of time, money, and responsibility.

Public transport – in the context of this study public transport is interpreted in its widest sense. In the majority of cases, it refers to mass transit (BRT, metro or subway, suburban rail, city bus services) running on predefined routes to a scheduled timetable and offering transport at a predetermined price, however, it also includes other forms of urban transport such as collective taxis. It does not include personal transportation or the use of a vehicle for a single door-to-door journey.

Safety – means being protected from danger, risk, or injury and it comes from the word in Latin *salvus*, “uninjured, healthy” and is related to *salus*, “good health”. In transport terms safety can be defined as the level of vulnerability/protection to accidental injury (usually involving at least one vehicle causing the injury) (World Bank, 2002). Safety interventions are often associated with technical standards (i.e. are the vehicles roadworthy).

Security – see Insecurity/Security above for definition. As security tends to be subjective and can have different meanings for different people, reflecting a wide range of factors, including social attitudes, values, and standing. For example, men may feel quite secure/safe in a given situation, while women could feel insecure in exactly the same situation.

Sexual harassment – is defined as unwelcome behavior of a sexual nature and includes a request for an act of a sexual nature by a person to another, for him or herself or a third party, in any form that indicates the subordination of that person, with threats or other form of encouragement of a persistent nature and against that person's desire. This includes unwelcome visual, verbal, and physical harassment and aggressive behavior that is of a sexual nature, including small actions up to and including more major assaults. It includes making sexually related comments about parts of a person's body, appearance, or behavior, staring or leering, following, stalking, pointing, and/or rubbing or exposure of sexual organs (usually male). It also includes groping, pinching, slapping, grabbing and/or fondling/rubbing in a sexual way.

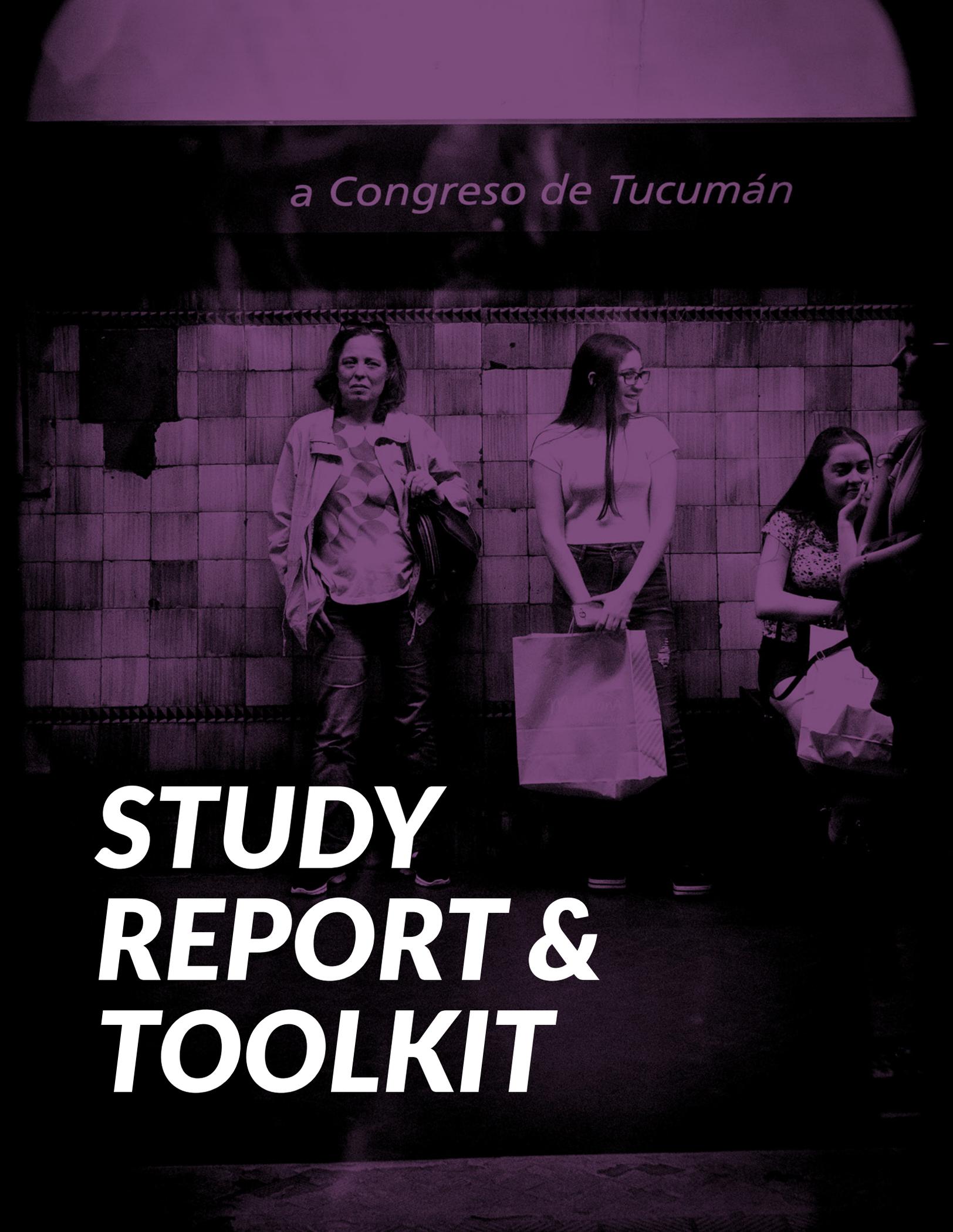
Violence – involves negative behaviors or actions between two or more people, characterized by aggression, which may be unexpected and unplanned. Violence manifests itself both in the form of physical and psychological violence and ranges from physical attacks to verbal insults, bullying, mobbing, and harassment, including sexual and racial harassment.

VAWG – Violence Against Women and Girls is any form of gender-based violence that results in, or is likely to result in, physical, sexual and/or psychological harm or suffering to women and girls, including threats of such acts, coercion or arbitrary deprivation of liberties, in both public and private life (UN General Assembly, 1993)

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a Congreso de Tucumán



**STUDY
REPORT &
TOOLKIT**

Ella se mueve segura (ESMS) – A study on women’s personal security and public transport in three Latin American cities

This report and the accompanying toolkit are the result of a study in three Latin American cities on women’s concerns about their personal security while using public transport. A multidisciplinary team, with the support of the FIA Foundation and CAF – Development Bank of Latin America, conducted research on this issue in Quito, Ecuador; Buenos Aires, Argentina, and Santiago, Chile, using the same methodology. The results therefore are based on comparable data and information.

The document is set out in a modular format, and is expected to be a useful reference for a wide audience including:

- National and local policy and decision-makers;
- International development banks and agencies;
- Public transport authorities and operators (both privately and publicly owned);
- Security agencies; and
- Academics, foundations, civil society and non-governmental groups.

By making the final report and toolkit modular and online, a wide audience can access the information and promote local, practical solutions. The findings are presented in such a way as to align them to the typical planning cycle at city level, but it is expected that each audience can use it as a resource to improve gender aspects of their work.

From the results, it is clear that urban transport is currently not gender neutral, and making it gender-sensitive presents a typical ‘wicked problem’ – one where no one single solution is certain to work in all situations. Therefore, in the conclusions a number of solutions are suggested, which include a combination of bottom up and top down measures to be applied by numerous different actors, who may have differing and in some cases conflicting information, ideas, and/or resources as to what is the best way forward. Based on our findings, we have tried to bring such different perspectives together.

STUDY OBJECTIVES

From its outset, the study's main objective was to research the issue of women's personal security in three different urban situations, using a common methodology to allow comparison of results. Additionally, another objective was to investigate whether insecure transport acts as a constraint to women taking an active role in society, such as taking up education and economic opportunities, and to gather some information on the extent of this. Finally, it aims to build a regional network of researchers and knowledge that could be used to improve the current situation once the study was completed. A mixture of qualitative and quantitative methods has been used and examples of good practices, especially those of interest for national and local policy makers, international development banks and agencies, and public transport operators, have been collected and analyzed.

HOW TO USE THE REPORT AND TOOLKIT

The report and toolkit are available on-line in English and Spanish and are set out in five main sections. The first sections take the format of a report, outlining the context of the study (both internationally and regionally) with global and regional statistics on women. The second part comprises the toolkit, with the practical methodologies, examples and tools that a city planner, transport

Research teams in each city followed the same methodology, which included collecting approximately 800 surveys of public transport users (male and female), holding at least four focus group discussions, the creation of a local advisory council, as well as semi-structured interviews and desk research. The key findings from the cities were compared and contrasted and used as inputs when formulating conclusions and the final toolkit.

Additionally, collective conclusions are put forward to help steer transport planning to be more gender sensitive and how this can be beneficial to sustainable development and inclusive cities.

expert, or decision maker can use for addressing gender and urban transport. In addition, an executive summary can be downloaded that has a comprehensive overview of the study and its findings: <https://www.fiafoundation.org/connect/publications/ella-se-mueve-segura-she-moves-safely> (FIA Foundation, 2017).



Figure 1. Document's structure. Source: Authors.

This document is structured as is indicated in Figure 1. Sections 1–2 set out the context of this study in terms of gender and transport, section 3 provides the methodology used while Sections 4 to 6 are the toolkit. The sections are divided as follows:

- Section 1 describes the global trends on gender inequality and inequity.
- Section 2 gives the regional context of this work and the research approach.
- Section 3 presents the Toolkit with a description of the methodology used in this study.
- Section 4 presents the city diagnostics and key findings of the study.
- Section 5 provides recommendations of actions, indications of potential resources, examples, and tools available.
- The annexes provide sample questionnaires used in this study, further examples of campaigns, good practice, and other actions, as well as early indications of the impact of the study.

A short overview – ‘Quick snapshot’ – is given at the beginning of each section to highlight the key points and messages. Hyperlinks from the table of contents can be used to access specific sections or topics. The city case studies which provide greater detail of the study and results in each city can be downloaded from the CAF and FIA Foundations separately. In addition an Executive Summary is also available for download from the FIA Foundation web site (in English only).



SECTION 1

GLOBAL TRENDS ON GENDER INEQUALITY AND INEQUITY

Section 1. Global trends on gender inequality and inequity

Overview

Gender inequality is not only a pressing moral and social issue but also a critical economic challenge. When women – who account for half the world’s working-age population – do not achieve their full economic potential, regional economic development suffers. Providing safe and equitable access to education and employment is not only a basic human right, it is also part of national commitments to the Sustainable Development Goals and the New Urban Agenda.

The 2030 Agenda for Sustainable Development, the SDGs and the New Urban Agenda set out a policy framework for inclusive urban development. With their adoption, the international community recognizes the importance of accessibility, especially in urban contexts, and gives particular attention to addressing multiple forms of discrimination. This is seen to form a major challenge to achieving accessible, inclusive, and equitable urban development, as well as the full enjoyment of human rights by all.

SDG Target 5.2 has a specific goal on “the elimination of all forms of violence against all women and girls in public and private spheres” (United Nations, 2015). Urban transport is seen as a key component of inclusive cities, and SDG 11.2 states that “By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.”

While this agenda is non-binding, it is expected that governments will report on progress and city efforts can be recognized as part of the national commitments.

Progress on the legal protection of women in the region over the past twenty years has been relatively good, although there is a greater focus on equality rather than equity. A growing number of institutions are helping to report on inequalities

and build the evidence base for change. However legal frameworks alone are insufficient to address the depth and breadth of discrimination against women.

The region is highly urbanized, but there is evidence that women make up a larger percentage of the urban poor and still carry unrealistically high burdens in terms of care and productive activities, compared to men.

Women are not participating in the labor markets and decision-making at national, regional, or local levels as much as they could. This is partly due to their care and reproductive roles, but also because of poor access to jobs and transport.

When women are in work, they tend to be in lower-paid and more part-time/informal jobs, compared to men. They spend more time in unpaid

caring roles than men, even when working. Getting more women out of precarious and unpaid work will improve economic dynamism of the region and help reduce poverty, as well as increase equity. A lack of safe and secure transport reduces economic opportunities, especially for women, reinforcing poverty and increasing inequality and social exclusion. Ensuring that urban transport is safe and secure helps to break down barriers for people, especially women, when accessing education and employment.

Women's participation in transport-related jobs is relatively low¹. More participation of women as employees within the sector, as well as planners, decision-makers, and in other areas, would increase the understanding of the diverse needs that sustainable, integrated transport systems should respond to, and how transport could be more sensitive to female needs.

¹ See examples in SECTION 4 Diagnostic and Main Findings

INTERNATIONAL CONTEXT AND POLITICAL AGENDAS

Globally there are more people living in urban areas than in rural ones, and in Latin America about 80 percent of the population lives in cities, making it the world's most urbanized region in the world (UN Habitat, 2017). Increasingly, the links between urban transport, women, and global development are being studied.

There are a number of global trends bringing women more robustly into policy and decision-making which are highlighted in this section. These include important changes in the political landscape, socio-demographic trends, and the influence of sustainable transport. The international political agenda, especially the Agenda 2030, has several aspects that aim to empower women facing the many challenges presented in the world nowadays.

HUMAN RIGHTS

Freedom of movement, mobility rights or the right to travel is considered to be an essential element of basic human rights (Art 13.1). This includes the right of individuals to travel from place to place within a city or a country. It also includes the right to visit places away from a person's residence in order to take part in economic activities, education, visiting family and friends, and for leisure or other social purposes. A number of global initiatives to end violence against women and girls (VAWG) are now recognized by the majority of governments in Latin America. These include the Inter-American Convention on the Prevention, Punishment

and Eradication of Violence Against Women (Cecillio, 2011), regional and national conventions such as CEDAW (Convention on the Elimination of all forms of Discrimination Against Women) (UN Women, 1979), and agencies such as UN Women. Most governments recognize the need to empower women economically, politically, and socially. Ensuring that women can travel freely and safely is seen as part of these efforts. Additionally, making transport and cities safer for women and girls also benefits many other groups, helping to make cities more inclusive and equitable for all.



Figure 2. The Sustainable Development Goals. Photo credit: UNDP Peru / Mónica Suárez (UNDP, 2017).

SUSTAINABLE DEVELOPMENT GOALS

In 2015, the United Nations replaced the Millennium Development Goals, which had successfully oriented global development efforts, with 17 Sustainable Development Goals (SDG), approved by 193 countries as their working agenda from now until 2030. Although not legally binding, governments are expected to embrace these Goals as their own, creating the institutions and programs necessary to attain them, and to monitor and report on progress.

The SDGs focus on economic, social, and environmental inclusion and, although there is no stand-alone goal for transport, several relate to transport, cities, and inclusive development. Goal 5, for example, refers to women's empowerment, establishing the objective of eliminating discrimination and violence against women and girls, in public and private spheres, including trafficking, and sexual and other types of exploitation. Goal 9 calls for building

resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation; Goal 11 aims to make human settlements of all sizes inclusive, safe, resilient, and sustainable (United Nations, 2015).

Two SDG targets directly relate to the inclusive aspects of sustainable mobility. SDG 9.1 establishes the target of developing quality, reliable, sustainable and resilient infrastructure with a focus on “affordable and equitable access for all”. Urban transport is considered a key component of inclusive cities: SDG 11.2 requires, by 2030, “the provision of access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons”.

Goal 3.6 establishes a specific target for improving road safety, specifically: halving the number of deaths (World Health Organization, 2018) and injuries on roads by 2020. Nearly 1.3 million people die in road crashes each year, on average 3,287 deaths a day, mostly in developing countries (Association for Safe International Road Travel, s/f), and an additional 20–50 million are injured or disabled. The majority of victims are not those who are behind the wheel, rather, they are pedestrian and bicyclists, many of whom are children. The estimated direct economic cost of road crashes is between 2 and 3 % of worldwide GDP and the burden of care falls on squarely women (especially mothers or wives). In many cases, families lose their bread-

Measuring progress on the SDG Goals

Each SDG has a set of targets and indicators to guide actions and to ensure that “no one is left behind”. Access for all through sustainable mobility is seen as crucial, but the exact definition of ‘access’ in this context can be tricky. One working definition, which was found useful in this and other similar studies, defines access as “*the average opportunity which residents of the area possess to take*

winner and women often have to care for those that have been injured. This gender aspect is frequently forgotten.

Gender is integral to achieving many of the Sustainable Development Goals, and many targets establish women’s equality and empowerment as both an objective and an integral part of solutions. Women, society as a whole, and governments all have critical roles if these objectives are to become a reality. The first UN High Level Panel on Women’s Empowerment delivered a report (March 2017) entitled ‘*Leave No One Behind: Taking action for Transformational Change on Women’s Economic Empowerment*’ (UN Secretary-General’s High Panel, 2017).

part in a particular activity or set of activities” (Wachs & Kumagai, 1973). This clarifies that the mere existence of opportunities is not enough; people of all ages, gender and abilities must be able to access them, in other words, there are no barriers to them doing this: neither physical nor emotional, cognitive, nor economic.

The current SDG framework tracks progress in transport using a number of indicators of universal access (Sustainable Mobility4All, 2017). Measuring accessibility in transport is not easy and differs depending on whether access is viewed through a *spatial/distance or time lens* (Geurs, Dentinho, & Patuelli, 2016), or a *social exclusion/justice lens* (Schwanen et al., 2015). Mobility or efficiency-based measures, such as reduced travel times and cost-benefit analysis (CBA), are widely used by planners, along with other quantitative models, such as the Social Accounting Matrix², Spatial Impact Analysis (Brockner, Korzhenevych, & Schurmann, 2010; Haynes, 2017), and the Index of Multiple Deprivation (Smith et al., 2015)³.

For cities with more than 500,000 people, the ITDP Rapid Transit to Resident Ratio (Institute for Transportation and Development Policy, 2016) compares a country's urban population with the length of rapid transit lines (suburban rail, metro, and BRT) that serve them. UNEP has developed an Urban Poor Accessibility Tool (United Nations Environment Programme, 2017) that allows transport planners and public authorities to map and assess travel patterns (bus routes, walking and cycling paths) of low-income communities at a minimum cost, using a limited number of people and resources. These give good indications of access and allow countries to track progress over time.

Box 1: People Near Transit ratio. An example of an urban indicator for linking transport with accessibility (ITDP Brazil, 2017)

The Institute for Transportation and Development Policy (ITDP) researched the People Near Transit (PNT) metric in Brazilian cities and examined different income brackets' accessibility to rapid transit. The research encompassed 900 transit stations along approximately 1,000 kilometers of rapid transit lines in ten metropolitan areas, where more than 60 million people live, about one-third of Brazil's population. Even in metropolitan areas where there is good overall population coverage, transit stations remain concentrated near high-income populations. These findings underline the importance of improving transit access for low-income people and the need to pursue more socially inclusive development in Brazil.

In metropolitan Rio de Janeiro, with over 12 million people, between 2010 and 2015, the city increased its rapid transit network by 91 kilometers of BRT and expanded the metro by 1.2km in preparation for the 2014 FIFA World Cup and the 2016 Olympic Games. A new metro line and downtown tram network opened in the second half of 2016. With these improvements, Rio showed the best population coverage by rapid transit at both the city (52%) and metropolitan (31%) levels in Brazil.

To improve this metric, ITDP recommends including an overlay of income levels per area covered.

Accessibility mapping using Smart Phone technology shows promise, but these approaches are flawed in how they treat the gender dimension of travel unless this aspect is built into the data collection (including gender and trip purpose).

² A social accounting matrix (SAM) can be defined as an organized matrix representation of all transactions and transfers between different production activities, factors of production, and institutions (households, corporate sector, and government) within the economy and with respect to the rest of the world.

³ The Index of Multiple Deprivation 2015 (IMD 2015) combines a number of indicators, chosen to cover a range of economic, social and housing issues.

THE NEW URBAN AGENDA

At the Habitat III Conference held in Quito, Ecuador in October 2016, governments established a new urban agenda (NUA), which identifies the urban challenges to be tackled over the next 20 years. Making cities accessible and inclusive, and providing equal access to all services, including transport, were widely accepted as overarching objectives. The ‘right to the city’, an important paradigm, was included for the first time in a UN declaration, which strengthens the fight for gender-responsive public services and the provision of urban mobility and public transport as key components.

“We will promote access for all to safe, age – and gender responsive, affordable accessible and sustainable urban mobility and land and sea transport systems, enabling meaningful participation in social and economic activities in cities and human settlements, by integrating transport and mobility plans into overall urban and territorial plans and promoting a wide range of transport and mobility options”

— (UNITED NATIONS, 2016)

INTERNATIONAL SUSTAINABLE TRANSPORT INITIATIVES

Transport has an undeniable impact on the three main aspects of sustainable development: protection of the environment, equitable economic development, and social integration. There are numerous initiatives to reflect individual and joint efforts by the sustainable transport community to address global aspects of transport.

However, such initiatives focus on reducing environmental impacts. For instance, the 21 Transport Commitments to Global Climate Change led by the Sustainable Low Carbon Transport Partnership (Partnership on Sustainable Low Carbon Transport,

2015) and, more recently, Sustainable Mobility for All (SuM4All). Most commitments are designed to address climate change and environmental impacts, with many focusing on the technical, rather than social aspects of sustainable transport. The decade of road safety, the SDG goal on road safety, and the work of the FIA Foundation in this area address the social impact of traffic related crashes and deaths. SUM4All also pays attention to social aspects, including gender, in its Universal Access component underpinning the concept that sustainable transport should “leave no one behind.”

GENDER DIMENSION OF INTERNATIONAL AND REGIONAL POLICY

International attention to gender issues is not new. The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) was approved by the United Nations General Assembly in 1979. It establishes the rights of women and upholds

the principle of equality among women and men. By adopting the convention, countries commit to creating the necessary institutions and to implement measures to eliminate all forms of discrimination against women. Originally ratified by all except two

Latin American countries in 1978, it was updated in 2007 and now all countries have ratified it.

The World Conference on Human Rights (1993) ended an era in which human rights were believed to be gender neutral. The Beijing Platform of Action (1995), a key outcome of the UN conference on women's status around the world, saw 189 countries agree to making improvements in 12 areas, ranging from poverty and human rights to health and education. Ending violence against women is considered a critical element. In 2013, the United Nations Commission for the Status of Women (CSW57) identified various forms of sexual violence against women and girls (SVAWG) in public spaces as a distinct area of concern and called on governments to prevent it.

In Latin America, the gender equality agenda has gained strength from converging national agendas at every scale, particularly with social and feminist movements demanding equality and non-discrimination, and the inclusion of CEDAW principles in national legislation.

Together, these agreements constitute a framework of goals by which to build democratic societies. The region is moving swiftly away from the dictatorships and armed conflicts of recent decades, which damaged democratic institutions and undermined the rule of law, and towards greater democratization and respect for human rights. This is particularly true of Argentina and Chile, which recovered their democracies relatively recently (Argentina, 1983; Chile, 1990).

There is an ongoing process of building a regional gender agenda(s) and developing breadth and depth in thematic and programmatic measures and actions, especially as government commitments provide important support for national initiatives. All of the region's countries have demonstrated their willingness to fulfil international and regional commitments, implement initiatives aimed at consolidating and strengthening democracy, and to build regional gender agendas. These are expressed in gender equality and equity plans. Ultimately, all seek to create conditions in which citizens, male and female, can fully exercise their social, economic, and cultural rights. Most recently, Women's ministers and top gender officials from 23 countries in Latin America and the Caribbean concluded the Regional Consultations leading up to the 61st session of the United Nations Commission on the Status of Women (CSW61), calling for decisive measures to promote women's economic empowerment (UN Women, 2017).

This trend is also reflected elsewhere in the world. The European Union's Lisbon Strategy (European Council, 2000), endorsed by the European Council (March 2000) set out the 10-year Lisbon Strategy for Growth and Employment, which includes key gender equality measures and objectives. European institutions revised this strategy in 2005, and many gender related aspects were then mainstreamed within general measures and objectives.

The reality, however, is that despite new policy frameworks, real progress on women's integration, especially into the labor market and key decision-making positions, is painfully slow.

EQUALITY AND EQUITY

Equality and equity are similar but require different strategies. Equality means treating everyone the same and aims to promote fairness, but it can only work if everyone starts from the same place and needs the same help.

On the other hand, equity represents fairness, or what may be termed as the equality of outcomes. This involves factoring in different aspects to respond to the needs and particular disadvantages of certain groups, so everyone starts with the same chances of success, but may receive different support along the way. Equity, therefore, includes adjusting policies to offset any initial (perceived or real) disadvantages arising from age, race, social standing, gender, and/or physical or mental abilities, so that everyone is able to have the same access or benefits. From this perspective, some groups need additional services and programs – rather than just a standard set provided for the majority – to offset their disadvantages. For ex-

ample, in theory, everyone can participate politically, but where women are the main providers of essential social care, it is difficult for them to participate as candidates, ministers, or senior public administrators. They should also enjoy equal rights to participate in all aspects of society, but in reality, this also means adjusting the privileges and priorities that society assigns to men and women, so that they are able to do so. Thus, equity is a more genuine demand, as it allows for redistributing care responsibilities more equally, as occurs in countries such as Denmark with strong laws regarding parental and maternal leave. So far, many national policies focus on equality (such as non-discrimination in employment) rather than equity, and few include transport. However, in order to achieve the high-level political aims of the SDGs and the NUA, it is extremely important for cities to implement more inclusive policies, particularly in respect to public space, roads, and public transport.

OVERVIEW OF LEGAL PROTECTION OF WOMEN (VAWG)

Despite the significant progress on legal protection, violence against women and girls is still widespread and is recognized as being a major barrier to the advancement of women. Fear of violence within the home, by family and non-family members, and in public space, constrains the participation of girls and women in education, work, and other aspects of human development. In particular, if cities are to fulfil their potential for generating economic growth, they must be inclusive; and for women to fully exercise their right to the city, they must become free of the patriarchal social structures that still prevail at almost every level of society.

Discrimination takes many forms, as illustrated in Figure 3.

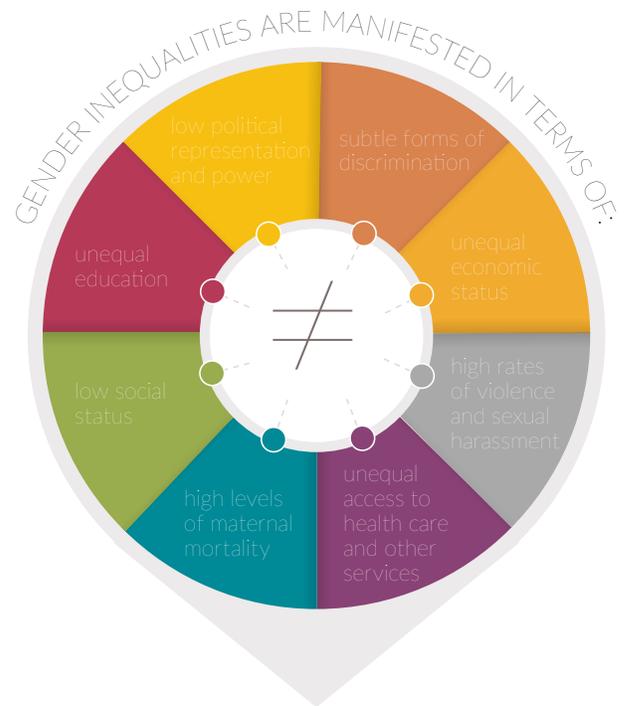


Figure 3. Gender based inequalities. Source: (UNDP, 2015).

RESPONDING TO DISCRIMINATION AGAINST WOMEN

Legal restrictions still impede women's rights in many areas of their lives, which directly affects their participation in the workforce. Globally, 155 economies have at least one law giving women fewer economic rights than men; this includes 100 countries where women are not allowed to perform the same jobs as men (OXFAM International, 2017). In addition, 46 countries have no laws against domestic violence, thus supporting the view that men can decide how women may behave and especially if they can work outside the home.

Equality between men and women as part of a state's responsibility has been enacted using three types of policy: those that assert gender equality under the law, affirmative (positive) action, and gender mainstreaming. Tackling the problems specific to women, which arise from gender inequality through public policy development, needs to go beyond equality *per se*, and focus on achieving the full exercise of human rights or agency. National and/or city governance should be strengthened to eliminate discrimination nationally and locally, in order to achieve equitable outcomes.

Standards related to the human rights of women within the context of the inter-American system of human rights have been gradually gathering steam since 1994, when the Convention of Belém do Pará (the Inter-American Convention on the Prevention, Punishment and the Eradication of Violence Against Women) was adopted. It is the most ratified instrument in the region on human rights and is still the only multilateral treaty in the world that centers exclusively on the problem of violence against women⁴ (Organization of American States, 1994). It reached an important turning point in 2009, when the Inter-American Court of Human Rights issued its first comprehensive ruling on women's rights (Celorio, 2011), after examining a significant number of violations under the American Convention

on Human Rights and the Convention of Belém do Pará. The Montreal (2002) and Bogotá (2004) Declarations on Women's Safety also provide useful roadmaps for urban governance regarding women's safety.

The existence of a strong regional human rights system, with institutions that have jurisdiction over states, is seen to play a fundamental role in eliminating all types of gender-based violence. The Inter-American System of Human Rights has the authority to hold states in the region responsible for cases of gender violence, and provides victims with an independent mechanism for demanding that their rights be upheld (Evidence and Lessons from Latin America (ELLA), 2014).

⁴ The Convention of Belem do Pará adopted in 1994 has been ratified by thirty-two member states of the Organization of American States.

OVERVIEW OF LEGAL PROTECTION FOR WOMEN IN THE STUDY COUNTRIES: ARGENTINA, CHILE AND ECUADOR

A rapid review of the legal frameworks on the protection of women in the countries taking part in this study revealed some striking differences. Ecuador, for example, has elevated the recognition of women's rights to constitutional status. Article 22.6 states that *“Women enjoy equal rights and opportunities with men in all orders of public, private, and family life, especially in respect of civil, political, social and cultural matters. The State shall adopt the necessary measures to ensure the effective exercise of this right and to eliminate all discrimination”* (Asamblea Nacional Constituyente, 2008). In 1997, Ecuador proposed including policies and goals based on the priorities approved during the Fourth World Conference on Women in Beijing in 1995 (UN Women, 1995) into the National Development Plan, aimed at diminishing poverty, eliminating violence against women, and increasing the participation of women in development, political life, and decision-making.

However, progress is slow, there are many loopholes and gaps, and violence against women remains widespread. Argentina has a particularly poor record for femicide, ranking third worst in the region out of 17 countries (after El Salvador and Honduras), with 254 women murdered per 100,000 female population. Ecuador (72) and Chile (34) post seriously high rates too (Economic Commission for Latin America and the Caribbean (ECLAC), 2015). These differences seem to reflect underreporting, which is considered to be fairly widespread, as the

reporting mechanisms and definitions of femicide are not universal. Femicide is not easy to prove and some incidents may be wrongly put into the category of homicide, when in fact they should be classified as femicide.

In 2014 in Ecuador there were 73 femicides (83 in 2016), although there is little standardization of what constitutes a femicide in the Ecuadorian Criminal Code. Regarding violence more generally, the Gender Violence Survey conducted by INEC (INEC, 2012c) showed that nationally 6 out of 10 women over the age of 15 have been victims of violence.

Under, or mis-reporting, is also an issue for harassment and violence in the public realm. These issues are currently widely underreported (based on the lack of available statistics), and therefore do not feature in many statistics used for transport and city planning (FIA Foundation, 2016)⁵. A hypothesis attempting to explain this is put forward in this document, based on the experience gathered in this study.

Quito has seen recent increases associated with the measures put in place (see Section 4 Diagnostic and Main Findings and Section 5 Taking action – Stakeholders, Solutions & Sharing). However, nationally, no specific institution handles women's affairs, although the Ministry of Social Inclusion leads on programs to tackle domestic violence. There are

⁵ Confirmed in Safe and Sound scoping studies as part of their flagship Safe Cities program <http://www.unwomen.org/en/what-we-do/ending-violence-against-women/creating-safe-public-spaces>.

also gaps locally, as Quito’s municipal government, which manages transit and mobility in the city, has no unit dedicated to women’s safety. The *Unidad Patronato Municipal San José* (a charity run by the municipality) implements local social policies and has recently introduced a number of programs to address violence and harassment of women in public spaces and on public transport.

In Santiago (Chile), the *Observatorio contra el Acoso Callejero* (an Observatory against harassment in public space, OCAC) led the way and today several ministries have specific gender units. In addition, the Ministry for Women and Gender Equity recently included urban and transport issues on its gender equity agenda.

In Argentina, two key laws frame efforts to improve the safety of women in transport, including it as part of the public space where women conduct their daily activities. National Law 26.485 (in effect since 2010) focuses on eradicating all violence against women and eliminating discrimination, to guarantee their right to live without fear of violence. Article 4 defines violence against women as “any form of conduct, action, and omission that is direct or indirect in both public and private environments, based on an unequal relationship of power that affects their life, freedom, physical integrity, dignity, and personal safety”. The integral nature of this law encourages development of public policies to address diverse forms of violence and its comprehensiveness makes it easier to apply.

Box 2: World Economic Forum - The Chile Gender Parity Task Force for national impact

Fourteen years ago, the World Economic Forum (WEF) took up the issue of gender parity and reported annually on global gender gaps, creating special task forces in Chile and, more recently, in Argentina. Senior public, private sector, and civil society leaders have come together to accelerate progress on economic gender parity across Chile and implement a collaborative model of action, with support from public and private sectors.

Supported by the Inter-American Development Bank and the executive secretariat of Comunidad Mujer, and with support from President Michelle Bachelet, the leadership of the Task Force has designed an action plan focused on four key areas. Their goal is to improve gender gap indicators within three years. No small task, as Chile ranks 70th in 144 countries in the gender gap report, and this falls further if participation in labor market and economic opportunities are included. The Task Force focuses on:

- Increasing the participation of women in the labor market;
- Increasing numbers of female managers and leaders;
- Narrowing the gender wage gap; and
- Shifting mindsets and stereotypes on gender.

Within each of these four areas, the Task Force has identified specific measures to create an impact, such as implementation of a gender-based approach in corporate human resources policies, a proposed amendment to the law on equal pay between men and women, and agreements with head hunters to increase the presence of women in senior management and board level positions. To deliver change, the Task Force is gathering commitments to action from more than 70 companies—many of which come from high-growth sectors crucial to Chile’s future economic growth—that have signed up to be members. Impact is already being felt, for example, through a recent government agreement with the private sector to support management and skills training for aspiring female managers. The model is now being promoted for adoption in other countries (Chavarría, 2017).

The *Consejo Nacional de la Mujer* (National Women’s Council, or CNM), created in 1992, has the mandate to articulate and coordinate actions to comply with this norm, and to design public policies. In 2017, it became the *Instituto Nacional de Mujeres* (National Women’s Institute), which reports to the Secretary of State, and has been developing the country’s first national action plan to eradicate violence against women (2017–2019). There is also progress at local level. In Buenos Aires Province, the Under-Secretariat for Gender and Sexual Diversity is within the Secretariat for Human Rights, while in Buenos Aires City, the *Dirección General de Mujeres* (General Unit of Women) comes under the Under-Secretariat for Social Welfare, which in turn belongs to the Ministry of Habitat and Human Development. Both jurisdictions – Buenos Aires City and Buenos Aires Province – have specific departments dedicated to the promotion of equal opportunities for women and men.

Within the context of this study, it is important to note that since 2015, the City of Buenos Aires has had specific legislation against street harassment (Law 5.306) to help eradicate this type of violence. In December 2016, Law 5742 on the prevention of sexual harassment in public spaces defined sexual harassment and punishments for those responsible. The law includes both verbal and physical harassment, intimidation, and abuse that may affect a person’s dignity, freedom, free transit, and the right to physical or moral integrity motivated by gender, identity, and/or sexual orientation.

However, despite legal progress, there is much still to do at national, regional, and local levels. While

important, these institutional changes are insufficient to guarantee women’s safety in public space or on transport, as noted by an expert on gender and law, interviewed for this study. Her study of the legal frameworks in Latin America (Gherardi, 2016) found that despite relatively robust legislation and progress on domestic violence, harassment in general, in public space in particular, is not dealt with effectively. In her view, the combined effects of a large number of small, seemingly inconsequential acts of harassment form the basis for more serious criminal acts against women. From her perspective and that of others consulted for this study, what is really missing is better interpretation and more robust implementation of these laws.

The study conducted in Quito, Santiago, and Buenos Aires showed harassment on public transport to be a serious problem, producing emotional distress to many women. It has been occurring for a long time, as shown by the older women interviewed in the survey and focus groups sharing their proven strategies for coping with it. Nevertheless, it is only recently being recognized as an issue that merits dedicated resources and attention. As mentioned, in most cities and countries, harassment is not currently typified as a crime and there is no clear procedure for reporting, responding, or bringing the perpetrator to justice, making it widely underreported and difficult to track in statistics. The findings of this study provide guidance to cities, institutions and civil society on the appropriate ways to adequately respond to sexual harassment (see SECTION 4 Diagnostic and Main Findings) and help to make urban transport more gender inclusive.

INSTITUTIONAL DEVELOPMENTS

In Latin America, a growing number of national ministries and observatories have the mandate to improve gender parity and equity in the region. At the ECLAC⁶ (CEPAL) Regional Conference on Women in Latin America and the Caribbean held in Quito in 2007, governments recognized that parity is:

“one of the key driving forces of democracy, that its aim is to achieve equality in the exercise of power, in decision-making, in mechanisms of social and political participation and representation, in diverse types of family relations, and in social, economic, political and cultural relations, and that it constitutes a goal for the eradication of women’s structural exclusion”.

—(UN & CEPAL, 2007, p. 3).

ECLAC member states requested the creation of a Gender Equality Observatory for Latin America and the Caribbean (Economic Commission for Latin America and the Caribbean (ECLAC), 2015) to coordinate the efforts of United Nations agencies, development banks, and national bodies responsible for the advancement of women and for maintaining national statistics in each of the region’s countries. The purpose of this initiative is to measure progress toward fulfilment of international gender-equity goals and increase their visibility. It includes a set of strategic gender-equity related indicators and analytical tools for policymaking; and delivers regular reports on advances in key areas such as:

- Paid and unpaid work, time use, and poverty;
- Access to decision-making and political representation;
- Gender violence;
- Health and reproductive rights.

A preparatory meeting, the 53^a *Mesa Directiva de la Conferencia Regional sobre la Mujer de América Latina y el Caribe* (53rd General Committee of the Regional Conference on Women of Latin America and Caribbean) was held in Santiago, Chile in January 2016 to discuss the 2030 Development Agenda and the objectives of Sustainable Development related to gender equity and the autonomy of women. Michelle Bachelet, President of Chile and former Director of UN Women, highlighted the need to implement specific public policies in order to follow up on inequalities that affect women in the region, and has also stressed the importance of the role of women to achieve the goals of sustainable development. Delegates approved the creation of a strategy for the execution of the commitments already assumed by the participating governments. The advances of the region were showcased at the XIII Regional Conference on Women of Latin America and the Caribbean, which took place in October 2016 in Montevideo and the Montevideo Strategy for Implementation of the Regional Gender Agenda within the Sustainable Development Framework by 2030 (CEPAL, 2017).

⁶ ECLAC /CEPAL – UN Economic Commission for Latin America and the Caribbean

TRANSPORT, WOMEN AND POVERTY

Income inequality affects many regions around the world, with 8% of the world's population living on less than US\$ 10 per day. There is a strong correlation between poverty, gender, and urban mobility. Transport fulfils travel needs but also influences access to employment and other services. Women are often in the poorer quintiles of society. The poor usually rely more on all forms of public transport (formal and informal⁷), and are more likely to suffer from unregulated fare structures. Thus, those on low incomes have to spend more time and money to meet basic mobility needs, which in turn reduces their ability to accumulate assets that could lift them out of poverty.

Transport plays a significant role in ameliorating or exacerbating the life conditions of women, particularly those who are poor (United Nations Statistics Division, 2015). Urban poverty, and its associated lack of infrastructure and services, also impacts how easily and quickly women can perform their daily domestic and care activities. If the transport connections are poor, trips for shopping, gathering water, or ensuring children get to school take up disproportionate amounts of time and energy. As women (of all ages), rather than men, are the primary undertakers of these duties, they are disproportionately affected by poor transport, suffering not only financial poverty, but time poverty as well. This is sometimes referred to as the double or triple burden carried by women, as they juggle care and reproductive roles with economic and income generating activities.

According to the UN, an increasing number of the urban poor are women (United Nations Statistics Division, 2015). Many poor urban women engage in informal, part-time activities to boost household incomes, often from a very young age. As a result, women's workloads for paid and non-paid activities are generally much higher than men's, furthering this notion of a double or triple burden of family care, household, and income.

Within the Latin American context of the past twenty or so years, Chile has been one of the countries whose economy has enjoyed swift growth. Although this has led to a considerable reduction in poverty, rapid growth often increases inequalities. According to data from the World Bank, between 2000 and 2015, the population considered poor was reduced from 26% to 7.9% (The World Bank, 2018). In spite of the above, there is still deep economic inequality in Chile, as demonstrated by its GINI coefficient, which places it alongside Turkey and Mexico (Index Mundi, s/f).

In the case of Argentina, a recent study by the World Bank in one of the low-income districts of Buenos Aires (Alves, Raffo, Gonzalez, & World Bank, 2018) called *Barrio 31*, near the center of the city, confirmed that poor women undertook most of the care duties within the family. Their daily mobility is conditioned by the location of centers of activity associated with education, health, and sports, and whether these activities are located within this dis-

⁷ In the context of this study 'formal' public transport refers to mass transit while 'informal' refers to the many types of service that may be supplied by the private sector in an organised, but are usually in response to demand. We understand that this is a crude categorization

strict or not. In this case, which can be considered to be representative of similar informal and very low-income districts of many cities in the region, public transport users (which are mainly women) must walk long distances to access bus stops, which are frequently located on the edge of the community⁸. As this is not possible after dark, for security reasons, they may only move about in daylight, unless unaccompanied by men. These become constraints to access employment, health and education with their potential for social advance-

ment, but additionally, it also affects their children's participation (especially girls) in activities that promote well-being.

A person's level of mobility determines the opportunities that he or she can access, particularly when it comes to education, health, markets, and employment. As shown below, women are also more likely to be unemployed or in informal precarious jobs.

Women's participation in labor markets



Figure 4. Women's participation in the labor market in Latin America. Source: (Granada et al., 2016).

Despite women making up around half the world's population, they only contribute 37% of global GDP and only 52% of women participate in the global workforce, compared to 78% of men. This means that there are 700 million fewer women than men are in paid work, and little progress has been made to reduce this gap over the past ten years (up to 2015). They are also more likely to work in the informal sector, without social protection or labor rights (Ulrichs, 2016).

In Latin America, participation of women in labor markets is even lower than the global averages, as only 50.3% of women are reported as active in economic activities (compared to 78.9% of men). This disparity is due, in part, to the way GDP calculations are made as women have fewer paid full-time jobs, more part-time contracts and informal jobs and over 80% of the world's domestic workers are women. Few of these jobs are counted in na-

⁸ As the transport providers will not provide stops inside such districts due to fears for their vehicles and personnel, and the local unlawfulness.

tional accounts. In Ecuador, women comprise only 45.4% of the Economically Active Population (EAP) nationally but represent 51.8% of the working age population of the city of Quito (INEC, 2010a).

The most recent report (using the latest available data, 2014) on the average time spent on paid and unpaid work in 10 Latin America cities (for the population aged 15 and over, by sex and by country), revealed that women work longer hours than men. In Argentina, women work an average of 68.6 hours per week compared to men (58.6) and in Ecuador this is, respectively, 61 and 54.2 hours 54.2

hours⁹. When we consider only paid employment, women in Argentina work an average of 15.6 hours per week compared to men (43 hours); however, they spend 34 hours in unpaid work, compared to 17.6 hours for men. In Ecuador, women spend 20.7 hours on paid work and 40 hours on unpaid work, while men spend 44 and 10.2 hours, respectively (Economic Commission for Latin America and the Caribbean (ECLAC), 2015). The cities included in this analysis are: Buenos Aires (Argentina), La Paz (Bolivia), Fortaleza (Brazil), San Pablo (Brazil), Bogotá (Colombia), Quito (Ecuador), Mexico City, Lima (Peru) and Montevideo (Uruguay).

	 Participation in global labor markets	 Participation in global labor markets	 World ranking
Argentina	55%	82%	100
Ecuador	58%	86%	99
Chile	55%	80%	98

Figure 5. Women's participation in global labor markets. Source: Authors, based on Mckinsey Global Institute (2014), for 145 countries

⁹ Chile was not included in the 10 countries

The McKinsey Global Institute has estimated that if women were to play an equal role in world labor markets, USD 28 trillion could be added to the global economy (Woetzel et al., 2015). By mapping 15 gender-equality indicators (in four categories: equality in work, essential services and enablers of economic opportunity, legal protection and political voice, and physical security and autonomy) in 95 countries, they found that 40 countries have high or extremely high levels of gender inequality on at least half of the indicators. Using these indicators, they found that in Chile and Argentina around 55% of women participate in the formal workforce and 58% in Ecuador.

Some consider that enabling women and girls to enter the formal job markets represents the sin-

gle biggest opportunity for human development and economic growth. CAF estimates that improving women's participation in the work force in the Latin American could add an additional 34% to the region's GDP (CAF, 2017). They note that, had it not been for the inclusion of 70 million women in the labor market in the last 20 years, the growth of Latin American economies (the so called 'economic miracle'), with average growth rates of around 5% (between 2002 and 2008) and drastically reduced extreme poverty levels would not have been possible.

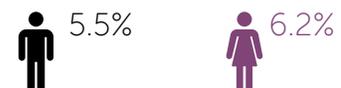
Women all over the world are not only in more precarious employment (part time and informal), but are often the first to become unemployed, as shown in Figure 6.

Women are more likely to be unemployed than men worldwide

Global unemployment rate



Gender breakdown



Youth unemployment rate



Gender breakdown



Figure 6. Women are more likely than men to be unemployed. Source:(UN Women, 2017)

In Quito, according to INEC, only 25.5% of women are insured under social security, while 67.5% do not contribute at all to it, reflecting that they are

Gender pay inequalities

It is well documented that women are often paid less than men for the same job. The World Economic Forum (WEF) published their Global Gender Gap report in 2016 (World Economic Forum, 2016), which shows the situation has worsened during 2016 and that economic gender equality will not be achieved for another 170 years. According to the report, progress on pay parity is at best stalling or even reverting. Often, when economies encounter problems in growth, women are the first to leave labor markets or to become unemployed. It is certainly worrying that there is no significant progress, and a move backwards should be unacceptable.

Women and care roles

In Ecuador, it is estimated that women spent four times more than men on care related activities. This is especially the case for married women. The INEC Time Use Survey (INEC, 2012b) confirmed this, as it showed that women spend 40% more of their time on unpaid work compared to men.

A similar picture can be found in Argentina, where women spend on average 3 hours more than men per day on care-related tasks and carry the burden of family duties. Only 1 in 5 men participate in domestic chores and child-care activities (INDEC, 2014).

more often in low paid and informal jobs (without contracts), or may be unemployed (INEC, 2010b).

The situation in Latin America is not different. In Chile, for example, in recent years, while women have increased their participation in the labor market, they still lag well behind men, with salary differences reaching up to 30%.

In all three countries, women earn on average 22–27% less than men for similar jobs. As cities provide a large proportion of national GDP, local and national economies would benefit greatly if more women were able to enter the formal job market. It is not easy to set the baseline on the numbers of women in the labor markets in the region. However, the study teams concluded that exact figures were not necessary, as all indications pointed to low, and possibly falling, rates of insertion.

The evidence presented shows that the provision of safe, secure, efficient, and affordable transport for women to be able to access education, and consequently, better-paid jobs and more secure working conditions is crucial. There would be several positive impacts for families: less domestic violence related to financial stress; greater spending on better nutrition and education for children, who in turn are able to learn better and stay in school longer, as well as greater spending on the women's own health and well-being. Thus, giving women better access to education and job opportunities not only helps fami-

lies to uplift from poverty, but, as stated by the IMF, (International Monetary Fund) “Closing gender gaps benefits countries as a whole’, and not just the lives of women and girls” (Revenge & Shetty, 2012, p. 40).

Box 3: Key findings from the study relating security to employment and empowerment

Women should enjoy the right to move safely in the city to the same degree as men, but currently their fear of harassment on public transport limits their ability to access opportunities that cities offer, especially education, jobs and health. Typically, they will restrain their travel to what they can access in the neighborhood where they live, if the transport offered is considered unsafe for them to use.

Women’s employment in transport

In all countries, transport provides attractive and promising employment opportunities, both in the formal and informal sector, but these are almost entirely filled by men. Transport service provision and transport-related construction projects frequently provide critical sources of employment for the urban poor. Yet these jobs are highly gendered and unequal. Currently, detailed and accurate statistics on the employment of women in the transport sector are hard to find, especially for specific transport modes. Where such data is available, it indicates very low participation by women. This is especially well illustrated in the European Union (EU), where progress is slow, despite continuous attempts over the past two decades to promote

A working day for men and women

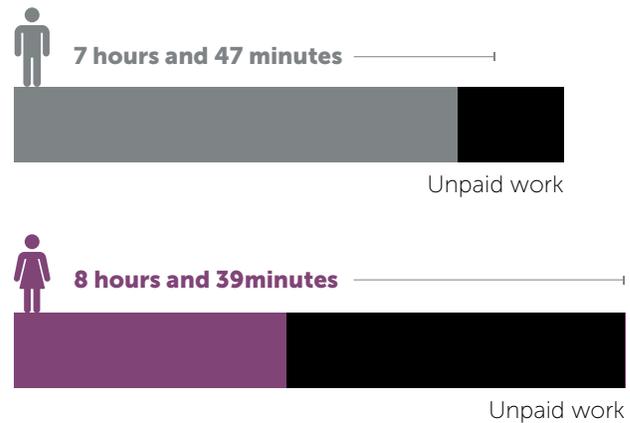


Figure 7. Women work a longer day than men with more unpaid care related activities. Source: (World Economic Forum, 2016).

equal opportunities between women and men. Transport lags behind other sectors –according to the ILOSTAT, only 21% of the labor force in transport services is female (based on 2006 figures), compared to 44% in all services in EU 27 (International Labour Organization, 2013)¹⁰.

For men, transport can be a promising sector to join, especially as drivers, service agents or in construction jobs. However, few women have access to these jobs, due to stereotypes and discrimination. Indeed, in many parts of the world, becoming a minibus or taxi driver, ticket collector, or crew is one of the first jobs many men find when they transition from rural to urban areas.

¹⁰ EU27 = number of countries within Europe included in this study.

Improving the gender balance of employment in all of the transport sectors, and creating more opportunities for women to work and participate in the

Women working in transport in the region

As transport jobs are designed for, and remain predominantly male focused, the few women who are working in the transport sector in the region are usually in lower paid and lower status jobs (such as cleaning and ticket collecting) with less, if any, opportunities for career development. There are a few examples of women in management and/or decision-making positions, but these are scarce. It is also not clear if the numbers are growing. During the period of the study, the Administrator of Quito's Municipal Government (who holds the responsibility for transport) and the Sub-secretary of Sustainable Mobility in Buenos Aires were female, both of whom participated in this study. At the end of the study, a female Minister of Transport for Chile, the second woman to hold this position in the country, was announced (January 2018). This is certainly encouraging, but they are still exceptions and the majority of transport decisions at political levels are still taken by men.

Women are also making some in-roads to work¹¹ in transport delivery and operation in urban transport. In a growing number of cities, they can be found driving buses, subways, regular train and trams (Project Wise, s/f)¹². Both Buenos Aires and Santiago have made efforts to encourage women to

design, planning, implementation, and operations of the sector would go far to help social integration and advancement.

join the sector – in Buenos Aires, women have been successfully recruited as traffic agents, metro drivers (20%), and there is one bus line that has only women bus drivers (see Section 4 on examples). Santiago has a program to encourage private bus operators (with franchised routes) to hire women drivers, and there is an annual prize for the best female bus driver, who is chosen by passengers. This prize is considered a success, not only because it recognizes a woman in such a position, but also because it increases the general (female) public's awareness of the possibility of applying to become a bus driver.

However, gender based occupational segregation is still strong. For instance, the Argentinian national rail services simply do not permit women to become train conductors. .

It is also important to recognize that, currently, the transport sector is neither easy to enter nor attractive as an employment opportunity for women. Operations typically run on shifts and schedules that often do not suit most women, and part-time work is not frequently available. Gender-segregated infrastructure such as bathrooms, changing rooms and rest facilities are often not widely available or

¹¹ There are also examples of subsectors, such as in mining, engaging a growing number of women drivers, where they have proved themselves to be safer and more careful than men.

¹² In some European networks which provide metro (subway), tramway and bus services, there are a higher number of women drivers of subways and trams over buses. This is the case in BVG, Berlin, Germany, HSL Helsinki, Finland and DeLijn, Antwerp, Belgium.

not adapted to women's needs and, as mentioned, prejudices remain about what jobs can be considered suitable for women.

In addition, according to the ILO and the International Transport Workers' Federation (ITF), violence against transport workers is one of the most important factors limiting the attraction of transport jobs for women and hampering the retention of those who are in transport-related jobs, especially for front-line positions in direct contact with the public. Thus, some transport jobs within the sector are not attractive to women and the majority of women currently do not consider applying for jobs in transport and, if they do, they have to contend with violence and discrimination.

Overall, it would be correct to say that transport plays a defining role for the quality of economic life of women in the region, and there is a latent potential for transport to serve women as an economic opportunity. On the one hand, transport provides important access to jobs (and other services) but, as a sector, it also provides job opportunities especially for those with few qualifications. Yet women are not enjoying these benefits as much as men.

Box 4: Sharing personal experiences

Personal testimonies collected from the ITF transport trade union include "A woman was raped and her underwear was hung on the notice board, whilst the offender boasted to the rest of the crew that he had finally 'got her.'" (Maritime worker).

"During a 15-year railway career, I have been sexually assaulted twice, physically assaulted twice and I am now verbally abused on a daily basis, especially on late night trains. It leaves me feeling vulnerable and shaken." (Railway worker).

In conclusion, women are not fully participating in many economic activities because they do not have access to safe and secure transport. The international agenda and the legal frameworks in place are promising, but not enough for women to be able to more fully engage in the many and various activities to the same extent that men are able. The information presented places this study in context and highlights its timing. The findings are presented in such a way as to be used by a number of stakeholders in order to start reversing this situation, starting from the perspective of existing public transport users. The practical and modular nature of this tool-kit means that small and large stakeholders will find areas where their actions can be combined with others, to co-create solutions that are appropriate and meaningful to the local context.

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SECTION 2

REGIONAL CONTEXT AND RESEARCH APPROACH



Section 2. Regional context and research approach

Overview

Latin América is one of the most urbanized regions of the world, with large urban populations and many transport and traffic challenges.

Socio-demographic trends in the region show a growing number of female heads of household, and a significant number of the urban poor are female. Women also outnumber men in older age groups (25 years onwards) and especially from 50 years on; globally, they represent around 54% of the population aged 60 and over and 62% of those aged 80 and over. Generally, women everywhere live longer than men.

Safe and equitable transport is of particular interest in the Latin American region, where women's empowerment and the alleviation of poverty is high on political agendas. There is still relatively little evidence and knowledge on gender and transport, in particular, on the impacts of urban transport on women's mobility.

It is well known and documented that women and men travel and use public transport differently – men tend to make longer trips at specific times of the day,

while women make a higher number of shorter trips throughout the day. Overall, women use public transport more than men, which was largely confirmed by the study.

Despite representing a majority of urban public transport users, women are largely underrepresented in all areas within the sector – at city, regional, and national levels – and especially in decision-making.

The three cities chosen for the study feature transport systems and profiles that are similar enough for comparison, while being different enough to be worth investigating comparatively. The combined results from all the three cities were triangulated with global and regional trends and information (see Sections 3 & 4).

The study took a multidisciplinary approach, including non-transport experts, while the methodology brought in both quantitative and qualitative approaches.

REGIONAL ASPECTS AND IMPERATIVES FOR CHANGE

Despite governments recognizing the need to guarantee women's rights to the city (as stated in the New Urban Agenda – see The New Urban Agenda) and the need for change having been strongly declared (as set out in the previous sections), women face consider-

able barriers to their mobility, as well as in entering the transport sector. This section sets out some of the most important current trends in the region and places them in the context of transport.

SOCIO-DEMOGRAPHIC TRENDS – INCREASED URBANIZATION

The most relevant global trend is the strong increase in the numbers of people living in urban areas. In 2014, 54% of the world's population lived in urban areas and this is expected to increase to 60% by 2030 and 64% by 2050. Latin America is one of the most urbanized regions of the world, with an average of 80% of the population living in urban areas. This figure reaches 90% in Chile and Argentina, but only 64% (2016) in Ecuador (CIA World Factbook, 2018; Statista, 2017).

Urbanization does not necessarily result in improved income and there is an increasing number of urban poor. Women are often overrepresented within this group, as mentioned in the previous section.

In addition, worldwide, men outnumber women by some 62 million as more baby boys are born than baby girls, a by-product of enduring selection processes, but this slight male advantage in numbers at birth disappears progressively during childhood and young adulthood, owing to generally higher male than female mortality. Consequently, women outnumber men in older age groups (25 years onwards), especially from 50 years on.

The WHO estimates that by 2025, individuals aged over 55 will account for 20% of the world's population (1.6 billion out of 8 billion (United Nations & Department of Economic and Social Affairs, 2015)). Although this is currently a trend in much of the developed world, it will not be long before transition and emerging economies will follow. Globally, women already represent 54% of the population aged 60 and over; and 62% of those aged 80 and over. The number of years lived by people aged 60 and over is higher for women than for men by about three years. This is reflected in Ecuador (INEC, 2012a), where women's life expectancy is 5 years longer than men's. In Chile, female life expectancy is 83.4, compared to 77.4 (WHO, 2017) for males.

Noticeable differences can also be found in the living arrangements of older women and men. In the later stages of life, women are much more likely than men to be widowed and to live alone. This has to be taken into account by programs and services targeted to senior citizens, particularly in the context of the increasing share of older persons in the population (population ageing) that is taking place everywhere. Age-appropriate and affordable mobility solutions will be needed, which may well affect women more than men.

SOCIO-DEMOGRAPHIC TRENDS – FEMALE HEADS OF HOUSEHOLD

Changes in demographic trends globally also include a greater concentration of female-headed household in urban areas. The reasons for this vary, but include the general attractiveness of urban areas; the availability of income-generating activities, even if low-paid, acting as a migration magnet; the opportunity for women to escape social stigma (Tacoli, 2012); and the general trend of lower levels of marital stability and responsibilities. According to the United Nations report ‘The World’s Women’ (based on the data available), in most countries lone mothers with children have higher poverty rates than single fathers, and much higher rates than two-parent families. In addition, the proportion of one-parent households, especially female, has been increasing over the past two decades, due to increases in divorce, as a result of

widowhood or separation, or simply because more children are registered and born outside marriage.

The same source states that in Latin America and the Caribbean, households headed by women without a partner are more likely to be poor than similar households headed by men. The study team found this to be the case in the cities studied. Argentina is the second largest country in the region (after Brazil) and roughly one-third of the population lives in the Buenos Aires Metropolitan Area. The number of women heads of households in Buenos Aires has been increasing, as 34% of households are headed by women, compared to 10% in 2001. According to their marital status, more than a third of Argentine heads of household are single.

Heads of household and marital status at the city, metropolitan and national level in Argentina.

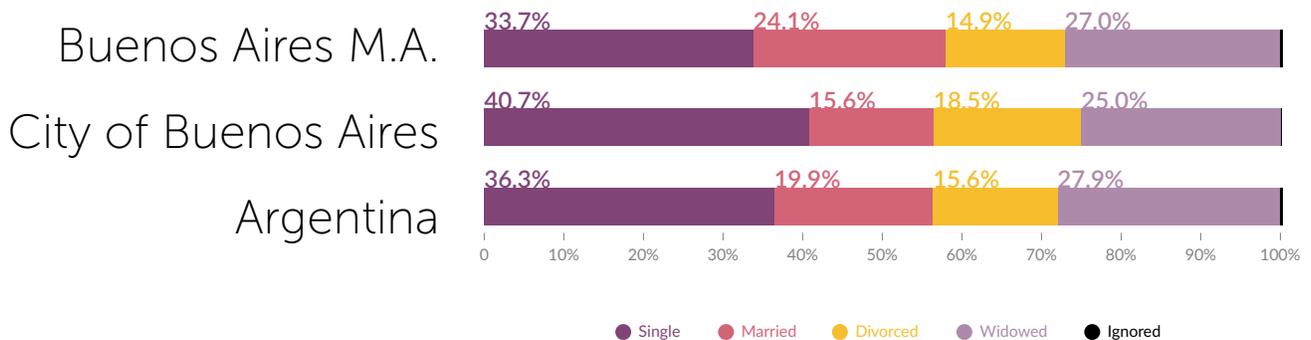


Figure 8. Total heads of household and civil status in Argentina (national). Source: (INDEC, 2010).

In Chile, this trend is also true. According to a recent study (Ministerio de Desarrollo Social, 2017), over the past 25 years, the percentage of Chilean households headed by women rose from 20.2% in 1990 to 39.4% in 2015. Women also account for 51% of households in poverty and 55% of those in extreme poverty (Observatorio Ministerio de Desarrollo Social, s/f).

This trend of more female heads of household in the region has important implications for transport and mobility (especially for women aged between 20 – 40 years) (Chant, 2013; UN-HABITAT, 2013). A woman living alone is both responsible for

productive and reproductive activities within the household. In these households, it is likely that the children will also bear more responsibility within the household, which may or may not include independent travel. This study shows that in Buenos Aires 78% of mothers of children under 15 years old were worried about them using public transport, based on concerns for their personal security.

“When women have children the number of trips increases by 13% while the number of trips by men tend to stay stable”.

Ella se mueve segura, Buenos Aires workshop August 2017, Source: (UEC Movilidad – Ministerio de Transporte, 2010)

SOCIO-DEMOGRAPHIC TRENDS – EDUCATIONAL BIAS

The past two decades have witnessed remarkable progress in participation in education. Enrolment of children in primary education is at present nearly universal. The gender gap has narrowed, and in some regions, girls tend to perform better in school than boys and progress in a timelier manner. However, in many developing countries that have not reached gender parity, the disparities are stark. Today, 58 million children of primary school age are out of school worldwide with girls still outnumbering boys.

Female participation in tertiary education overall has increased globally and currently surpasses male participation in almost all developed countries and in half of developing countries (United Nations Statistics Division, 2015). For example, in Argentina 54% of those having completed university education are women.

Box 5: Preparing girls to fail as income earners (UNICEF, 2011)

Being able to remain in school impacts how much a woman can earn. Providing girls with just one extra year of secondary education can increase their potential income by 15-25%.

However, an estimated 781 million people aged 15 and over remain illiterate. Nearly two thirds of them are women, a proportion that has remained unchanged for two decades. Illiteracy rates remain highest among older people, but are also typically higher among women than men. When it comes to transport and learning to use a formal public transport system, it is obvious that not being able to read is a great disadvantage.

There is also a strong gender bias in the choice of higher education subjects, although it whether this is influenced by career advice or peer pressure is not clear. Fewer women are in advanced degree programs, especially in science-related fields, such as engineering and construction¹. This puts them at somewhat of a disadvantage when entering the transport sector via engineering or technical jobs. There are also fewer women researchers in these fields – corresponding to today’s transport paradigm, which is focused on men’s experiences.

TRANSPORT AND CITY DEVELOPMENT

A city’s transport system often defines its structure and influences how it grows, both shaping and reflecting social values and costs, and their distribution across society.

According to a number of indicators from the CAF Urban Mobility Observatory (2015), in socio-economic terms, Santiago and Quito share similar profiles. Despite Santiago being a much larger city in terms of population (more than double compared to Quito), it’s local GDP is only slightly higher than Quito. Buenos Aires is by far the richest city, compared to the other two, even when only the central area (CABA) is considered. Santiago is nearly twice as dense (persons per km²) than the two other cities, which should, in theory, promote the development of an efficient public transport system and high patronage. It has more transport choices than Quito, but lower ridership levels.

In order for transport to be able to respond to the new challenges that it faces, especially as it moves from its function of mobility to being a service (MAAS – Mobility as a Service), the sector needs to increase the diversity of the workforce and make it more attractive for women. More girls staying in education and being encouraged to take up science and transport-related subjects would widen the labor pool and allow more women to enter the sector.

The data from the CAF Observatory shows that Buenos Aires has the highest car use (total number of trips per day), with Santiago second but at a third of BA’s levels. While Quito has significantly fewer car trips than the other two (less than 10% of BA), it has the highest number of trips made on public transport of the three cities. People who live in Buenos Aires make 7 times more car trips per inhabitant and around double of those made per inhabitant living in Quito. There is good data availability in Santiago, and the study teams also found that car use is growing significantly.

People living in Santiago appear to be the least mobile (in terms of distance), and they make more walking trips than in the other two cities. Public transport use appears to be in decline (also observed from the Origin and Destination data used by the study team), and around half as many trips

¹ The so called STEM subjects – science, technology, engineering and mathematics

are made compared with Quito, which has the highest use of public transport and where walking is the least recorded mode. The data also show that people in Buenos Aires move around the most compared to the two other cities, but despite their high car use, people also use public transport widely (nearly double the levels in Santiago) and they walk more than in Quito (but less than those who live in Santiago).

WOMEN AND MEN TRAVEL IN DIFFERENT WAYS

People move to urban areas because they see them as centers of opportunity, but this shift brings many challenges, not only for those moving in, but also for decision-makers, who are responsible for the provision of services that make city life attractive and loveable. Among these, public transport is one of the most essential services, serving millions of people daily and playing an important role in the economic and social life of cities. Access to transport helps lift people out of poverty, a key challenge for Latin America and the Caribbean, home to 175 million people, of whom 36% live in poverty.

Investments in urban development (and especially urban transport) are frequently assumed to be gender neutral (i.e. providing equal access to men and women), but the reality is that many physical infrastructure projects (roads, expressways, over- and under-passes) as well as changes or 'improvements' to transport services have dissimilar and unequal impacts on men and women.

It comes as no surprise that energy consumption (gram equivalent of petrol) is highest in Buenos Aires. Per capita consumption is not quite double that of someone living in Santiago, while Quito's is slightly more than two thirds that of Buenos Aires.

Walking is the predominant mode of transport for most women, with public transport coming a close second. Women in the poorer areas of the study cities stated that walking was their primary mode of travel. When they use public transport, women trip chain more than men, therefore they usually have to pay more for using public transport. This presents a challenge for local authorities as they try to balance increasing public transport quality with keeping fare prices low. Many women will choose to walk, keeping their transport horizons in line with how far they are willing to walk rather than pay for a motorized trip, or will only pay for parts of their journeys (such as a return shopping/market trip when they have a load to carry). In addition, goods and services can also be more expensive in low-income communities due to poor transport infrastructure and transport services pushing the prices up.



Figure 9. Women walking with children in Buenos Aires. Photo credit: Heather Allen.

It is well known and documented that women and men use public transport differently – men tend to make longer trips at specific times of the day, while women usually make a higher number of shorter trips throughout the day, in line with the greater number of trips associated with the family. Typi-

cally, therefore, women use public transport more frequently than men – although men tend to use it for longer distances – and this was largely confirmed by the study. The figure below shows that public transport is the dominant mode of transport (apart from walking) for all urban citizens.

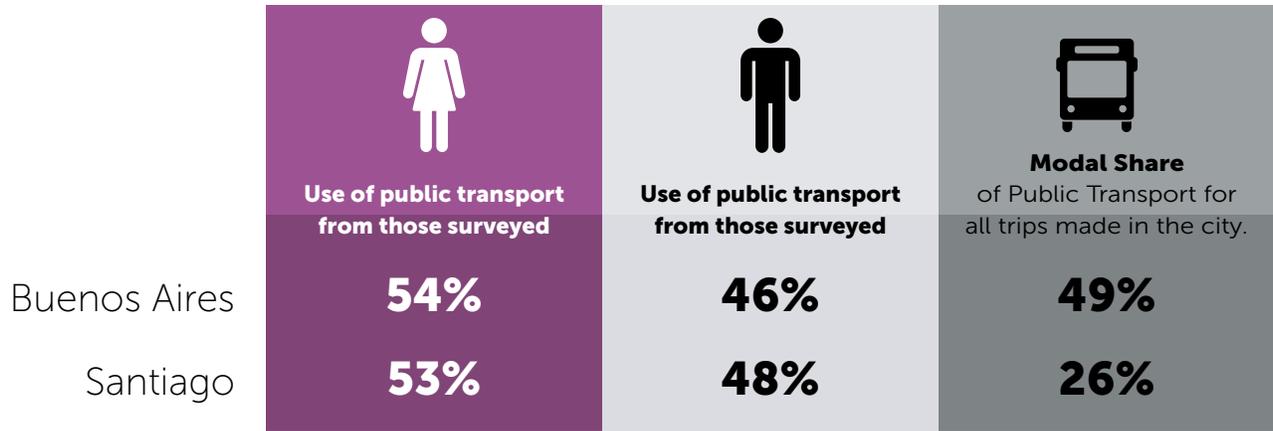


Figure 10. Public transport modal share showing the percentages of women and men from the total surveys that use public transport. Source: Authors

Public transport operates within urban public space, and women, as well as men, should be able to travel in this space safely and securely. However this is not always the case for women, and many systems are not perceived as safe and secure for them. The region has some of the least secure transport networks in the world. According to the

IADB, 67% of women have suffered verbal aggression in the transportation system in Quito; 64% of women in Bogota and 60% of women in Lima have been victims of sexual assault on transportation, while 62% of women are afraid of suffering sexual assault in transportation in Guadalajara.

Insecurity profoundly affects women's mobility

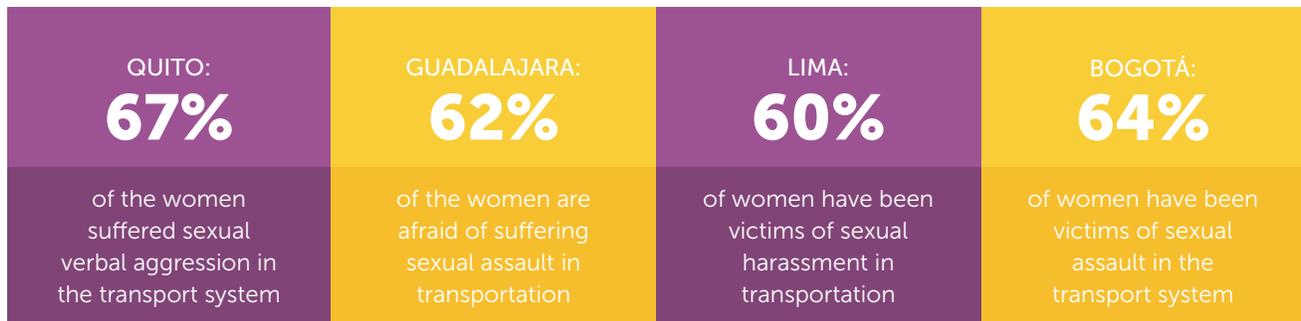


Figure 11. Violence against women on public transport in the region. Own elaboration with data from (Granada, 2017).

Inefficiencies are almost always translated into higher costs, which affect women more than men. Women, especially low-income women with no access to a private vehicle, tend to be captive public transport riders and therefore are likely to suffer more from system inefficiencies. Low-income men will suffer, but they are usually not obliged to travel as much as women (due to care-related duties). With limited transport options, people will forego trips, such as to school or for health care, and may choose not to take up employment opportunities because the costs (in time and money) of transport are greater than the benefit of employment. These choices have consequences beyond transport: for example, if women skip trips to health centers during pregnancy or infant check-ups for young children and new born babies due to transport issues, their health and that of the children can be put at risk.

Not all women (nor men) are the same, and transport use and habits change as people age and enter different life stages. Younger women without families show a higher tendency to use rail, especially metros, but this changes once they have to travel with small children and strollers. Women typically use buses more, as rail-based modes do not suit the flexibility variety of destinations.

There is also a wide difference in distances travelled between men and women. Women tend to

Box 6: The importance of public transport

Public transport is crucial for many urban citizens, especially women, and helps to keep cities livable by providing affordable mobility. Ensuring that women can travel freely and safely in cities benefits many other groups and makes cities more inclusive and dynamic. However, it is clear that there is not enough information about how women move about a city, so it is difficult to estimate the size of any inefficiencies in transport systems or gauge the potential of public transport if it could be made to work better for women.

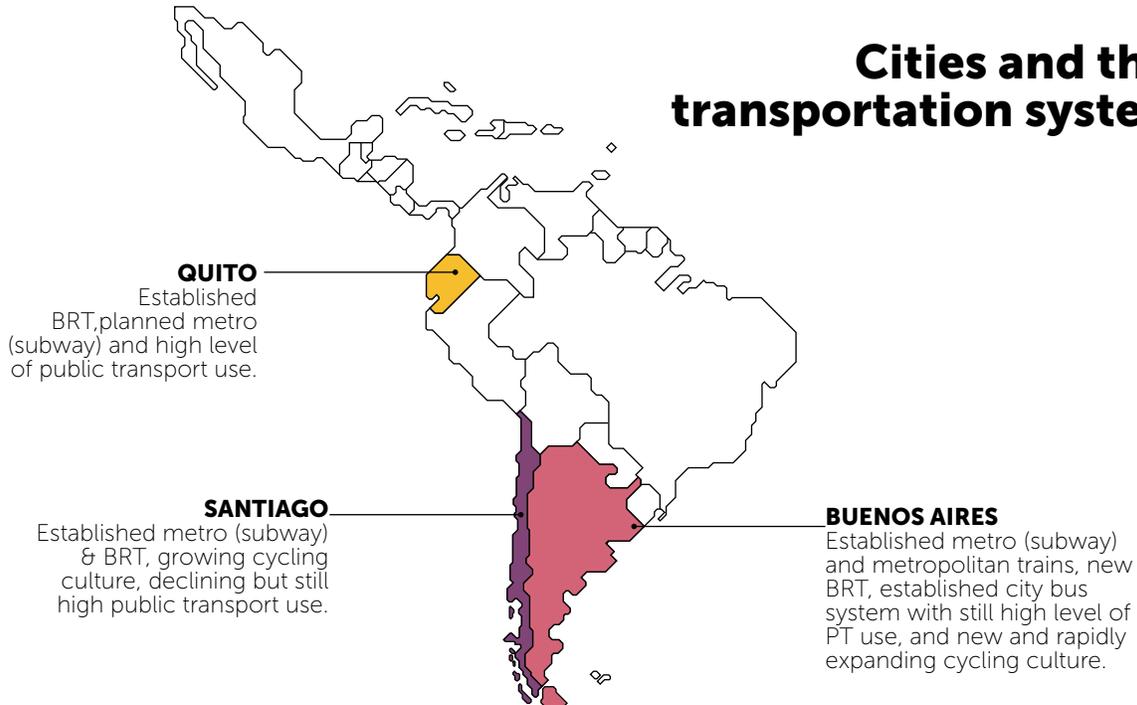
make numerous trips around key centers of interest, such as the home, schools, work, sports, and shopping activities. In turn, men tend to make longer, more direct trips, which are particularly suited to rail modes. However, as incomes rise, this gap narrows, and higher-income women may have more similar travel patterns to men, especially in those groups which are able to afford more than one motorized vehicle.

In Buenos Aires and Quito, the results of the surveys and focus groups show that most trips made by women are work-related or for education². In all cities studied, women walked a lot, and this mode was most frequently associated with care-related activities. Low quality, insecure transport is seen as a major barrier to women being able to access better jobs, especially as these may be further away from their homes – but insecurity also impacts their access to education and, consequently, to better paid jobs.

Figure 12. Map of the cities selected for the study: Quito, Ecuador; Santiago, Chile and Buenos Aires, Argentina. Source: Authors

² In Santiago, women made a majority of care related trips.

Cities and their transportation systems



SHORT OVERVIEW OF CITIES CHOSEN FOR THIS STUDY

Three Latin American cities with different transport profiles were chosen for this study: Quito, Ecuador; Buenos Aires, Argentina and Santiago, Chile.

The three cities were chosen as they shared a certain level of homogeneity but were also different enough for the study teams to be able to contrast

and compare findings. They were also considered to be representative of the different geographic regions – north, east, and west –, but in terms of transport and behaviors, they showed interesting contrasts. Women in each city were the majority of the transport system users and have different levels of empowerment.

CITY PROFILE DETAILS: BUENOS AIRES, ARGENTINA

Metropolitan Buenos Aires (AMBA) is Argentina's largest urban area with a total population of 12.8 million (2010 census) accounting to around one third of the country's population and 40% of GDP. The area includes the Autonomous City of Buenos Aires (known as CABA) and 24 municipalities (within the Province of Buenos Aires). Of the

19 million daily trips made in AMBA (UEC Movilidad – Ministerio de Transporte, 2010), 49% are on public transport, mainly buses (eight out of ten public transport trips). In the city center (CABA), the metro is the second most frequently used public transport mode, while the rest of the metropolitan area is served by train.

Buenos Aires, with its mature metro and train systems, established city bus system, new BRT³ and new cycle and pedestrian infrastructures, still enjoys high levels of ridership in central areas (49%) where the public transport service is good and well connected. However, this diminishes as distances from the Central Business District (CBD) increase. The *colectivos*⁴ (city buses) are the preferred mode for the majority of people, supplemented with a relatively dense and recently upgraded suburban rail service.

People frequently walk (24% of all trips are walking trips). Women tend to travel by public transport and make the most trips per family unit (Quiros, Mehndiratta, & Ochoa, 2014), but they cover smaller distances, reflecting their more limited mobility options. The data currently available for AMBA is disaggregated by sex and allows differences in choice of transport modes and trip purposes be-

tween women and men to be compared. In terms of city planning, despite the availability of disaggregated data between men and women, it is not yet widely used to develop a gender-sensitive approach for transport.

To date, women's daily mobility habits have not been analyzed deeply. Results from the desk review and interviews during the study suggest they have less access to jobs, culture, and other urban benefits than their male counterparts. While women living in the central urban areas have relatively good levels of empowerment and are able to move more or less freely, outside of the city they are still the main care-givers for the family and do not work outside the home. In the City of Buenos Aires, the participation rate in the labor market is 51.3%, while this declines to a little more than a third of women (36.3%) of active age participate when the metropolitan area is considered.

CITY PROFILE DETAILS: SANTIAGO, CHILE

The capital of Chile, Santiago, is the country's largest metropolitan region, with over 6.5 million people (2012 census). The *Comuna de Santiago* (The City Center) has a population of 200,000, while the metropolitan area has a population of 7 million (Instituto Nacional de Estadísticas (INE), 2018). Santiago still retains a strong link to neighborhoods, especially in the historic zones, and its growth is limited by its location with the Andes on the one side and the river running through it.

The total number of trips generated on a typical day exceeds 18 million; of these, walking (34%) is the single largest mode, followed by public transit (26%) and private car (26%). Only 40% of households own cars, making public transit crucial to the daily functioning of households and the city itself. The minority high-income households make 2.5 motorized and 0.65 non-motorized trips per day, versus 1.54 motorized and 1.65 non-motorized trips made in low-income households. As with the other cities, women account for a disproportionate

³ BRT Bus Rapid Transport

⁴ Not to be confused with the collective taxis in other Latin American cities.

numbers of walking trips, in some areas as high as 70%, reflecting not only their limited mobility, but also certain trip purposes; often focusing on shopping and other care-related activities that can be conducted close to home.

The public transport system consists of a network of Metro, Metrotren, Transantiago (Bus Rapid Transit and city buses), intercity buses and taxis-colectivos (collective taxis following fixed routes and carrying 3-4 passengers at a time). The Metro network has five lines accounting to 103 km, which carry more than two million people daily. An office in the national Ministry of Transport runs the Transantiago system, which combines buses and

CITY PROFILE DETAILS: QUITO, ECUADOR

The city of Quito (population of 2.2 million) is located on a plateau that shapes both the city and travel, creating clearly defined zones for employment, residential and retail. The residential areas are located in the north and south, while jobs, commercial, and educational activities are to be found mainly in the center (although now they are expanding towards the north, called the hipercentro)– creating distinct traffic flows and peak/off-peak periods. It is also smaller than the other cities in this study.

Quito has an extensive Bus Rapid Transit system, El Trole, which began operations in 1995. It was one of the first BRTs in Latin America (after Curitiba) and has provided the backbone of the city's public transport for the past 30 years. It was nicknamed El Trole as the first buses on the system were trolley buses, although today a mixture of energy sour-

some Bus Rapid Transit (BRT) corridors, with private firms bidding to service specific routes. Since a disastrous implementation reform in 2007, the Transantiago bus system has struggled to improve both system service and its battered image. Meanwhile, the Metro, once considered the gold standard in public transport in Santiago, increasingly suffers from overcrowding and breakdowns, making services less reliable and attractive. The city center and some adjacent areas have made significant progress in promoting cycling and developing infrastructure and, in combination with increasingly active and diverse advocacy, cycling has risen from 2% to 4% (between 2006 and 2010), and is currently estimated at 6%.

es and bus sizes are used. The city also has a fairly dense system of regular city buses (which also serve as feeder buses for the BRT), and collective and single journey taxis. A metro line is currently being constructed.

Like many cities in the region, people living in Quito depend on public transport significantly, and its modal share represents 64% of all trips within the city. It is used by women in particular, accounting for 64.4% of their trips, compared to 58.8% for men (see Figure 13). Women also walk more than men do (16.2% of trips compared to 15.1% for men), and men use private transport (cars) more (26.1% compared to 19.4%). The majority of public transport trips are done for employment and education purposes; and women usually do not move out of their neighborhood unless it is for these reasons.

Male and female use of transport

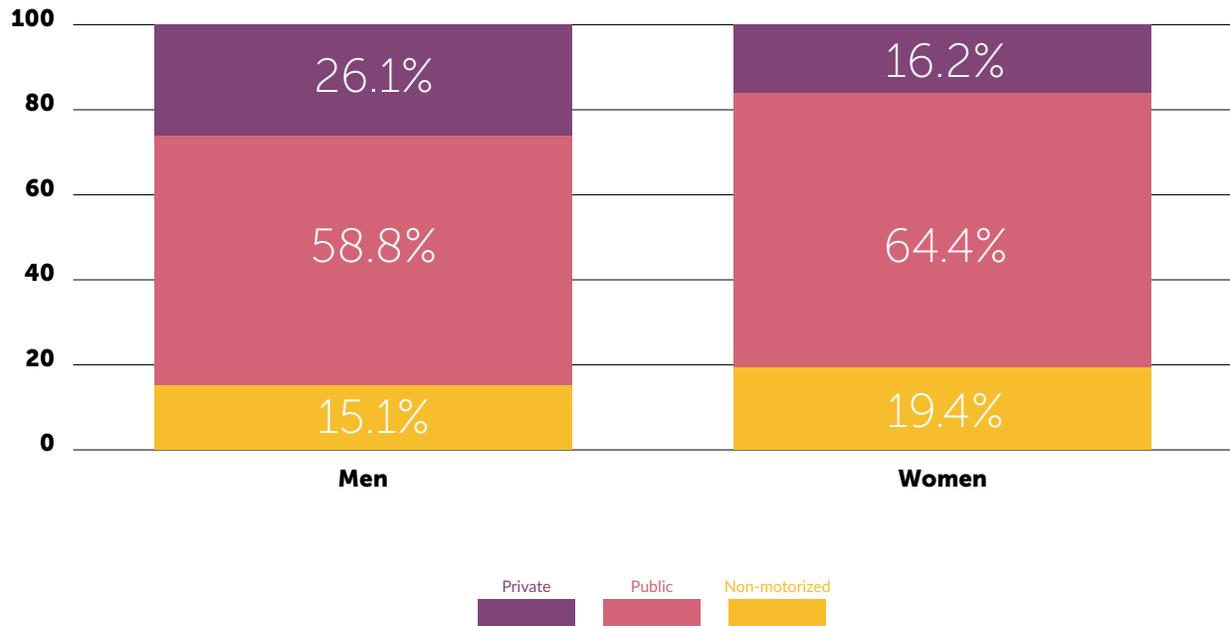


Figure 13. Graphic showing that women use more public transport than men (based on Quito data). Source: (Integrado De Transporte Masivo, Distrito Metropolitano de Quito, & Metro de Madrid S.A., 2010).

Located at 2.850 meters above sea level, Quito is extremely hilly, limiting the possibilities of walking and cycling compared to Buenos Aires and Santiago. Despite this, cycling has been increasing steadily in recent years.

It is also of interest to note that in Ecuador generally, and in Quito in particular, women still fulfil the traditional role as the main caregivers for the family. Women living in Santiago and Buenos Aires tended to share more of these responsibilities with men, although this was not considered to be the case outside the capital city.

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SECTION 3

METHODOLOGIES



Section 3. Methodologies

Overview

Using the same methodology and working closely together in the development and analysis of the data collection brought considerable added value to the study results and knowledge development, which would not have occurred otherwise.

Investigating violence and sexual harassment is sensitive. By recognizing that harassment on public transport was widespread in all cities and comparing and contrasting the results via an international seminar in each city, many of the taboo aspects were overcome. The major players, especially city officials, were able to engage the study teams and other cities openly (with fewer constraints), to a greater degree than if the subject was only being investigated in their city individually. This also helped to defuse other sensitivities regarding this subject.

A number of similarities in terms of the main types, frequency, and impacts of harassment, as well as the typical strategies used by women, were found in the three cities. It was important to ensure that the

teams shared a common understanding of terminology, common approaches to the data collection and analysis.

Key learning from the surveys:

- The length of the survey needs to be short and the questions easy to understand
- This subject is sensitive, and questions must be asked carefully. Open, rather than closed questions helped people to feel comfortable, leading them to answer the questions about security. In this study, the majority of the surveyors were female. The surveys should be tested prior to rolling them out for the context and clarity of the question, as well as for the analysis.
- It is also important that the line of questioning avoids suggesting that public transport is insecure for women and/or that they should be concerned.
- When constructing the questions in the survey, attention to detail regarding how the an-

swers will be analyzed is extremely important. Indeed, the survey analysis and comparison between cities needs to be carefully planned, especially if the results are to be comparable (see note on quantitative and qualitative data collection guidance).

- The time of day and the day of the week, in addition to the location selected for the collection of data, need to be considered. For instance, women generally avoid travelling at night. However, the perception of when night started varied between cities and modes. For example, in Santiago metro users were more comfortable travelling late than those who used the bus.
- Sampling selected for diversity, particularly with regards to socio-economic groups and according to city zones or districts, rather than representativity of the entire population.
- The profile of the respondents needs to be thought through in terms of the scope of the study. This study only captured information from existing users of public transport, not from those who had either stopped using it due to extensive harassment, or had never used it because they felt it was too risky.
- Key learning from the focus groups:
- Qualitative data offers important perspectives on behavior and expectations that complement the quantitative data and provide important pathways to identify possible interventions.
- The focus groups provided valuable insights, not previously captured in the survey, into perceptions and reactions to perceived and real fears about insecurity from both men and women. This is considered a key finding as the majority of incidents are not reported, and the time for the survey was considered too short to be able to gain enough trust for people to share information on such a sensitive subject.
- Using women-only groups resulted in a bias in the information and stories collected and the rich discussions held in both men only and mixed groups provided valuable insights
- While there are a number of commonly shared concerns about personal security held by both men and women, the focus groups helped identify the extent of the differences between the sexes, as well as helping to more precisely identify strategies used, and how transport could be made more gender balanced.

METHODOLOGY OF STUDY

The three Latin American cities were of different sizes with different histories of innovations in public transport (see SECTION 2 Regional context and research approach), making it possible to explore how the issue of women’s personal security play out in a number of urban contexts. This section outlines the methods used and provides insights into the challenges the study teams faced in the analysis, highlighting some pitfalls for others to avoid, and opportunities to pursue when conducting this kind of study as the basis for gen-

der-sensitive transport planning. Both qualitative and quantitative methods were used and the results from the three cities were compared and contrasted, in order to reach overarching conclusions.

The main conclusions are presented in SECTION 4 Diagnostic and Main Findings. The details of how each city team implemented the study and their conclusions can be found in the separate case studies, which can also be downloaded from the CAF and FIA Foundation websites.

Methodology

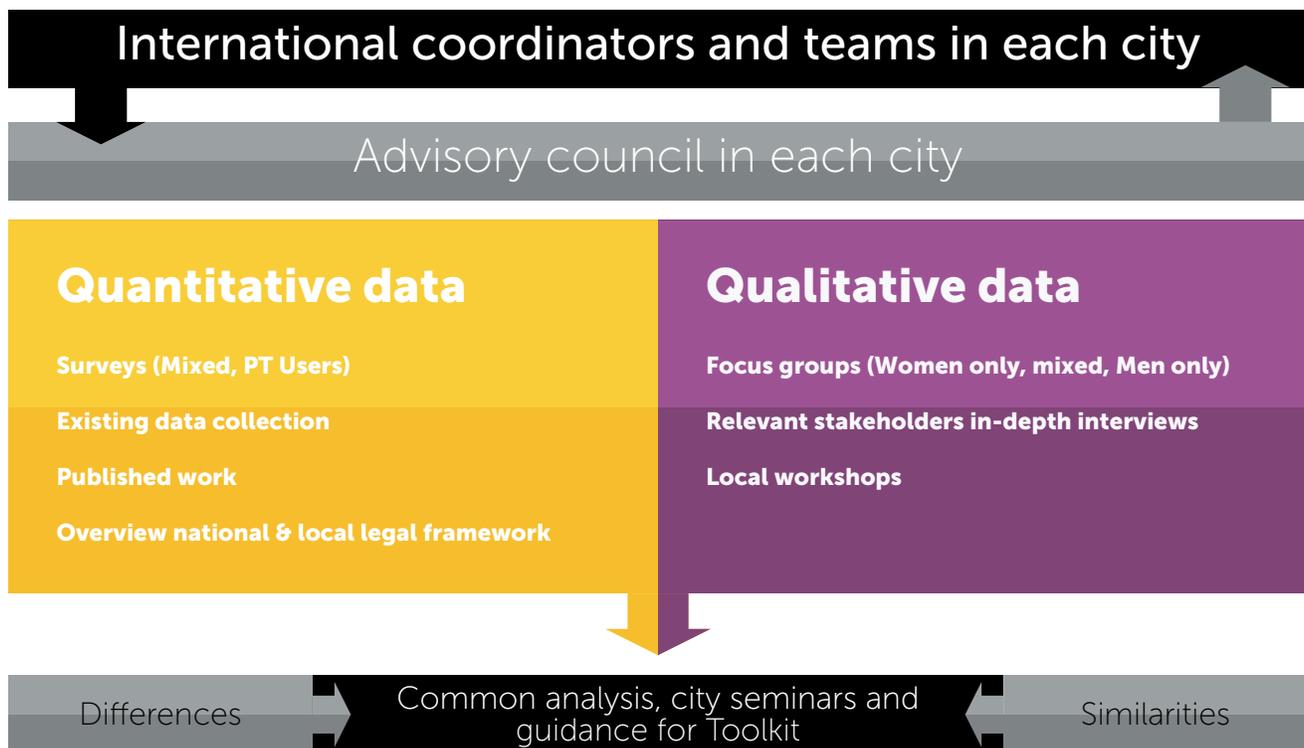


Figure 14. Graphic showing the methodology for data and information collection in each city. Source: Authors.

OVERVIEW OF STUDY APPROACH

Each city team composed their members as they saw fit for the research goals and objectives. However, this individual expertise was shared, and the combined study teams were able to work with each other, benefitting from the strengths of each city partner. They were also able to draw on experts, both within and between cities, on different issues such as urban studies, transport engineering, planning, anthropology, sociology, gender and other relevant subjects.

Santiago, for example, had strong support from the University's transport engineering department and their extensive experience in transport-related surveys, which helped all three cities to develop their base questionnaires and survey methods according to current best practice. Buenos Aires team's strong analytical experience in designing mobility surveys, including the formats of questions/categories and codes, helped simplify the data entry processes. The Quito team's transport planning experience and strong communication skills complemented the above.

Developing the study methodology

The research phases for this study included:

- Desk research to identify published national and regional literature of interest. Each team also undertook a rapid review of national, regional and local legal frameworks on the protection of women. Literature reviews are to be found in the city case studies.

In each city, the study explored:

- Perceptions of personal security on the different modes of public transport.
- Key drivers such as accessibility of public transport, affordability, overcrowding, travel times and distances travelled.
- How respondents react to harassment, what strategies they use to reduce the risk and manage their level of concern.
- How assistance is requested, from whom, who is responsible for security and what works best (visible security, segregation, panic buttons, and grassroots support/actions).
- Trust/ confidence in grievance systems and assisting authorities.

By combining different methods to explore the depth and the extent of harassment and violence against women associated with their daily use of transport, the interdisciplinary research teams were able to draw results that can be implemented by a wide number of actors at international, national and local levels.

- The collection of data in each city from randomly selected male and female public transport users via face-to-face surveys (using the same base questionnaire with slight modifications in each city to fit with the local culture and context).
- Focus discussion groups following an agreed outline developed by the research teams.

- Semi structured interviews with key stakeholders and interested parties in each city.
- The creation of an Advisory Council in each city to help provide local insights and create ownership of the study results
- Joint analysis to develop combined conclusions for the study that applied to all cities

and more specific recommendations for each city. The conclusions were further developed into guidance for each audience and presented in a practical fashion. Each city also hosted an international seminar and a number of workshops.

DESK RESEARCH & REVIEW OF NATIONAL REGULATIONS AND LOCAL LEGAL FRAMEWORKS

Each city reviewed published international, regional and national literature to provide the context and build the evidence base. The teams also conducted a rapid review of the international conventions, policies and agreements on the protection of women during the past 20 years. Overall, the region has made significant progress on increasing the legal protection of women (especially against violence) but in reality, this has focused mainly on equality

rather than equity. Many of these are referenced in the preceding sections and more specific references can be found in the bibliographies of the city case studies. The findings have been used to help formulate the conclusions. In addition, it is clear, that legal frameworks appear insufficient to address the depth and breadth of discrimination against women. This was a strong message from some of the interviews, especially in Buenos Aires.

COLLECTION OF DATA AND INFORMATION

Recognizing that issues of sexual harassment associated with public transport journeys are a relatively new field for investigation, the study teams applied a combination of methods to evaluate the extent of depth of the problem, and to gain further insights into the mechanisms that produce these events and perpetuate their impacts.

In the first instance, the study teams identified the three main components of any public transport

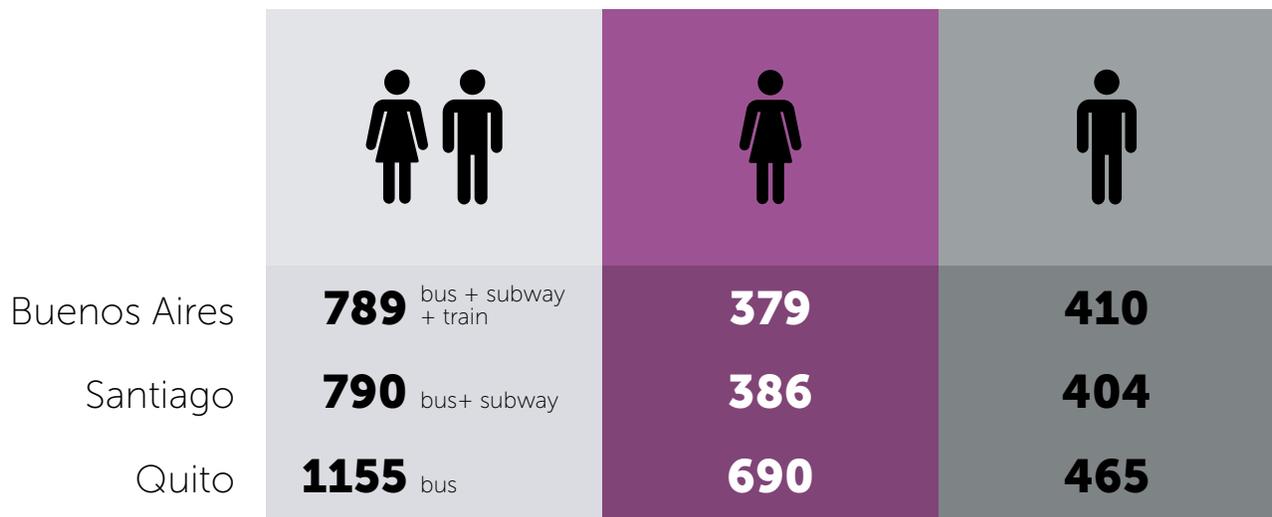
journey where women feel most at risk. These are: walking to, from or between transport facilities or stops (e.g. home to a taxi rank or back); waiting at boarding points and facilities (e.g. taxi/bus stops, train/bus stations/platforms, modal interchanges etc.); and the trip itself (while travelling on board the vehicle – bus, train or taxi). They were then able to plot the best locations for the collection of data by public transport users.

SURVEYS

Based on the expertise in travel surveys of the transport engineering department at Chile's Pontificia Universidad Católica (PUC), a basic survey questionnaire was developed, with teams from other cities fine-tuning language, definitions, and other aspects of the lines of questioning. This resulted in slightly different versions of the base survey questionnaire, with language adapted to local needs and locations. The survey questionnaire samples can be found in Annex 4 Methodology for in-depth inter-

views. A maximum number of questions was set by the teams, as the target sample were most likely to be pressed for time, either beginning or mid-way their public transport journey. Sampling of regular public transport users (male and female) was adapted for each city, and surveys were undertaken during peak and non-peak hours, both in central and more isolated public public transport locations. Table 1 shows the detailed approach on sampling in each city.

Figure 15. Total number of surveys undertaken in the three cities (disaggregated between women and men) and the mode of transport. Source: Authors.



Sampling selected for diversity, particularly with regarding socio-economic groups and city zones, rather than representativeness of the city population. Survey participants were male or female users of public transport, living in different parts of the city, varying in terms of socio-economic composition and spatial relationships to the city center and other main centers of activities. Both men and women were interviewed at peak and off-peak hours. The survey teams were predominately female, to help ensure that women felt comfortable answering some sensitive questions about their experiences and emotions.

In Quito 687 women and 463 men were interviewed at 8 different interchange stations; in Santiago 404 men and 386 women at 4 types of metro station and bus stops in 3 districts; and in Buenos Aires, 379 women and 410 men at selected public transport stops and main interchanges. The total numbers of surveys that were used for the analysis are found in Figure 15. These totals formed the base sample for our analysis.

Table 1. Defining the survey interview profiles in each city

CITY	PROFILE
Buenos Aires	<p>Socio-demographic: gender, age, occupation, family structure (female/male heads of household).</p> <p>Socio-spatial:</p> <ul style="list-style-type: none"> • City of Buenos Aires (CABA): good levels of infrastructure and supply of urban services and transport. • Buenos Aires Greater Area (GBA): (i) Southern Area: poor levels of infrastructure and supply of urban and transport services, (ii) Western area: medium levels of level of infrastructure/supply of urban services and transport, (iii) Northern area: acceptable levels of infrastructure and supply of urban and transport services.
Quito	<p>Socio-demographic: gender, age, occupation.</p> <p>Socio-spatial: Metropolitan District of Quito (DMQ). Good representation of women and men from different areas of the city, including the valleys (consolidated and peripheral areas).</p>
Santiago de Chile	<p>Socio-demographic: gender, age, occupation.</p> <p>Socio-spatial according to district (comuna):</p> <ul style="list-style-type: none"> • Ñuñoa: high income, high level of infrastructure. • Santiago Central district: average income, high number of immigrants and social diversity. • El Bosque: low income, lacking road infrastructure or in poor condition, social problems including poverty and delinquency.

FOCUS GROUPS

The qualitative research was used to explore the finding from the literature review in greater depth, and to expand on certain aspects that could not be captured in the quantitative findings. In particular, this complemented the information obtained in the survey and provided deeper explanations, common discourse, and narratives revealing how people interpret experiences of harassment and how this influences their transport behavior and ability to participate fully in society. The implementation and analysis of the focus groups used methods from the social sciences; included the teams sharing tips and producing written guidelines on both the facilitation of the focus groups and data analysis of the survey. Each city held at least three focus groups. Two female-only groups and one mixed group was considered to be the minimum. In Buenos Aires and Santiago, a male-only group was held to gain further insights to the masculine perspective.

The city teams used a limited set of specific factors (typological variables), related to the characteristics of each city, to define the groups and their facilitation. Focus groups participants generally came from the same areas where the surveys were conducted, which ensured consistency and complementarity in the data collected. Indeed, the results were remarkably consistent with the surveys, but provided broader information and deeper insights into gender-based harassment and violence and how women respond emotionally to it.

All teams followed common guidelines on the recruitment and facilitation of the discussion groups, but had the flexibility to add questions if deemed desirable and/or necessary. For example, Buenos Aires and Quito implemented an extra question in their surveys to establish the willingness of the interviewed people to participate in parts of the project, while in Santiago the recruitment was done through pre-existing social networks, and existing civil society organisations assisted the team.

Table 2. Description of the focus discussion groups and variations in each city

CITY	DESCRIPTION
Buenos Aires: 4 focus groups	<p>Women: three groups, one in CABA and two in Buenos Aires Conurbation (one in Northern Area and one in Southern Area)</p> <p>Mixed: one group in CABA, with people from different parts of the city</p> <p>Note: Having different groups (CABA and the corridors of the Conurbano) provided conversations that denoted differences between the districts and their perceptions of security.</p> <p>Originally, a group of CABA women was not planned, however, after the CABA mixed group, there was a need to further investigate the experiences of insecurity in transportation in order to know if the presence of another gender implied modification in the dynamics of the group.</p>
Quito: 4 focus groups	<p>Women: two groups, one for young women, another for older women, considering people from different parts of the city.</p> <p>Men: one group with men from different parts of the city.</p> <p>Note: The men only focus group provided useful perspectives without prejudices. The mixed group had enriching face-to-face discussions of sensitive issues.</p>
Santiago de Chile: 4 focus groups	<p>Women: 3 groups; Santiago Centro, Ñuñoa, and El Bosque.</p> <p>Men: 1 group with men from different communes and ages.</p> <p>Note: It was important to carry out groups differentiated by communes/districts with different socioeconomic profiles, allowing a variety of experiences in relation to the use of public transport to be captured.</p> <p>The men only group brought a masculine perspective to the problem, which provoked deeper discussion than other approaches had.</p>

The qualitative data from the focus groups was recorded and noted down during the discussions by 2–3 different researchers. Discussions were transcribed and key issues, terms, and experiences were noted and categorized to identify both common and contrasting trends. The combination of notes taken during the focus groups and interviews recorded observations such as voice tones, level of animation, and bodily attitudes/body language that

that the audio recordings miss (or in some cases video), and can be useful to strengthen the work of analysis and interpretation. Transcripts and tapes of the discussions were then analyzed.

Tools and examples of facilitation notes and guidance are included in Annex 4 Methodology for in-depth interviews and Annex 5 Note on analysis of data of this toolkit.

IN-DEPTH INTERVIEWS

The interviews were used to obtain new and relevant information regarding the objectives of the study, based on the interviewee's strategic position and experiences related to transport or gender issues. The questionnaires and profiles of the interviews to be conducted were decided by each city team, and jointly agreed to ensure the information could be contrasted and compared. The criterion for inclusion was based primarily on the expected level of contribution and value of information that could be provided by each actor interviewed. A typological framework for this selection was established per city, considering a number of parameters such as public and private sectors, transport operators, civil society organizations, and academia.

To complement the data gathered, each city team also conducted in-depth interviews with a number of interested parties (government officials, transport actors, civil society, and NGOs). This included an iterative set of collective conversations as the research progressed and new questions emerged, or if observations/conclusions required testing. These activities sought to complement survey and focus group data with more contextual information regarding other relevant studies or information, policy initiatives, and potential political and transport agency interest in research results. They also helped to identify and commit additional actors, such as (women's) cycling groups, private transport operators, and other government agencies, thereby incorporating their knowledge and perspective into the final results. The advisory council was also involved in this review process.

In Buenos Aires, the interviews helped to provide further insights into the legal framework on the protection of women within Argentina and the region as a whole. The team concluded that there are probably enough laws, especially at national and regional level, however, these need to be better translated to the local level and used in proactive ways to protect women. The prosecution of offenders, especially of those who harass women, is still weak.

In Santiago, interviews were used primarily in the preliminary research stages to identify key actors and expertise, expand the teams' knowledge about other relevant studies, and give inputs into the study database. Participatory workshops and advisory board meetings were used to present and re-validate data, and to explore answers to questions that had arisen from the data. They also provided occasions for ongoing exchanges and discussions with a number of actors (especially with the transit operators and the Ministries), as well as opening up discussions with CEPAL/ECLAC.

In Quito, in-depth interviews provided an academic perspective to the analysis and helped to highlight the lack of integration of gender policies, especially at institutional levels. The impact reports from the three cities revealed that interviews also increased the local impact of the study.

Table 3. In depth semi-structured interviews conducted in each city, according to profiles

CIUDAD	SEMI STRUCTURED INTERVIEWS
Buenos Aires	9 interviews: <ul style="list-style-type: none"> • 3 academics. • 4 civil society organizations. • 2 private sector.
Quito	10 interviews: <ul style="list-style-type: none"> • 2 academics. • 2 civil society organizations. • 1 representative of UN WOMEN. • 5 public sector actors, including a city councilor, representatives of the the Metropolitan public transport company EPMTQP (<i>Empresa Pública Metropolitana de Transporte de Pasajeros de Quito - EPMTQP</i>), Patronato San José, and the Secretary of Mobility. <p>It is important to mention that in the case of Quito, the analysis was performed in the Integrated Transportation System operated by the public sector through the Municipality, and not by the private operators.</p>
Santiago de Chile	7 interviews: <ul style="list-style-type: none"> • 2 academics. • 2 civil society organizations. • 3 interviews with Transantiago (key transport agency), transport and women's ministry staff, and private bus operators, as part of data processing workshops.

ADVISORY COUNCIL

All three city teams created an advisory council to assist with the development of the study. These were composed of key stakeholders and interested parties from government, academia, civil society, and other expert actors. The profile of the council was different in each city and decided by each team according to the local context and needs. Each team set out the protocols for meetings and inputs, but shared the profile of the participants, objectives, and key points of interest from their discussions with the other teams.

These councils played a strong role in guiding the study teams and also gained information from the international seminars held in each city, where they could share their own perspectives as well as learn from others. They continue play an important role in the sustainability of actions at city level, and they have helped to increase the impact of the study, as well as expectations on how the results and this toolkit may be taken forward.

More details of the advisory council composition and members are found in the city case studies.

DATA PROCESSING

Processing data from focus groups and interviews relied mainly on notes and transcripts from these activities. It required synthesizing the results of the various conversations, organizing responses in terms of specific terms and moments of interest, and summarizing comments either common or differing across the cities. Where appropriate, it was found to be useful to triangulate the survey results, the focus groups, and the interview observations and experiences. Specific, representative comments were selected to exemplify key terms and concepts and to provide additional insight into the feelings, values, and perceptual and behavioral changes resulting from experiences of different kinds of sexual harassment. The main value was seen in the narrative accounts of specific experiences and strategies in response to fear of sexual harassment, as well as the stories of actual experiences. The results of the combined focus group discussions and the survey responses were remarkably consistent.

In Buenos Aires, for example, the survey revealed significant security issues relating to robbery, violence, and harassment experienced on public transport, while focus groups were more articulate about specific incidents, especially regarding sexual harassment and how it was dealt with. Findings for both Buenos Aires and Santiago revealed that sexual harassment is embedded in a culture of violence prevalent in public spaces and is perceived by both men and women, who nonetheless show slightly differing responses. The public transport

system was not perceived to offer a safe haven to users in either city, rather, it forms a continuity with the general ambience of fear and violence. Generally, in Quito, people were more supportive of the public transport system as a whole (and related to its identity more), although they did not feel safe on it either.

In Quito, results from both quantitative and qualitative approaches were contrasted, and re-triangulated again through interviews. Of particular interest is the institutional and operational context of public transport service provision, given that there are several initiatives to help women deal with sexual harassment underway or being piloted. Civil society interviews revealed the importance of advocacy in raising the visibility of the issue and pushing for action and effective solutions. The team used a series of academic interviews to help explain the problems and identify the structural conditions that propitiate them, as well as gathering more information about individual and collective responses and impacts. This information complemented the survey and focus group results, helping to build contextual knowledge and understand the importance and the urgency to address the issues. It also helped to formulate potential actions and insights into the roles of different actors needed to address this challenge. Similar approaches were followed in Santiago and Buenos Aires (with the triangulation of results and further insights through specific interviews).

Initial results were also analyzed in different fora, such as the Safe and Sound/*Ella se mueve segura* seminars held in each city, as well as presentations to other groups, analytical workshops, and other activities. City teams shared methods, problems, observations and results, a procedure that improved the robustness of the results.

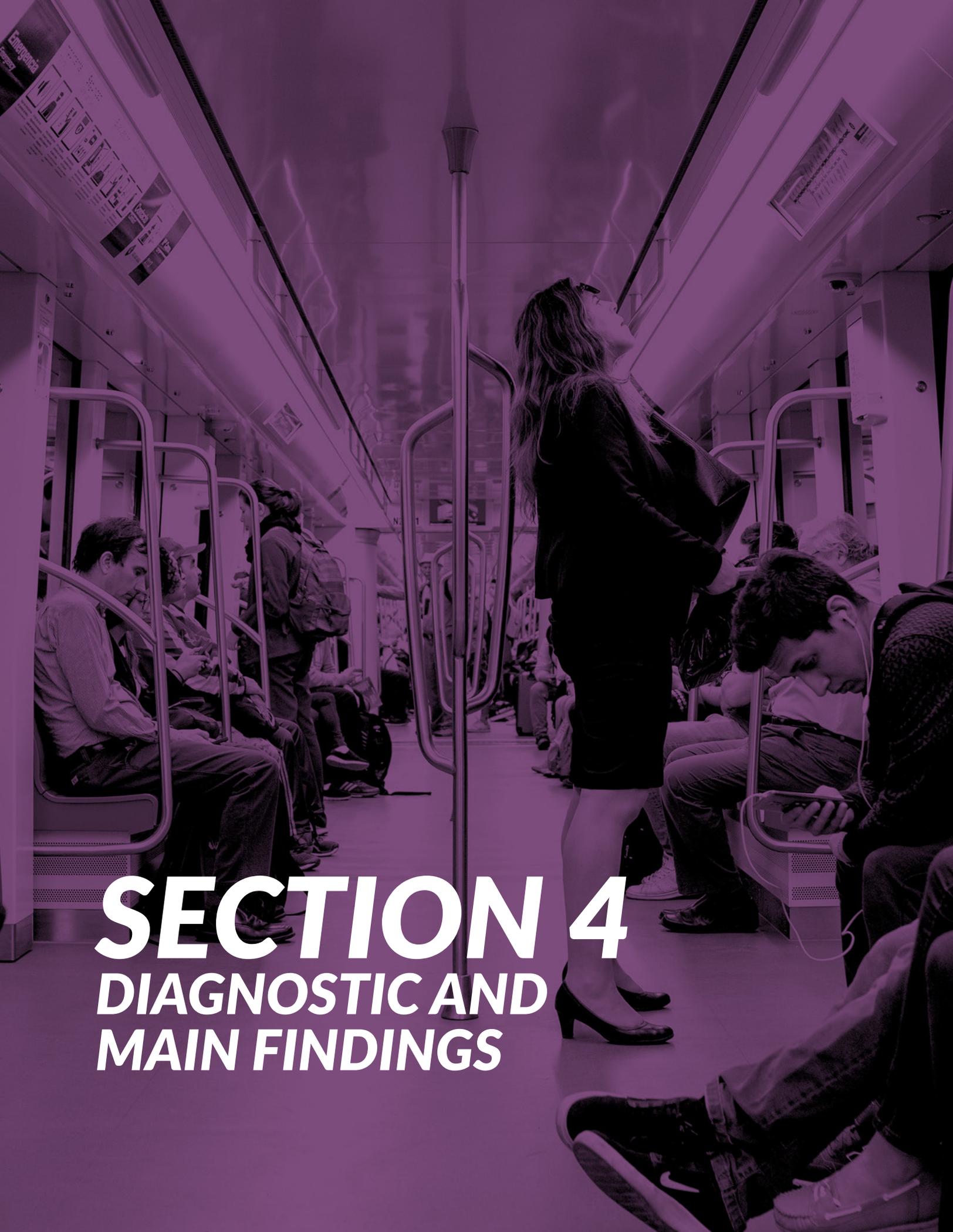
In addition to the survey, focus groups, and interviews, A number of participatory workshops were held in Santiago, bringing together a diverse array of transport and gender-related experts and community members, to expand their understanding of the results and potential tools for remedying the problem of sexual harassment and public transport. The ongoing involvement from a number of stakeholders (and especially via the Advisory Council), transport and gender ministry staff, the transport agency (DTPM), transport engineering academics and staff, citizens' groups, and bus operators helped to round out the analysis of both quantitative and qualitative results.

Additionally, in Santiago, a safety and infrastructure audit was held in El Bosque, a low-income area which involved El Bosque's local women's center and municipal staff, along with more than 30 women who were personally affected by security issues. The post-audit workshop identified problems and potential solutions, and led to an ongoing relationship between the research team and the community, which also involves municipal planning staff.



Figure 16. Discussions at one of the participatory workshops held in EL Bosque, Santiago. Photo credit: Laboratorio de Cambio Social.

The broad experience of the three teams was extremely helpful in improving the depth of the scientific and analytical experience. Focus groups allowed the teams to observe rich discussions between women and between men and women. Key findings focused on their emotional and rational reactions to harassment, i.e., how they felt and what they did. This information has been incorporated into the report, and is documented more fully in the case studies. Results were also shared and enriched with feedback from diverse citizen, government, private, and academic actors during interviews, analytical workshops, and the seminars. These both involved and reinforced the participation and usefulness of the advisory councils.



SECTION 4
DIAGNOSTIC AND
MAIN FINDINGS

Section 4. Diagnostic and Main Findings

Overview

The study validated a number of internationally recognized trends.

While walking is still the most dominant mode for women in all three cities, they use public transport for the majority of their motorized trips. In all three cities, women's travel represented more than 50% of the public transport trips taken in the city.

- Large numbers of public transport users (both men and women) experience petty theft and harassment in public space and on public transport. But in the study cities, women were more likely than men to see and/or experience both crime and harassment while accessing or using public transport. In the majority of cases, a female victim was visually, verbally, or physically harassed by a male perpetrator, and therefore can be considered to be sexually motivated.
- Although harassment is widespread, the focus group participants indicated that the majority of men behaved well. It is the small

percentage of those who do not that has a deep and lasting impact on how women feel about travelling on public transport. Women would remember incidents that affected how they travel for many years afterwards, while men did not seem to, or at least not to the same extent. Concerns over personal security affects women more than men, causing emotional distress, increased fear of travelling alone and, in some cases, a reduction in travel. This hampers their mobility and ability to benefit from economic opportunities, education, sports, and/or leisure activities.

- Women have a larger number of conscious and unconscious strategies that they use to reduce risks and avoid harassment. These were consistent in all three cities and this study has mapped those that are most commonly used. Typically, women use about 6 strategies while men only 4.

Few incidents are reported and there is a low level of trust in the security authorities to deal effectively with harassment, even when physical violence is involved.

- Women express lower levels of loyalty to public transport and will leave the system more quickly than men (who tend to have more entrenched habits) if they have access to alternative affordable options for transport. This was seen in Santiago, where low-income women would prefer to group together to pay jointly for a taxi and pay a little more rather than use public transport.
- Generally speaking, the majority of women interviewed shared the view that public trans-

port fails to respond adequately to women's needs. They feel that their needs are not properly considered in current transport planning and development plans, and they resent this lack of attention.

- Investigating the levels of acceptable behavior and when behaviors became harassment could only be understood from the qualitative data collection.
- From the suggestions based on our findings, it is likely that making transport more gender sensitive would not only improve women's mobility, but would also benefit children, men, and the elderly; in short, virtually all other users.

DIAGNOSTIC AND KEY FINDINGS FROM ALL THREE CITIES

The following are the highlights of this research based on the results in all three cities. Women rely on public transport to get around cities and account for more than half of public transport users in Buenos Aires (54%) and Santiago (52%). Similarly, in Quito 64% of all trips made by women are made on public transport. This is consistent with findings from other countries, both within the region and globally. Most users interviewed felt unsafe and were concerned about security on public transport. This ranged from 66% in Santiago, 64% (Buenos Aires), and 60% in Quito. Women displayed higher levels of concern – in Buenos Aires, 72% of women compared to 58% among men; in Santiago, 73% and 59%, respectively; and in Quito, a more even 61% of women and 59% of men were concerned. The majority of users (both women and men) have experienced or witnessed sexual harassment: in Santiago, 89% of women have experienced it at least once, while in Buenos Aires, 40% of women interviewed had done so within the past 12 months. There were differences in the perceptions of this between men and women – men in Quito did not admit to either seeing or experiencing any harassment, while in Buenos Aires they witnessed it almost as often as women, but experienced it at significantly lower rates. In Quito, men expressed a

high level of fear of attacks and robbery and focus group discussions showed that this came from a concern that small incidents can quickly escalate out of control and turn violent¹.

Much of the harassment was experienced either inside the vehicles or on the journey to or from public transport, which is often neglected by transport planners. In Buenos Aires, women experienced 5 times more harassment on buses than on metros (subways) and this was similar, to a lesser degree, in Santiago.

Women experience greater emotional distress than men while using public transport, and the researchers identified a number of typical reactions. In all cities, most incidents are not reported to the authorities and in some cases not even shared with friend and family. For example, 56% of all incidents in Buenos Aires were not reported and the respondents in all cities lacked trust in the grievance and justice systems available. This makes it difficult for authorities and planners to gauge the levels of insecurity from harassment, and leaves the victims to deal with consequences alone while the perpetrators are seldom caught nor prosecuted.

¹ Crime is a severe problem in Ecuador, with an increase in violent crime over the past few years. Pickpocketing, purse snatching, robbery, and theft are the most common forms of crime and pickpockets are particularly active on public transport. This fear of theft was strongly reflected in both men and women in the Quito survey findings, overriding other security concerns, while in the other cities personal security featured higher (OSAC - United States Department of State, 2016).

Levels of violence

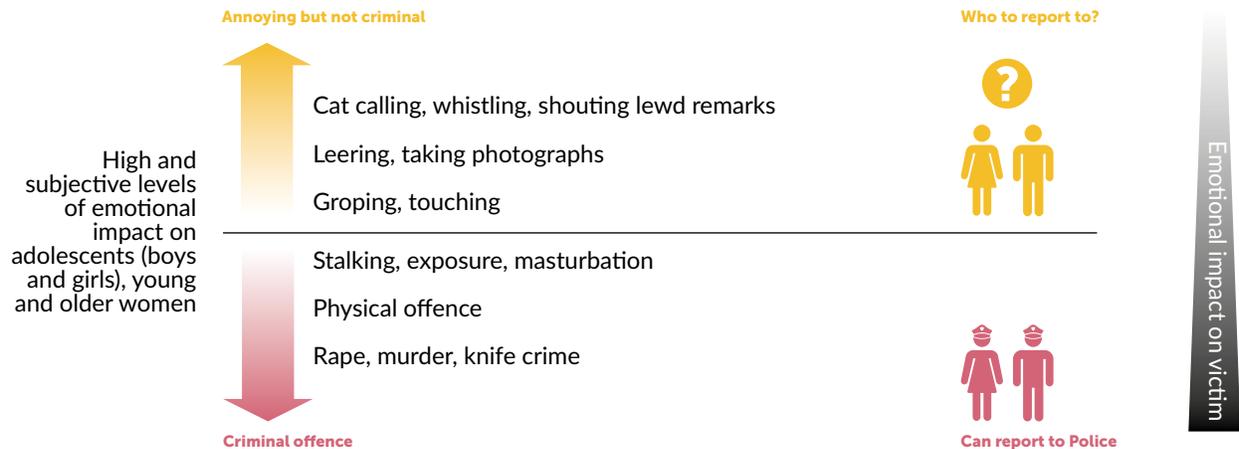


Figure 17. Levels of emotional impact on women from harassment. Source: Authors.

The study identified a high level of intent from current public transport riders to switch to another mode should a suitable and affordable alternative be available. Cars (individual private transport) were the first choice for both men and women, should economic circumstances permit. Already there are instances of women (especially low and mid-income) taking more expensive transport options, such as taxis or private hire vehicles (e.g. ride hail services such as Uber) to avoid taking public transport. This was most frequently mentioned in Buenos Aires and Santiago. The survey also indicated that women will leave the system silently and quickly when other mobility choices become available for them, and in some places, they are already doing so. Indeed, from our results there is every indication that that they will do this more quickly than men are prepared to do. This exodus is not only due to security concerns, but security was one of the main motivations identified, while convenience was another.

This study highlights the need to collect further information on the subject. Focus group discussions revealed that women pass their negative attitudes and personal security concerns on to their children, especially their daughters, which in turn make them cautious and concerned when they use public transport, even into their adulthood. Most women (but particularly low-income women) share a sense that society has abandoned them to fight for their own security, to the extent of implying that they should carry blame for provoking incidents and also actively take responsibility for neighborhood security. This was highlighted in *El Bosque* district of Santiago. From this study, it is clear that women have deep concerns about their security while travelling on public transport and that this is a main determinant of their travel behavior and mobility patterns.

These concerns affect a woman's decision on where and when to use public transport, especially if they are travelling accompanied by small children, and frequently leads them to curtail or reduce their use

of public transport for activities after dark. In extreme cases, they may choose to stop using it altogether, or only to use it when accompanied by another adult.

Implications for sustainable transport



Women are likely to shift from their current high use of public transport to 'safer' individual modes or simply choose not to travel at all

Women/mothers will influence the perception of public transport and the safety of public space of the next generation

Figure 18. Implications for sustainable transport. Source: Authors.

Although men and women share similar perceptions of personal security, they respond differently to these concerns. Women carry a double burden of fear of theft and robbery and a fear of sexual harassment, and consequently they worry more about using public transport. Although many people see or experience harassment and/or theft, neither women nor men report their experiences to the authorities, making it difficult for city officials and public transport operators to gauge its effects or to put measures in place to address it.

Despite being the majority of transport users women's needs are hardly considered in transport planning, however, the stakes are high if their ridership

declines. In the cities studied, even when disaggregated data is available, there was little evidence of more gender sensitive transport planning of its use to guide decisions in major transport projects so they would attract and benefit women as well as men. As the gender role of women as caregivers persists, the continuous fear that many women experience in their daily travels can be transferred to their children, which may influence how younger generations view public transport when they become adults. This information and the conclusions from this study provide signals for national, regional, and city authorities to start addressing this issue urgently.

OVERVIEW OF FINDINGS

Our findings in the three cities are consistent with those from cities elsewhere (FIA Foundation, 2016), but provide additional evidence regarding the frequency of sexual harassment on public transport in the Latin American region, as well as the social, cultural, and other mechanisms that help to perpetuate it. The study and the literature review provide evidence that people who use public transport find it an insecure environment, and both men and women have concerns that center on theft and harassment.

It is also clear from this work that all forms of harassment occur widely on public transport and in the public space used to access it. Gender-based harassment and violence takes many forms – some, but by no means all, are criminal in nature. It takes place in public places, on streets, at the stations and stops used to access public transport, as well as on the vehicles themselves. It happens to both men and women, depending on their age, social status, and physical/mental abilities. Some levels of harassment (especially visual and verbal) may appear to be of little consequence, but this generality should not be accepted as a social norm. Women and girls are affected in different ways depending on their personal experiences and life stage (adolescence, motherhood, grandmotherhood, widowhood etc.), but in all cases it has been shown that these incidents influence how women and girls travel around a city.

It is also clear that women are more often the victim than men are, with younger females being particularly vulnerable victims. Meanwhile men are most frequently the perpetrator; indeed, men were cited in all our examples. It affects different women in different ways, causing differing levels of emotional scarring and mobility behavior changes.

Younger women are harassed more, and are more deeply affected emotionally by it than older women, who may have more experience and feel more confident with their personal coping strategies. This study did not investigate adolescents, schoolgirls, or boys, but there were strong indications that they are also deeply affected. These indications came from information and stories shared in the focus groups from mothers, family members, or friends, as well as examples from the participants themselves of incidents that happened in their youth. Women do not forget such incidents easily and may carry them for the rest of their lives, allowing it to frame their perception of travelling on public transport. In Buenos Aires, mothers expressed grave concerns when they had children of 15 years or younger – their concerns about harassment were not only for themselves when travelling but also for their children, even if they were travelling with them.

Our findings show that all types of harassment, but in particular sexual harassment, is very emotionally distressing for the victim. The fear that is generated, either based on personal experience or someone else's, impacts many women's ability to move freely and influences their mobility and lifestyle decisions. This, in turn, affects to a greater

or lesser degree their access to education, leisure, and job and career opportunities. This study brings new and interesting information, especially on how women respond to harassment, that is useful for international, national, and local decision-makers and actors.

TRANSPORT MODAL SHARES IN THE THREE CITIES

There are still high levels of public transport use in the three cities, as shown in Figure 19. Public transport use in Quito is higher than in the other two cities. This may, at least in part, be due to the fact that over the past 30 years El Trole BRT has formed the backbone of the city transport system, and the topography of the city is not particularly suited for walking or cycling beyond local neighborhoods. Statistics on walking and cycling are higher in the other two cities, where there are fewer hills and less steep slopes to climb. Santiago and Buenos Aires² show lower levels high levels of walking, with the share in Santiago being slightly higher. However, there was not enough disaggregated data available on mode share to be able to determine whether men or women use one or other mode more or less, or if there were any trends based on gender parameters. Evidence from other countries (DeGroat, 2012) indicate that as women become financially stable they obtain driving licenses and buy private vehicles at a higher rate than men, but it is not clear whether this is the case in the region.

In Santiago, public transport's modal share has fallen steadily in recent decades, from high levels similar to those of Quito, to 26%. However, as mentioned, a large number of trips (especially by women's) are still made on foot (35%). In Santiago, car trips have grown significantly over the past few years and it has the highest modal share of private car use of the three cities, while Buenos Aires and Quito share similar lower levels.

Of the total of daily journeys made in CABA (Buenos Aires), 45.5% are made on public transport, while in Greater Buenos Aires (periphery) the share reaches 49%. In the central areas, the network is relatively dense and there is a good level of choice between the train, Subte (metro), Metrobus (BRT), colectivos (city buses), and ordinary buses, but service levels and the number of options drop in the outlying suburbs.

² In Quito there are also a large number of walking trips but they can be quite short and are mainly confined to within local neighborhoods (see Quito city profile Section 2). These trips may not have been fully captured in some of the secondary data used in this study.

Modal Share

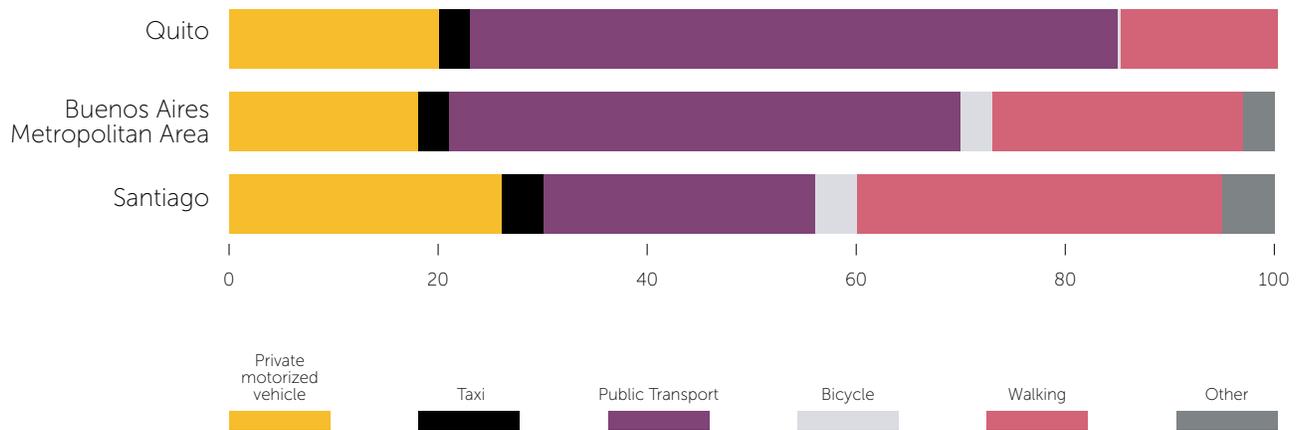


Figure 19. Public transport and walking make up the majority of the trips made in all three cities. Source: Authors, based on (Municipio del Distrito Metropolitano de Quito, 2012; Secretaría de Transporte & Ministerio del Interior y Transporte, 2009; SECTRA – Secretaría de Planificación de Transporte, 2012).

TRIP PURPOSES

According to household surveys and other sources, women make more than 50% of all public transport trips – 54% in Buenos Aires and 52.5% in Santiago³. This is in line with expectations – as women tend to make more frequent, shorter trips, while

men make longer ones. In addition, our study highlighted that women tend to use buses more than rail (noting that in Quito rail is not an alternative at the moment), thus they tend to be captive bus riders.

Public transport use

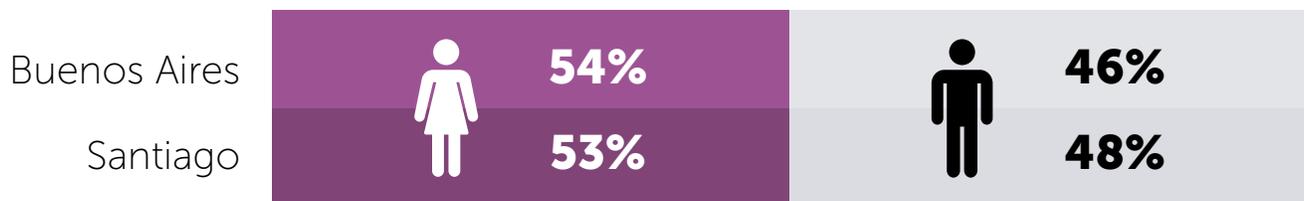


Figure 20. Modal share disaggregated between men and women using city wide origin and destination surveys. Source: Authors, based on (Municipio del Distrito Metropolitano de Quito, 2012; Secretaría de Transporte & Ministerio del Interior y Transporte, 2009; SECTRA – Secretaría de Planificación de Transporte, 2012). This information was not available for Quito but it is deduced from the information available (and from the survey) that women take public transport more often than men. Source: (Allen et al., 2018)

³ In Quito the survey collected slightly different information so we cannot directly compare it with the other two cities, however the results were similar.

At the city level, the most regularly collected transport data examines primarily work/education-related trips, but rarely includes care-related trips. Therefore, most transport planning still focuses almost exclusively on these trips and de facto ignores women's needs for care-related trips. For example, in Quito, it was difficult to extract the disaggregated data on trips from the most recent household survey, and the number of walking trips appeared to be reported.

It was possible, however, to make some comparisons and establish that trip purposes differed to some extent between the cities, although the majority remain related to work or education. This is thought to be due to lifestyle differences. According to the surveys, the majority of female public transport trips in Buenos Aires and Quito are still made for educational or work-related reasons – while in Santiago the majority are made for care or reproductive purposes. Comparing the cities, the second most cited reason for travel was care related (to buy, to pick up/drop off schoolchildren, health trips), and the third most common reason to travel among women – after work or study – was to leave or pick up a household member from an educational establishment (13% of total trips for women). For men, the third most cited reason for travel is to buy something make a specific purchase.

OVERVIEW OF PEOPLE'S PERCEPTIONS ON PUBLIC TRANSPORT

Generally, women in urban areas tend to take more frequent and shorter trips at more varied times. It is also accepted that they would choose not to travel at peak times as most trips are in respect of their

Overall, care-related trips amounted to almost half (47%) of daily trips on a weekday and 64% on the weekend. Work-related trips accounted for just 38%, while educational trips represented 10% of daily travel. In all cities, women frequently travel with others as part of their caring duties. 11% and 8% of women, in Santiago and Buenos Aires respectively, travelled accompanied (either with children or relatives) compared to only 3% of men (both cities).

In Buenos Aires, the number of women's trips increased when there were children in the household, while men's remained constant. This was found to be similar in Santiago. A recent study (Sagaris & Tiznado-Aitken, 2018) from that city revealed that women travel two to three times as much as men for care-related purposes (shopping, picking someone up/dropping them off, health/formalities, etc.).

Due to the general lack of available data on women's mobility (or incomplete data), it is difficult to say exactly how women move about a city. Therefore, it is also difficult to estimate the size of any inefficiencies in transport systems or to gauge the potential benefits of public transport if it was made to work better for women.

care roles (shopping/health etc.), but this is no longer the case. Based on the information gathered, many women often accompany their children to school in the morning and therefore, if the school

is not within walking distances they are obliged to travel during peak times. However, it was found that they tend to travel to more disperse locations than men (see below on working women who are domestics).

Transport use and habits change as people age and enter different life stages, this impacts not only the mode they may choose (buses over subways, for example), but also the time of day they may travel and the total number of trips taken (impacting how much they need to spend on their mobility). For example, in Buenos Aires it was found that when there are children, the number of women's trips

increases by 13%, while men's trips remain stable (Secretaría de Transporte & Ministerio del Interior y Transporte, 2009).

Women are also more likely to be employed as informal and part-time workers. It will come as no surprise that more women than men work as domestic workers. These workers travel usually much earlier or later than the typical commute, when transit can be more unpredictable and /or expensive. In addition, their destinations are not necessarily concentrated in the Central Business District (CBD) or major commercial hubs. This was found to be the case in Quito in particular.

Some expressions from women and men

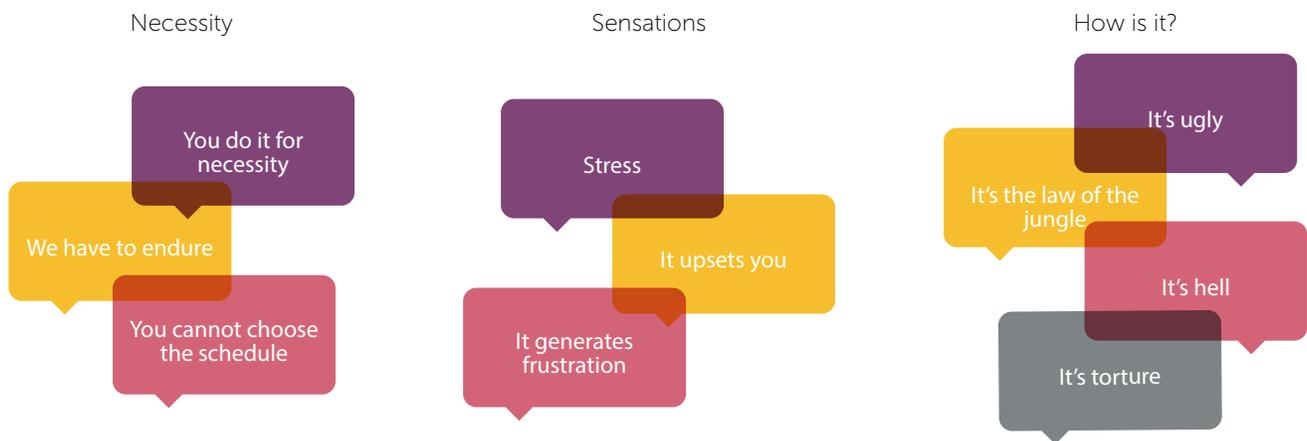


Figure 21. Expressions used in the focus groups (women and men) to describe their experience of using public transport (taken from all three cities). Source: Authors.

The results of the survey show a general and widespread dissatisfaction with the quality of service of public transport. Poor quality public transport is

usually associated with inefficiency, which is translated into higher costs. Such inefficiencies therefore affect women more than men, as they tend to

be captive public transport riders, trip chain more than men, and have fewer other transport options available to them. The level of female satisfaction with public transport quality was less negative in Quito, where women generally appreciate the BRT.

Insecurity is a key concern to both men and women, but for different reasons. This was especially seen in the results of the survey in Buenos Aires, which revealed significant security concerns relating to robbery. Generally, it was found that men

tend to be more worried about theft and physical violence, especially small incidents escalating into physical violence.

Women are also concerned about losing property, but in addition worry about the possibility of harassment (verbal, visual and/or physical). They are emotionally affected not only by seeing or experiencing incidents themselves, but also by those that they hear or read about, and they are more emotionally troubled by such incidents.

Quotes from the focus groups in Buenos Aires



Figure 22. Verbatims from the focus groups in Buenos Aires showing the frequency of incidents on the Subte (metro), suburban train, and buses. Source: Authors.

Women felt most vulnerable during all three parts of the journey: on the way to and from a public transport stop or station, while waiting for public transport, and while travelling in the vehicles.

In the three cities, 64% (Buenos Aires), 66% (Santiago) and 60% (Quito) of users felt generally unsafe on public transport. Rates were higher among

women; in Buenos Aires, this was 72% of men versus 58% of women; in Quito, 61% and 59%, respectively; in Santiago, 73% versus 59%. In the focus groups in Buenos Aires it was established that women experienced 5 times more harassment on buses than on metros (subways), and this was similar, in a lesser degree, in Santiago.

Perception of insecurity from survey respondents

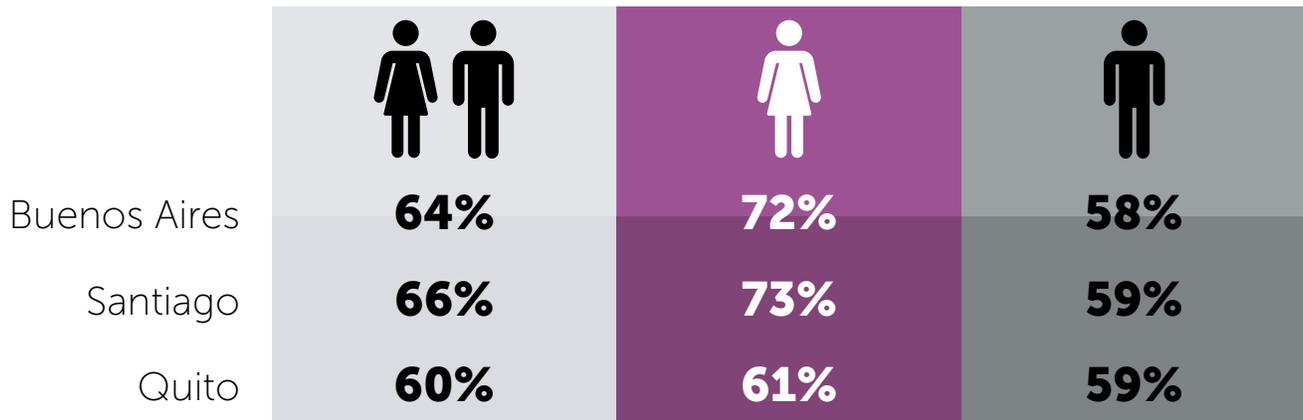


Figure 23. Perception of insecurity from survey respondents (combined and separated male and female). Source: Authors.

Survey respondents in all three cities showed they were aware of high levels of harassment on public transport. Both men and women saw and experienced many types of harassment – with the questionnaires asking for their experiences in the most recent past (weeks or past month) as well as over the preceding 12 months. In Buenos Aires, the respondents to the survey were asked directly if they felt insecure while travelling on public transport, whereas in Santiago and Quito they were able to indicate that insecurity was one of their main concerns when using it (questions were framed not to imply that they ‘should’ have seen such incidents but rather ‘if’ they had). While, in one city they were asked a direct question, and two cities an indirect question, the results are comparable. In Buenos Aires 72% of the women interviewed felt insecure, while in Santiago this was slightly higher at 73%, and in Quito this was lower, at 61%.

The study teams found that sexual harassment is embedded in a culture of violence that is widely perceived to dominate in all public spaces, especially those that can be considered to be male dominated. Overcrowding and unreliability in transport affects everyone, but women suffer more from this than men do. Too many or too few people are key factors that increase the fear of travel for women. The public transport system itself was not perceived to offer a safe haven to users, but rather formed a continuity with the generally perceived ambience of fear and violence for women.

The results of the surveys showed that there was a correlation between service satisfaction levels and concerns over personal security. When asked how they would classify public transport services (from very good to very poor), 61% of the survey respondents in Buenos Aires were not satisfied with the system in general terms, rating it as fair,

poor or very poor. In turn, in Quito they were relatively satisfied⁴, as 40% men and women felt it was good, with 6% and 7%, respectively, saying it was very good. On the positive side, people felt that it was ‘affordable’, ‘rapid’, and takes you to a lot of locations in the city, while a lack of comfort, overcrowding, low respect for passengers, and poor driving habits were all mentioned in the focus groups as being disadvantages. Verbatim from these discussions included wording such as ‘it is torture’, ‘an endurance’, ‘frustrating’ and ‘stressful’.

Affordability of public transport is also of key importance for women. They frequently have a tight transport budget and, with limited affordable

transport options available, they may often forego health related trips. They are more likely to forego employment opportunities because the related costs (in time and money) of transport are greater than the benefits of employment (Cresswell & Uteng, 2016; Frumkin, Frank, & Jackson, 2004; Grieco, Pickup, & Whipp, 1989; Ndulo & Grieco, 2009; Turner & Grieco, 2000). This affects low-income women more than low-income men and its effects can be detrimental to maternal and infant health. For example, a lack of affordable and convenient transport options can result in women skipping trips to health centers during pregnancy or infant check-ups for young children and newborn babies. Discussions in the various focus groups and interviews confirmed a number of these concerns.

What do people worry most about when travelling?

This study identified a number of typical aspects that generate a feeling of insecurity. Fear of being harassed far outweighed other concerns in all three cities and travelling alone was the second highest security concern. Travelling at night, in the dark, and being responsible for others also featured very strongly as key areas of worry.

Some more specific aspects emerged for each city. For example, women in Quito looked carefully at who else was using the system at the time they wanted to travel (either at the stops or stations or on the vehicles) – and if there were too many or too few people it generated fear, which may make them change their plans. 69% of women and 52% of men mentioned this aspect.

⁴ It should be noted that it is a flat fare in Quito so people can travel long distances for the same as short trips.

Conditions that made public transport users feel insecure

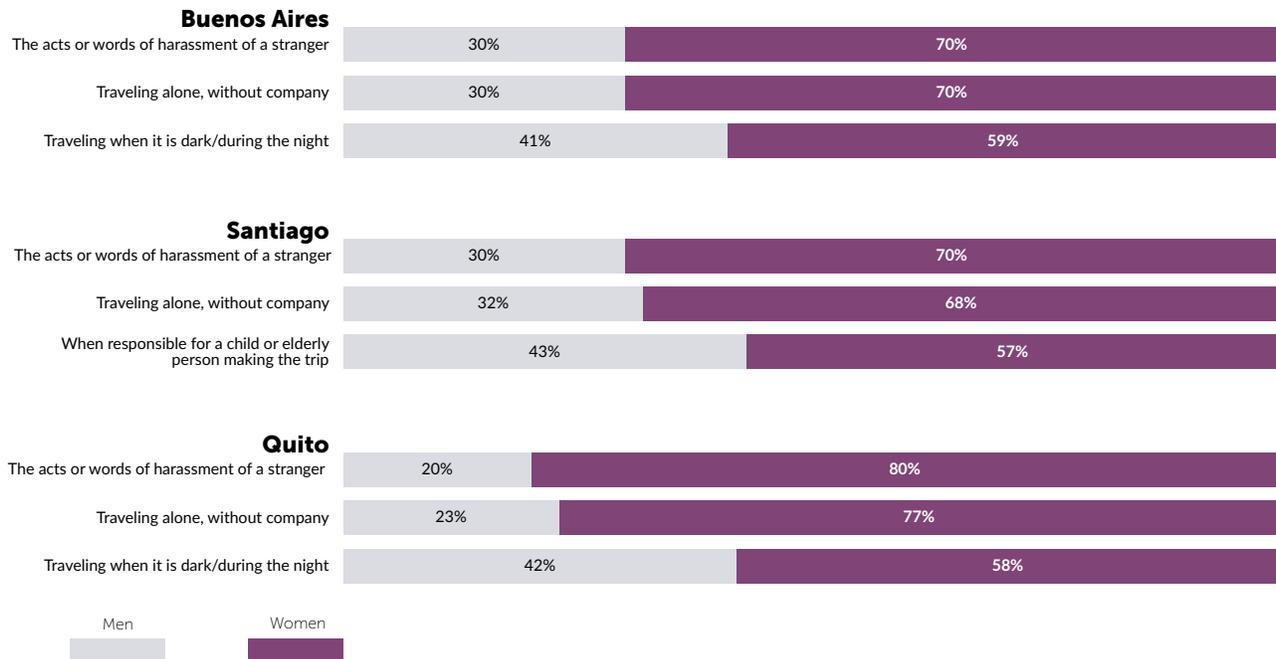


Figure 24. The conditions that made public transport users feel insecure. Source: Authors.

Aspects that generate insecurity in the system by gender in Quito

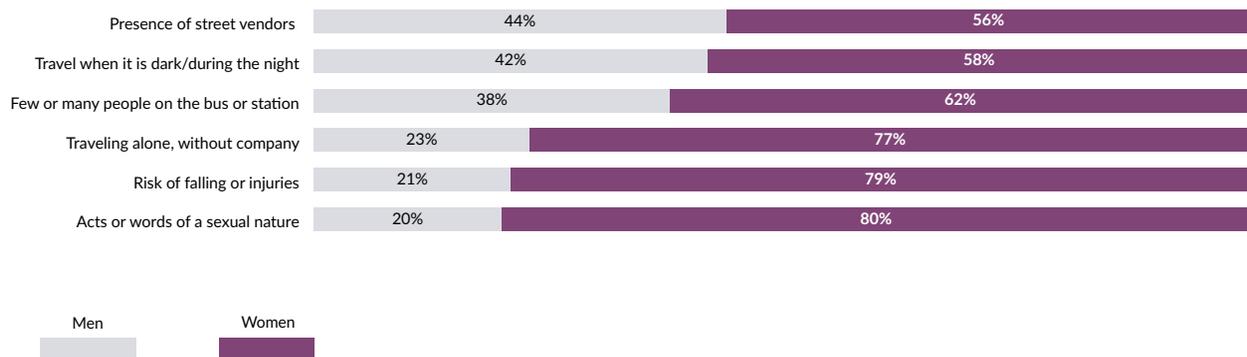


Figure 25. Specific results from Quito on where on the system people felt least safe. Source: Authors.

This was similar in Buenos Aires, where it was mentioned with equal levels of concern. Here 77% of women would avoid using public transport if there was a high presence of men (in the vehicle

or carriage or loitering at or near bus stops or stations) and 55% if there was overcrowding or too few people using the system.

Aspects that generate insecurity in the system by gender in Buenos Aires

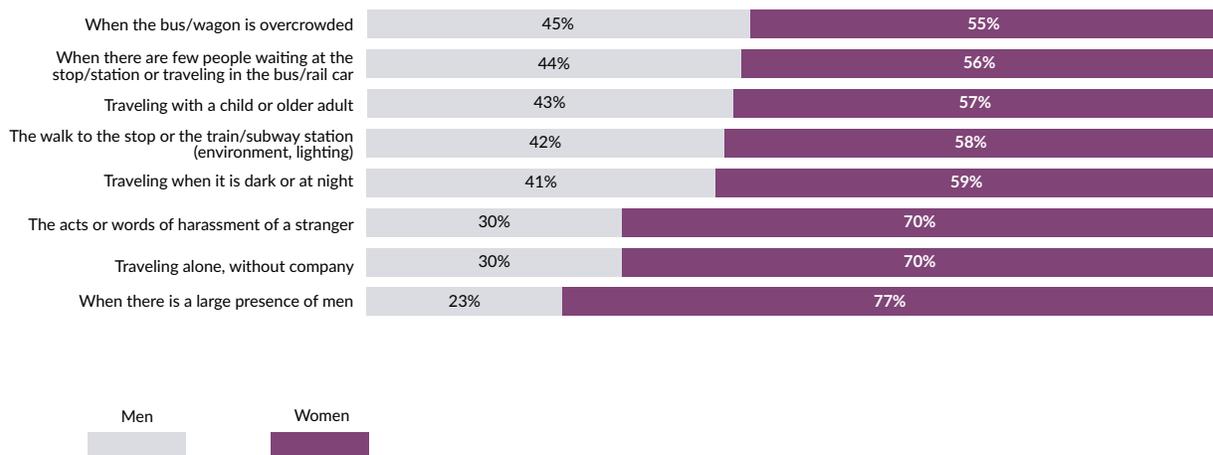


Figure 26. Specific results from Buenos Aires on where people felt least safe. Source: Authors.

In Santiago, the data was disaggregated to compare metro and bus users⁵. It was clear that buses were associated with more personal security concerns than metros, which is not to say that women perceive metros as being safer than buses. Traveling ‘without daylight’, i.e. when it was dark, had the most impact on women’s travel choices. This was especially the case for bus users. Poor bus stop conditions was a close second. Of those surveyed, 23% of women reported travelling accompanied,

10% with children, requiring care and protection. The rest were travelling with others who could presumably afford some protection to the women herself in the event of harassment. Only 1% of men reported travelling accompanied, revealing the very different roles performed by men and women in Chilean society, and women’s responsibility for most care trips. This was also the case in other cities.

⁵ All three questionnaires had similar and comparable questions

Aspects that generate insecurity in the system in Santiago

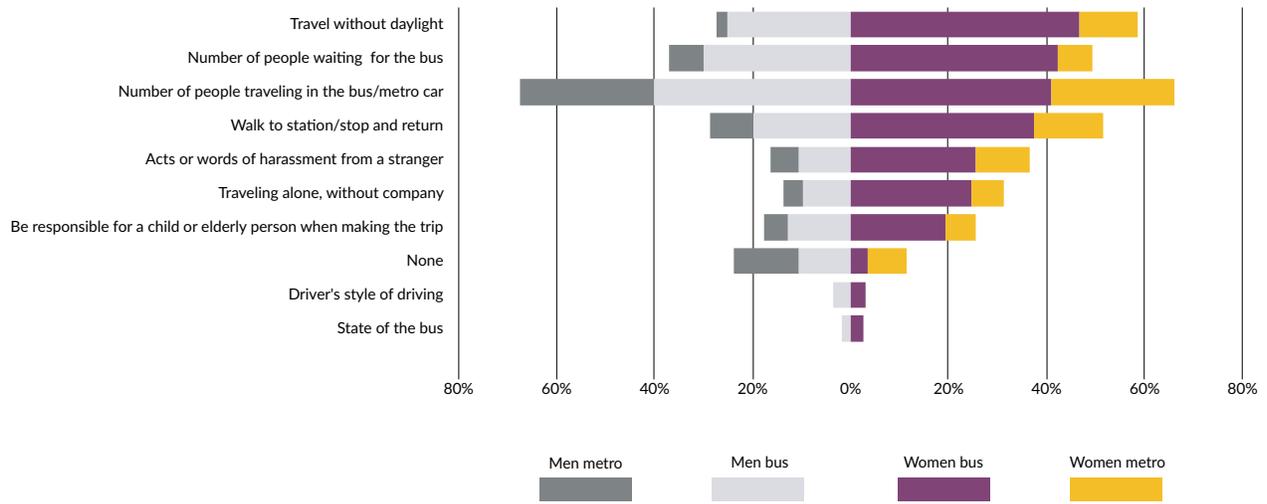


Figure 27. Santiago results of where people felt insecure while travelling. Source: Authors.

From a Santiago focus group, it also became clear that women set a silent curfew: a time after which they will not travel alone. This schedule coincides with their mode of transport. Some women ruled out travel on any mode as early as 7 p.m., but most reflected personal curfews associated with their usual transport mode, around 10.30 p.m. for Met-

ro, later for buses. The latest traveling hours were reported by those who mainly cycle. They felt free to travel after midnight, mainly because cycling requires no waiting times in lonely areas and provides sufficient maneuverability to avoid potentially hazardous situations.

Levels of Harassment

Harassment includes a large number of different types of actions, which were identified by this study. These range from visual harassment (staring, leering, making suggestive or lewd facial expressions sometimes linked to gestures including touching or exposure of private parts), to verbal (comments, insults or unwanted invitations), and physical (groping women, fondling or masturba-

tion), escalating upwards to and including criminal offences such as rape. The majority of harassment is verbal, but the study showed that, on average, 1 in 5 women have experienced physical harassment and 1 in 4 women have experienced severe harassment. Men do experience harassment but far less often than women.

Types of harassment

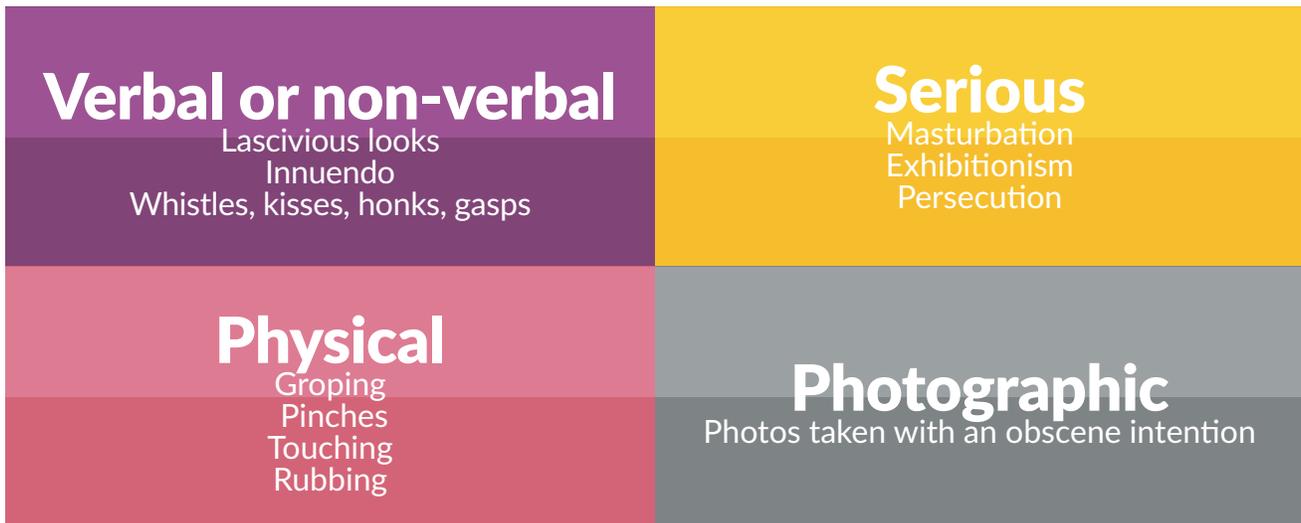


Figure 28. Types of harassment. Source: Authors.

In Santiago, 89% of women (and 82% of men) reported they had seen, heard, and/or experienced two or more cases of harassment. In Buenos Aires, those surveyed reported 210 cases of harassment (from a total of 790 people) – 73% were women and 27% men. In addition, of those reporting having experienced two or more cases of harassment in the past 12 months (82 respondents), 89% were women and 11% men. This suggests women tended to experience additional victimization with some frequency, whereas few men did. This may be associated directly with gender targeting or with routes those women use.

In Quito, 29% of the female respondents have witnessed (i.e. seen it happen to others⁶) visual acts of

sexual harassment in the form of looks or gestures and 18% have experienced it. 18% have seen an act of physical harassment (a physical touch of a sexual nature) on another person and 11% have themselves experienced it. Additionally, 14% of women had seen another passenger exhibiting or manipulating his genitals, while no men saw anyone doing such things. In fact, none of the men surveyed admitted to having experienced any harassment themselves but they had seen it happen to others (mainly women). On the other hand, 82% of men had seen robbery or theft occur, although only 2% had experienced it.

In Buenos Aires, of those who witnessed harassment (said that they saw incidents), 47% were

⁶ It is worth noting that people have a tendency to say that something may have happened to a 'friend' or that they saw it happen to a third party rather than admitting that it actually happened to them. This is why we used this line of questioning in order to understand the extent of this problem rather than focussing on reporting personal experiences only.

women and 53% were men, while the clear majority of those who experienced it were women (73%) and only 27% were men. In Santiago, 43% of men and 57% of women had experienced harassment in the previous year. Almost all (95%) had seen or heard about harassment at some point in their lives.

In Buenos Aires, for every three incidents on the metro, there were 15 on the bus. It should be remembered that women use buses most, so this is not surprising.

Abuse is not only when someone is violated, abuse happens when a guy makes approaches to a woman without her consent.

Source: Focus Group Buenos Aires

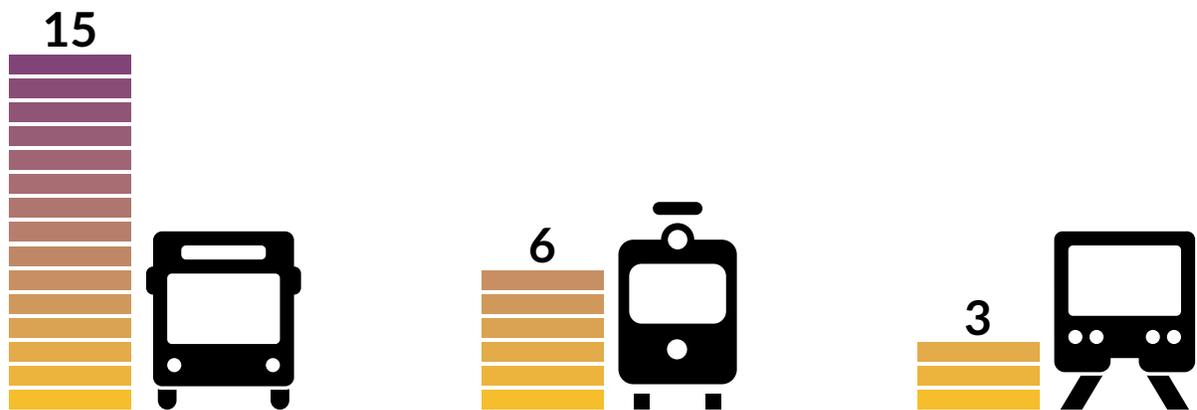


Figure 29. Number of mentions of sexual harassment incidents. For every incident on the metro system there are five on bus system in Buenos Aires. Source: Authors.

This information was collected from the bus and metro riders of the Buenos Aires survey and focus groups who answered about seeing or experiencing harassment. Although the metro can get very crowded, it has a higher number of CCTV cameras and therefore the risk of being caught is perceived

to be higher. However, it is not possible to say if this was the main deterrent or reason for fewer incidents. The difference between bus and metro was similar in the results from Santiago, where there were also higher numbers of incidents being seen or experienced on buses than metro.

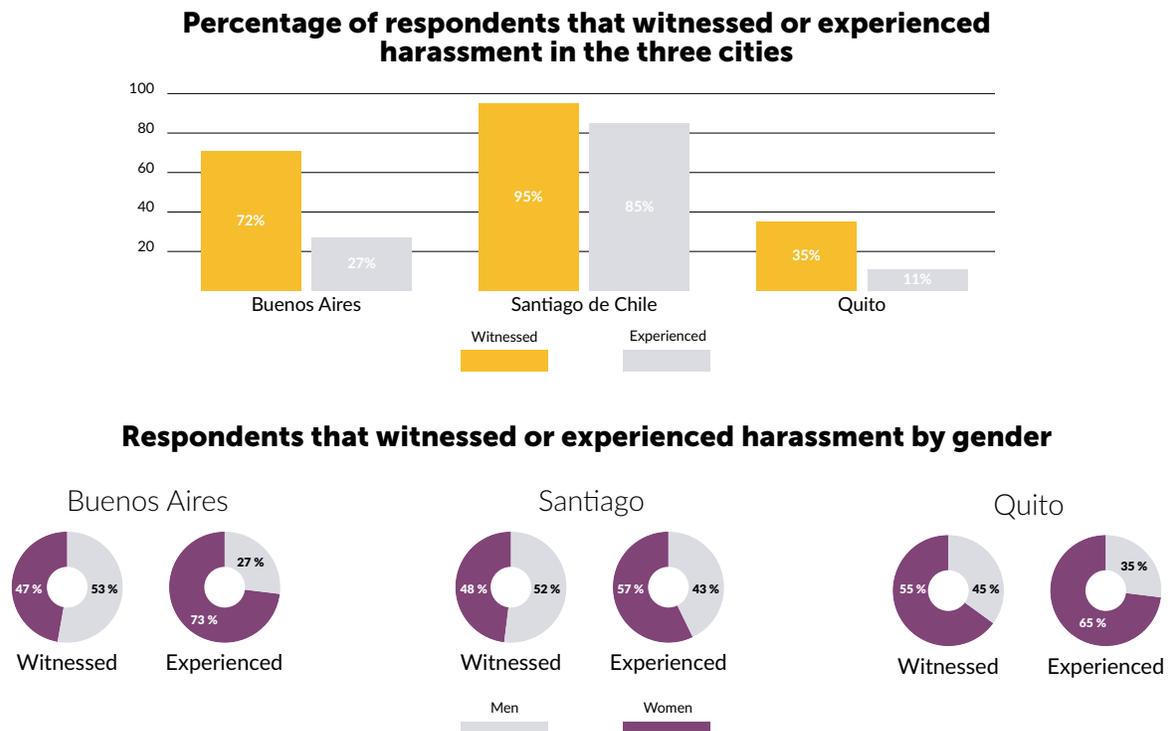


Figure 30. Percentages of women and men who have suffered or witnessed harassment in the three cities. Source: Authors.

The statistics on harassment in Figure 30 may also include some petty crime, although the line of questioning was on harassment. However, clarifications showed that men are more worried about theft and crime and, although women are also concerned about this, they are more worried about (sexually related) harassment. More details on the locations where they felt most fearful can be found in the case studies.

An interesting and important finding in all cities was that, in the majority of cases, men and women had differing perceptions of harassment. There were similar discussions in each city (especially in the mixed focus groups), and all parties agreed on the importance of basic levels of moral behavior,

although these levels differed between men and women. The notion that these are based on personal values was generally accepted. In reality, there seemed to be approximately similar levels of acceptability between the cities, especially when it came to sexual harassment. Although undesirable, verbal, and visual harassment could (or might) be tolerated as long as it is not intrusive or threatening, all forms of physical harassment were considered to be unacceptable.

The boundaries of when verbal harassment became unacceptable were difficult to pin down. Shouting insults was understood to be unacceptable, while commenting on parts of a women's body, looking in a suggestive fashion, staring, and/or leer-

ing at women and girls or parts of their bodies was more difficult to categorize. There was also general agreement that what is considered to be acceptable and what actually occur are also two different things – when men are in groups (such as working on construction sites), drunk, or under the influence of drugs they may behave worse than they would otherwise.

When triangulating the data gathered in the surveys with the focus group discussions, it was observed that women are more affected by hearing about third party experiences than men are. They may even alter their mobility behavior for a short

Reporting incidents

From the surveys and the focus groups the teams concluded that the majority of the cases were not reported by both men and women, and there is little confidence in any of the cities of either effective or sympathetic responses from the official security agencies. The situation in Quito has changed since the initiative *Bájale al Acoso* was introduced in March 2017 (after the data collection for this study was concluded in the city). The city now reports 74% of public transport users know about this new initiative and, therefore, about the reporting process as well. In Santiago, there are no regulations or procedures in place to handle sexual harassment, even on the Metro, which does have its own security system. Queries to transport authorities indicated there was no specific category among the general complaints system to document or respond to harassment-related situations. Survey respon-

period of time based on ‘hear say’ or stories that they may have heard from a variety of sources (such as the media, friends, social media etc.).

Although harassment is widespread, the focus group participants noted that most men behaved well. However, the small percentage that harassed women had a strong impact on their feelings and behavior regarding public transport.

Another key finding was that this information would not have been possible to obtain from the survey, which underlines the necessity of investigating the issue using qualitative techniques.

dents and focus group participants mentioned a number of individual responses, and low expectations or reliance on official assistance.

In fact, low levels of reporting were consistent across three cities, as detected by surveys and explained in more depth by focus groups. This is rather alarming, since it means that a major constraint on women’s mobility is not being detected through any of the current instruments used to study and plan transport systems, and thus is not taken into consideration. This is a key finding of this study. The importance of collecting both quantitative and qualitative data regarding these experiences and broken down by sex is highlighted by the widespread underreporting of this issue.

In Buenos Aires, of survey respondents that experienced incidents, 56% did not report them, and among women that suffered an experience of harassment, 55% did not tell anyone that it happened (due to shame, guilt and distress). From the focus groups the following expression emerged: “as [physical harassment] is already something natural, nobody spends time or goes to the police station, because what complaint are you going to make? What are you going to say? ‘Look, today when I was on the bus a lazy guy harassed me’? The real thing is that they do not take you seriously, they treat you badly, the same policeman will laugh in your face”...

Focus group discussions in all cities also showed a low level of trust in the authorities’ response to reporting incidents. Reporting an incident was seen as being time consuming, with distrust in the attitude and capacity of the security (police and/or public transit) agencies to treat the complaints in a sympathetic or effective manner. Victims had low expectations that the perpetrator would be caught or brought to justice. Mistrust of impartiality extended to the police, the prosecutor’s office, and the judges.

Box 7: The Ombudsman Office, Buenos Aires

The Ombudsman of the Autonomous City of Buenos Aires was created to fulfil the constitutional mandate of protection and promotion of human rights and other individual, collective, and diffuse interests against acts or omissions of the administration or public service providers. Since 2014, the Transport and Telecommunications Directorate, created within the structure of the Ombudsman’s Office, has had a special emphasis on public transport policy and mobility as a whole. The work carried out by this Directorate and its gender policy agenda promoted by the movement “Not One Less”, led to a special line of work on gender issues and the creation in 2017 the Ombudsman’s Office the Gender Observatory.

With the increase in transport fares in 2016, the Ombudsman’s Office received numerous complaints from socially vulnerable users. 90% of the total concerned women with dependent children and, in particular, those employed as domestic workers. In this regard, the Ombudsman held meetings with the Nation’s Ministry of Transport in order to establish an integrated fare mechanism that would smooth the cost of transport for those who make the most trips, particularly the transfer of children to school. Recommendations have also been made to the relevant areas to facilitate access to the right to transport by these affected sectors.

Complaints about problems of accessibility to the subway network, especially from mothers with children (in strollers), pregnant women, and the elderly have also been filed. The Ombudsman initiated legal actions against the Autonomous City of Buenos Aires to guarantee full accessibility of the stations, as the accessibility index is currently 50%. Complaints about public transport drivers’ behaviors have also been made and the office has responded with special training programs for bus and subway drivers.

Claims channeled through the Ombudsman have increased over time as this service becomes better known and it is able to respond to claims that are not usually addressed by the local authority. A personalized treatment for each case and a direct and accessible assistance for the victims facilitates the coordination of claims before the local authority and allows a better follow-up and control by the citizens.

Although the total of cases specifically related to gender issues are low, the Ombudsman has still been able to make some general recommendations to the Government of the Autonomous City of Buenos Aires based on the complaints received.

A national “Gender Violence Survey” (INEC, 2012c) undertaken in Ecuador found three of every five women over 15 years old reported having experienced violence (mainly within the home). Quito responded with a new local ordinance to define parameters and bring perpetrators to justice. In May 2014, a pioneering new initiative, Resolution C337, became the basis for policy actions to ensure that women could travel safely on the city-run public transport system. Its specific purpose was to reduce harassment and violence against women. These efforts continued with further resolutions (March 2016), which led to UN Women to create a specific project in the city under their Safe Cities for Women and Girls program and empowered the Patronato San José foundation, in coordination with other bodies, to implement it. The new Criminal Law (COIP) of 2014 (Ministerio de Justicia Derecho Humanos y Cultos, 2014) includes all crimes against sexual and reproductive integrity in public spaces. It distinguishes between sexual harassment⁷ and sexual abuse, the former being the main type of offense for cases occurring in public transport. Article 170 of the new COIP on sexual abuse, establishes that: “a person who, contrary to the will of another, executes on her or obliges her to execute on herself or another person an act of a sexual nature, without existing penetration or car-

nal access, shall be punished by imprisonment for three to five years.” Additionally, it establishes the codes for abuse committed against children under 14 years and when the act is committed on public transport.

Since the new ordinance 235 in Quito, there have been more incidents reported and several men have been charged with under-age molestation. The revised legal framework made it easier for them to be brought to justice and for sentences to be given.

Key laws are needed in each country to frame crucial issues, such as defining (sexual) harassment on public transport and how this fits within the legal system and under what laws (laws, ordinances, protocols and procedures). Generating an environment of zero tolerance so women can freely move about in public space may require local ordinances, reviews of legal frameworks to include public transport as public space, specifying types of harassment, and other legal measures. It frequently requires increasing legal sanctions, particularly for the most serious forms of harassment. Both Quito and Buenos Aires have made recent changes to address harassment and gender-based violence in public space.

⁷ Article 166.- Sexual harassment.- “A person who requests an act of a sexual nature, for himself or for a third party, in the presence of authority ... any other form involving subordination of the victim, with the threat of causing the victim or a third party, an evil related to the legitimate expectations that may have in the scope of said relationship, will be punished by deprivation of liberty of one to three years. [...]”

Discussions on responses and how people deal with harassment

Interestingly in Quito, a city where a number of campaigns have been put in place since 2011, ignorance of the reporting process was still widespread at the time of the implementation of the survey. Only 27% of women and 29% of men interviewed knew how to file a complaint in cases of harassment, or in other words, around 70% of the traveling public were not aware of how to complain. At the time of the study, 21% of those surveyed were aware of the Cabinas Cuéntame (Tell me Kiosks), a major campaign (2014) of kiosks in the main BRT transport hubs where women could find help and information about harassment.

Generally, the focus group discussions in all three cities confirmed that men were more confident about their dominance and rights within public spaces, while women were less confident. Both sexes were generally unwilling to intervene in any type of incident (witnessed or experienced). Women frequently felt that the incident may have occurred due to something that they may have done, but that they were not aware of, and therefore assumed some guilt.

From these discussions, the main reasons that women chose not to intervene as a witness or victim were found to be:

- Fear of possible aggression by the aggressor (including fear of being followed after leaving the bus).
- Not knowing how to react or being clear that they should react (i.e. it is within their rights)
- Perception or fear of a lack of support from fellow passengers (who themselves may be afraid of intervening).
- Fear about retaliation if the action was denounced. many women felt anxious about their vulnerability should they react to openly and firmly.

Typical reactions were noted from these discussions, based on the information collected in Santiago, but considered to be similar in all cities:

- Passive (internalizing the victimization)
- Verbal
- Physical

Typical reactions to aggression and harassment

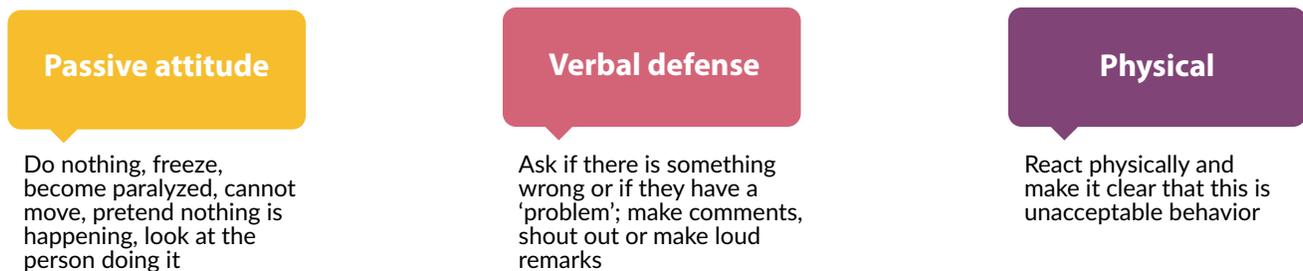


Figure 31. Typical reactions to aggression and harassment. Source: Authors.

Reactions were also similar according to age and experience. People are complex creatures and the majority reacted with a combination of one or more of the above ways. Younger people tended not to know what to do or how to react – especially if the perpetrator was older than them – while older women (over 35), with the experience of previous incidents, have developed personal strategies. This may include giving verbal responses, such as ‘Do you have a problem?’, making it clear that whatever was happening was not going to be tolerated, slapping the perpetrator, moving to another seat or area, pretending to phone a man, or other ways of showing that they could ‘be difficult’. An example came from Santiago from a lady who always travels with a large ‘pin’, which she will use if needed, and she has found it to be an effective deterrent stopping any unwelcome physical behavior.

Generally, women had developed more strategies to avoid such incidents than men – typically six or seven, and they were similar in all cities. This included changing routes, keeping travel within the neighborhood, altering the times of travel and/or the route, changing the mode of transport, changing the carriage or bus (getting off the vehicle), or travelling with another person/family member. Further strategies included considering more how they dress or behave, using (or not using) cellular phones, and being more alert. While men have much fewer strategies (typically three): changing routes and time of day, not travelling at night, and being more attentive and alert when travelling being the most common. Both men and women expressed little trust in the authorities and felt that they had to find their own solutions to this behavior.

Six strategies used by women looking for safety



Figure 32. Six main strategies for women were identified. Source: Authors.

However, as mentioned there are a number of specific risk factors that increased the level of anxiety for women, both too many people (overcrowding) or too few people on the system were frequently cited. Waiting areas around public transport (especially if they are in isolated places or if there is no street lighting) and traveling out of daylight hours are all considered to be risky. An interesting observation

included the difference in what is considered to be ‘night’ or ‘without daylight’ (Santiago). There was a difference of the perception of when night started that was aligned to the difference modes – for example metro users put it later (based on when the metro services became less frequent and/or ended) while bus users put this earlier for similar reasons.

Did public transport users change their behavior?

Both surveys and focus group discussions revealed that while men tended to make fewer changes in their travel patterns in response to concerns about personal security, women were very likely to make changes, sometimes quite significant ones, such as not travelling at all, not travelling at certain times or to unfamiliar places, etc. However, a third

of interviewees in each city made no changes to their travel behaviors after an incident. This was discussed in the focus groups in Quito where the decision not to change was due to very limited alternatives being available – in other words, it was a choice of giving up being mobile or suffering the likelihood of being harassed.

Other changes in behavior

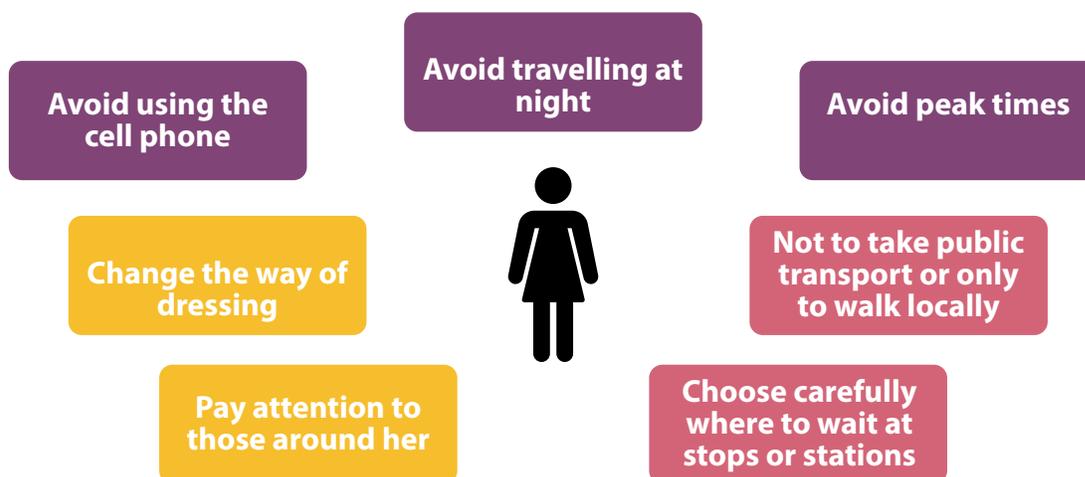


Figure 33. Typical examples of female strategies to avoid being harassed. Source: Authors.

In Buenos Aires, 79% of men did not change their habits, and for women the most frequent strategy was to travel with someone (71% of those who admitted to making changes). This was also the preferred strategy for women in Santiago (68%). In turn, in Quito and Santiago, women chose primarily to change routes (81% and 57%) and to avoid certain roads or sections of roads.

Reducing their use of public transport was the least preferred option in all cities – which is understandable, as this would significantly affect their

mobility and quality of life. However, in Santiago, 40% of women and 27% of men answered that they had eliminated some public transport trips, and this was also high in Buenos Aires (63% and 37% respectively). In Quito, where there were the least transport options, 63% of women have reduced their public transport use or changed travel behavior, while only 32% of men have. Thus, in all cities respondents admitted to modifying and/or reducing their use of public transport due to fear of harassment and personal security.

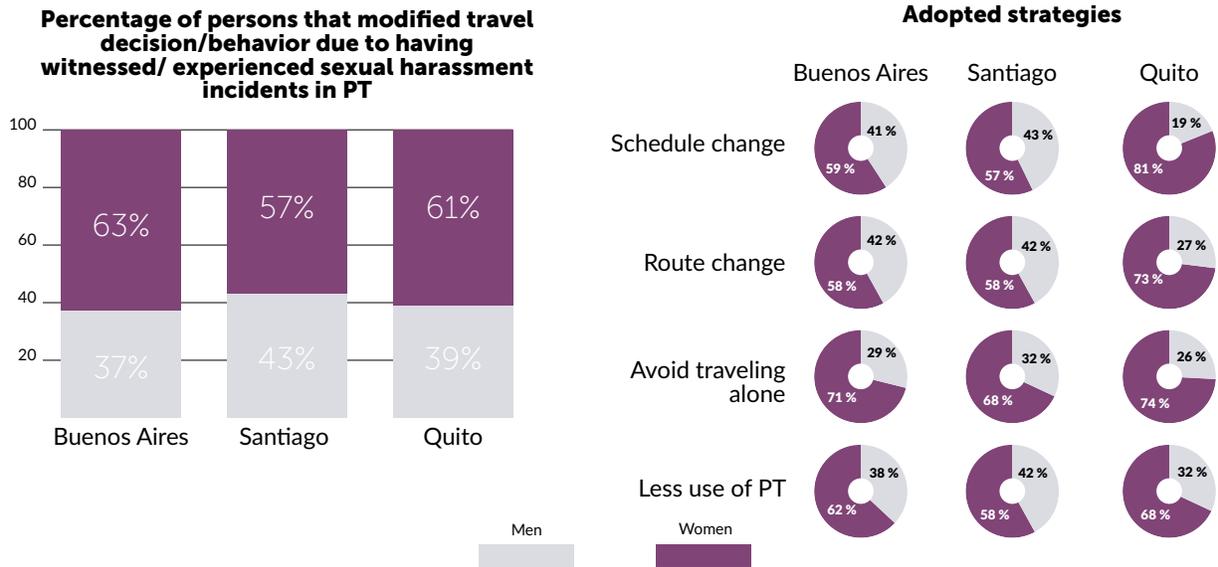


Figure 34. How people changed their travel behavior after experiencing harassment in all three cities. Source: Authors.

In addition, the survey enquired about the respondents' propensity to change from the mode they used currently if they were able to do so, i.e. if there was an affordable and convenient alternative. In all cities, if given the choice, people would move away from public transport. At least one third and in some cases two thirds of the respondents in

all cities would like to change if they were able to. Women expressed this more strongly than men, and generally, women appear to be less loyal in their mobility habits than men, as they are more used to having to change them according to other duties (such as children's needs) than men, who may have more entrenched habits.

The preferred choice would be changing to a car, which is perceived to be more comfortable and faster, and women were at least as, if not more, likely to change than men if they could.

In Santiago and Buenos Aires, both men and women stated the car was their first choice to change

from public transport. Private vehicles are seen as being more comfortable and quicker than public transport, and in some cases, they are. However, as congestion increases this perception is ever further from reality. The bicycle was also rated quite highly by both men and women⁸.

Table 4. Responses from men and women to the question whether they would like to change given the choice of another mode. Source: *Ella se mueve segura* – Santiago Case Study.

WOULD YOU PREFER ANOTHER MODE OF TRANSPORTATION?	
MALE (63%)	FEMALE (70%)
Automobile (26%)	Automobile (33%)
Bicycle (16%)	Shared Taxi (20%)
Shared Taxi (11%)	Bicycle (12%)

Possible solutions

Solutions suggested by focus group participants:

- Improved reporting procedures for incidents (all types, not only criminal offences) and support systems;
- More visible and better trained security agents/police at stations and major transport hubs and the creation of specific units;
- Increased, better, and continued public awareness campaigns (advertising and information);
- Increased levels of punishment and the publication of court hearings and judgments so

perpetrators are made aware that they might be caught.

Altering common operating practices within public transport, such as allowing buses to stop ‘between stops’ at night⁹, technologies such as CCTV cameras, alarms on buses and at stops (including panic buttons), single service hot lines, or SMS numbers were also suggested. Other proposals included greater citizen participation and increasing neighborhood watch programs, as well as infrastructure improvements such as better lighting, and improv-

⁸ There have been a number of programs to increase cycling targeting both men and women in Santiago.

⁹ Started in Montreal in 1996 where bus drivers are allowed to stop between stops on request (Wekerle, 2005)

ing areas around public transport places, and hostlines to security personnel.

No one clear option was universally proposed and accepted, and there were discussions on what could work best within the cities as well as across cities. This was also somewhat beyond the scope of the study, but is clearly an area where more work needs to be done. More details of the diverse actions a city might consider doing can be found in Section 5.

KEY FINDINGS

Overall, it was found that public transport does not respond well to women's security needs. The following are the most relevant findings of this work.

1. Transport is not gender neutral

Many care-based trips are not considered in data collection nor are they recognized in most cost-benefit analyses, yet, for women, are the majority of trips. Many of these trips are made on foot; this is sometimes because public transport can be expensive for the numerous short trips that women need to make. According to the information collected, care related trips were the majority of trips made by women in both Buenos Aires and Santiago. For example, in Buenos Aires Metropolitan Area 13% of total trips made by women are for taking and collecting children from school.

The tools and data currently available to decision-makers are frequently insufficient for them to be able to make gender informed decisions and

Based on these findings, the teams concluded there is a need for a more robust gender-based baseline (with origin and destinations, trip purpose, mode, and including the latent demand from households that are not currently using public transport). It is also necessary to create a strong multi-stakeholder process that includes the voices of women's groups to identify local needs and requirements, to build a higher level of interest from women in transport, as well as instigate a gender action plan for transport.

be able to take these differences into account in their development (and transport) plans. The majority of transport data collected at city level is not disaggregated by gender, so the majority of urban transport is planned without proper information on their main user base. However, this study also makes clear that simply disaggregating quantitative data between men and women is not enough to provide sufficient insight for inclusive transport planning.

Until recently transport planning and operations has been assumed to be gender blind. Project developers and planners take a "one-size" fits all approach to mobility solutions, assuming that both men and women will benefit equally. In reality, women and men have different mobility needs and patterns, and more importantly, different expectations from a transport system and different perceptions of security. Thus, transport policies and operations need to respond to these differences.

This study concluded that quantitative or qualitative data was insufficient on its own, and that both are needed to be able to provide the detail that

planners and authorities need to develop a new framework or paradigm that would provide more inclusive and affordable transport.

Aspects influencing modal change

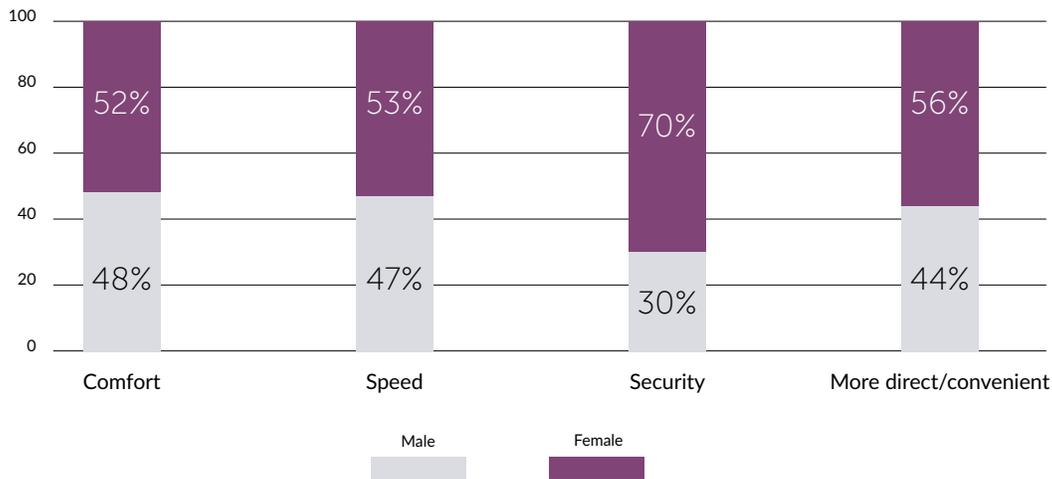


Figure 35. Propensity for women to shift away from public transport when asked in the focus groups in Buenos Aires. Source: Authors.

2. Transport has a major impact on the quality of life of women

Transport, and urban transport in particular, serves the population beyond the provision of mobility, as it is a key enabler for people to be able to fully participate in labor markets and access key functions (education, health, paid and unpaid employment, markets) and social exchanges. Women, especially those that juggle care and work roles, are known to be time poor. Thus, the proximity, affordability, availability, and security of transport has a serious impact on their quality of life.

This study shows that the availability of suitable transport impacts women's quality of life. In Quito, women (low income) tended only to go out of their neighborhoods if El Trole BRT was available. In Santiago, where women still walk a lot, all forms of public transport helped expand their transport horizons. However, even low-income women were not satisfied with the service and quality of public transport, and they would organize themselves together to take a taxi and share the cost (from the example of El Bosque).

The travel behavior of women may be more or less impacted by personal security concerns as they move through the various life stages of youth, adolescence, early adult/motherhood etc. Younger women are more affected by harassment, but they learn coping strategies as they age. Women may have to switch from one mode to another (e.g. metro to bus) when they have families. In Buenos Aires, the number of trips made by women increased by 13% when they have children, while the number of trips made by fathers tends to stay stable. It is likely that would be similar in the other study cities, and possibly more generally in the region, as women shared similar levels of care and reproductive responsibilities. Were men to take on similar levels of responsibilities, these differences would not exist.

3. Women use and rely on public transport more than men

The data collected in the three cities confirmed that women use public transport more than men, although their trips may cover shorter distances. Consistently with other findings in the region, women account for more than half of public transport users in Buenos Aires (54%), Santiago (52%) and Quito (64%). In addition, women tend to use bus more than rail.

When these high levels of public transport use are combined with their levels of walking, it shows that today the travel behaviors of most mid to low-income women can be considered to be environmentally sustainable.



Figure 36. A woman in Quito managing doing the shopping and her care duties – it would not be easy for her to use a subway or to travel on crowded public transport. Photo credit: Galo Cárdenas

However, as the focus groups discussions confirmed (especially in Buenos Aires), women would shift from public transport to almost anything else if it were feasible to do so. Women do not show loyalty to public transport itself. Men also indicated that they would also switch, but less quickly as they tend to have more engrained habits.

One hypothesis put forward is that this is due to the fact that women continually have to plan their trips to accommodate the needs of others that may change on an almost daily basis (unforeseen trips to the doctor or dentist, a family member requiring attention of some kind, a shopping errand that needs to be fitted in etc.). They are therefore generally more flexible in changing their travel behaviors. That said, women's current sustainable mobility habits (walking and public transport) should be nurtured, rather than lost.

4. A high level of general dissatisfaction from female users

Women who use public transport as their main mode tend to be captive riders, but are largely dissatisfied with the transport options available to them. Low income men and women in Quito expressed relative satisfaction with the quality of public transport services, while in Buenos Aires, 61% of women and men rated it as fair, poor or very poor and 69% of low-income women held very negative views on public transport quality. Generally, people expressed high levels of dissatisfaction in Santiago. Security, and the perception of personal security is a key influence on how women live and move, more

than for men. It also affects how they allow their children to access activities (e.g. going to a better school that is further away – of special importance for girls – sports, or taking babies and infants to health checks). For example, if transport to health centers is complicated, time consuming, and expensive, mothers will simply skip these checks, especially if there are several children in the family.

There are three main sections of the journey where women feel most vulnerable – on the way to and from a public transport stop or station, waiting for public transport, and while travelling in the vehicles themselves. In the three cities, 64% (Buenos Aires), 66% (Santiago) and 60% (Quito) of users felt unsafe on public transport, with rates higher among women; in Buenos Aires, this was 72% of men versus 58% of women; in Quito, 61% and 59%, respectively; in Santiago, 73% versus 59%.

5. Women experience high levels of harassment while using public transport

The study groups in all three cities confirmed that women face many types of harassment on an almost daily basis while using public transport, while men expressed more concern about theft and crime than personal security or harassment. The emotional impact of harassment, and fear of it, is significantly higher among women, and this can make them modify their mobility patterns. This includes avoiding taking public transport, changing the time of day they travel, and general stress. In extreme cases, the emotional distress caused by harassment or violence means that they restrict their

transport horizons to the proximity of their local area and neighborhood, will only travel if accompanied, or will not travel by public transport at all. This research identified a ‘ladder of violence’ (see Figure 28 above) and identified the strategies used by both men and women. It also found that if given the choice, more women than men would choose to abandon public transport, if that option were available and affordable.

6. Lack of trust in grievance systems and security responses

There is a widespread lack of trust in the ‘authorities’ responsible for security (for both men and women, but more so for women). Generally, there is a lack of clarity on what to do when harassment happens (on the part of the victim, and by those witnessing the incident). Quito has put in place a series of (pilot) programs over the past few years (including *Bájale al acoso*) that has increased the number of reported incidents and brought those that harass underage girls and women to justice, giving sentences from 1-5 years.

7. Women can play a stronger role as part of the labor pool within the transport sector

Current stereotypes of travel behavior of men and women remain predominant, although they are also changing to some extent. Women are also underrepresented as employees in the transportation sector – in all subsectors, including public transport operations such as drivers (bus and especially rail), maintenance and engineering roles, construction/infrastructure and planning at city, regional, and national level.

The study documented several initiatives to encourage more women to take up jobs in transport. An example comes from Buenos Aires, where now more than 50% of the traffic agents are women. In a recent recruitment drive (July 2017), of the 216 new recruits to the force, 65% were women. Efforts have been made to hire women subway drivers, who now represent 20% of the 532 subway drivers. Santiago has also made strides in increasing the numbers of bus drivers on Transantiago.

8. Women are eager and willing to engage with the transport community

On the positive side, if women are encouraged with adequate opportunities, knowledge, and information they will enthusiastically engage with transport actors to find local low cost and practical solutions. This has been clearly demonstrated in the collaborative initiatives with the local government and the El Bosque Women’s Centre in Santiago. This is starting in Buenos Aires, especially, in bringing in others such as those working on wom-

en’s rights (e.g. MuMaLá–Mujeres de la Matria Latinoamericana) and the cycling community (e.g. Ciclofamilia or Mujeres sin frenos). It can be concluded from the wide and varied inputs from the number of actors in each city (and in many cases the passion they expressed), that this is not ‘just’

a security issue, but is a complex *wicked* problem requiring diverse strategies and approaches. It was seen to be the responsibility of both men and women to address it and to co-create solutions, rather than impose what one or the other sex may feel is the appropriate response.

CONCLUSIONS FROM THE FINDINGS OF THE STUDY

There are a number of conclusions from this study that can be used to take this topic further.

Firstly – it is clear that we do not know enough about the differences in mobility behavior between men and women. The current paradigm for planning, and the expectation that better transport provides better connectivity and accessibility is simply not going to deliver sustainable transport for the future. The gaps and trends that have identified from many perspectives should be enough for us to realize that this approach must change. We believe that the arguments and information based on the experience of this study, set out above, should help to kick start and generate change.

Secondly – this study and the inter-city learning and exchanges have delivered significant added value compared to a single study. The legacy of the study in terms of knowledge exchange and networking between the cities and the knowledge gained by the individual study teams has been invaluable. In particular, the younger members of the teams have used this work to refocus their own research interest areas, and are motivated to include gender in future work in a more formal and strategic manner. The benefits of the active participation

of multidisciplinary approaches has allowed great depth of analysis – that can still be improved and built up further – which has been more than if each city team would have undertaken this study individually.

Thirdly – trying to address gender and transport using traditional methods of qualitative and qualitative data collection has been shown to be inadequate. Neither one or the other is sufficient, but both used together start to build a picture that is more useful for planning and implementation.

In addition, our research indicates that ignoring women in transport planning and development carries high stakes, especially regarding inclusiveness, quality of urban life, and for the environment. Indeed, in much of the region, public transport’s modal share is falling more quickly than a “captive rider” assumption can justify, suggesting that large numbers of current public transport users are actively seeking, and often finding, alternative modes of transport. According to this study, women felt little loyalty to public transport (less than men) and would readily leave the system if they could. Collective taxis are becoming particularly important to women’s mobility, not only in

the larger cities covered by this study, but also in small towns with little or no public transport and even in low-income areas where women feel that travelling on public transport is fraught with risk. It is unclear whether ride hailing (TNC) services such as Uber will help or hinder this. These topics indicate that there is a wide range of areas of interest for further research to further knowledge on gender and sustainable transport.

As cities grow, the gaps between the ‘haves and have nots’ tend to widen. Public transport provides equitable connectivity that helps to keep cities socially inclusive and safe. Secure transport plays a crucial role in ensuring a desirable balance between economic, social, and environmental sustainability. If there is little attention given to needs of women, this balance becomes more fragile, and can rapidly dissolve. On the other hand, women tend to be more sensitive to fairness and the environmental advantages of all types of transport, public transport included, and this can be used as an advantage if nurtured.

Thus, it is important to retain and increase use of public transport, as well patronized public transport helps keep transport emissions in check while increasing the equity of connectivity within a city. Keeping women in the public transport system as satisfied users by addressing their needs, especially their growing concerns over personal security, is certainly part of the solution.

For too long women have been apathetic about transport and have been happy to its design and

operation mainly to men. If they are really serious about equality and equitable transport, then they must also take an active role in all aspects of it.

Finally – the study and its findings show that there is still much to do. Women learn from a very early age to avoid risky situations, generating unconscious habits that can severely limit their participation in the normal activities of society. This study documents some of those elements, such as a “personal curfew”, which limits women’s travel after a specific time of day, often related to their preferred transport mode.

This study explored the attitudes and experiences of a diverse group of women and men in each city using a similar methodology, permitting comparison. Both men and women’s travel characteristics vary with age (life stage), income, race, ethnicity, social status and other factors. A woman or man who is single, married with no children, or married with children, etc. will have different transport needs. As the household composition changes, so do travel requirements.

Our findings, the guidance in this toolkit, and the solutions offered are by no means conclusive. There are still a number of areas that need further investigation that we noted as we progressed associated with our findings. One example is the importance of studying the habits of perpetrators of sexual violence against women on public transport. Who are they, what motivates/inhibits them? Is harassment done by a small number of repeat offenders who thrive under current conditions of impunity, or is

this something common to most men? How does this kind of VAWG relate to/interact with domestic, workplace, and other forms? How can this be taken into consideration within public policy and public transport planning?

There are still gaps in our understanding of what measures work best. The research approach should be further tested to find the ways to phrase the questions in a survey in order to gather the right information, especially when such surveys are done while people are travelling and therefore are pressed for time. We were also acutely aware that we did not collect information from women who do not currently use public transport, nor from those that have done in the past but no longer do. It is clear that harassment is a sensitive subject, and collecting the data is complex, as answering ques-

tions that expose that a person has experienced sexual harassment to a total stranger is not easy. Therefore a number of methods are needed to unpack this issue properly. The baselines in the three cities still need to be more fully developed and we anticipate further work, especially in testing this approach and in the development of meaningful data sets and indicators that could be used to show progress towards truly inclusive and sustainable transport. We welcome any interest from cities to test this toolkit.

The initial assessment of impacts and the interest shown by the wide variety of players (national ministries, cities, NGOs and others) in the core study cities, but also beyond, makes us enthusiastic to continue on this journey.

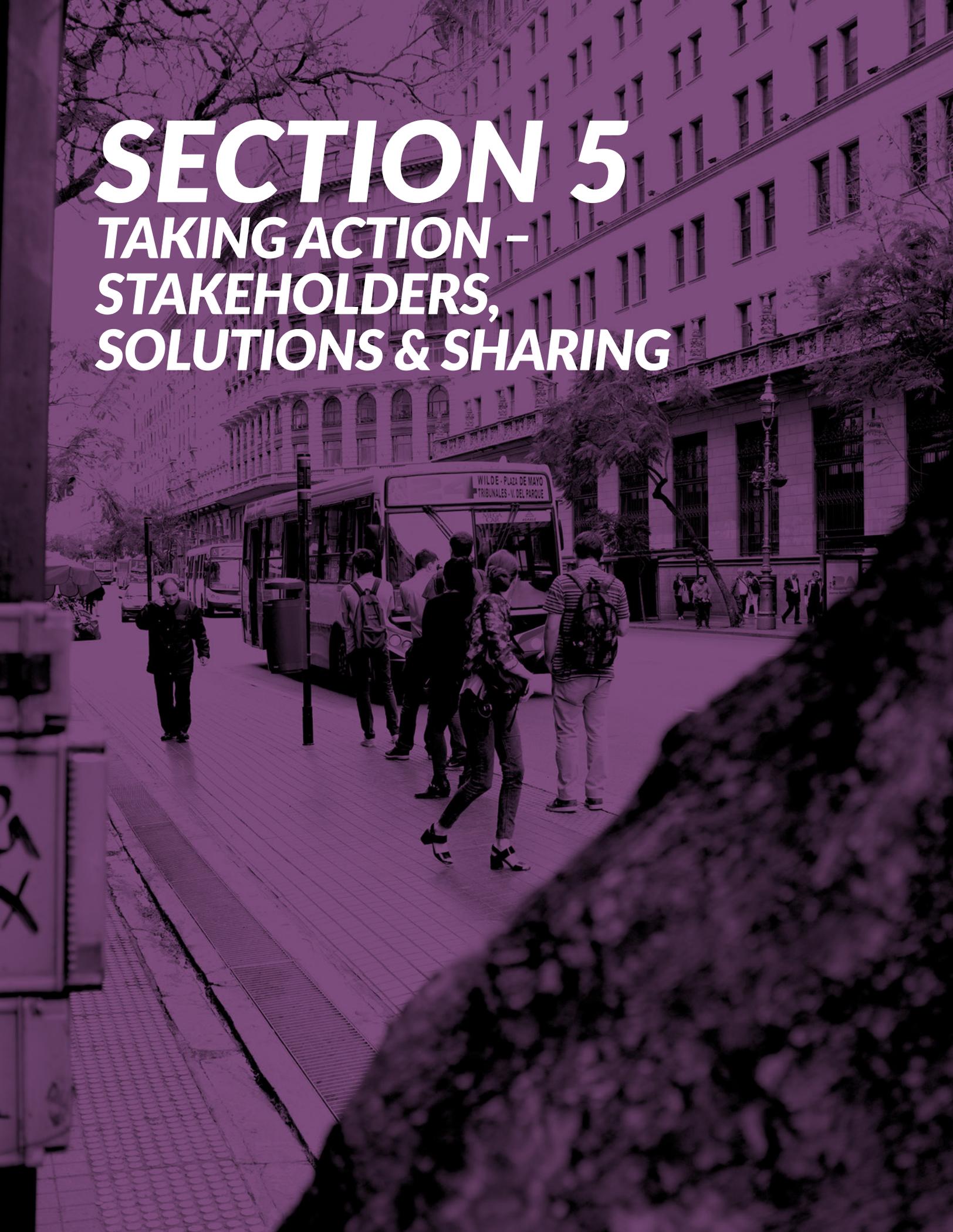
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SECTION 5

TAKING ACTION – STAKEHOLDERS, SOLUTIONS & SHARING



Section 5. Taking action – Stakeholders, Solutions & Sharing

Overview

Currently, urban transport is not gender-neutral, and planning rarely includes a strong gender dimension. Getting gender into the planning cycle would help make transport more gender-sensitive and inclusive.

Data and mobility information frequently does not include details on gender, and when it does, it is rarely included in any diagnosis or analysis that can be used for transport planning or improvements, either at city or national levels.

There is little exchange of information and experience between cities or agencies on the challenges, experiences, or successful measures that address women and public transport either at local, national, or regional level. This is considered to be a knowledge and research gap.

Despite a number of examples and tools available, there is a lack of technical capacity at national and city level, and the evidence base is still small, with patchy research expertise and academic interest.

There is little guidance available for the different clusters of interested parties, and the outputs of *Ella se mueve segura* have been used to help develop initial references and proposals.

Globally, there is a strong positive correlation between sustainable transport, women's empowerment, their position in society, and economic growth. These topics are featuring highly internationally and the combined conclusions from the three cities provide useful insights for cities to take their own steps to address this issue, and for them to provide information to national bodies responsible for monitoring progress on the 2030 agenda.

TAKING ACTION

Taking action – who and what?

This section outlines the main actors who can make changes and the types of action that can be taken to address this issue. It suggests practical measures that can be replicated and scaled up, as well as intersections of ‘who should/could do what’. Despite the similarities that were found between these cities, this is an issue that requires local action, and while solutions may be inspired by what has been done in other places, they should be developed based on local needs and context.

There are a large number of stakeholders and interested parties in transport – ranging from national to local actors. While previous sections show how a baseline city diagnostic can be undertaken, this section provides some specific recommendations for integrating gender aspects into the work of key stakeholders and decision-makers. This section of the toolkit groups the large number of stakeholders into three categories, and provides guidance for each group. Interested parties should be able to find inspiration for relevant local actions according to their role.

A number of interventions that can be undertaken are presented, as well as tools used by the cities in this study and beyond. The study team hopes this collection of examples will inspire further action in different cities.

This study has shown that the opportunity costs of ignoring the gender dimension in urban transport are particularly high. Overlooking or underestimating the differences regarding how men and women use and perceive transport reduces the effectiveness and efficiency of transport projects and infrastructure. In particular, it can undermine expected benefit to those that are poor – frequently the communities that the project is designed to benefit most.

Globally there is a strong positive correlation between women’s empowerment, their position in society, and economic growth (see SECTION 1 Global trends on gender inequality and inequity). Based on this evidence and international gender-specific policies linked to transport, it is clear that transport plays a defining role in women’s empowerment, well beyond the function of travel. However, currently gender considerations in transport (planning, development, and operations) are frequently not taken into account. To a large extent, this is due to a lack of capacity, especially at the institutional level, and a widespread assumption among transport planners, developers, operators, and those in decision-making roles that a gender-neutral, rather than a gender-sensitive, approach is sufficient.

Box 8: Closing gender gaps (UN Secretary-General's High Panel, 2017).

'Closing gender gaps in the economic domain will not only advance women's empowerment but also support progress towards achieving many of the Sustainable Development Goals that are essential for inclusive and sustainable growth – a key policy objective embraced by the global community'

The study teams involved in this work consider that if we are to shift from the current decision-making and urban transport planning paradigms to a more sustainable model, gender considerations will need to be more formally and robustly incorporated. Indeed, if gender is not properly considered, transport cannot be fully inclusive. As the baseline(s) and level of information on gender and transport is still low there is much work to do.

Security is an important entry point as the findings of this study show, and fear of harassment and violence are key determinants for travel decisions

Stakeholders and interested parties

Who needs to do what is always a crucial question. There is a wide number of stakeholders and interested parties that can take action on this issue. The audience for this toolkit reflects this variety.

In Latin America and many countries around the world, development agencies play an influential role in the development of social and urban policies and projects. A cities' transport system is the result of numerous iterations of transport plans over a number of years and under many different administrations. This section focuses, in particular,

(especially for women). Although difficult to quantify, these concerns also are likely to have a direct impact on local and regional development, gender equity and equality, and women's empowerment beyond the functions of transport per se.

It was also found in this study, that an effective way to address this was to include women more in the decision-making process and to ensure that the varied perspectives and interests of a wide number of stakeholders were gathered and respected, as well as encourage more women to be employed in transport. This was demonstrated with the engagement of the advisory councils and the outreach to women's constituencies during the study. For some, investing in gender-based outreach and the extra effort involved may appear to be a luxury, but this study concluded that stakes of not doing this now are extremely high.

on the possible intersections of gender and transport through the planning and development cycle lenses.

To simplify the use of the toolkit, the research teams collected a number of actions and measures that could be used by a wide number of stakeholders when addressing personal security, gender, and inclusive and sustainable urban transport. This work included the collection of data and information and reviewed solutions, but there are no clear recommendations on what a city should do. Solu-

tions are more impactful and sustainable if they are co-created at city level. The toolkit provides guidance and indications of what can be done and what has been done elsewhere, but ultimately the best solutions are those that make sense locally.

In terms of identifying roles and responsibilities, as well as in the allocation of resources, a number of public and private players will need to take the lead. However, public agencies should assist private players with resources so they are able to contribute in an effective manner, as gender-sensitive and inclusive transport should be considered a common good.

The planning cycle

Planning institutions vary enormously by city and by country, but most planning processes involve five steps or phases (Figure 37). These are usually:

- Problem analysis, feasibility of actions and formulation (diagnosis);
- Planning and design process(es);
- Formulation of regulatory frameworks (policies, programs), protocols and processes for construction/infrastructure (projects);
- Implementation (policies and programs) and operations (projects);
- Monitoring and evaluation.

Box 9: An example of the complexity of transport governance

Some particular features of Santiago's governance arrangements:

- Metro Santiago has 52 municipal jurisdictions, 34 of them urban, each with its own mayor and elected council.
- The Regional Government is at best a coordinating body, as it is only now transitioning to an elected governor, and there is an elected regional council that is mainly responsible for allotting funds for investment.
- Most planning decisions are made by the regional secretariats of each individual national ministry, with very little coordination, and frequent rivalry among them. The main bodies making transport-related decisions are the Regional Secretariats of the Ministries of Public Works (highways and major road investment), transport and telecommunications (buses, taxis, collective taxis), housing and urbanism (cycle ways), and municipal governments (sidewalks, some parks and public spaces).
- A transport planning secretariat, SECTRA, coordinates policy for the North, Central and Southern regions of Chile, but has no implementation capacity.
- Public transport in Santiago involves the government-owned and run Metro; Transantiago, a transport ministry office that runs bidding and contracts with private firms providing bus transport; and regional transport authority responsible for taxis and collective taxis.
- Public transport in regions such as Temuco is supervised by the regional transport office, and provided by private bus operators, many of them running just one or two buses.

The Sustainable Transport Planning Cycle



Figure 37. The Sustainable Transport Planning Cycle. Source: (Laboratorio de Cambio Social – Chile, s/f).

While planning systems vary, most follow some version of steps shown in the Figure 37. Achieving gender-inclusive results using elements in this toolkit can occur at different points in the cycle, particularly where collaborative approaches are taken. The outer section indicates actions and measures, while the inner section suggests ways of integrating gender considerations into these typical planning processes, based on the evidence collected from the *Ella se mueve segura* study.

All planning starts with data on transport users. Collecting gender-disaggregated data is a good start, but the data should also include socio-eco-

nomical levels, trip purpose, and spatial distribution to better determine its implications for policy-making. This conclusion is based, primarily, on the findings from Buenos Aires and Santiago, which showed some differences in the perception and incidences of harassment, as well as in the reactions and the behavior towards public transport according to sex and income levels. Low-income women were the most anxious about using public transport, but women who had more income available also had more choice and were more confident that they could 'buy their way out' of a situation if needed. Therefore they were also less fearful about travelling and what might happen.

The importance of having disaggregated data is strongly highlighted. This not only includes the basic gender split according to the available transport options/modes including informal vs formal, but needs to be combined with socio-economic information (including education and income level), spatial context and information on intermodality/accessibility etc. Cities are beginning to collect this (such as in Buenos Aires) but it needs to be expanded and used more rigorously in transport analysis and planning.

Throughout the process of this study, the different degrees of collaboration with civil society and the role of continued communications with the general public were extremely important and strategic to policy and project success. The transport system is not just an engineering artefact, but it is a dynamic system where human dimensions play a major role. It impacts people's lives (at all levels of income, education and social status) every day of the year.

How improvements and/or changes in the system are communicated to men and to women, and the respective messaging based on gender differences require effort, reflection and testing. Women or men are not homogenous groups. There are many sub-groups that may need specific attention, and therefore require more than taking a 'lowest common denominator' approach.

Identifying and involving individual citizens, particularly via citizen organizations with an interest and commitment to gender, equity, sustainability or other concerns associated with sustainable

transport, mobilizes different kinds of knowledge and skills and plays a crucial role in improving the quality of the final transport system. Moreover, it can mobilize other networks to enhance the credibility of certain initiatives and ensure sufficient support to ensure that crucial resources are available as needed.

Gender-sensitive tools and approaches, such as those included in this toolkit, can be applied at any phase in the planning cycle. Obviously, getting the right mix according to local needs, context and people's requirements is crucial, and varies from city to city. Above all, combining measures to get the most outstanding results for an appropriate level of resources is particularly important.

SUGGESTIONS FOR ACTION

Overall, the main recommendations are:

- Engage women transport and city planners in the policy and decision-making process, and thus increase the participation and representation of women through the processes of transport planning and evaluation;
- Build alliances with national, local and central ministries: transport, education, health, employment, planning and finance. Involving local government, NGOs, women's organizations, academia and research institutions is vital;
- Improve collaboration through formal and informal networking approaches and the use of mechanisms such as commissions/committees, technical working groups, round tables,

etc. These should involve government and non-government actors with the aim of building more collaborative links among transport, city planning, and social policies. Overcoming disagreements on roles and responsibilities is a key aspect of this, and the attention of

high-level senior officials (with the power of action) is also important, otherwise people will only provide ‘lip service’ to this work and send junior, inexperienced or disinterested people to these forums.

Understanding different actors, stakeholders, citizens

There are a lot of people and groups who could be relevant to making transport more gender-inclusive and sustainable in a city. ‘Actors’ or ‘players’ is a relatively neutral way of calling groups of people, with different roles, abilities, needs, aspirations and capacity for influencing the planning processes. ‘Stakeholders’ or ‘interested parties’ refers to specific types of people with particular interests in a given policy or project. These are also numerous and diverse, and there are as many ways of identifying them as working effectively with them.

As sexual harassment and violence against women reflect deep and complex social issues that cannot be effectively addressed by those most affected, acting alone is unlikely to produce sustainable change.

“If you want to go fast – go alone, but if you want to go further then travel together” African proverb.

For this purpose, this toolkit has grouped stakeholders under three main categories: public, private, citizen and academic/university sector actors, with the aim to represent typical groups of interested parties.

PUBLIC SECTOR PLAYERS

Public sector players comprise national, regional and local players. These include mayors, planners and other key politicians, senior advisors, public transport authorities and operators (although in some cases these sit in the private sector), etc. The list includes those that are both directly and indirectly responsible for urban transport. Women’s ministry, transport ministry, health ministry, social planning or other staff can be highly relevant to the successful implementation of gender-inclusive measures as outlined in this toolkit. Development and financial agencies are clustered into this category as groups that influence infrastructure and how public actors behave.

PRIVATE SECTOR

Private sector players vary, but generally include consultants (who may provide studies or implement projects); companies that run public transport or auxiliary services; bike-share, taxi, collective taxi and other operators of complementary services, as well as the financial sector, private banks and other companies that may sponsor them as part of the overall functioning of the transport system. These companies’ actions are usually dependent on con-

tractual, regulatory or other obligations (typically a combination), but increasingly all players are aware of the importance of going beyond statutory minimums to genuinely serve the city well, with greater efficiency.

CITIZENS – ORGANIZATIONS AND INDIVIDUALS

Citizens are the vast majority of people, the general public (excluding, in this context, private sector actors and government, who participate in the planning processes as representatives of the private or public sectors). Citizens by their nature are very diverse, but some particular sub-groups are highly relevant for the purpose of increasing gender sensitivity in urban transport. These are all interlinked and include women, girls, older adults, children and youth, low-income population, people with disabilities (mental and physical), street / market vendors and hawkers, car drivers, cyclists, walkers, etc.

Organized citizens, often referred to as ‘civil society’, are central in advocating for change and grassroots activism creating the pressure necessary to overcome barriers to systemic change (in both positive actions and negative reactions) and can serve as useful ‘early warning’ systems.

Guidance for action

This section sets out some guiding principles for the main groups of interested parties and how they can work together to improve gender sensitive transport in their cities. There are three main

Active citizens can contribute enormously to buy-in, support and ensure the correct implementation of policies and programs, as well as helping mainstream gender-sensitive innovations in public transport. Individual citizens can also influence decisions through blogs, opinion pieces, activist letter-writing or formal participatory events. Organized citizen groups are the gold standard: they accumulate knowledge and credibility, can grow with new systems, and help raise awareness within their peers on why these issues are important.

Not everyone fits neatly into these categories. University researchers may participate as independent advisors or as consultants, hired directly or through bidding systems. This means they tend to function in a hybrid manner, combining characteristics of private and public entities. Strong ethical guidelines help to maintain high standards of transparency and treatment of all those involved in any planning process, and the use and integration of local scientific knowledge and methods into gender-inclusive sustainable transport planning need to be considered.

The Annex ‘Early indications on impacts’ provides some information on the experience of the teams that may be useful.

clusters for action considered important: policy; planning, operations and infrastructure; and communications (see Figure 38).

The toolkit indicates those that should take the lead in these areas but this does not mean this is

exclusively their domain. The roles of these three main clusters are closely interlinked.

Clusters of action areas to be addressed



Figure 38. Clusters of action areas to be addressed. Source: Heather Allen

POLICY CLUSTER – PUBLIC PLAYERS

Encouragement and support for addressing gender and transport needs to come from the highest of-office in a city. Women are an important constituency in any city and often make up more than half of the local population. By recognizing this, mayors and their councils send an important political message about equity and inclusiveness.

Policy innovation may be initiated by visionary leadership within a city administration/ elected body, or by external civil society groups. Either

way, it is important to bring together a small but representative group that combines the most committed citizen, political and technical levels to build consensus and work together on developing and applying the best strategy for change.

Setting up a baseline, starting with a diagnostic of the issue within the local context, is a good starting point. As set out by this study, it is vitally important that women's needs are incorporated into transport networks. This includes the development of gender-action policies (such as employment

policies oriented towards equal opportunities and encouraging women to apply for jobs within the sector, as well as other policies that help encourage equitable access to transport). The impetus to collect disaggregated data starts at the level of household and transport data survey collection processes and frequency (see previous section on disaggregated data collection by sex, income, mode and trip purpose). Much more can be determined from this data in terms of gender, and the modes that women use most, than just origin and destinations.

Developing and implementing a city-wide Gender Analysis and Action Plan (GAAP) can be a useful first step. Developing such a plan is a dynamic process, which requires active support as well as resources, but should also fit with any town or city's other development objectives and ambitions such as livability, inclusive development and social justice. This plan will also help to provide a platform to increase the participation and representation of women and involve them in the various planning processes.

Gender analysis and action plans along the process of policy, program and project development

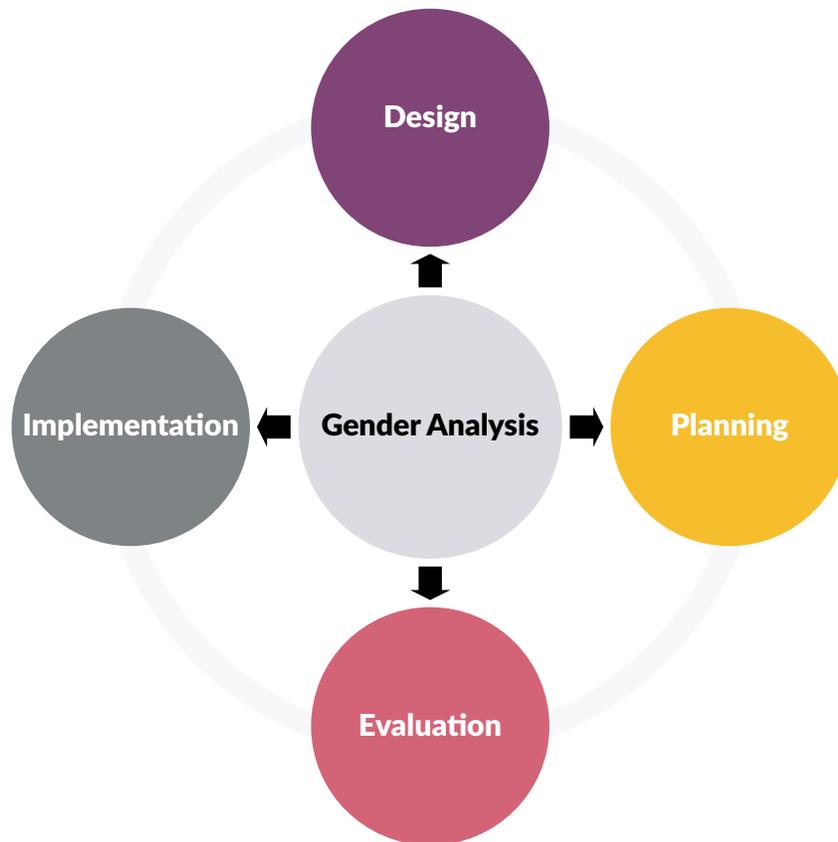


Figure 39. Intersections of gender analysis and action plans with policy, program and project development. Source: Heather Allen

STARTING THE PROCESS INTERNALLY WITHIN THE CITY ADMINISTRATIONS

Consulting the heads of urban planning and mobility departments on how they currently include (or do not include) gender into transport and urban mobility planning builds the picture of the current approach to gender and transport at city level. Local experts that can advise on suitable approaches can be brought on board.

Typical steps include:

- (i). Assess whether national support programs or international initiatives can support ambitions and allocate resources to both the strategic and implementation of a Gender Action Plan.
- (ii). Undertake a mapping exercise to plot the main actors and allies. This can be done by consulting with local universities, gender and transport experts, civil society, NGOs and women's groups to better establish the needs of women in your city.
- (iii). Set the baseline using disaggregated data (initially for origin and destination) that helps to show how women move in your city. A more detailed overview will result if this data is overlaid with information on public transport, cycling and walking routes. This can be done at district or neighborhood levels, as to give spatial distribution of income and public transport availability, helpful to identify gaps and low levels of accessibility.
- (iv). Establish a multi-stakeholder committee with high level steering and chairmanship

that owns, develops and/or renews a gender action policy and monitors how the GAAP is progressing.

- (v). Set clear-cut responsibilities and allocate the necessary resources and mandates within the different units of the administration. Ensure that local districts and councils are able to access limited funding for grassroots actions (such as participatory workshops, safety and security audits or local public awareness campaigns) is particularly helpful to get city-wide integrated policies developed and put in place.
- (vi). Implement the Gender Action Plan and set in place processes to monitor this implementation, so it retains its dynamic nature and people pay attention to the issue in all aspects of urban and transport planning.
- (vii). Review the numbers of women in transport and urban planning departments to ensure that there is also a good gender balance in the internal decision-making processes.
- (viii). Measure the impact of the implemented measures, re-adjust if necessary and update the plan regularly (every 4–7 years).
- (ix). A GAAP can be integrated into a Sustainable Urban Mobility Plan (SUMP) (Frank Wefering, Siegfried Rupperecht, Sebastian Bührmann, & Susanne Böhler-Baedeker, 2013).

DATA COLLECTION

This study has underlined the crucial importance of collecting and analyzing data disaggregated by sex (and combining this data with income, mode and trip purpose). How to do this better is an area of some debate, and it is worth further work and investiga-

tion. What is clear is there are a number of parameters that need to be more fully considered in order to make transport more gender-responsive. As mentioned, the changing social structures of modern society in towns and cities show a growing number of single-parent households, many headed by women, and analyzing their dynamics could provide interesting information not only on transport requirements, but also related to how to reduce poverty in the city.

There are a number of tools and technologies that can be used to reduce the costs of surveys and data

collection, in particular smartphone applications available free of charge or for a small fee.

In addition, while this study only investigated women who used public transport, there is also much to learn from studying women who are not currently users and their reasons for choosing other modes (e.g. lack of availability, affordability, proximity or security). For instance, in Quito, the 2011 Household study enquired on reasons for not travelling on a daily basis, the results are shown in Figure 40.

Percentage of the population that do not travel in Quito per occupational activity

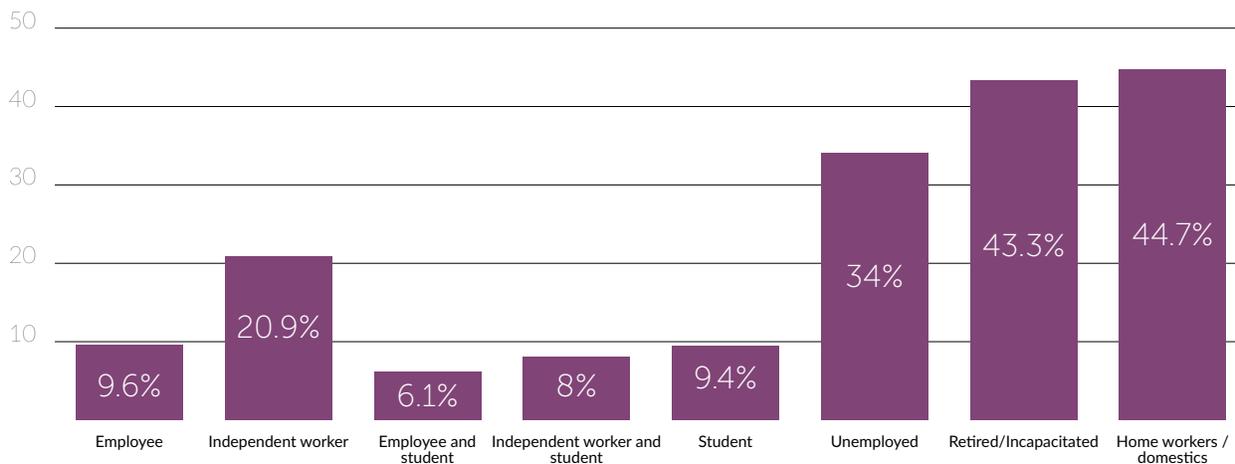


Figure 40. Percentage of the population that did not travel on the day of the survey in each activity category. Source: (Metro Quito, 2012).

PLANNING, INFRASTRUCTURE AND SYSTEM DESIGN – PUBLIC AND PRIVATE PLAYERS

A necessary condition for achieving a transport system that is as attractive to women as it is to men is a thorough understanding of where men and women currently go, but also where they would like to

go if transport was available. Typically route planning focuses on bringing people closer to jobs and to some extent education, health and sport facilities; but this may not serve women's needs well, as has been explained previously.

Mapping data on origins and destinations specifically for women's trips helps to reveal where transport provision gaps are and consequently plan service delivery that will serve their needs. Female-only focus groups also provide good information on this, complemented by local audits. These can be of particular interest and use when redesigning certain areas.

Accessibility mapping can help to provide this information, especially if the key interest points are those which are important to women – this might include markets, hospitals and schools rather than main train stations, CBD or centers of employment.

Infrastructure design and route planning can also be addressed through a gender lens. When possible, attention should be paid to where bus stops and stations are located in respect to commercial activities using a gender perspective. Women and girls using transport at night may not use services altogether if they are near typical male dominated public space or locations such as bars, betting shops or liquor stores (although these can change over time). Key amenities that women use should be given as much importance as those typically used by men.

INCORPORATING GENDER INTO PLANNING AND DESIGN

In the planning and design stages, it is extremely important to consult and involve users, particularly women of different ages and diverse socio-cultural background into infrastructure and system design. There are many tools available to enable this on a

regular basis, such as advisory committees, participatory mapping, field audits etc. A 'tactical urbanism' approach, which allows users to try out and provide feedback on the design of bus stops, buses themselves, and other key components of system infrastructure can really help improve design and user buy-in as well as generate enthusiasm for changes.

Many interventions relate to the concept of Universal Design (also called inclusive or accessible design and/or accessibility planning) of transport facilities and services, which are designed to accommodate the widest range of potential users, including people with mobility and visual impairments and other special needs. 'Universal Access' is growing as an interest area, based on a collaborative innovation process in accessibility to transport that brings together all the stakeholders involved in the field: end-users, operators, authorities, designers and manufacturers.

Crowding levels exceeding 6 pax/m² are usually more of a problem for women than for men, as this is when the majority of harassment (and petty theft) occurs. In Europe and the US, 4 pax/m² is the acceptable standard. Planners should also note that women need more space for walking and dropped curbs are helpful (as they frequently travel accompanied, with shopping bags and/or strollers). Thus, the widths of sidewalks as well as typical obstacles that may impede pedestrian passage (such as lighting poles, electricity substations and vehicle parking) probably affect women more than men. Other aspects such as more seats and other facilities such as quality, dedicated bathroom facilities, especially at interchanges, are also desirable.

Many of these aspects will improve travel for women, but also other members of society that may struggle to gain access to the system for a number of physical, cognitive or emotional reasons.

INTEGRATING GENDER INTO INFRASTRUCTURE PROJECTS AND VEHICLE DESIGN

There are a number of ways in which gender aspects can be incorporated into large transport projects:

- In the procurement contracts (especially in data collection);
- Improving infrastructure, system design and operational aspects;
- In building capacity at national and local levels with decision makers, transport planners, engineers and
- Motivating the construction industry with quotas and protocols

Development and public agencies have a clear role to play in ensuring that efforts are made to guarantee that women benefit as much as men from any transport project that has been supported by public money. To date, transport projects have tended to be ‘gender blind’ – paying little or no attention to how a project will actually impact women. This is slowly changing but it is still a relatively weak and fragile component of most transport projects.

There is an increasing number of transport projects and levels of investment in the region. This provides an opportunity to include gender aspects into project designs, bringing benefits to women (espe-

cially those travelling with children who currently are finding the system to be inaccessible for them) but also for the elderly, adolescents and those that may be physically less-able, ultimately helping cities to be more inclusive.

Infrastructure construction and transport engineering are traditionally male-dominated disciplines. This presents two main challenges: on the one hand, how to include gender in a systematic and robust fashion in project design, development and implementation; and on the other hand, how to ensure that the job opportunities created from a transport project do not benefit men exclusively. This is particularly true for infrastructure/construction companies, which are predominantly run and integrated by men. Nevertheless, there are several areas where women have comparative advantages, and quotas for female job opportunities can be part of the procurement process.

Having large crews of men working on site, often away from their own family, creates opportunities for harassment and sexually related problems for women, girls and vulnerable boys. Project developers and construction firms can be encouraged with ‘carrots and sticks’: ensuring that there is basic gender training in place; designing clear protocols on the level of tolerance of misdemeanors; and indicating to the general public how they may complain, should this be necessary.

Some key aspects – based on the outcomes of the discussions and results of this study – which are considered relevant in terms of infrastructure, are:

- **Accessibility** – women travelling with shopping and strollers mirror the same needs as elderly travelers and those in wheelchairs. Therefore, keeping access to grade or limiting the number and height of steps required to access the vehicles and when travelling between modes is important. Footpaths, crossings and sidewalks should be designed with women and children in mind, and incorporate design features such as dropped curbs and safety islands at crossings that benefit everyone, but especially women travelling with children. Low floor vehicles and at grade entry is also key.
- **Sight lines** – ensuring that there are clear sight lines (level of visibility) is probably the second most important design aspect. Women often scan a bus stops or public spaces to ensure they are safe for them to enter. In Quito, a number of BRT bus stations have been redesigned and the solid barriers (from ground level to +/- 1.20m) have been replaced by transparent material (see example of rehabilitation of BRT bus stations in Quito in Bus stops rehabilitation).
- **Lighting** – darkness was stated by many respondents as being a key determinant of when and how they travelled. This included darkness generally but also poorly lit areas or dark spots. Getting the right level of lux at bus stops, in stations and waiting areas is not easy. If it is too high (i.e. too bright) levels can act as a type of spotlight for attracting attention rather than protecting those who are waiting or travelling, while not enough light

allows (and indeed encourages) people to lurk in dark corners ready to jump on victims.

The placement of lighting poles should not obstruct passageways (especially important at crossings and for women with strollers) and the lights need to be maintained especially in less frequented areas of the city.

Anecdotal evidence from Buenos Aires included a story about a woman choosing to walk home after 10 pm at night along the dedicated bus routes, as these were the most well-lit and provide her the best sightlines, so she could see who was ahead or behind her.

- **Tunnels and overpasses** – Tunnels and overpasses should be avoided as much as possible, as there is substantial evidence that they constitute significant places of risk for all vulnerable users. If unavoidable, tunnels and overpasses need to be accessible (with escalators or ramps as well as steps) and they should be well-lit, as they easily suffer from dark spots. Ideally, they should be wide, with no dark corners and well-lit lifts/escalators. Infrastructure of this nature, built in Santiago during the 1960s, provides striking examples of how well-meaning investment proved to be a waste of public funds. Several pedestrian tunnels under Santiago's main street, the Alameda, have been closed due to lack of use. The space can also be encroached with hawkers or street sellers and at night they may provide shelter for certain groups of people, who may also be more likely to harass women, especially if they are under the influence of drink or drugs.

- **Transport interchanges and hubs** – many trips require a change, especially as women trip-chain more than men. Interchanges can themselves act as ‘eyes on the street’ and can be designed to be dynamic centers with the possibility for small shops, services, and occasional authorized market stalls. Linking major interchanges with effective complaints and grievance systems has proved successful (as the Cuéntame kiosks in Quito). These may be combined with other information services, but they should be clearly branded so women, especially, can use them for reporting any type of incident.

Smaller interchanges that may require a short walk should be well designed with good levels of lighting, and no dark areas where men can lurk or congregate so women would feel uncomfortable passing through. Good passenger information on when the transport is expected is also helpful to reduce anxiety and can allow women (and others) to manage their waiting time better. Convenient washroom/sanitation facilities with well-lit, open, and safe access should be provided separately for men and women, as well as minimum levels of rest areas with seating. All interchanges are suitable for communications campaign outreach.

- **Wayfinding, signage, and passenger information** – women are used to planning their trips more than men, who tend to use habitual schedules, routes, and modes. This is due mainly to their care-related role, as they often have to accommodate their schedules to children’s timetables, relatives, shopping,

and numerous other errands on a daily basis. Therefore, information on where transit will take them, at what time, how much will it cost, as well as how quickly or easily they can interchange, is of higher importance to them. Clear signage and passenger information, especially about service change, or disruptions, is crucial for them to be able to change their plans should they need to.

- **Design of the vehicles and rolling stock** – should include appropriate standards and functions. It is obvious that ‘barrier free’ access is important, and ideally the entire network should be fully accessible.

Interconnecting carriages for subways and trains allow people to circulate freely. However, this can have both positive and negative aspects, as women may board a carriage that they perceive to be ‘safe’, yet if someone is looking for single or vulnerable women to harass, they can also find them quite easily and it is more difficult for them to change carriages or to ‘escape’. The design of buses can include seating areas near the driver for use at night, and the way the bus driver compartment is designed and/or in vehicle cameras may allow him or her to see the corners on the bus where harassment may take place.

The width of the passageways, doors and turnstiles also needs to be enough as to be comfortably used by those with push-chairs, baby strollers, young children, and shopping. Designated seating for women who are pregnant, travelling with babies, and the physically less-able is welcomed, and clear commu-

nication linked with social acceptance helps make the proper use of these seats ‘normal’. Grab rails and handles can be quite tricky for women to use if they are designed for male rather than female passengers. On the one hand, women are generally physically smaller than men, so the positioning of the rails must allow women to easily grab them and secondly, they should avoid putting women’s body into positions that are uncomfortable or make them feel vulnerable, especially when there is overcrowding. Falling and being pushed was mentioned in the focus groups as being a problem (in all three cities) and is often the main cause for the elderly to be hurt. As women frequently travel with shopping or children, they are also more at risk from falling when driving starts or stops, therefore having the appropriate handles and grab rails available and specified in vehicle design is also an important gender aspect.

TRANSPORT OPERATIONAL DESIGN

There are several operational aspects that can be improved and which, if put into mainstream practice, would make transport more gender-sensitive. This can be seen from different perspectives, including how transport is organized, scheduled and operated; as well as increasing the numbers of women active in the sector, how front-line, operational staff interact with women and how gender sensitive they are encouraged and /or trained to be.

Routes need to be planned so people can access centers of interest for women as well as for men. In other words, planners need to be more sensitive to the needs of women. However, this is difficult without good data. Schedules may also need to be adapted to certain needs of women.

Fare integration and affordability

Low-income women, in particular, suffer most if they have to pay each public transport trip individually when they trip chain. They also tend to be more vulnerable to extortion (with drivers and/or crews illegally increasing prices because they are women or are travelling with children or shopping/market produce) on the many legs of their trip chain. Thus, it also goes without saying that integrated ticketing with seamless changes provides particular advantages to them, as long as the system is not designed in such a way as to exclude them (for example requirements for ‘high’¹ upfront payment to be put onto a smart card). Being careful with the amount spent on transport is frequently the reason that many poor women –choose not to take public transport for at least for some part(s) of their journey.

Grievance systems

This study found that there was significant under-reporting of harassment events. This was based on the fact that women in all three cities stated high levels of harassment, but this was not reflected in complaint statistics. Additionally, as indicated strongly in this study, women mistrust the effectiveness of authorities dealing with harassment.

¹ How ‘high’ is interpreted needs to be set by this socio-economic group and local context rather than the contractor.

It is important that people (passengers, employees and the general public) know:

- (i). What behavior is unacceptable;
- (ii). When to intervene to help others if they are aware of something suspicious happening;
- (iii). How to stop incidents and how to intervene if they witness them;
- (iv). How to report such incidents.

It goes without saying that women will feel further intimidated if they have to explain sensitive sexual details of an attack to a male security agent, so female staffing will be needed (if it is not already in place). Specific protocols on how to respond to the different situations that can arise, and training in their contents and application is crucial.

Location and accessibility of services for filing complaints are key to them being used, and the easy availability of assistance will increase the number of reports. Indeed, increasing the numbers of reports should be an objective of the city (rather than decreasing them), as this will increase the visibility of this issue. It will also help to redress the current situation in which many women do not think of reporting such incidents, while attackers are encouraged by the lack of consequences.

Security agents responsible for the transport spaces that are used by passengers should be involved in developing the program and protocols. Gender-sensitive training for drivers, front line staff, security agents, and in some cases the creation of gender units within these groups, can help to ensure that complaints are treated quickly, efficiently, and sensitively. In most cases the units can be integrated as a subsection within existing bodies.

Quito has been leading the way in this respect, and has implemented a number of programs over the past few years. During this study, Quito was the only city where the number of reports had increased due to the recent programs and communication efforts².

How the information is collected and processed by the authorities is important. For example, in Victoria, Southern Australia, both verbal and written complaints are treated in the same manner. This means that victims do not have to physically go to a center to make a complaint and it may be done at a later date than the time of the incident.

² This has further increase since the introduction of *Bájale al Acoso* in March 2017

Technology

There has been significant progress in how technology can help security. The most obvious and frequently used intervention are CCTV cameras. These are most often used on rail-based systems (train and metro), and at major stations and interchanges. However, increasingly, they are being installed in-vehicle (e.g. bus) to protect not only passengers, but also prevent aggressions against the drivers and/or conductors. They can also be used for surveillance of outlying stations and stops, and they do act as a deterrent.

However, limitations include high costs of capital investment and installation, continued maintenance, quality of footage, and human staffing at control centers. Other shortcomings, besides the high costs involved, are in effectiveness. For instance, in crowded (and overcrowded) areas they may not be able to document harassment (rather than aggression). In addition, as technology is developing, it is important to consider how to upgrade it to avoid premature obsolescence. A review of the effectiveness of CCTV from an operators' perspective can be found on UITP's website (<http://www.uitp.org/tags/cctv>).

A combination of human presence and technical surveillance is often the most effective solution – and this depends on the context and resources available.

Technology, however, has many uses. It can now be used for collecting any type of data, as well as mapping and auditing, and there are already a number of applications in use, such as Safetip-in (see annexes on good practices in Bogotá, Colombia). Data can also be collected using smartphones (and technology partnerships³), providing an affordable option for route mapping, alighting and boarding information, vehicle frequency, and crowding levels.

However, as shown in the study, personal security is of greater concern for low-income women – and currently, despite lower costs, the penetration of smart phones is not yet widespread enough for this to be a secure way to help protect women. This was one of the main reasons for the *Bájale al Acoso* (Down with harassment) (pilot program in Quito to use SMS rather than an application in Quito).

³ New partnerships for the collection of data are emerging with numerous partners such as with navigation systems (e.g. Tom Tom etc.), TNC /ride hail applications (Uber, Grab etc.) and others.



Figure 41. A unique SMS number can be used to send a direct message to a complaints center in Quito with the *Bájale al Acoso* campaign that has been trailed and is now being rolled out in 2000 buses. Photo credit: Galo Cárdenas.

It is likely that with the progression of smart phone technology and lowering of mobile data costs it will become a viable option for promoting reporting in the not too distant future. Once this is the case, it is expected that the reporting of incidents will increase, but the response of the authorities needs to be more rapid and robust, or else women will quickly lose trust in the system.

Getting more women working in the sector

Transport jobs can be well paid, rewarding, and offer long-term career opportunities for men and women, but attracting women to join the sector is still a challenge. Nonetheless, there are many opportunities for women to work in transport. A higher representation and integration of women into the sector will ultimately help to bring the benefits of diversity to a typically male dominated

work force. In places where this has been successful, it has been recognized as a win-win-win situation. The differing perspectives and approaches to work of women and men can complement each other and everyone benefits – management, workers, and customers.

Typically, barriers for women entering the sector are:

- Recruitment – if women do not feature in the job advertisement or fit easily into the job profile (the wording may not be correct to attract them to apply), then they may believe they are not qualified for the job, although they may be.
- Women more frequently feel that they do not have the right skills and/or qualifications

for jobs in transport, and may require extra encouragement. An example is how women need to be encouraged to apply for a commercial license in order to be able to drive buses or trains, which can be expensive. If quotas are introduced into contracts, more efforts will be made by operators to find suitable women. In addition to complying with legal requirements for equal opportunities, internal protocols are often required to ensure that women and men have the same opportunities for training and career advancement. Otherwise, if they do not see the same or similar career prospects, they may choose to leave and all the efforts to attract and train them may be lost. Such protocols can help to address common issues, working cultures, and practices that exclude women, as well as overcoming violence and fear of violence.

- Flexible working times, as work timetables and shifts may not allow women the flexibility they need, as they are often the primary carers in their households. Schedules fitting in with school holidays and avoiding night shifts are helpful in this respect.
- A lack of suitable facilities such as rest facilities, dedicated changing rooms and bathroom facilities.
- Health and safety aspects of the workplace cannot be neglected. Uniform design is an obvious aspect that needs to be considered, as well as segregated facilities and rest/changing areas. Ideally, childcare facilities should also be

available, and this may also encourage men to take more caring roles within their households.

- Wages, career progression, re-entering the market, and training opportunities

Based on these barriers, efforts should be oriented towards improving recruitment procedures, taking positive action to encourage women to apply for jobs, designing campaigns, setting targets or quotas, and tracking progress.

Other areas of work include adapting job profiles, schedules and shifts (with flextime when appropriate), maternity/paternity arrangements, and ensuring that the actual working conditions and facilities are as attractive to women as to men. The influence of the transport trade unions and their attitude to increasing female members has a strong impact on this. There are both positive and negative examples⁴ of this.

Buenos Aires has made positive efforts to recruit women as traffic agents (see Targets for women employed in the transport sector) and the city set and achieved a target for recruitment. In Santiago, private operators needed the award scheme in order to change their human resource policies to attract women. The Transantiago prize for Best Woman Driver has been quite successful in inspiring more women to become bus drivers and to change the perception of other bus drivers on the capabilities of woman.

⁴ A positive example includes the International Transport Federation work on drivers times and the work done by the ILO. On the other hand, the study teams were presented with the strong resistance of the Argentinan national rail drivers union who even in 2017 will not allow women to either train or operate trains.

Workplace discrimination and violence is still widespread (see ILO publication ‘No place for women’ (International Labour Organization, 2013)) and this is a major barrier for attracting women into the sector. Inspiration to develop codes of practices can also be found from the ILO website (International Labour Organization, s/f) and some examples can be found in the Annex 1. Good practice examples

of this toolkit. The continual reinforcement of this message, and visible support from senior management, helps to provide the confidence for women to report workplace incidents, but also helps staff who may have witnessed incidents and have to cope with distressed passengers to know what to do and to provide immediate and effective support to victims.

Cause-Effect Relationship of Poor Retention of Women in the Transport Sector

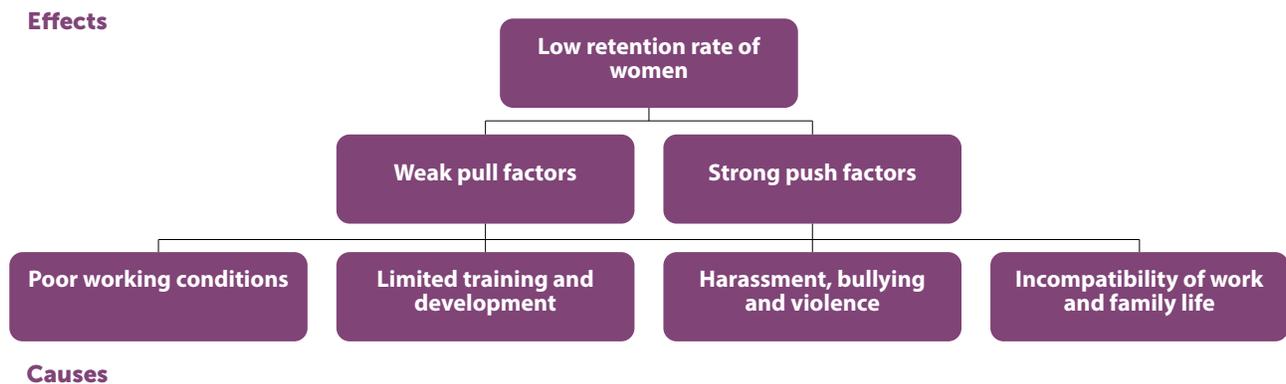


Figure 42. Cause-Effect Relationship of Poor Retention of Women in the Transport Sector. Source: (International Labour Organization, 2013).

Protocols and staff guidance

The role of the operational staff (both male and female) towards the customer is also crucial. Clear guidance and protocols for front line staff are necessary. How staff are expected to behave and to react to women’s needs should be widely advertised both on the system – where passengers will see it – and in the back-office area – where staff, drivers and other employees will see it on a constant ba-

sis. Regular training sessions linked to an approved organization on equality and zero tolerance policy for violence against women is also an important component.

Other protocols that have proved useful include allowing public transport operators to implement certain actions that help protect women, such as the ‘between bus stop request’. This started in

Montreal in 1996, and has been successfully introduced in a number of systems world-wide. At night, (between 9 pm and 5 am) bus drivers have the authority to stop to let passengers off the bus at a safe location that may be nearer their final destination, if requested. The hours when the change operates need to be clearly indicated, the exact stopping area is decided by the bus driver, and it can only be between the designated stops on that route. The Toronto Transit Commission (TTC) has also been a pioneer in addressing women's safety concerns in public transport, introducing the Between Stops Program and creating Designated Waiting Areas (DWAs) on subway platforms that provide a safe, well-lit space and access to an intercom that enables communication with station operators. Public telephones are located on all subway station platforms, at station entrances, and in many bus and streetcar transfer areas. There is also an emergency button at the entrance of every train carriage, which can be used if needed.

COMMUNICATIONS AND PUBLIC AWARENESS CAMPAIGNS – CITIZENS AND PUBLIC ACTORS

In the three cities, it was clear that there is a low level of trust in the capacity and effectiveness of the authorities to bring perpetrators to justice. Strong public awareness campaigns help to redress this and build trust. These can use a variety of mediums such as traditional communication channels (press, TV and radio), public service announcements, social media (Facebook, Twitter and local versions of these), and identifying local or national champions who can increase the visibility of the issue and its non-acceptance.

Box 10: Example from Quito

Since 2015 there have been numerous public marches against gender violence and sexual harassment in the city. In 2016, the feminist platform *Vivas Nos Queremos* (We want to be alive) was created in order to bring together feminist groups so that their voices could be heard. This platform organized a national march to increase visibility for everyday violence against women. It was held on November 26, 2016 on the occasion of the Day of Nonviolence Against Women, and around 5,000 people participated. In 2017, activists from the platform *Vivas Nos Queremos* created a Facebook group with the hashtag *#Primeracoso* (*#Firstharassment*) *#NoCallamosMas* (*#Nosilenceanymore*), in which women were invited to break silence and tell their first experiences of harassment in order to visualize the magnitude and frequency of this problem. Currently the page is still available and has reached more than 26,000 followers.

The role of communications is crucial to bring awareness on what can be and should be reported. Multi-stakeholder consultations need to be held in order to help structure these – and they should include a wide variety of differing profiles and perspectives.

There are a number of examples of public awareness campaigns in the Solutions sections. However, such campaigns are only meaningful and effective when they are accompanied by genuine action and transparency on the issues they address. This way, people can see that campaigns are translating into significant action. Otherwise it can further fuel a loss of credibility and trust in public authorities. An observation from this study is the lack of rigorous evaluation of impacts of such public awareness campaigns.

The role of civil society in making public transport more secure

Building strong alliances with citizens and civil society, as well as local and national ministries of transport, education, health and employment with the objective of engaging on planning, financing and operations of local transport is the way forward. Encouragement from local government, institutions, NGOs, Women's organizations, Academia and Research institutions creates a 'win-win' situation.

Civil society has a major role to play in:

- Making sure the voices of women are heard in the decision-making processes about transport
- Mobilizing women's groups and others to ensure that they engage with the authorities on improving transport in a positive fashion
- Ensuring women take an interest in the transport options that are currently on offer, are able to make suggestions about improvements and invest in increasing their knowledge about what is possible, feasible and just.

Through collaboration and partnerships, Civil Society Organizations (CSOs) play a powerful role in building credibility and improving the effectiveness of monitoring systems. Examples from other places include London Travel Watch (London TravelWatch, n.d.), an arms-length citizen-controlled institution funded by the London Assembly, which

processes complaints regarding the transport system with an autonomy and transparency absent when agencies manage their own complaints.

Similarly, public transport agencies can integrate citizen representatives, who offer diverse and valuable skills as well as a citizens' perspective on key planning and strategic decisions. In North America, many transit agencies have advisory councils with citizen representation. The Toronto Transit Corporation (Toronto, s/f) (Canada) is run by a board that includes elected city councilors and city-council appointed citizen representatives. Similarly, a citizen coalition, the Toronto Centre for Active Transport is leading the implementation of complete streets in 19 Ontario municipalities, large and small⁵.

These are good entry points for introducing gender-sensitive strategies, data collection methods and other gender-related perspectives. Creating these kinds of permanent collaborative institutions are important steps to improving representation, collaboration and the effectiveness of voluntary participation in transport planning.

All three cities are showing emerging and positive indications of this collaboration taking place and the impact of the study has helped to accelerate it. This was done both via the local Advisory Council (see SECTION 3: Methodologies for details of the

⁵ (METRAC, s/f) a women's advocacy organization in Toronto developed the women's safety audit system which was adapted for use by the Santiago team. Their strategy for participatory diagnosis and improvements to women's safety in urban environments, has travelled the world, and has been adopted by UN Habitat, women's organizations in India, and most recently tested in the El Bosque community of Santiago, Chile as part of this study.

composition and roles of the Advisory Councils) and other meetings, which brought people and institutions with common interests together. An added benefit is the discussions such alliances create between actors, who often have not been able to discuss these issues previously, thus integrating diverse perspectives into a single analysis. This is useful not only to address security and harassment issues, but also to generate on-going dialogue among local/regional authorities, organized citizens, and others to find common solutions based on the resources and knowledge all actors. The study helped to bring together a number of interested parties in Buenos Aires that had not actually exchanged ideas or experiences before – but had many shared interests. Hopefully this platform may be formalized and continued.

As part of the project, workshops and safety audit were held at the local Women’s Center in El Bosque, Santiago. Here, researchers, neighborhood women, members of the women’s center, representatives of Carabineros (local community police), a research manager from a local bus operator, and other interested parties were able to discuss the local situation and co-create solutions, and this was found to be particularly successful. Participants found it both informative and interesting to be able to discuss common-interest aspects of security in a positive environment, where different perspectives could be put forward freely. Indeed, some commented that it “was the first time that the women in the center had been able to ‘discuss’ with the community police and transport operator”, which led to a better understanding of the differing perspectives of

those present. Of particular value was the increase in women participants’ understanding and knowledge about how public transport is organized, enabling them to engage more with the authorities on what they should or could ask for in public stakeholder consultations. With increased confidence, they felt that they would be able to speak out from a more informed position. Interestingly, it was not difficult to attain acceptable solutions to the local problems that were shared within the workshop once this had been achieved.

In Quito, there has been support from UN Women for a number of years, and the municipality has set aside a budget for supporting the Patronato San Jose to implement actions to increase women’s security. This study has helped to accelerate progress and underpin continued support within the municipality – and attract the attention of other cities.

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ANNEXES



Annex 1. Good practice examples

The following section documents examples from the three core cities, while the second part includes further examples that are considered of interest. A selection of useful tools can be found in the third section.

BUENOS AIRES, ARGENTINA

Awareness raising campaigns

ESO QUE NO VEMOS TAMBIÉN ES VIOLENCIA DE GÉNERO (2016) AND #PARALAMANO (2015)

The public railway company *Trenes Argentinos* (SOFSE) developed two awareness campaigns, with posters, information booths, and delivery of brochures in railway stations with significant passenger flow. The first, called #PARALAMANO, was developed in 2015 and updated during 2016; the second, FOR A TRIP FREE OF VIOLENCE, took place at the beginning of 2017.

In 2016, the City government of Buenos Aires, with the National Ministry of Human Development and Habitat, developed an awareness campaign about all types of gender violence, from the most explicit to more implicit forms, such as humiliation, devaluation, contempt, and/or emotional blackmail. The campaign was called *Eso que no vemos también es violencia de género* (What we do not see is also gender violence) and included posters on the subway and public roads.

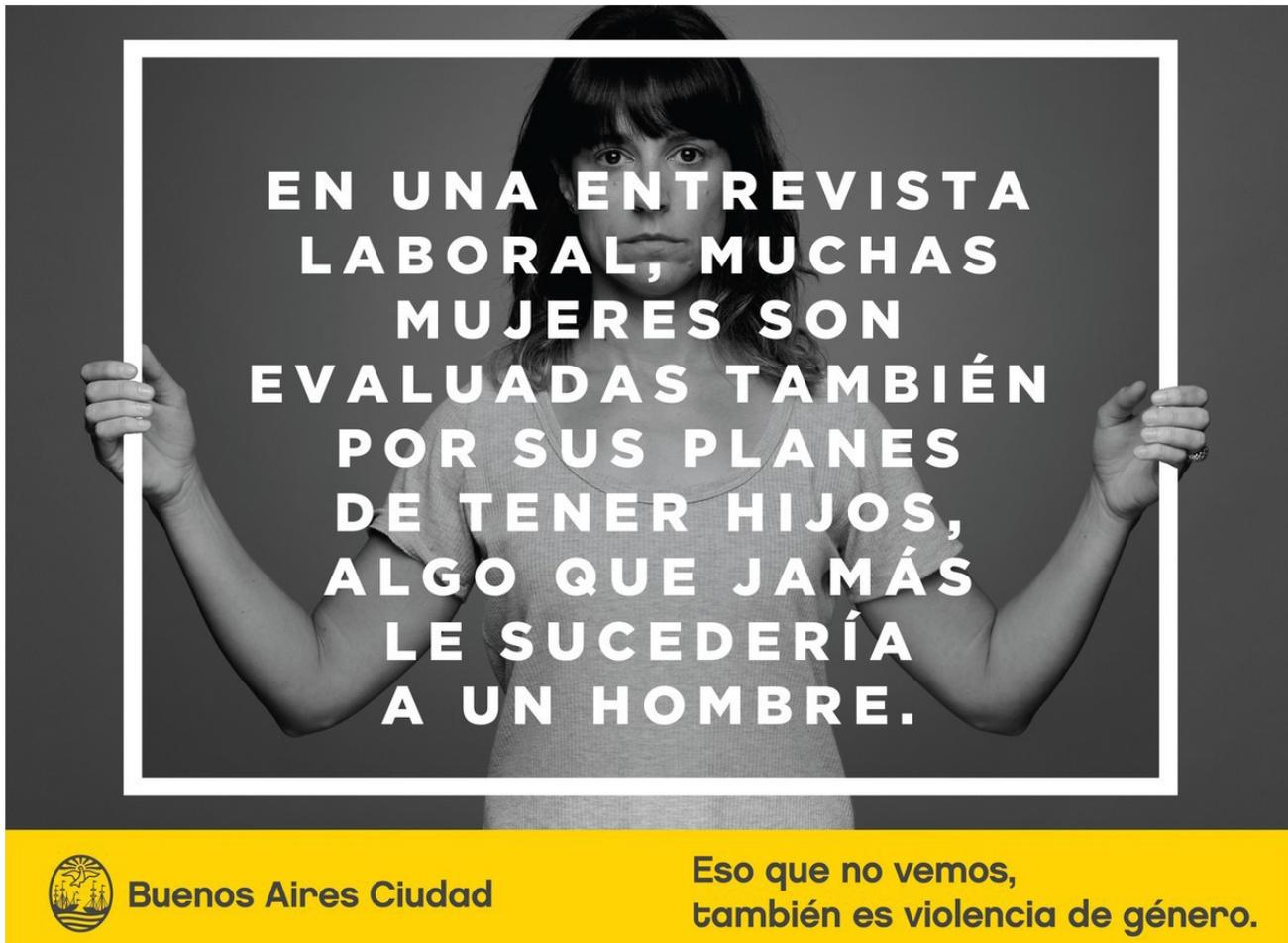


Figure 43. An example from Buenos Aires city's campaign– Eso que no vemos también es violencia de género (What we do not see is also gender violence), Buenos Aires, 2016. Source: (Clarín.com, 2016).

Since 2016, the public metro company SBASE, which depends on the Government of the City of Buenos Aires and is responsible for the administration and control of the subway operation, has implemented a survey to collect information and opinions from passengers on a regular basis. The objective is to better understand the incidence of aggression experienced by subway users.

Data availability

The national Ministry of Transportation has a website (Ministerio de Transporte – Presidencia de la Nación, s/f) where reports and household mobility surveys databases carried out both in AMBA and in several metropolitan areas of Argentina can be accessed. The

surveys, conducted between 2008 and 2013, have variables that are segregated by gender.

Targets for women employed in the transport sector

By taking a pro-active approach and dedicated recruitment criteria, the government of the City of Buenos Aires has been able to increase the gender balance in the numbers of city traffic agents to an equal representation of women and men. Currently, of the 2,750 agents, 54% (1,485 agents) are women. During the month of July 2017, from a total of 303 new agents recruited, 66% were women.



Figure 44. Women can make effective traffic agents as they tend to adhere strictly to the rules and implement them without modification. They now represent more than 50% of the Buenos Aires city unit. Photo credit: Secretaría de Transporte, GCBA.

Another example within AMBA is the effort to incorporate more women as drivers of urban buses. Since 1998 the operating company Grupo Plaza has systematically encouraged women to become bus drivers, being the only company in the agglomerate that hired women as drivers. Starting in 2010 with 1% (22 drivers) of the total number of 2,000 drivers, it peaked at 40 but has declined to 15 by 2015. In 2011, the Municipality of Vicente López, located in the northern area of Greater Buenos Aires, put a free local bus line in place, Transporte Bicentenario, whose drivers are all women. The service is provided within the limits of Vicente López's municipality and particularly serves kindergartens,

maternal centers and recreational centers for the elderly. Currently the line has 8 units and a staff of 18, between women drivers and guards. It is striking that in AMBA only two initiatives could be identified. Some transport operators maintain that adding women as drivers would require adapting existing infrastructure in the companies (changing rooms, bathrooms, etc.), having been until now only suitable for male drivers. Based on the low level of spontaneous reaction by women to step forward as drivers, they do not consider it necessary to implement these changes in the facilities, which requires specific investments.

Rail actions

The public railway company Trenes Argentinos (SOFSE), responsible for the operation of 5 of the 7 urban passenger lines in AMBA and several regional lines, has developed an institutional Plan for Gender Equality. It aims at generating both internal actions within the company itself (such as gender training and awareness of human resources) and actions targeting the public aimed at improving the experience travel of users of their service. Agreements were signed with the National Institute for Women (INAM) and the National Institute against Discrimination, Xenophobia and Racism (INADI). As mentioned in the previous sections, two awareness campaigns oriented at reducing violence against women have been implemented.



Figure 45. Example from Metropolitan Area of Buenos Aires (AMBA) from their campaign #PARALAMANO (Stop the hand), 2015 (Cortés, 2015).

In line with their implementation of the Gender Equality Plan, SOFSE carried out a survey in 2017 to diagnose gender violence in the metropolitan train system. In addition, it is noted that the rail union currently bans the employment of women as train drivers, although this is not the case on the Buenos Aires subway. In 2016, of the 532 drivers of the subway and the light rail (Premetro), 427 were men and 105 women (representing 20%). Out of the 433 guards: 289 were men and 144 women (33%).

Metrobus

Metrobus is one of the most emblematic transport measures to have been implemented recently in the AMBA. It is a system that combines pre-existing urban buses with segregated infrastructure, in order to increase bus reliability and promote the use of public transport. The system has been expanded and currently the Metrobus is a major part of the public transport network, connecting the city center with the rest of the metropolitan area.



Figure 46. Waiting at *San Martín* Metrobus station, a well-designed bus stop (similar to a station) with clear sight lines, seating, good passenger and real time information. Photo credit: Sebastián Anapolsky.

Metrobus' objective is to reduce travel time, increasing predictability and contributing to better road safety. It also brings an improvement in the quality of public space, which includes the renovation of urban space in the area, the revaluation of sidewalks and the improvement of lighting. In general, Metrobus has been positively received by users, with travel time gains being the most valued benefit. According to the latest report on the results of the Survey of Users of Metrobus Juan B. Justo (Acosta, 2017), the aspects perceived most positively are the behavior of drivers and the time savings.

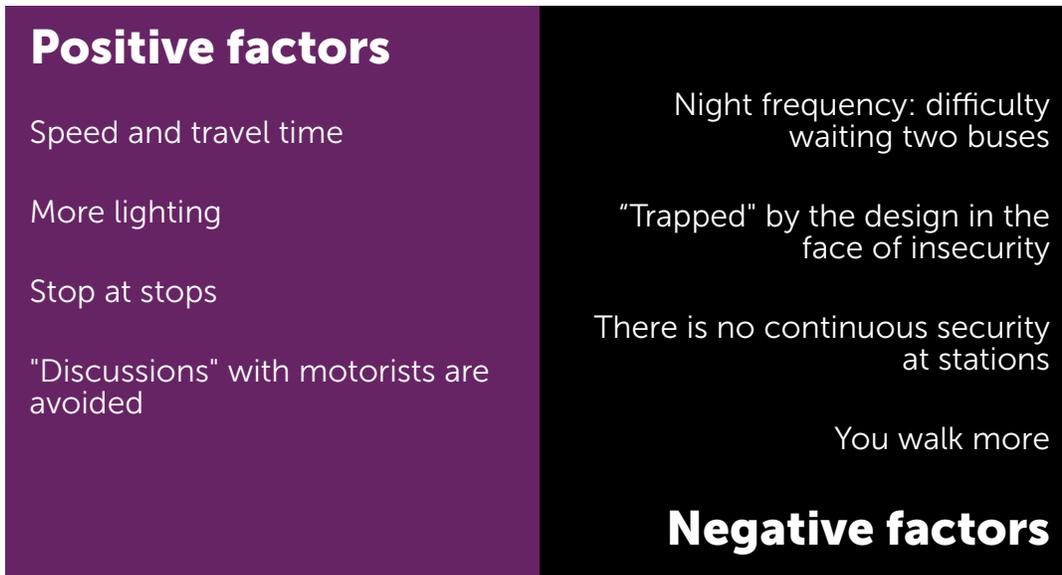


Figure 47. Positive and negative aspects of the Metrobus, Buenos Aires Argentina. Source: Authors.

In the discussion during *Ella se mueve segura* Focus Groups, the factors perceived as positive by users align with the information provided in the CNRT surveys. However, among the negative aspects were: i) the locations of stations and stops on certain lines, and at night –when the frequency is reduced – the design does not allow users to choose among lines, given the distances between the platforms; ii) some women users also mentioned feeling “trapped” by the design, because in case they need to “run” because of aggression “you cannot go quickly to the street or run to a shop “, as is the case with traditional bus stops on streets; iii) the absence of continuously present security in the stations; iv) some users express having to walk more, due to the distance between stations.

It is not clear from the surveys if Metrobus has increased the numbers of women using public transport. The CNRT surveys show that, in the Metrobus corridors analyzed, 6 out of 10 users are women. These numbers are higher than those from ENMODO, which show that female users in AMBA are around 56% of the total (Secretaría de Transporte & Ministerio del Interior y Transporte, 2009).

Safer cycling infrastructure

Since 2009, the City of Buenos Aires (CABA) has been segregating its cycling infrastructure to improve safety. In 2017, the cycle path network reached a total of 180 kilometers.

Since 2010, the free public bicycle system has been operating in the city center, encouraging the generalized use of this mode of sustainable transport. According to information from the local government, the number of trips made by women on bicycles in the city has increased from 7.2% in 2009, to 21.4% in 2016. However, when observing the level of enrolment in the public bicycle system, while 4 out of 10 registered users in 2016 were women, they represent only a third of those who actually use the system (Alalu, 2017).

In this sense, civil society organizations play an active role in promoting equal participation in the road space, especially including women and bicycles. Since 2011 the Association of Urban Cyclists (ACU), together with *Ciclofamilia*, has been providing training courses in the use of bicycles for adults, where about 75% of the participants are women. Among them, half are between 20 and 30 years old. One of the members of these organizations mentions that their actions are always “motivated by equality” because they observed from those who join the Biciescuela (Bicycle School), that “there is a whole group of people who are out of urban cycling (...) and we are mobilized by the situation of social [and] gender inequality” (Ciclofamilia, s/f).

Prevention of violence and women’s activism

Since 2016, the City of Buenos Aires (CABA) has legislation for the Prevention of sexual harassment in public spaces or public access (Law 5742). This seeks to prevent, as well as punish those that harass (verbally or physically), mistreat, intimidate, or affect the general dignity, freedom, free movement, and the right to the physical or moral integrity of people, based on their condition of gender, identity, and/or sexual orientation. The Law

also stipulates actions and dissemination campaigns to make visible, denaturalize, and eradicate this type of violence. Thus, in the CABA, street harassment is by law considered a contravention, and penalties include monetary sanctions or public utility actions.

Women's organizations, among them MuMaLá (Mujeres de la Matria Latinoamericana), have collaborated to increase the visibility of street harassment that women in the City of Buenos Aires and other cities of Argentina suffer daily. This important contribution made from civil society includes surveys and reports of results, and has demonstrated the need to research women's experiences of violence in urban space.

Lack of proper procedures for complaints and grievances

In the study, this was found to be one of the greatest weaknesses in addressing harassment and violence. Buenos Aires is no different, and the lack of information and mechanisms to carry out effective reporting has weakened the relatively strong legal framework in place to protect women from all types of violence. Some initiatives to complement the Law 5742 and the creation of the Argentinian Observatory Against Harassment (OCA), with the responsibility to gather information and statistics about the different forms of harassment, are helping to increase the number of reported incidents. In addition, the Office of the Ombudsman of the City of Buenos Aires has created the Observatory of Gender Equality with the objective to monitor and influence public policies in the city.

Since 2010, the Province of Buenos Aires has had an Observatory on Gender Violence. Additionally, the Law 26,485 on "Integral Protection to prevent, punish and eradicate violence against women in the areas where they develop their interpersonal activities" gave the National Council of Women (CNM), a body created in 1992, the mandate to be the governing entity in charge of articulating and coordinating actions to ensure compliance with this law. In addition, the CNM works on the design of public policies that allow the implementation of its provisions.

During 2017, the CNM developed the first National Plan of Action to promote Prevention, Assistance and Eradication of Violence against Women 2017-2019, a national-level legal requirement. It consists of a strategic planning tool that gathers and systematizes policies, programs, and initiatives. In September 2017, the National Institute for Women (INAM), created by Decree 698, became a decentralized entity of the Ministry of Social

Development, at the national level, to continue the tasks of the CNM. This position of the agency, as Secretary of State, seeks to accelerate the administrative processes currently required to implement the programs.

QUITO

Over the past ten years, Quito has implemented a number of campaigns. In 2011 *Quiero andar tranquila. Calles sin acoso* (I want to move safely. Streets free from harassment) was the first to target public transport, specifically the Bus Rapid Transit system known as *Trolebus*.

Changing the legal framework

The local ordinance #235, championed by a young city councilor, Norman Wray, was approved in 2012. The objective of this ordinance is to eradicate gender-based violence inside homes (domestic violence), but also within public space. It specifies actions such as including gender mainstreaming into projects, actions, and campaigns, and training public servants, metropolitan police and national police on this issue. Different kinds of harassment: physical, sexual, and psychological violence, and street harassment or sexual abuse are specifically recognized for the first time. This groundbreaking local ordinance created the basis for other protocols in the mobility sector designed to tackle harassment in public transport.

EXPIDE:

LA ORDENANZA METROPOLITANA QUE ESTABLECE LAS POLÍTICAS HACIA LA ERRADICACIÓN DE LA VIOLENCIA BASADA EN GÉNERO EN EL DISTRITO METROPOLITANO DE QUITO

Artículo 1.- Agréguese después del Capítulo Innumerado “*Protección Integral de los niños y adolescentes contra la explotación sexual en el Distrito Metropolitano de Quito*”, del Título II, Libro Primero del Código Municipal para el Distrito Metropolitano de Quito, agregado por la Ordenanza Metropolitana No. 246, sancionada el 7 de febrero de 2008, el siguiente Capítulo Innumerado “De las políticas hacia la erradicación de la violencia basada en género en el Distrito Metropolitano de Quito”, al tenor del siguiente texto:

“Capítulo...

De las políticas hacia la erradicación de la violencia basada en género en el Distrito Metropolitano de Quito

Figure 48. An extract from Quito's ordinance 0235, approved in 2012. Source: (Secretaría General del Consejo, 2012).

In parallel to this ordinance, there were many communications efforts and campaigns. For example, during 2011, the campaign *Quiero andar tranquila. Calles sin acoso* (I want to move safely. Streets free from harassment) was implemented. This campaign was directed at men and had a widespread impact because it was the first in its kind to address this issue to men as the main audience.



Figure 49. Set of images from the campaign (Top left: I don't touch nor skim; top right: Keep your hands still, don't touch me; bottom left: Cool guys are not louts; bottom –right: Those compliments are aggressions. Source: (ElComercio.com, 2014).

Public awareness campaigns: *Cuéntame*

In 2014, *Cuéntame* (Tell me) booths were introduced by the new municipal administration, and under the lead of the former Vice-Mayor, Daniela Chacón. The campaign *Cuéntame* was an integral approach to tackle insecurity and to facilitate the process of reporting to authorities. After declaring the Municipal Transportation System in emergency due to the high levels of harassment, an Emergency Plan was created. This plan included measures, a budget to face sexual harassment on public transport and the implementation of *Cuéntame* booths in major passenger transfer (interchange) stations for women to get support or report sexual harassment on public transport. In the kiosk, women could choose to report violence to trained staff and to file a complaint against the perpetrator, or simply

receive immediate attention and guidance on what to do next. Drivers for the Quito transport system have been trained to help those affected and to provide information on how and where to report incidents of violence against women and girls.

This project also provides legal and psychological support to victims and follows specific judicial protocols. In just nine months, the booths had received a total of 274 complaints, out of which two sentences were generated, the first of its kind in the judicial system of the city. While in operation, the system led to 11 people charged for serious incidents, with two convictions for underage molestation.



Figure 50. Photo of Cuéntame (tell me) booths in transfer stations in Quito. Source (El Universo, 2015).

In addition, since May 2015, the campaign Yo Cambio por Ellas (I change for them) was organized by the Patronato San José, in order to sensitize the 200,000 passengers of the Trolebús system about this issue. The objective was to promote reflection, especially on the part of men, on the discomfort that women feel in public transport when harassed.



Figure 51. Image of the communication campaign in one station of El Trole. Photo credit: Galo Cárdenas.

As part of the actions implemented, 3,500 officials and municipal employees or collaborators of the EPMPQ (Empresa Pública Metropolitana de Transporte de Pasajeros de Quito), the Metropolitan Transit Agency, the Metropolitan Police and the Public Works Enterprise, have been trained in themes such as new masculinities, protocols of attention, and human rights.

Bájale al acoso

In 2017, the project *Cuéntame* was redesigned to increase the coverage and to facilitate the process of reporting with a new concept called *Bájale al Acoso* (Down with harassment). This has helped to reduce the number of sexual harassment incidents and denunciations still occurring on the public transportation system since the cabins were implemented.



Figure 52. Example of the cabins implemented in Quito. Photo credit: Galo Cárdenas.

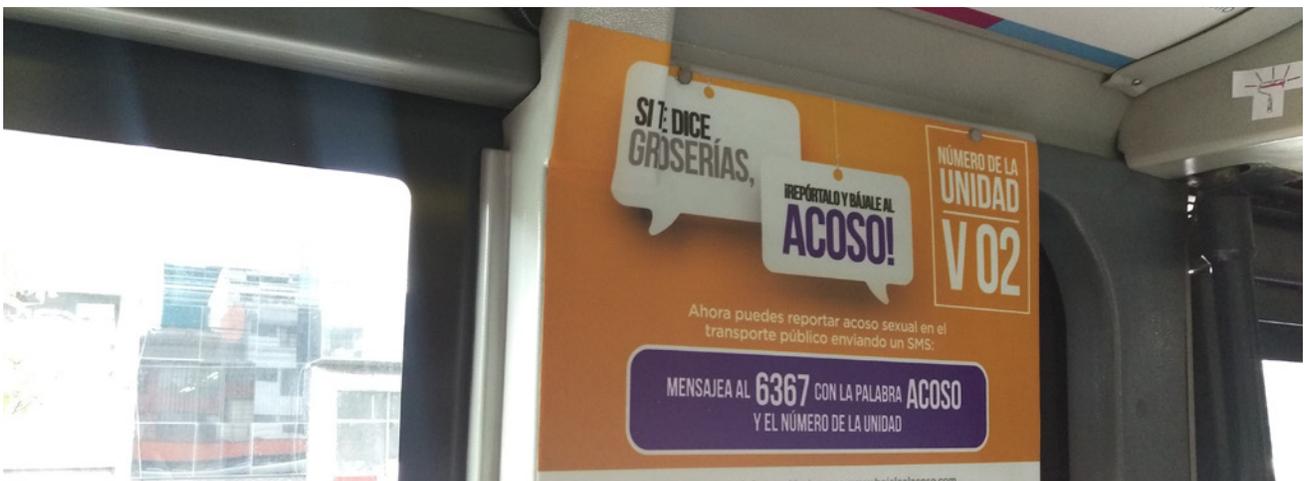


Figure 53. Advertising inside the buses of municipal system. Photo credit: Galo Cárdena.

The objective of this campaign is to rely less on the judicial system and generate a social sanction at the point where the harassment occurs, through the use of a technology platform that provides information in real time. Since users of the public transport usually do not have time to complain at the cabins during the trips, the campaign Down with Harassment makes it possible to make an instant report by sending an SMS. SMS was chosen, as not all women have access to smart phones or data roaming (especially low-income women).

Once the message is received, the person receives a call from the control center of the EP-MTPQ asking to explain the situation; simultaneously, the driver of the bus is notified of the incident of harassment; finally, an alarm sounds inside the bus, alerting all passengers that they should be especially vigilant. In addition, the police or security personnel of the EP-MTPQ are alerted in order to intercept the victim and/or the aggressor at the next bus station. The victim is then given the opportunity to legally report the situation, however, the main objective is to reduce cases by alerting citizens. This is necessary, as more than 61% of women who experience sexual harassment on buses did not receive any protection or support from other passengers.

According to information shared by *Patronato San José*, the system *Bájale el acoso* has received 1,011 SMS messages in the period from March to December 2017, leading to 32 cases being brought to trial, of which there have been 6 judgements (of between 12 to 36 months in prison). Additionally, more than 4,000 people have been sensitized and trained (Metropolitan police, private security and drivers) as part of the program. This trial will be further rolled out onto 2,000 buses across the system (January 2018).

Research into criminal behavior shows that the decision to offend is highly influenced by the cues given and the perceived risk of being caught. If perpetrators feel they are more likely to be caught, it is more probable that they will refrain from harassing women. Such measures can be evaluated to see the extent that they reduce the temptation to offend, and evaluate whether it is a cost effective or overly costly measure to implement.

Bus stops rehabilitation

In 2016, a number of *Trolebús* system bus stops were redesigned to make them more gender-inclusive. This included replacing a steel lower panel with a glass-walled design that guarantees better interior and exterior visibility as a mechanism to promote passenger safety. The new infrastructure was put in place to complement new high capacity, bi-articulated buses starting operation.

The cost of this project was some USD 13 million, and 44 bus stops have been upgraded. This new infrastructure is branded with messages of different campaigns to stop harassment and includes universal accessibility for people with disabilities, making easier to access for women.



Figure 54. Images of the new stop buses, Quito. Photo Credit: Galo Cárdenas.

Use of Social media

The Quito team also used social media to promote the study during the period of investigation. The use social media is a growing way of successfully communicating on this issue.

An *Ella se mueve segura* Facebook page was created for the Quito international seminar and continued for the rest of the study. It quickly attained 500 followers with 2,870 likes. The followers came from well beyond Latin America and included Argentina, Austria, Australia, Belgium, Bolivia, Brazil, Chile, Colombia, Germany, Honduras, Ecuador, France, Spain and Venezuela.

SANTIAGO

Promoting bus driving as a suitable job for women

Faced with prejudices against women drivers and the fact that several private operators refused to hire women bus drivers, the Transantiago public transport agency developed an awards program. The public can vote for the Best Male and Best Female Bus Drivers. This award was designed to recognize women bus drivers and to complement the award already given to men.

Within a year, all bus companies had a small, but growing contingent of women bus drivers, so that they could compete for the award, which is important for their rather low public image. This also became an opportunity to highlight women's role and contributions to the quality of public transport before the general public. The award also provides an opportunity for the public to see that women may also successfully apply to become bus drivers, as well as recognizing those that are already working in the system. The winner may also visit and give talks in local schools to help break down barriers about the sort of jobs that women are able to do.



Figure 55. The winner of the Best Female Bus Driver in 2016. Photo credit: Laboratorio de Cambio Social.

Their increased involvement is also particularly strategic as there is currently a shortage of qualified drivers in Santiago, and public transport operators must compete with large mining companies for suitable professionals in this area.

Cycle-inclusion and increasing the numbers of women cycling

The city of Santiago has enjoyed considerable success with a focus on cycling inclusion that has been developed during three years of training and collaborative policy implementation by citizen organizations, local and regional governments, and some private players (2007 – 2010). A survey conducted by the Ministry of Transport and Telecommunications in Santiago found that there was a very low number of women cyclists in the city, and that women either didn't know how to ride or were afraid to do so in the city.

With assistance from international and local experts, a Santiago women's group, Living City and Macletas, set up courses to encourage women to ride bicycles as a mode of empowerment. They introduced the Learn to pedal course for complete beginners, and the Get off the sidewalk initiative aimed at women who knew how to ride a bicycle but were too frightened to use it around the city.

Meanwhile, cycling infrastructure quadrupled from 50km to over 200km between 2007 and 2012, as the city government invested in an extensive network of cycle tracks. Modal share has doubled to 4%, and women's participation grew from under 10% to around 30%.

Some 40,000 people can be seen cycling, walking and roller skating on the streets of Santiago every Sunday, as part of the open streets CicloRecreoVía initiative which closes a number of city streets to vehicular traffic to make them available for walking, running, cycling and other social activities.

Safety and security audits

The method of women's safety audits, developed by METREC (Toronto) and adopted by UN Habitat for use in cities in the developing world, was adapted and tested in the El Bosque district of Santiago. This was combined with a participatory mapping exercise, which provided considerable data on specific micro-level problems requiring social, design, or policing solutions. Participatory safety audits are a tool for exploring the elements of public spaces that can undermine or improve feelings of safety and vulnerability. They can also generate public awareness and important consensuses around specific actions to improve insecurity issues.



Figure 56. Photo of the security audit in El Bosque. Photo credit: Laboratorio de Cambio Social.

Public awareness communication campaigns

In 2017, Santiago's Metro developed a poster campaign with a citizens' organization, the Observatory against harassment of women in public spaces (OCAC). This campaign underlined that *#AcosoEsViolencia* (Harassment is violence). Two civil society groups focused on masculinities, EME Masculinidades and MenEngage Alliance, cooperated with a complementary campaign: *#NoTeDaVergüenza* (Aren't you ashamed?).

Annex 2. Examples of tools available

The tools used in this study have been described earlier, however, there are more tools available of interest to national and city decision makers. A selection of these are discussed below.



Figura 57. Process for effective analysis, developing actions and measures and monitoring and evaluation (M & E). Own elaboration.

SMARTPHONE APPLICATIONS

There are a number of smartphone applications that have been developed both for the user and to help authorities to pinpoint where harassment is happening most frequently.

The list below outlines a number that can be accessed on the Internet:

SafetiPin

Safetipin (Safetipin, s/f) is a Delhi based social enterprise providing a number of technology solutions to make cities safer for women and others. The app MySafetipin and Safetipin Nite can be used to collect information in the form of a Safety Audit based on 9 key parameters: level of lighting, openness (sight lines), visibility, transport facilities

and modes available, security (such as presence of security agents or help kiosks), state of the walking infrastructure, and feeling (emotional sentiment of the area – does it feel safe or unsafe)

The general public can download the app and use it to make audits to indicate the safety of areas in their city. They can report problems such as poor/no lighting, broken/blocked footpath, lack of people, etc. While travelling, they can view Safety Audits to view safe and unsafe locations and plan their routes accordingly. It has been used in India, Colombia (Bogotá), the Philippines, Indonesia, Kenya, and Papua New Guinea.

Safetipin Nite collects images from the perspective of a moving vehicle such as a taxi. Safetipin has been working with governments, NGOs, city planners, international agencies, and corporates to provide safety data for change, and has been tested in a number of cities.

Safetipin Track allows more personalized information and rules can be set to let friends know only if something unusual happens.

Safecity, India

Safecity (Safecity, s/f), India is registered as not for profit foundation, and their website is a platform that crowdsources personal stories of sexual harassment and abuse in public spaces. This anonymous data is aggregated into hot spots on a map, indicating trends at a local level. The idea is to make this data useful for individuals, local communities, and local administrations to identify factors that cause behavior that leads to violence and work on strategies for solutions. Since its launch on 26 Dec 2012, over 10,000 stories from over 50 cities in India, Kenya, Cameroon, and Nepal have been collected.

Harassmap

HarassMap (Harassmap, s/f) has been used in Egypt to collect information on offences that take place in public spaces, including on or around transport, and it recently celebrated five years of existence. Via a website, victims are encouraged to anonymously document incidents on-line and the data is then compiled to give the authorities and the public information on hot spots which could be avoided or better patrolled. People's

stories are published on social media so there is a better understanding of the types of incidents occurring, and the victims are offered legal, medical, and physiological support. In its first year, the HarassMap (2012) web site had 88,851 visits and 239,821 page views.

Hollaback

Hollaback (Hollaback, s/f) started in 2005 as a blog in the United States and has now grown into an international Internet platform for addressing harassment in public spaces, present in more than 30 countries and with many more local chapters. It builds on the simple concept that the Internet is actually the largest global public space, and it can be used to build a community who feel empowered to address this issue. They have identified that the real motive of harassment is intimidation – and making the target scared or uncomfortable helps to make the harasser feel powerful.

By documenting, mapping, and sharing incidents of harassment, this power is shifted to the victim rather than the perpetrator. Street harassment frequently requires the victim to remain silent in order not to escalate the unwanted behavior. Hollaback allows the victims to become more confident and to take control as they have a course of redress. HeartMob is their first online platform to tackle harassment by providing real-time support to individuals experiencing harassment and gives bystanders indications of concrete actions so they can step in and help with confidence¹. Users who report harassment have the option of keeping their report private and cataloguing it in case it escalates, or they can make the report public. If they choose to make it public, they can choose how they want bystanders to support them, take action, or intervene.

Designing urban spaces for women

There are a number of design systems and principles that can be helpful in determining what can be done to design public space to be more gender sensitive. There are a number of well know tools such as Universal design, Complete streets, and Urban principles (such as those developed by Gehl, ITDP and GIZ), which can be found on the internet. Gehl Architects have also produced a number of useful reports. Some less well-known but nonetheless useful tools are mentioned below.

¹ Several studies identify that other passengers or passers-by are not willing to offer assistance (unless it is serious) when they see incidents for a variety of reasons but primarily fear of getting involved

CPTED – CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

CPTED is an internationally recognized approach with four main principles that form part of their security assessment:

PRINCIPLE #1 NATURAL SURVEILLANCE

“See and be seen” is the overall goal when it comes to CPTED and natural surveillance. A person is less likely to commit a crime if they think someone will see them do it. Lighting and landscape play an important role in Crime Prevention Through Environmental Design.

PRINCIPLE #2 – NATURAL ACCESS CONTROL

Natural Access Control is more than a high block wall topped with barbed wire. Crime Prevention Through Environmental Design or CPTED utilizes the use of walkways, fences, lighting, signage and landscape to clearly guide people and vehicles to and from the designated entrances. The goal with this CPTED principle is not necessarily to keep intruders out, but to direct the flow of people while decreasing the opportunity for crime.

PRINCIPLE #3 – TERRITORIAL REINFORCEMENT

Creating or extending a sphere of influence by utilizing physical designs such as pavement treatments, landscaping, and signage that enable users of an area to develop a sense of proprietorship over it is the goal of this CPTED principle. Public areas are clearly distinguished from private ones. Potential trespassers perceive this control and are thereby discouraged.

PRINCIPLE #4 MAINTENANCE

CPTED and the Broken Window Theory suggests that one broken window or nuisance, if allowed to exist, will lead to others, and ultimately to the decline of an entire neighbourhood. Neglected and poorly maintained properties are breeding grounds for criminal activity. Developing a formal CPTED-based maintenance plan helps preserve property and make it a safer place.

CPTED has been successfully applied in Villa Padre Hurtado, a social housing settlement in Puente Alto, a North East part of Santiago Chile – an area that is very dangerous and with high levels of drug trafficking (CPTED Security, s/f).

Collectiu Punt 6

A Barcelona based group of feminist planners, architects and activists interested in re-thinking cities, neighborhoods, and the built environment in order to eliminate discrimination and include a gender perspective in local planning. The group started working in response to a new law approved in 2004 in Catalonia, the Neighborhood Law, which mandated cities to promote gender equity in the use of public space and facilities. The main activities of Punt 6 since then have been research, participatory processes, training and capacity building, women's activism and advocacy, consultancy projects and co-development. The group has worked with gender audits, equity plans and training on gender violence prevention with diverse audiences in El Salvador, Mexico, the United States and Spain (Collectiu Punt 6, s/f).

OTHER TOOLKITS

There has been some useful toolkits produced in this area. Below is a short list of some useful references:

The InterAmerican Development Bank (IADB)

The IADB has a number of tools and reports in English and Spanish on gender and violence. It also has a gender lab where examples of actions can be found (Granada et al., 2016).

The World Bank & World Bank Group

The World Bank resources include *Mainstreaming Gender in Road Transport: Operational Guidance for World Bank staff and Resource Guide* (The World Bank, 2010) and *Transport Brief on Violence against Women and Girls* (Karla González, Diana J. Arango, Jennifer McCleary-Sills, & Bianca Bianchi Alves, 2015).

Asian Development Bank (ADB)

This toolkit provides guidance for transport sector and gender specialists on how to mainstream gender equality issues into transport project design, implementation, and policy engagement. It has been designed to assist ADB staff, consultants, and government partner executing agencies to conceptualize and design gender-responsive projects in the transport sector (Asian Development Bank, 2013).

Annex 3. Note on data collection and analysis

RELEVANCE OF GATHERING QUALITATIVE DATA FOR *ELLA SE MUEVE SEGURA*.

Why is it important to work with qualitative methodologies in transport and mobility studies?

The traditional approach to collecting transport data centers on the study of daily trips made by people between origins and destinations. People who make these trips are usually analyzed through their socio-economic and demographic characteristics, which in turn informs decision-making, reflecting possible solutions built to address the daily flows of trips that take place in cities. Thus, the quantitative approach, using surveys and counting has been dominant.

However, there have been advances in characterizing the diversity of travel patterns, which are different for women and men in terms of purpose, modes, times, and distances. These quantitative differences in everyday mobility have helped clarify the complexity of these trips and have highlighted the need to incorporate other methodological approaches that allow studying users that differ from the average, as their decisions and behaviors have an impact on urban transport systems.

This is why this study incorporates both quantitative perspectives and qualitative methodologies, including aspects such as the perception of security in public transport for both men and women, and recognizes the sensitive nature of this issue. In this framework, qualitative methods which allow complex social phenomena to be investigated are considered to be a valuable tool.

Qualitative studies are framed within the interpretative methodology paradigm and incorporate the user's perspective. They probe into the meanings and representations of societal norms and facilitate deeper understanding of the different dimensions of individual emotional behaviors, as well as groups' specificities, by delving into personal experiences, hypothesizes, restrictions/constraints and barriers.

By incorporating the diversity of daily problems and travel needs of women and men within the city, qualitative approaches allow deeper understanding of the specificities of experiences, which are difficult to address from a more general perspective, and therefore promote a more in-depth reflection on solutions and measures that are targeted, efficient and focused.

The experience of implementing qualitative methodologies in the *Ella se mueve segura* project

As part of the project, two types of qualitative techniques were implemented: i) focus groups with female and male public transport users in each of the cities included in the study, and ii) in-depth interviews with key social actors selected because of their direct or indirect knowledge of the issue addressed as well as their institutional, collective, or personal involvement with the topic.

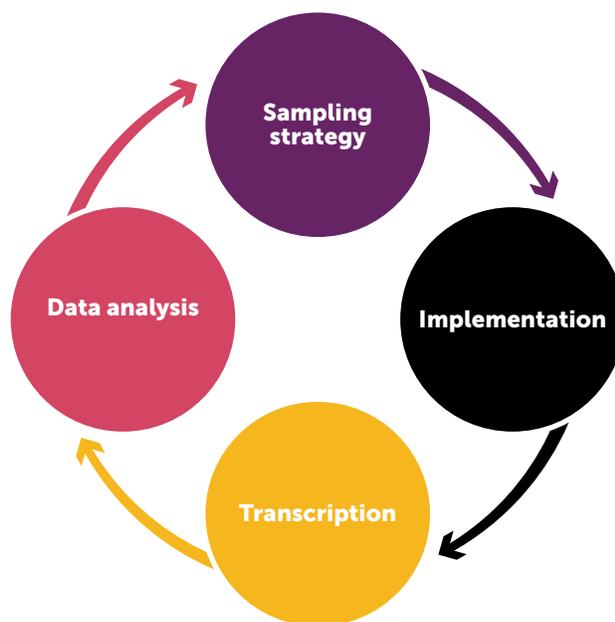


Figura 58. Process for carrying out focus groups and in-depth interviews. Source: Authors

- **What are in-depth interviews?**

They are a qualitative technique based on personal interaction, which allows gathering in-depth information in a holistic way from the interviewee's account and their experience in the role they carry out. Some of the advantages of this method include the extent of the information gathered, the flexibility for widening the investigation if necessary, and the creation of a space of confidence for interaction. For this project, a format of the semi-structured script was chosen, designed according to the position the interviewee held or the organization they were part of.

- **What are they for?**

They allow for gathering the perspective of different social actors regarding the social phenomenon under study. For this project, it was used particularly for interviews with key stakeholders, which allowed access to expert and specialized information on the issue addressed, from a diverse range of perspectives linked with the institutional affiliation of the actors. This information can also illustrate or be compared with the wider array of information (both qualitative and quantitative) gathered throughout the project. Additionally, it helps to understand the processes and visions of institutions, civil society, academia and, in general, several types of stakeholders.

- **What are focus groups?**

They are a qualitative technique which permits to gather information through a group interview. Some advantages include the lower cost and time required for their organization, flexibility to inquire on people with diverse profiles, and the synergy and motivation generated by the interaction and presence of other participants.

- **What are they for?**

Results contribute to the analysis of different dimensions and variables related to the social climate and representations. They can be combined with other information (qualitative or quantitative) to deepen, illustrate and clarify results and relationships between variables. They allow delving into subjective and diverse aspects, such as opinions, perceptions, motivations, beliefs, emotions, experiences, and reactions, among others.

Sampling strategy

The objective of sampling in qualitative research is distinct to statistical representativeness. Considering that the approach seeks to represent a social phenomenon in its diversity, the main criterion considered for choosing cases (either group profiles or people) was to ensure inclusion of different typologies defined for each city, which permitted presenting data on a wide variety of ways to see or experience the problem.

In the case of focus groups, sampling was guided by the heterogeneity criterion, as the goal was to seek socio-structural and typological representation according to the research aims and purposes. As a general guide, it was decided that there should be one group of

female public transport users and a mixed group (female and male users). However, each city defined a set group of concrete factors (typological variables) related to each city's own characteristics, according to which the number and type of groups was established.

Table 5. Focus groups- typological variables considered for each city

Buenos Aires	Socio-structural: gender, age, occupation, motherhood/fatherhood Socio-spatial: Autonomous City of Buenos Aires (CABA); Surroundings ¹ : i) greater deprivation on infrastructure level/supply of urban services and transport, ii) lower deprivation on infrastructure level/supply of urban services and transport.
Quito	Socio-structural: gender, age, occupation Socio-spatial: Metropolitan District of Quito (DMQ). Ensure representation of women and men from different areas of the city, including the valleys (consolidated areas and the periphery).
Santiago de Chile	Socio-structural: gender, age, occupation Socio-spatial: Ñuñoa Commune: High income, better infrastructure

For in-depth interviews, the criterion for including cases was fundamentally based on the expected level of information provided by each interviewee. A typological framework was defined for the selection, which considered the heterogeneity of institutional affiliation: public sector, private sector, civil society organizations, and academia. In any case, the interviewees were expected to provide information of relevance to the study's objectives, therefore, they were in strategic positions related to issues of transport or gender within their field.

While performing qualitative research, the interpretation of information must be done during implementation, transcription and analysis. Thus, even if the number of focus groups and interviews to be carried was established at the beginning of the research, the definite number of cases (groups and people interviewed) could be revised and adjusted according to the process of data gathering and interpretation, in order to validate new or different information that may have been presented.

¹ Surroundings: this category included the AMBA municipalities (excluding CABA) which are located on either the North corridor or the South corridor

Figure 58 (page 168), shows that during qualitative research, the interpretation of information must be done simultaneously during the stages of implementation, transcription, and analysis. For this reason, though the amount of focus groups and interviews to be done was determined approximately before initiating the investigation, the definitive cases (of groups and persons interviewed) was revised and adjusted as the data collection and interpretation advanced.

Table 6. Focus groups implemented in each city, according to profiles

Buenos Aires	4 focus groups: Women: 3 groups (CABA, North-corridor surroundings, South-corridor surroundings); Mixed: 1 group (CABA)
Quito	4 focus groups: Women: two groups, one for young women, one for adult women from different areas of the city; Men: one group formed by men from different areas of the city; Mixed: one group with people from different areas of the city.
Santiago de Chile	4 focus groups: Women: 3 groups; Central Santiago, Ñuñoa and El Bosque; Men: 1 group with men from different communes and ages.

Table 7. In-depth interviews carried in each city, according to profiles

Buenos Aires	9 interviews: 4 academia; 3 civil society organizations; 2 private sector
Quito	10 interviews: 2 academia; 2 civil society actors; 1 UN Women representative; 5 public sector actors, including a (female) council member, representatives from the Metropolitan Passenger Public Company, Patronato San José and the Secretariat for Mobility It is important to recall that in Quito, the analysis was for the Integrated Transport System (BRT), operated by the public sector through the municipality, and not for the private operators.
Santiago de Chile	4 interviews: 2 academia; 2 participants within civil society organizations.

Implementation

Before implementing focus groups and interviews, it was necessary to define protocols for recruitment and logistics, as well as the roles within the leading team. It was also important to define the necessary inputs for adequate implementation. These tasks were articulated from the planning stage until the end of the data gathering process.

In the case of focus groups, although there were some common guidelines, each city had flexibility to adapt the method according to the local context.

Table 8. Focus groups - Common guidelines

RECRUITMENT AND LOGISTICS	WORKING TEAMS	GUIDELINES AND INPUTS
<p>Recruitment:</p> <p>Buenos Aires and Quito included a question on willingness to participate in further stages of the project, as a basis for contacting participants.</p> <p>Santiago: Participants were recruited through pre-existent networks from the leader organization. Additionally, well-established civil society organizations aided with the recruitment process.</p> <p>Follow-up (and communication): apart from the initial call, participation was confirmed a few days before the interview took place</p> <p>Dates and considerations for times/days: better on weekdays. Saturday can be useful to allow those in full-time employment to participate. Evaluate according to profiles if it is better on the afternoon or by night.</p> <p>Physical space: neutral, accessible, chairs and table organized in a circle.</p>	<p>Team: moderator + assistant/s for taking notes (observation)</p> <p>Moderation: moderator's profile according to participants' profile (female or male). Explain confidentiality policy and data management.</p>	<p>Guidelines: differentiated according to group profile.</p> <p>Materials: consent form, attendance control, snacks, monetary payment or other. *Except in the case of Santiago where participants volunteered.</p> <p>Recording: check proper functioning, notify participants.</p> <p>Photos/video: notify participants, take silences into account, not intrusive.</p>

Table 9. Grupos focales – Variaciones según ciudad

Buenos Aires	<p>Having different groups for the CABA and the surroundings proved important. This prompted conversations that indicated differences between both territory typologies and their impact on security perception.</p> <p>Originally, the women-only group for CABA was not planned. However, after the mixed group, there was a need to explore women's experiences with insecurity in transport more deeply, to identify if the presence of another gender modified the group's dynamics.</p>
Quito	<p>The men-only focus group was useful for knowing their perspective in an environment without prejudice or interference.</p> <p>The mixed group was enriching because of the possibility of comparing up-front both genders' perspectives.</p>
Santiago de Chile	<p>Carrying out groups differentiated by commune with different socioeconomic realities was important. It allowed the identification of a wide variety of experiences related to public transport.</p> <p>The men-only group included the male perspective on the issue, which allowed analysis from a different perspective.</p>

For the in-depth interviews, although these required less logistics for organizing, the tasks followed the same sequence that for the focus groups.

Table 10. In-depth interviews - tasks preceding the implementation

CONVOCATORIA Y LOGÍSTICA	EQUIPO DE TRABAJO	GUÍA DE PAUTAS E INSUMOS
<p>Contact and recruitment: Stakeholder identification and appointment schedule.</p> <p>Follow-up (and communication): appointment confirmation days before the interview</p> <p>Dates and considerations for days/times: availability and suitability for stakeholders.</p> <p>Physical space: availability and suitability for stakeholders.</p>	<p>Interviewing team</p>	<p>Guidelines: basic general instrument adapted to the interviewee's profile.</p> <p>Recording: check adequate functioning and request participants' consent.</p>

It is worth highlighting that, among the preparatory tasks for the interviews, it was necessary to identify and contact the key stakeholders to be interviewed. For this, the teams built a stakeholder map, which included – in addition to the institutional affiliation – past, current, or potential involvement of the interviewee with the issue (mobility/transport, gender, or both), and their level of interest and influence. The provisional list was validated and adjusted during meetings with the Project Advisory Council. The Council members suggested key stakeholders to be included and helped by providing contact information for some of them.

Transcription

It is important to transcribe the audio from the interviews and focus groups to written text. For this the working team needs to be organized, in order to work in an articulated manner, and advance in parallel with the process of transcription and data gathering. This enables early interpretations of the data and clarifies whether it is necessary to look further into any new information that may have emerged. The comparison with notes taken during focus groups and interviews was also highly relevant, as these registered observations on voice tones, body language, and other aspects which are not recorded on audio (or even video) and can be useful for strengthening analysis and interpretation. The transcripts usually need editing to ensure the documents are understandable.

Análisis de datos

As was previously mentioned, qualitative data analysis is a process which begins early in the implementation stage of data gathering, and helps to identify which additional information should be gathered. The purpose of analysis is to acquire greater knowledge and understanding of behaviors, to answer the research questions, and deepen the results of the surveys. Taking into account that the body of information is sizeable, a selection of material to be interpreted must be determined, and a decision is made on whether it should be analyzed generally or in detail.

Two main stages for analysis were identified, for both focus groups and in-depth interviews: i) data reduction and ii) information segment reconstruction depending on similarities.

- **Data reduction:** the first step is the segmentation of each account in smaller units, according to relevant criteria. In particular, this follows the ‘topic’ classification previously defined in the guidelines. After this, a ‘code’ is assigned for each segment, in order to establish conceptual connections between each fragment’s content and the topics. The third step requires ‘categorizing’ all the codes referring to a specific topic.
- **Information segment reconstruction depending on similarities:** this aims to define similarities between categories, using comparative and reflexive analysis, which provide a relevant meaning for the research objectives. These objectives have been previously established and, additionally, some unforeseen dimensions can emerge during the analysis stage. Literature review and other similar empirical studies can strengthen the reflexive element during this stage, and aid in the identification of relations between concepts which enhance the interpretation framework.

Software assistance (such as the use of Atlas.TI) can be of particular help to the data reduction process, facilitating coding and category assembly. Additionally, it is practical for establishing similarities and relations between categories and concepts, especially in these cases where there is a great volume of information.

Methodological triangulation of data gathered

During this study, results from different methodologies were articulated. Specifically, the project integrated information obtained through intercept surveys (quantitative technique) and qualitative data. Within the qualitative methods, data was also triangulated, by comparing information from the focus groups and the in-depth interviews.

This process allows for the articulation and simultaneous exposition of different perspectives and realities of the same phenomenon/behaviors, ensuring a thorough understanding and enrichment of interpretation.

Harassment

- Obscene sexual verbalization
- Sexual handling / support
- Body photographs of a sexual nature
- Display of genitals
- Feeling of persecution

Thefts and fights

- Theft, without weapons and without violence
- Robbery, with weapon
- Fights with blows
- Fights with shouts and insults (no blows)

INSECURITY

ASPECTS OF TRANSPORTATION

Previo al viaje

WITH INFORMATION

- Stopping
- Being able to get on
- Known frequency

WITHOUT INFORMATION

- Where does it stop?
- It does not enter some neighborhoods
- Changes (routes) not informed

Durante el viaje

OCCUPATION LEVEL

- Full, Overcrowded, Overloaded
- Open doors. People perched
- Not being able to get on/off. Pushing

QUALITY

- Old vehicles
- Poor condition of the vehicles
- High speeds

Figura 59. Triangulation – Insecurity dimensions. Buenos Aires case. Source: Authors

The intercept survey asked female and male users about situations related to aggression or assaults that they had either seen or experienced on public transport. During focus groups, a wider contextual framework on insecurity emerged based on the information given about situations which caused anxiety when using public transport, as well as episodes associated with harassment, thefts, and fights. This included, additionally, aspects related to transport itself, such as: uncertainty due to situations that may have occurred before travelling and concern for physical integrity during the trip.

In the case of Quito, data triangulation was used to identify aspects of the quantitative methodology which needed to be deepened or explained. In addition, results from both methodologies were compared, in order to identify behavior patterns and perceptions and generate proposals for action. In turn, through in-depth interviews, it was possible to clarify the institutional and operational contexts within which the provision of public transport service occurs, as well as the actions implemented and the challenges to improve the system. It was also possible to understand the role and influence mechanisms that civil society applies to identify and put the issue of gender and transport on the public

agenda, as well as to generate responses to harassment situations. Finally, the motives behind this problem, as well as the structural conditions that enable it and its impacts at an individual and collective level, were explored from the academic perspective. With this information, it was possible to understand the context in which this problem occurs, its importance, and the urgency to modify it, as well as actions and suggestions to do so and each stakeholder's roles and challenges.

QUANTITATIVE METHODOLOGIES

Why is it important to work with quantitative methodologies in transport and mobility studies?

Quantitative methodologies allow researchers to determine the extent of a phenomenon in any social context. The objective is to perform an analysis that can be replicated and extended to the whole population, through numerical analyses and the formulation of causal hypotheses. In this sense, in the cities where this research took place, it was necessary to quantify the extent of the problem of security and transport from a gender perspective. From this understanding of the local context it was possible to determine the extent of the problem in the Latin American context.

In this particular case, it is interesting to analyze how men and women experience their trips in public transport. Therefore, it is not only necessary to know their arguments and meanings in depth, but to what extent these are generalized, or not, within society. In this sense, surveying the issue of insecurity on public transport using a gender lens, it would not be possible to know what percentage of people who use public transport have ever suffered harassment.

What are surveys?

Surveys are a research instrument generally associated with quantitative analysis of a certain phenomenon, in which closed questions with limited answer options are usually applied. It is possible to incorporate open questions with a limited space to answer, but these are generally less frequently used.

What are they for?

This instrument allows researchers to gather a greater amount of information than through an interview, for example, but with less depth. As such, it is useful for studies which seek to analyze general aspects of a population or phenomenon.

The experience of implementing surveys in the *Ella se mueve segura* project

As part of the project, an intercept survey which sought to study the perception and experience of public transport users (female and male) regarding security was conducted. Thus, the analysis included risk factors that foster insecurity in public transport and the experiences of users in vehicles, stops, and stations, as well as during the stages of access and exiting.

A particular characteristic of this study is that it sought to determine gender differences on issues such as the perception and experience of security/insecurity in public transport, and how this influences decisions and travel behaviors (when to travel, with what purpose, and how to do it).

Table 11. Survey characteristics in each city

Buenos Aires	Survey with 36 questions, 34 closed and 2 open. The survey was divided in 3 modules: i) socio-demographic, ii) daily mobility, iii) public transport perception. Each respondent answered the 36 questions and there were 3 optional questions at the end, asking for contact details (name, mobile phone number and e-mail) for those interested in participating in the focus groups.
Quito	Survey with 27 closed questions, some with answer choices and some with Likert scales.
Santiago de Chile	Encuesta de 30 preguntas cerradas con alternativas de respuesta. Cada encuestado respondía solo los ítems del medio de transporte que decía utilizar.

Strategy for sampling and representativeness

In this project, the sampling strategy chosen was interception of public transport users in bus stops or metro stations. The main objective of this survey was to achieve representativeness of gender.

Table 12. Variables considered in each city

Buenos Aires	<p>Non-probabilistic sampling of 800 interviews. With this type of technique, the sample selection is not random and is based on certain criteria. Quotas by sex, age and interest area were defined, based on processing and analysis of secondary information.</p> <p>790 surveys passed the data validation filter, having as a result 379 women and 410 men.</p>
Quito	<p>Non-probabilistic sampling of 1155 interviews. Selection criteria were age, sex and time.</p> <p>Surveys were applied in the most important transfer stations of the metropolitan transport system (8 in total). These stations gather users from all the consolidated area and the city valleys, as well as passengers from privately operated routes and those operated by the municipality.</p> <p>Age quotas were defined in two groups: for respondents between 15 and 35 years of age and for those over 36. There were also quotas for peak and off-peak hour to ensure representativeness from both periods, as well as proportion of men and women.</p> <p>690 surveys from women (59.7%) and 465 from men (40.3%) passed the data validation filter.</p> <p>A daily goal for questionnaires applied by interviewer and location was also defined.</p>
Santiago de Chile	<p>Sample is representative for men and women over 18 years of age who use public transport in the communes of Santiago, Ñuñoa and El Bosque, with an error below 5% at 95% confidence (Z of 1.96). Conservative values of 0.5 for p and q were used, which indicates the assumption that an equal proportion of men and women use public transport in the population. The sample for each commune was defined proportionally to the population in each of them.</p> <p>804 questionnaires were applied, 790 of which passed the data validation filter, resulting in 386 women and 404 men surveyed. Of these, 790 addressed the walking trip to/from the transport mode, 749 the <i>Transantiago</i> bus and 424 the Metro.</p>

Table 13. Randomization

Buenos Aires	When using non-probabilistic sample by quotas, there are no randomization criteria.
Quito	When using non-probabilistic sample by quotas, there are no randomization criteria.
Santiago de Chile	<p>Methodology was as follows:</p> <p>All bus stops and Metro stations in 3 communes were chosen (Santiago, Ñuñoa, and El Bosque).</p> <p>4 categories of bus stops were defined according to urban environment pleasantness for walking accessing/exiting and bus service frequency. This was based on information from the pre-census (2011) and DTPM (2016).</p> <p>Bus stops to survey were chosen randomly, ensuring representation of each category in each commune.</p> <p>To avoid selection bias, within each bus stop a rule of 1/3 was defined (the third person accessing the bus stop was approached)</p>

Table 14. Implementation

CHARACTERISTICS	WORKING TEAMS	APPLICATION AND INPUTS
<p>Buenos Aires: Surveys were implemented between the 13th and 31st of December 2016 (except for Christmas and New Year periods). They were implemented in 4 previously defined time bands (2 in peak hour and 2 in off-peak hour).</p> <p>Quito: Surveys were conducted in a period of six days, between February 7th – 9th and February 13th – 14th 2017, with a group of 6 interviewers divided in two groups and supervised by two more interviewers. They were conducted in 8 BRT transfer stations, including Trolebús, Ecovía y Metrovía stations. Surveys were conducted in a time frame of 12 continuous hours, divided between two groups of interviewers so that each one would conduct surveys for six hours.</p> <p>Santiago: Surveys were conducted between December 19th and January 18th. There was no work during Christmas and New Year's weeks. They were conducted in four time slots previously defined according to passenger affluence (2 in hours of low affluence and 2 in hours of high affluence)..</p>	<p>Buenos Aires: Team of 10 interviewers, 7 women + 3 men. All interviewers were previously trained and were part of both the definite implementation and the pilot conducted. All had identifying badges. Insurance in case of accidents was acquired for each of them.</p> <p>Quito: 10 interviewers divided in 2 teams, each with one supervisor, which were trained in two previous sessions. Implementation was done by shifts between 7 am and 7 pm.</p> <p>Santiago: 12 interviewers previously trained (9 women and 3 men). Each one had an identifying badge.</p>	<p>Buenos Aires: questionnaires were printed physically. Interviewers had cards to illustrate those questions that included ranges.</p> <p>Quito: questionnaires were printed and distributed among the interviewers, who had uniforms and badges to build trust among people. The printed questionnaire had all the inputs necessary and no additional cards were required.</p> <p>Santiago: the survey was applied through tablets using Qualtrics software. Some interviewers preferred using printed questionnaires and then tabulate results through SurveyMonkey.</p>

Data processing

The software used for data processing was SPSS, after filtering and cleaning data in Excel. First, descriptive data was processed to have a general overview of results, and then variables were ordered and some combinations performed, to then proceed to the creation of new variables with the objective of understanding the issue and its magnitude from a broader scale.

Table 15. Particularities of data processing for each city

Buenos Aires	The data processing was divided in several steps: i) Data cleaning and missing data removal, ii) Crossings with socio-demographic variables to validate quotas, iii) Creation of new variables. Specifically, a new variable allowed to distinguish harassment incidents from insecurity incidents. Analysis of this variable showed the gender gap in harassment situations witnessed or experienced by women and men. Other variables created allowed to differentiate the number of aspects that generated insecurity for each interviewee when travelling in public transport and the number of necessary actions to tackle the problem of harassment in public transport.
Quito	The first stage of the data processing was quality control, revision of coherence and mistyped data, and general data cleaning. For this purpose, bot Excel and Stata were used, and data was presented both disaggregating men and women and total aggregates. In addition to the combinations in each question, some crossings were made between questions that could produce particular information.
Santiago de Chile	<p>Main highlight was the creation of a new variable, which allowed analysis of how many respondents reported to never have experienced harassment situations in each mode of public transport. This variable was proposed after questioning if harassment was or not an issue linked to public transport. After this, the question was reinterpreted based on the number of harassment situations experienced by each respondent, where the alternatives were: all, some or none. Subsequently, the question was aggregated by aggressor.</p> <p>In light of reflections of a possible migration from public to private transport, a variable was created to study the reasons behind preference for automobiles. Finally, harassment types were classified in Verbal or non-Verbal; Physical; Photograph and Serious.</p> <p>Tables and graphs characterizing the sample and describing the problem of security in public transport were developed in Excel. After this, variables of gender, transport mode and type of harassment were crossed for further analysis.</p>

Table 16. Data analysis

Buenos Aires	<p>Data analysis followed this process:</p> <ul style="list-style-type: none"> i) first internal analysis and team validation through controls based on secondary sources (Secretaría de Transporte & Ministerio del Interior y Transporte, 2009); ii) second result validation based on comments and observations from the Advisory Council and academics specifically consulted for this purpose; iii) analysis contributions through presentation and result comparisons in the seminar <i>Ella se mueve segura</i> – Santiago and Quito; iv) preliminary conclusions validated through the Participatory Workshop conducted in August in the City of Buenos Aires.
Quito	<p>Mainly done through an internal analysis with the team, who reviewed and validated information by contrasting it with qualitative data. Additionally, it was analyzed during the <i>Ella se mueve segura</i> conferences, through presentations.</p>
Santiago de Chile	<p>Data analysis followed this process:</p> <ul style="list-style-type: none"> (i) internal analysis by the team, with initial observations and proposals for the Toolkit; (ii) 2 analysis workshops with the Advisory Council and other stakeholders; (iii) analysis contributions through the seminar <i>Ella se mueve segura</i> – Santiago and (iv) final revision and development of conclusions.

Annex 4. Guide for implementing intercept surveys

The survey objectives are to 1) gather basic information on modal share, times/uses of public transport, and travel distance disaggregated by sex and 2) answer the following questions relating to perception of women's personal security in public transport:

- Define the extent or incidence of harassment (sexual or otherwise) in public transport (e.g. How many women and men have witnessed and/or experienced harassment?)
- How does harassment affect them emotionally and rationally? Do they keep quiet or are they afraid? Or do they react?
- What do they think about harassment? What strategies do they use, consciously and unconsciously, to avoid being victims?
- Have these experiences led to a change in travel habits? If they have, to what extent? For instance, do they stop travelling altogether? Do they travel less on public transport? Do they travel accompanied? Do they change their travel times, routes or transport mode?
- What actions do they consider that can be taken to solve or alleviate this problem?
- Are they aware of the existing help mechanisms in case they are victims of harassment? Explore how would they prefer to react.
- What type of support is needed before, during, and after an incident? Whose responsibility is it? (Authorities or local entities)

METHODOLOGY OVERVIEW¹

Methodology: A method of declared preferences was chosen for the study, as it is an effective way of determining the aspects that most affect the participants' perception of security when using a certain transport mode.

Sampling: Randomized within the selected municipality².

Location: Bus stops, metro stations, and interchange stations. The study team understood that this would capture public transport users, with a few individual car users, and that this meant that those that did not travel by public transport were mainly excluded. This was recognized as a constraint within the study. The locations were selected after evaluating a number of criteria such as their location, how many people use them, logistics of surveying, etc.

Timing: Different times of the day. Interviews were carried out during morning peak hour, off-peak hours, and the evening peak hour. Additionally, surveys should be conducted on different days of the week.

Number: The following equation should be used to determine the adequate number of participants:

$$N = Z \times SD \times \frac{1 - SD}{Error}$$

Where: N is the number of surveys to be conducted, Z is the Z value for a given confidence interval, SD is the value for the standard deviation, and Error is the maximum admissible error.

Using socio-demographic, economic, and mobility data from national census as a reference is recommended. This helps ensure that the sample is representative. The geographical scope of the sample can be adjusted to communes/boroughs/neighbourhoods, etc.

¹ Suggestions gathered from the methodology used by the study's executive teams in Santiago, Quito and Buenos Aires

² The age bands were determined prior to the study and people who were under 18 excluded (as this would require different levels of authority to officially be able to ask them questions)

Target population: Male and female users of public transport in the defined localities within the geographical scope of the sample.

INTERCEPT SURVEY MODEL OF QUESTIONNAIRE³

Good morning/afternoon, we are carrying out a research project on public transport and we would like you to answer an anonymous survey. This will take XX minutes.

Mobility

During the past week, how many days did you use public transport?

This applies to trips for any purpose (work, study, healthcare, shopping, recreation, drop-off/pick up someone, etc.). Choose only one option

- a) Every day
- b) 3-5 days
- c) One or two days
- d) Didn't use public transport (THANK AND FINISH THE SURVEY)

During the past week, generally, at what times did you use public transport?⁴

Choose only one option

- a) xx
- b) xx
- c) xxx

³ Model questionnaire used by the study's executive teams in Santiago, Quito and Buenos Aires with additional recommendations as part of best practices identification. Questions were slightly adapted to the local context in the different cities. It is recommended to carry out training sessions with the surveying teams and conduct a pilot of the intercept survey

⁴ Define peak and off-peak hours according to local context.

What is the MAIN purpose of the trips that you make in public transport?⁵

Choose only one option.

- a) Work
- b) Study
- c) Personal shopping
- d) Home-related shopping**
- e) Entertainment/leisure
- f) Personal healthcare
- g) Family/relatives healthcare**
- h) Accompanying or leaving someone
- i) Accompanying or leaving someone to an educational facility**
- j) Visiting someone
- k) Running errands
- l) Other (please specify)

During the past week, for what other purposes did you use public transport?⁶

Choose up to three applicable options

- a) Work
- b) Study
- c) Personal shopping
- d) Home-related shopping**
- e) Entertainment/leisure
- f) Personal healthcare
- g) Family/relatives healthcare**
- h) Accompanying or leaving someone
- i) Accompanying or leaving someone to an educational facility**

⁵ Options associated to care-related trips are in bold

⁶ Surveys enquired for the “main” reason, however, it was noticed that in this way, information about care-related trips is lost. ‘Trip chaining’ could be better characterized by adding a question as shown here (this was not tested).

- j) Visiting someone
- k) Running errands
- l) Other (please specify)

Which is the purpose of the trip you are making right now?⁷

Where did your trip start? You may indicate the exact address, an intersection or a nearby landmark

Where does your trip end? You may indicate the exact address, an intersection or a nearby landmark

When you travel by public transport, which modes do you use?

- a) Only bus
- b) A combination of bus and public bicycle
- c) A combination of bus and own bicycle
- d) Only metro
- e) A combination of metro and public bicycle
- f) A combination of bus and own bicycle
- g) A combination of bus and metro
- h) A combination of bus, metro and public bicycle
- i) A combination of bus, metro and own bicycle
- j) A combination of bus and either collective taxi, individual taxi or car
- k) A combination of metro and either collective taxi, individual taxi or car
- l) A combination of bus, metro and either collective taxi, individual taxi or car
- m) A different combination (please specify)

Considering your trips in the past week, they were mostly done:

- a) By yourself
- b) Accompanied by one or more adults
- c) Accompanied by one or more children

⁷ This question could also gather information on the variety of trip purposes (main and secondary) if there is a representative sample or one controlled by quotas.

- d) Accompanied by one or more elderly adults
- e) Other (please specify)

How would you rate the public transport service?

Choose only one. Read options if necessary.

- a) Very good
- b) Good
- c) Average
- d) Bad
- e) Very bad
- f) Not sure / Not answering

Would you prefer to make this trip in a different transport mode? Which?

Choose only one option.

- a) No
- b) Yes, by car
- c) Yes, by metro
- d) Yes, by bus
- e) Yes, by taxi
- f) Yes, by UBER/another private app-based service⁸
- g) Yes, by bicycle⁹
- h) Yes, on foot
- i) Yes, other (please specify)

⁸ According to one hypothesis, women will be the main users of shared mobility. Understanding if they are willing to use Uber more than men would be interesting for future interventions

⁹ Add “public bicycle” if there is a system available in the city

Why would you prefer to do it in this mode?

Choose up to three options. Read options if necessary

- a) It is faster
- b) It is more comfortable
- c) It is cheaper
- d) It is punctual
- e) It has a better social level
- f) Less likely to suffer a traffic crash
- g) Less likely to suffer sexual harassment
- h) Less likely to suffer a crime
- i) It is better for the environment
- j) Other (please specify)

What prevents you from changing from your current mode of transport to the one you would prefer?¹⁰

- a) Cost
- b) Travel time
- c) It is not available in my area of residence/main activity
- d) Lack of comfort
- e) Insecurity
- f) Other (please specify)

¹⁰ Not included in the original surveys. It was added as an alternative to know the tipping point for when a user could change to another mode.

Security perceptions and experiences

Indicate TO WHAT EXTENT do you agree with the following statements:

Mark with an X 5 =Completely agree, 1 = Completely disagree.

Public transport:

a) Is fast	5	4	3	2	1
b) Is comfortable	5	4	3	2	1
c) Is cheap	5	4	3	2	1
d) Is safe (regarding robbery or mugging)	5	4	3	2	1
e) Is safe (regarding sexual harassment)	5	4	3	2	1

What conditions make you feel insecure when travelling on public transport?

Choose up to three options. Show options to the respondents if necessary

- a) None
- b) Too many or too few people in the bus or station
- c) Walking to the bus stop or metro station
- d) Conditions at the waiting spaces (surroundings, lighting, cleanliness or other)
- e) Physical harassment from a stranger
- f) Verbal harassment from a stranger
- g) Traveling alone, unaccompanied
- h) Vulnerability when travelling with a child or an elderly adult
- i) Travelling when dark (no daylight)
- j) Risk of falling or bumping into something (because of stairs, ramps, bus elevation, gap between bus/train and platform)
- k) Presence of street vendors or panhandlers
- l) Other

At what stage of your trip do you feel most secure?

- a) Walking to or from the public transport station (bus, train, etc.)
- b) Space where you wait for the bus (surroundings, lighting, cleanliness or other)
- c) During the trip (inside the bus)

During the last 12 months, have you seen and/or experienced any of the following situations:

Mark with an X (you may choose both options: seen and experienced)

SITUATION	SEEN	EXPERIENCED
A person making insinuations or staring (visual)	1	2
A person saying rude or obscene words (verbal)	1	2
A person groping or leaning sexually on someone (physical)	1	2
A person taking photos of someone else's body without consent	1	2
A passenger flashing or touching their genitals	1	2
Felt that someone was following you	1	2
Sexual harassment or rape (physical)	1	2
Theft or robbery without weapons, violence or intimidation	1	2
Assault or theft without weapons, but with violence or intimidation	1	2
Assault or theft with weapons	1	2
I haven't seen or experienced any of the above (skip next two questions)	3	3

Generally, how do you react to such cases?

Choose up to three options. Read options if necessary

- a) No reaction
- b) Take some action against the aggressor (hitting, screaming, whistling)

- c) Notify the driver or the authorities
- d) Alert other passengers
- e) Denouncing (formally)

In case of alerting other people, what has generally been the reaction of other passengers?

Choose up to two options

- a) They got involved by supporting the victim
- b) They got involved by acting against the aggressor
- c) They did not get involved (did not act)

How have these experiences influenced your behavior when travelling?

Choose up to three options. Show options to respondents if necessary.

- a) They have had no influence
- b) They have affected your decision to make a trip
- c) You have changed your travel times and/or avoid travelling at night
- d) You have changed your route and/or avoid walking through certain streets
- e) You have reduced your use of public transport
- f) You have changed your mode of transport (bus, train, taxi, public or own bicycle, walking, etc.)
- g) You travel mainly within your neighborhood, where you know people and are known
- h) You prefer to travel in a private car
- i) You avoid travelling alone
- j) You pay more attention to your surroundings and other passengers
- k) You carry a personal defence weapon (pepper spray, sharp object)
- l) Other

Proposals and reporting

In order to improve the situation, what actions do you consider should be implemented?¹¹

Choose up to three options. Show options to the respondents if necessary.

- a) Cameras and monitoring equipment in buses, stations, etc.
- b) More female personnel in transport
- c) Better lighting at stops
- d) Greater police control or more security personnel
- e) Communication campaigns
- f) Counters for reporting located at main stations
- g) Option for reporting through internet/app
- h) Option for reporting through telephone
- i) Laws that protect the victim and stronger sanctions
- j) Other (specify)

Do you know how to report sexual harassment in public transport?

- a) Yes
- b) No

Have you heard of the _____?¹²

- a) Yes
- b) No

¹¹ Adapt to local context. Some options were included based on the focus groups results in the different cities.

¹² Include if there is a phone number for attending cases of harassment or gender-based violence, or a special programme for harassment episodes in public transport.

Socio-demographic characteristics¹³

Participant's gender.

Do not ask. Choose by observation

- a) Female
- b) Male
- c) Other (please specify)

What is your age?

Ask directly or estimate based on observation.

- a) 18-25
- b) 26-40
- c) 41-60
- d) More than 60 years

What is your educational level?¹⁴

Choose only one option.

- a) Did not complete primary school
- b) Completed primary school
- c) Did not complete high school
- d) Completed high school
- e) Did not complete university or technological education
- f) Completed university or technological education
- g) Postgraduate (Masters, PhD, or equivalent)

¹³ For the first five questions use similar categories to the ones reported in the National Census, in order to perform structural controls or comparisons.

¹⁴ Adapt to local context

Which is your MAIN occupation?

Choose only one. Read options if necessary.

- a) Salaried employee
- b) Independent/autonomous worker
- c) Student
- d) Househusband/housewife
- e) Unemployed
- f) Retired
- g) Other (please specify)

How many people usually live at your home (for more than six months) including yourself?¹⁵

What is the average income of your household?

(Total for all members) Read options.

- a) 0 – 300 USD
- b) 301 – 600 USD
- c) 601 – 900 USD
- d) More than 900 USD
- e) Not sure / not answering

Do you own a mobile phone from which you can access the internet and use mobile apps?

- a) Yes
- b) No
- c) You do not own a mobile phone

¹⁵ It is recommended to include a question on marital status and whether or not they have children or dependent persons. Again, this would provide valuable information associated with care-related mobility.

What mobile apps do you use most frequently on your phone?

Choose up to three options.

- a) Internet browser
- b) Facebook
- c) WhatsApp
- d) Twitter
- e) E-mail
- f) Instagram
- g) Mobile games
- h) Local transport apps¹⁶
- i) Other – specify

In what sector do you live?¹⁷

Choose only one.

- a) North
- b) South
- c) Centre
- d) Other

¹⁶ Include if there are apps either developed by the local government or third parties (for example Moove it, Waze, Uber, etc.).

¹⁷ Adapt to local context

Would you be interested in participating in a focus group on this subject? You would receive compensation for the time you dedicate.

Give information sheet.

- a) Yes: (Full name; Phone number)
- b) No
- c) Not applicable (if it is clear that the person is unwilling)

Thank you very much for your time!

Survey metadata

Survey n°; Interviewer.

General information on the Ella se mueve segura methodology:

- This methodology was developed for the international research project carried out simultaneously in Buenos Aires, Argentina and Santiago, Chile. It was financed by CAF – Development Bank of Latin America and FIA Foundation.
- The objective of the project was to evaluate citizen's perception (particularly women's) regarding the public transport system, addressing issues such as citizen security and gender-based violence.
- The project included surveys, interviews and focus groups to gather qualitative data to complement the quantitative data.
- The study's results will be used to inform public policy and help transport operators improve travel conditions
- It also aims to generate greater awareness regarding gender-based violence within society

Observations:

Annex 5. Methodology for in-depth interviews

In-depth interviews are a qualitative technique in social research which allows researchers to capture, through interviewees' expressions, the abundance of meanings, perspectives, interpretations, and classifications of a certain phenomenon.

In the *Ella se mueve segura* project in particular, interviews allowed, through an in-depth approach, to illustrate the information obtained through the literature review and to generate a counterpoint to secondary data and data gathered through other techniques. They also allowed to inquire on positions and opinions regarding the issue of interest according to each stakeholder role and institutional affiliation.

GENERAL OBJECTIVE

To understand the vision and opinion of specialists, decision-makers, and leaders from civil society organizations or the private sector regarding the situation of women's security in transport and its possible causes, as well as inquire on past, present, or future initiatives aimed at improving this situation, by looking into opinions regarding these experiences and which would be the role/roles of each sector involved in the issue (public, private, academia, civil society).

SPECIFIC OBJECTIVES

- Explore what concepts are considered part of the umbrella concepts of harassment/violence/discrimination towards women in cities and particularly in public space/transport.
- Deepen understanding of the opinions of each type of stakeholder involved regarding the current situation of women's security in public transport.
- Inquire on the impact of different socio-economic and demographic variables regarding this situation for diverse women and the differences with men, as well as

between the varying typologies of territory within cities.

- Get to know the opinion of different types of stakeholders regarding the impacts and conditionings that this situation generates for accessibility and women's access to the variety of opportunities provided by cities.
- Examine the relationship and incidence of several factors related to transport systems on the situation of greater vulnerability for women when using public transport.
- Explore the framework of possibilities and causal links of the issue.
- Investigate the knowledge and opinions regarding past, present, and future experiences of actions or projects aimed at improving/changing/addressing this situation.
- Understand what type of stakeholders are considered relevant to engage in providing a comprehensive response to this problem, and especially get to know the vision on the role of citizens.
- Inquire on visions for a secure public transport for women and citizens in general.
- Explore potential lines of action for projects or measures oriented at improving/changing/addressing this situation.

INTERVIEW DESIGN

Four areas of analysis are proposed:

1	2	3	4
Problem: Current state / situation of harassment / violence / discrimination towards women in public transport.	Experiences/actions Past, present, future to improve / change / address this situation.	Role/position of stakeholders to provide integral solutions	Vision: public transport for women

A Guideline was elaborated based on these topics, which has some variation on the wording of questions, according to each interviewee's profile.

GUIDELINES

Civil society organizations

- (i). Could you tell me your name, position/role, and how long have you been in this organization?
- (ii). How did your interest in working on issues regarding women and gender perspective begin? Inquire on motivations and experiences.

PROBLEM

- (iii). How would you describe the situation of women who travel on public transport? Do you think there is a difference with the situation for men who travel on public transport?
- (iv). To what extent do you think that women worry about their safety when traveling on public transport?
- (v). Do you believe that this situation conditions women in terms of their mobility and their access to the different activities, services and opportunities the city provides? How? Why? Inquire if they perceive there are differences according to territory typologies, socio-economic conditions, age, occupation, motherhood, etc.
- (vi). In your opinion, what factors affect insecurity (and the perception of it) for women in public transport? (Technical, operational, organizational or design issues, reporting procedures and trust in the authorities)
- (vii). Which do you think are the causes of such situations?

EXPERIENCES

- (viii). Do you know if any projects, actions or initiatives have been implemented by your organization aimed at improving/changing/addressing this situation? Which? Inquire on origin, initiative, project objectives, starting and ending years, relevance, beneficiaries, results and impacts
- (ix). Was it the objective of these programmes to address the issue of insecurity in public transport or public space, or was it an indirect impact?
- (x). Do you know about other projects, actions, or initiatives implemented in the city or in other cities or municipalities which are aimed at improving/changing/addressing this situation? What about the legal or regulatory background, reporting procedures, etc. related to the issue? Which ones? Inquire on opinion
- (xi). How do you feel this issue should be addressed? From which sectors, areas or profiles?

ROLES

- (xii). Which should be the role of this organization and of civil society regarding this problem?
- (xiii). And what do you think should be the role of citizens?

FUTURE PERSPECTIVES

- (xiv). What would public transport that is safe for women be like?
- (xv). Do you have in this area/department/institute any projects/actions/initiatives on the agenda that are related to this issue and/or are to be implemented in the future? Inquire
- (xvi). If you could do anything directly to improve the situation? What would you do?

Public sector and private sector

- (i). Could you tell me your name, position/role, and how long you have been in this role?
- (ii). How did your interest in working on issues regarding women and gender perspective begin? Inquire on motivations and experiences

PROBLEM

- (iii). How would you describe the situation of women who travel on public transport? Do you think there is a difference with the situation for men who travel on public transport?
- (iv). To what extent do you think that women worry about their safety when traveling on public transport?
- (v). Do you believe that this situation conditions women in terms of their mobility and their access to the different activities, services and opportunities the city provides? How? Why? Inquire if they perceive there are differences according to territory typologies, socio-economic conditions, age, occupation, motherhood, etc.
- (vi). In your opinion, what factors affect insecurity (and the perception of it) for women in public transport? (Technical, operational, organizational or design issues, reporting procedures and trust in the authorities)
- (vii). What do you think are the causes of such situations?

EXPERIENCES AND ACTIONS

- (viii). Have any projects, actions, or initiatives been implemented from the municipality/legislative body/company aimed at improving/changing/addressing this situation? Which? Inquire on origin, initiative, project objectives, starting and ending years, relevance, beneficiaries, results and impacts
- (ix). Was the it the objective of these programmes to address the issue of insecurity in public transport or public space, or was it an indirect impact?
- (x). Do you know about other projects, actions or initiatives implemented in the city or in other cities or municipalities which are aimed at improving/changing/addressing this situation? What about the legal or regulatory background, reporting procedures, etc. related to the issue? Which ones? Inquire on opinion
- (xi). How do you feel this issue should be addressed? From which sectors, areas or profiles?

ROLES

- (xii). What should be the role of this agency regarding this problem?
- (xiii). And what do you think should be the role of citizens?

FUTURE PERSPECTIVES

- (xiv). What would public transport that is safe for women be like?
- (xv). Do you have in this agency any projects/actions/initiatives on the agenda that are related to this issue and are to be implemented in the future? Inquire
- (xvi). If you could do anything directly to improve the situation? What would you do?

Academia

- (i). Could you tell me your name, position/role, professional profile, areas of interest and how long have you been in this organization?
- (ii). How did your interest in working on issues regarding women and gender perspective begin? Inquire on motivations and experiences

PROBLEM

- (iii). How would you describe the situation of women who travel on public transport? Do you think there is a difference with the situation for men who travel on public transport?

(iv). To what extent do you think that women worry about their safety when travelling on public transport?

(v). Do you believe that this situation conditions women in terms of their mobility and their access to the different activities, services and opportunities the city provides? How? Why? Inquire if they perceive there are differences according to territory typologies, socio-economic conditions, age, occupation, motherhood, etc.

(vi). In your opinion, what factors affect insecurity (and the perception of it) for women in public transport? (Technical, operational, organizational or design issues, reporting procedures and trust in the authorities)

(vii). Which do you think are the causes of such situations?

EXPERIENCES AND ACTIONS

(viii). Do you know of any projects, actions or initiatives have been implemented by your organization aimed at improving/changing/addressing this situation? Which? Inquire on origin, initiative, project objectives, starting and ending years, relevance, beneficiaries, results and impacts

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(x). Do you know about other projects, actions or initiatives implemented in the city or in other cities or municipalities which are aimed at improving/changing/addressing this situation? What about the legal or regulatory background, reporting procedures, etc. related to the issue? Which ones? Inquire on opinion

(xi). How do you consider this issue should be addressed? From which sectors, areas or profiles?

ROLES

(xii). Which should be the role of academia regarding this problem?

(xiii). And which do you think should be the role of citizens?

FUTURE PERSPECTIVES

(xiv). What would public transport that is safe for women be like?

(xv). Do you have in this area/department/institute any projects/actions/initiatives on the agenda that are related to this issue and are to be implemented in the future? Inquire

(xvi). If you could do anything to directly improve the situation, what would you do?

Annex 6. Early indications of the impact of the study (2018)

The *Ella se mueve segura* study took place between October 2016 and December 2017. This period (a little over 12 months) is quite short, but despite this, there have been some noticeable impacts at city and in some case national level. This has been helped by the high profile and credibility of FIA Foundation and CAF as supporters, especially at generating support and interest at city level, not only with the core cities, but also with others. NGOs and CSOs who currently work on complementary topics have also noticed this work and it was impressive to note that several of them attended the international seminars and workshops, at their own cost, in order to learn more. Efforts are on-going to ensure these contacts are nurtured and that where possible further work can be coordinated.

BUILDING LOCAL CAPACITY

Participation in this study has greatly increased the local capacity on gender and urban transport in all three cities. This has impacted young and post-graduate researchers most, and the opportunity to work with others has expanded this knowledge, helping to position these issues as important and the organizations associated with the local study teams as experts. In addition, and in particular in Chile, this study has engendered greater discussion and built recognition that transport is not gender-neutral among transport engineers and other strategic professions within academia, and that this is not only a major problem but is a significant opportunity for building sustainable transport systems based on greater equity and justice. This includes new courses and a gender perspective in the new annual Transport Justice Report, being developed by CEDEUS/PUC (Chile). There was also extensive interest in learning more about tools for resolving gender-related issues from Buenos Aires and Santiago, and integrating gender sensitivity in the relevant planning, operations, design, and other phases.

In addition, the study has had an impact on policy in Buenos Aires. The Secretary of Transport of the City of Buenos Aires has created a Gender and Transport Plan using the results and findings of *Ella se Mueve Segura* as well as other sources concerning women and mobility issues as a baseline for action. The Ministry of Transport of Argentina has also increased its commitment to delivering gender sensitive transport through the introduction of the gender perspective in planning transport projects. Thus, gender issues are now considered at the city and national level of transport planning and a number of interventions (such as CCTV cameras on buses, training, and attention-protocols and data collection) are being carried out.

In addition, the study has had an impact on policy in Buenos Aires. The Secretary of Transport of the City of Buenos Aires has created a Gender and Transport Plan using the results and findings of *Ella se Mueve Segura* as well as other sources concerning women and mobility issues as a baseline for action. The Ministry of Transport of Argentina has also increased its commitment to delivering gender sensitive transport through the introduction of the gender perspective in planning transport projects. Thus, gender issues are now considered at the city and national level of transport planning and a number of interventions (such as CCTV cameras on buses, training, and attention-protocols and data collection) are being carried out.

The ESMS research also deepened the understanding of data collection to reflect gender needs. Examples include increasing the use of disaggregated data available in Buenos Aires and deeper analysis of the Santiago Origin-Destination survey, which reveals high but rapidly declining levels of transport sustainability, with over two-thirds of daily trips by sustainable walk-bike-bus combinations of travel. Women account for a disproportionately high number of walking trips and their radius of action is often restricted to their own neighborhoods. The study teams believe that this behavior was not unique to Santiago and would be an interesting area to continue investigating.

The clearly stated intention to change transport modes at the first opportunity reflect problems with safety and sexual harassment on public transport, whether Metro or buses, and on the way to and from bus stops and Metro stations. In Buenos Aires, the ESMS study team has given support to the development of a survey of bicycle users in the City of Buenos Aires by a civil society organization *Ciclofamilia*, that will allow them to characterize the profile of the cyclist.

The seminars were all well attended by local players including numerous city and national officials, security agencies, academics, and NGOs/CSOs working on transport and gender, or only one aspect of these, as well as the study teams from each city. The fact that international speakers and researchers were present and there was much dialogue and sharing has helped to increase the commitment and understanding of this issue at local level. It is too early to say if this has influenced local policy but there are indications that this will be the case.

The role of the Advisory Council in promoting local ownership and interest in the study has been crucial and is seen as being a key lever for future work within the three cities. In Quito, the impact at the national level of the international conference held in May 2017 was covered by two articles in national press and high political participants (councilors) from cities such as Ibarra, Latacunga, Ambato and Cuenca – four of the most important cities in the central highlands of Ecuador, was notable. This impact was also positive because the participants exchanged contacts and created an informal communication network about the *Ella se mueve segura* project and many other initiatives.

Local capacity has also been boosted by the close collaboration between the cities. An example includes the interest of the Undersecretary of Sustainable and Safe Mobility's team of the Government of the City of Buenos Aires on information of the *Bájale al Acoso* experience implemented in Quito and other actions implemented in other cities in Argentina, as well as other regions in the world. The objective is to know in depth these measures in order to be able to better develop and manage solutions for the City of Buenos Aires. There has been high interest in the Transantiago example of the public-voted Best Female Bus Driver, and also how to interact with private transport operators, and exchanges on what types of measure can help increase their interest in including gender perspectives (training and employing more women). This has come from Quito, Buenos Aires, Rosario and Mexico.

The contacts generated with the Transportation and Telecommunications Directorate of the Ombudsman's Office of the Autonomous City of Buenos Aires is also helping the management team to develop their gender and transport agenda. The Buenos Aires study is also now aware of the interest of the Interdisciplinary Program of the University of Buenos Aires on Transport (PIUBAT), which is starting to work the databases of the SUBE (Unique System of Electronic Ticket) to incorporate the gender perspective and is also

progressing in the realization of a video, which integrates transport and gender subjects. A willingness to work in conjunction with the ESBA AMBA team has been expressed.

DEEPENING CONTACTS WITH LOCAL AND NATIONAL INSTITUTIONS

To varying degrees, all three cities have deepened their own contacts with local and national players interested and/or responsible for women's' issues, transport, and sustainability. *Laboratorio de Cambio Social* (Chile) (Laboratory for Social Change) has been invited to generate a new, urban transport-related section (for the first time) in the National Gender Action Plan, developed in 2017 and covering the next 10 years.

Within the three countries, there has been high levels of interest from other cities. Argentina, in particular, has seen strong interest from second tier cities, especially Rosario. This has been a two-way process, as there are a number of aspects that Rosario has addressed that Buenos Aires may learn from and vice versa. Beyond Santiago, the methods and lessons from ESMS and gender-related issues could be integrated into a new regional public transport plan (Temuco-Padre Las Casas, Región de la Araucanía, Chile).

In the same way, in Ecuador, the Undersecretary of Land Transport of the Ministry of Transport is generating a team that is interested to replicate the methodology based on the experience of ESMS. The project was also presented in the city of Cuenca in front of representatives of the Municipal Council, public officials, and activists of the city. This generated awareness and the participants await the results of the study.

In Buenos Aires, the series of in-depth interviews with key social actors and, in particular, the discussions with representatives of the public and private sectors, Academia, civil society within and outside of the Advisory Council, helped to link the various existing program areas: transport and mobility, gender, and security.

ESMS Buenos Aires team held a meeting with the team of the Statistics and Community Relations areas of the Mobility Agency of Rosario (EMR) to share the methodological approaches used and the results obtained from the AMBA study. The EMR team continued working and advanced in generating information using available sources: Household Mobility Survey (EOD, 2008) and the Permanent Passenger Surveys (EPP), considering male and female mobility patterns. From the EMR team, they point to this work as a first step to start the analysis of mobility, with a gender perspective.

PUBLICATIONS LEADING TO POLICY INFLUENCE

The ESMS publication documenting the extent of sexual harassment on public transport journeys and how it affects women and men of different ages and social conditions provides potential for making policy inputs and change. Publications for top-tier and other academic, e-media, and other media outlets are also in preparation. In particular, this has allowed researchers to use this study to develop, author, and co-author papers for publication. In addition, the toolkit and related material will be highlighted on several knowledge platforms, one in connection with the *Laboratorio de Cambio Social* (Chile) and it has also been used in the update of the GIZ Urban Transport and Gender Module (Allen, 2018), with a complementary webinar and associated slides.

The ESMS team in Buenos Aires has been in contact with members of civil society organizations from the City of La Paz, Bolivia, who had knowledge of the project through one of the gender experts interviewed during the qualitative survey. Links were also generated with collaborators of *Proviás Decentralizado*, Ministry of Transport and Communications of Peru, and an expert on gender issues linked to the Gender Lab of the IDB. The team were also able to generate links with the project team of public policies in the context of social marginalization. An approach to the analysis of state capacities and gender equity in the metropolitan region was carried out jointly by the University of Buenos Aires, the National University of San Martín, and the Latin American Justice and Gender Team (ELA). A meeting between the teams is planned to give continuity to the mutual collaboration.

In the case of Chile, most of the debates, policy-building, and planning around women and gender had previously focused on domestic violence and reproductive rights. There was little awareness of city and territorial issues as they reinforced or could potentially break through existing patterns of gender exclusion and violence against women (VAWG). As part of the Chile study team research, they were able to reach out and find a series of significant resources with the following:

- Basic gender studies and statistics from the national women's service (SER-NAM-EG), which has now become a full Ministry Service for Women and Gender Equity (SERNAM-EG);
- Basic studies from *Comunidad Mujer* (Women Community), a non-partisan women's group that conducts some of the best gender studies from a policy perspective;
- Electronic surveys and other data collected by OCAC, a civil society organization

against sexual harassment of women in public space, including transport.

The project also assisted in deepening the collaboration with citizen organizations and three national ministries: the national women's ministry, the national transport ministry, the Santiago transport agency (DTPM), and the Temuco–Padre Las Casas regional transport planning authorities.

In Santiago, it influenced the work of the New Alameda Providencia BRT line, still in the design stages; and in Temuco, it became a cross-cutting issue within the new sustainable transport plan, developed through citizen participation with regional transport authorities. An electronic survey in that city identified significant discrimination based on gender, disabilities, and race (indigenous peoples), and goals for the regional transport plan called for specific transport measures to reduce and eventually eliminate discrimination and achieve inclusion.

In El Bosque, it enriched the on-going work on a Cool Routes to School program, encouraging links with the women's center and the municipal government, and helping develop new tools and approaches to question and re-define gender roles: visits from transport planners and women bus drivers, visits to the *Transantiago* operations center, bicycle mechanics, and a better understanding of why public transport is good for the city and for moving people around.

Transantiago has offered the school where we developed this program and the surrounding community the opportunity to design four bus stops, using themes developed by the children (pre-kinder through grade eight). This program ended in 2017 with a complete guide for teachers and a complete curriculum, available for use by other schools and eventually, by educational, health, and gender-related public officials for work throughout the country.

PROMOTION OF AND INCREASING THE VISIBILITY OF THIS ISSUE

All study teams and the coordinators have been invited to present at numerous seminars and events. These include international events such as the annual OECD International Transport Summit (Leipzig 2016 & 2017), Transportation Research Board (TRB) workshops 2017 (Washington), Women on the Move (1st international conference on women and transport in Delhi, India), UN Women/IADB event in Mexico, plus Scientists for Cy-

cling/Velo-City (The Netherlands, June 2017), preparatory gender event to World Bicycle Forum (Lima, August 2017), International Cycling Conference (GIZ-Germany, September 2017), Thredbo public transport conference (Stockholm, August 2017), Mobilize Santiago Global Transport Summit (Santiago, June 2017), Urban Mobilities Conference (SLO-CAT-CEPAL-ITDP, Santiago, October 2017), CEPAL Gender Summit (Santiago, December 2017), Transportation Research Board (Washington, January 2018), American Association of Geographers (New Orleans, May 2018), Latin American Studies Association (Lima, April 2017, Barcelona, May 2018), 2nd Argentine Congress of Transport (September 2017, City of Mendoza, Argentina); and in in the *1º Foro Argentino de la Bicicleta* (September 2017, City of Santa Fe, Argentina).

