Mobility with a gender perspective in Mexico City
Introduction

In 2018 The Development Bank of Latin America (CAF) sponsored Steer to develop an analysis of the 2017 Origin Destination Survey for Mexico City.

The analysis had the objective of identifying the differences in the mobility patterns of women and men in Mexico City.
The 2017 Origin Destination Survey was carried out by the National Institute of Geography and Statistics (INEGI) and it involved authorities from Mexico City and the State of Mexico.

194 districts in the Mexico City Metropolitan Zone and 85 districts in Mexico City.

The survey was carried out during a six week period between January and March, and was published in February 2018.

54,593 homes, located in the 16 boroughs of Mexico City were surveyed, and 59 municipalities in the State of Mexico and 1 municipality in Hidalgo.

The units of analysis of the survey are the following:

- House
- Housing unit
- Person
- Trip
- Trip part
Introduction and key concepts
Mobility and gender

Two questions that generally frame studies on gender and mobility:

1. How does mobility affect gender?
   • The manner in which mobility and immobility create and reproduce power relations between women and men and reinforce gender roles

2. How does gender affect mobility?
   • The way in which gender roles influence needs and responsibilities in daily life and the manifestation of this in mobility patterns
What is gender?

"Gender refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity).

Gender roles and expectations are learned. They can change over time and they vary within and between cultures. Systems of social differentiation such as political status, class, ethnicity, physical and mental disability, age and more, modify gender roles. The concept of gender is vital because, applied to social analysis, it reveals how women’s subordination (or men’s domination) is socially constructed.

Sex describes the biological differences between men and women, which are universal and determined at birth”

Source: UNESCO’S Gender Mainstreaming Implementation Framework
Key concepts

- Intersectionality
- Mobility of Care
- Interdependence
- Traditional and Complex Accessibility

These all have distinct manifestations in *space and time*
Case study: Mobility through a gender perspective in Mexico City
Context

Trip characterization

Week
34.5 Million trips

CDMX/MC
53% of trips done by women

Saturday
21.3 Million trips

CDMX/MC
50%/51% of trips done by women
Mobility patterns in Mexico City through a gender perspective

Trip purpose

Weekday

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of trips</td>
<td>41%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>33%</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>35%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Saturday

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of trips</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>33%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>38%</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>6%</td>
<td>22%</td>
</tr>
</tbody>
</table>

- 35% of women’s weeday trips are related to care, as opposed to 13% of men’s
- 33% of women’s trips are work related, as opposed to 54% of men’s trips
- While women are responsible for about half of all trips with the purpose of going to work (41%), they are also responsible for nearly all (75%) of trips related to care. This could indicate what has been referred to as “false independence”.
Mobility patterns in Mexico City through a gender perspective

Mobility of care

Weekday

- Women in lowest socioeconomic levels reported a greater percentage of trips related to “care” than women in higher socioeconomic levels. In men, the participation in trips related to care increased as the socioeconomic level increased.

- Women between 30-44 years old reported a greater percentage of trips related to “care” than any other group except for women in the ages of 60 of older.

<table>
<thead>
<tr>
<th>Socioeconomic level</th>
<th>NS 1</th>
<th>NS 2</th>
<th>NS 3</th>
<th>NS 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of mobility of care trips</td>
<td>Lower</td>
<td>Higher</td>
<td>Lower</td>
<td>Higher</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>0-14</th>
<th>15-29</th>
<th>30-44</th>
<th>45-59</th>
<th>60 y más</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of mobility of care trips</td>
<td>Lower</td>
<td>Higher</td>
<td>Lower</td>
<td>Higher</td>
<td>Lower</td>
</tr>
</tbody>
</table>

1,529,617 Daily Trips

512,975 Daily trips
Mobility patterns in Mexico City

Mobility of care: Modal choice

**General Context**

<table>
<thead>
<tr>
<th>Mode</th>
<th>% of trips</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>23%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Mass Public transit</td>
<td>34%</td>
<td>24%</td>
<td>18%</td>
</tr>
<tr>
<td>Collective transport</td>
<td>37%</td>
<td>34%</td>
<td>19%</td>
</tr>
<tr>
<td>Taxi</td>
<td>36%</td>
<td>33%</td>
<td>19%</td>
</tr>
<tr>
<td>Private vehicle</td>
<td>19%</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>33%</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td>Only walking</td>
<td>34%</td>
<td>33%</td>
<td>36%</td>
</tr>
<tr>
<td>Walking and other modes</td>
<td>33%</td>
<td>21%</td>
<td>18%</td>
</tr>
</tbody>
</table>

**Mobility of care**

- Women generally use public transport less than men in all of their trips.
- Less use of bus system and mass transport for trips related to care than in the general context for both men and women.
- Nearly 58% of women’s trips related to “care” are 100% by foot, as opposed to 38% of the general context.
- In all cases, the use of private vehicle is more pronounced in men than women.
Mobility patterns in Mexico City

Mobility of care: Spatial characteristics

- Trips with care related purposes tend to be more linked to the home than labor related trips, implying a different spatial manifestation.

Percentage work and care trips within the same zone

Distribution of total internal trips by purpose

Women: Mobility of care 11%, Work 53%, Other 33%
Men: Mobility of care 12%, Work 35%, Other 33%
Mobility patterns in Mexico City
Spatial characteristics of mobility of care

While the destination of labor related trips have a clear spatial patterns, this is not the case for trips related to care.
Mobility patterns in Mexico City
Spatiality of mobility of care

For trips during the week, one can observe that the percentage of care related trips carried out by women is greater in more peripheral districts, while in more central densely populated areas, men have a higher participation in trips of purposes related to mobility of care.

This demonstrates that gender has spatial characteristics.
Mobility patterns in Mexico City through a gender perspective

Modal choice by socioeconomic level

**Women**
- 3,878,915 Daily trips

**Men**
- 4,426,305 Daily trips

**Difference between women and men**
- 527,410 more trips for women
Where are men and women cycling in Mexico City?
Conclusions
**Recommendations**

**Data production and information**

- **Incorporate** a gender perspective in data collection exercises and the development of surveys, as well as data collection tools.
- **Consider** family structures in surveys.
- **Ask** if the trip was realized alone or in the company of someone.
- **Include** questions that allow to identify trip chaining dynamics, including origin-destination and the purpose of these trips.
- **Involve** institutions, such as the Institute of women in developing future surveys.

**Public policy for mobility**

- **Comfort** measures for public transport systems, including bus stops and transfer centres.
- **Improvement** of pedestrian infrastructure (sidewalks, ramps, Street lighting).
- **Promote** policies of transport-oriented development.
- **Ensure** that spatial accessibility of health services, supermarkets, and education centres.

**Identification of relevant actors**

- **Incorporate** a gender perspective and mobility of care in tariff integration studies.
- **Increase** the availability of information.
- **Develop** studies that explore the particular mobility needs of women.
- **Consider** public policy that favours “care” related cycling trips.
- **Promote** the participation of women in the transport value chain.
- **Implement** capacity building programmes for transport workers.

- **Actors related to public transport systems**
- **Actors related to urban development, management of space, and social development**
- **Actors related with the development of data collection instruments**
- **Women**
- **Academic sector**
Thank you

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