



TUMI INITIATIVE'S TRANSFORMATIVE STORIES

THE JOURNEY OF BOGOTA: LEVERAGING ON TECHNOLOGY AND DATA TO MAP OUT STREET SAFETY FOR WOMEN AND GIRLS

Bogota has shifted towards sustainable transport. A world-class BRT system, TransMilenio, and an extensive cycle-path network have changed mobility in the largest city in Colombia and made it more inclusive and sustainable. However, these improvements are not equally enjoyed by women and men, mostly due to security issues. A technological application created in India can help make public transport and public spaces in Bogota more inclusive and safer for women and girls.

ABOUT BOGOTA

Bogota is both the capital and the largest city of Colombia. In recent years, it has experienced a profound transformation towards non-motorized transport (NMT) in its infrastructure planning and policies. Since 1998, the city has envisioned a shift from a car-oriented transportation system to a people-centered one. To achieve this, Bogota prioritized the development of bus lanes and bike paths and dedicated more spaces for pedestrians by clearing sidewalks from parked cars, creating new parks, and rehabilitating existing public spaces. As a result of this vision, Bogota today can count on a growing bicycle-path network of 344 km, and a well-developed BRT system providing 2.2 million daily trips over 113 km. A partial ban on cars on specific routes and the introduction of car-free days further contributed to the strong culture of walking, cycling, and using public transport.

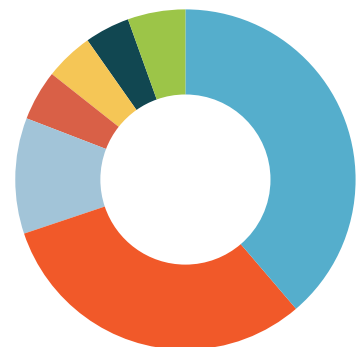


Population (2018 estimate): 8.181.047

Land area: 1.775 km²

MODAL SPLIT

- 38.73% public transit
- 31.12% walking
- 11.20% private car
- 4.79% moto
- 4.60% taxis
- 4.28% bicycle
- 5.1% other



TARGETS by 2030:

1. 80% of the citizens of Bogota will have a public transport option (BRT, metro, or bus) within 1 km.
2. Zero emission public transport
3. Construction of first metro line in Bogota which will be 24-km-long expected to be inaugurated in 2024.

BOGOTA'S TRANSMILENIO

While the long-awaited metro line is under construction, Bogota's public transport relies heavily on the TransMilenio. This world-class bus rapid transit (BRT) system represents about 25% of all transit trips in the Colombian capital. The implementation of TransMilenio was so successful that it became a model for several cities in the country. Since the inauguration of its first phase in 2000, TransMilenio has decreased the average travel time by 32%, increased property values along the main line by 15-20%, enhanced tax revenues, created thousands of direct and indirect jobs, reduced traffic accidents by 50% in all corridors, improved air quality, and even generated approximately USD 894.737 per year in direct carbon credits (TMSA, 2017).

Financed at 70% by the national government and 30% by the local government, the total investment in infrastructure of phases I, II, and III totaled USD 2,040,433.88 (TMSA, 2017). TransMilenio is the first ever mass transit project registered with the UNFCCC for Clean Development Mechanisms (CDM) in 2006.

With 2.2 million of passengers daily, TransMilenio has contributed positively to mobility in the city. There is still room for improvement though: its crowded buses create the perfect environment for sexual harassment. In fact, Bogota ranked first on a list of worst cities for women in public transport, which included the 15 largest capitals in the world (Thomson Reuters Foundation, 2014).

WOMEN AND PUBLIC TRANSPORT IN BOGOTÀ

Studies on mobility of care, which takes into consideration gender-related responsibilities, show that women move differently than men:

1. women's travel patterns are more complex since they require multiple stops throughout the day;
2. women have less access to private motorized modes of transport and depend on public transportation highly;
3. women need barrier-free units designed for safe transport with children, which are traditionally a female responsibility.

It is not surprising that 6 out of 10 women in Bogota travel by public transport (ECSC, 2017) and that 51% of the trips by women are on foot compared to 39% by men (IDB, 2016).

Alarmingly, 9 out of 10 women feel unsafe in public spaces in Bogota: public streets ranked first with 90.5%, followed by public transport including bus stops with 86.3% (ECSC, 2017). In 2014, 64% of the respondents claimed being victims of sexual harassment in public transport (SDMujer, 2014). While the majority of harassment cases do not involve physical contact (OMEG-SDMujer, 2014), safety is of paramount importance to ensure that women have access to public spaces.

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64% reported being victims of sexual harassment in public transport*



BOGOTA'S PILOT PROJECTS AGAINST SEXUAL HARASSMENT

Bogota has taken the safety of women's mobility seriously and has implemented a series of initiatives led by the Secretariat for Women and Gender Equality (SDMujer), the District Department of Mobility (SDM), TransMilenio SA (TMSA) with the aim to improve the quality of life, safety, and mobility experience for women.

Bogota introduced in 2014 **women-only sections in its TransMilenio** buses, along with an awareness-raising campaign, and training for workers, such as ticket vendors, advertisers and drivers. This initiative managed to provide visibility to sexual harassment in public transport and turned it into an issue to address in the public debate. However, it ended in 2016 as it produced little change in dynamics and in reducing the rampant number of sexual harassment cases against women.

In 2014 an **"elite group TransMilenio"** was established and patrolled the TransMilenio buses and stops with the aim to apprehend the rising number of sexual aggressors. The "elite group" captured 16 men red-handed in the first 20 days of operation.

In Colombia, 25% of men do not consider sexual harassment a crime. Some even consider it a compliment for women. This initiative sent a positive signal even if it was too small to monitor all routes and trigger behavioral change in the perpetrators. Instead of creating women-only spaces and prescribe the behavior for the victims on how to reduce the risks, it focused its attention, resources and debate on the perpetrators and their crimes.

LEVERAGING TECHNOLOGY TO MAP OUT SAFETY IN BOGOTA

At the international Conference "Safe Cities" in 2013, SDMujer learned about **SafetiPin**, an innovative, real-time mapping app developed in India and used to collect, analyze, and disseminate information to make public spaces safer for women.

The safety audit, which can be crowdsourced, quantifies nine parameters including lighting, public transport, visibility, and security, and creates a pin which appears on the app with its safety score.

Apart from having a preventive function of helping women making safer decisions, the app allows to gather real-time data of better quality, validity and relevance, for city policy-makers and stakeholders to enhance safety in public spaces, by pinpointing deficiencies.

After translating the app into Spanish, five taxis drove around Bogota with mobile phones mounted on their windshields for 3 months. By taking pictures automatically every 50 meters, about 17,000 pins were collected and categorized. Bogota's road network comprises 15.547 km out of which taxis can drive only 4,000 km.

SDMujer partnered with the women's security council of each district to help point out unsafe areas, such as river banks which are not accessible by car. By taking advantage of the extensive bike-paths network in Bogota, bicycles were used for the first time to audit safety. This led to the audit of 400 km and the improvement of bikers' safety measures such as fixed lights, bike racks, and CCTV cameras.

BOGOTA'S NIGHT SAFETY INDEX

As a TUMI Challenge Winner, SDMujer, in collaboration with SafetiPin and CAF, is planning to gather and audit geo-referenced data according to eight variables that make up the index for 15,547 kilometers of streets within the city of Bogota. These variables are: (1) quality and quantity of lighting, (2) openness/blind spots, (3) visibility, (4) pedestrian density, and (5) security staff in the area (6) availability and quality of pathways, (7) public transport, and (8) diversity of people (in gender and age).

In addition, 12,000 face-to-face interviews will be conducted in areas adjacent to public transport stations with the aim of studying the perception of insecurity and harassment. This will lead to the creation of a night safety index for women, the first one encompassing all 19 zones of the city.

To present key findings, encourage dialogue and public debate on women and girls' safety in public spaces, and inspire other cities, an international event will be organized, following which the project will aim at implementing selected improvement measures in the least safe areas identified.



In this project, women are their own actors of change by taking part in the data collection, shaping recommendations for improvements and awareness campaigns and events, as well as taking concrete actions. The project aims to generate a public debate and to trigger a change in citizens' behavior and in a culture that does not consider sexual harassment as a form of violence. Bogota aspires to inspire other cities to explore and adopt similar solutions to make their public transport and spaces truly inclusive.



"Listen to the women, because they are the ones who can tell you what their needs are and what the possible solution might be."

Angela Anzola

Head of Bogotá's Secretariat for Women and Gender Equality (SDMujer)

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The [Transformative Urban Mobility Initiative \(TUMI\)](http://transformative-mobility.org) enables leaders in developing countries and emerging economies to create sustainable urban mobility. It offers technical and financial support for innovative ideas. In TUMI the German Federal Ministry of Economic Cooperation and Development (BMZ) has brought together some of the world's leading institutions working on sustainable mobility with city networks and think tanks to implement projects on site where they are needed most. Partners include ADB, CAF, WRI, ITDP, UN-Habitat, SLoCaT, ITDP, ICLEI, GIZ, KfW and C40. transformative-mobility.org

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ADDITIONAL READINGS

<https://mapas.bogota.gov.co/safetipin.com/>

UN-HABITAT, 2016. Bogotá a Safety Analysis Report

TUMI / SUTP / GIZ, 2018. Module on Gender and Transport

ICLEI, 2013. Building a Plan to Transform Non-Motorized Transport in Bogotá