Activity Deliverable

22148 INCLUSIFY

DEL02 Results of focus groups

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List of abbreviations

AMB	Barcelona Metropolitan Area
ATM	Metropolitan Transport Authority of Barcelona
STI	Residents of Barcelona's integrated fare system
EMEF	Working day mobility survey
IERMB	Barcelona Institute of Regional and Metropolitan Studies
EVAMB	Victimisation Survey of the Metropolitan Area of Barcelona
EASTP	Sexual Harrasment in Public Transport Survey
TMB	Barcelona Metropolitan Transport

Contents

1. Executive Summary

The INCLUSIFY project seeks to empower women to enhance their experience of sustainable urban mobility by mapping existing inequity in the system as an important step to enable future trips to be safer and more inclusive.

Following the literature review carried out in the DEL01, which aimed at identifying the challenges and key issues faced by women when walking and using public transport, this report explains the main findings derived from the focus groups as outlined in the project proposal. These groups have the aim of seeking the real perspective of the issues faced by women using active and public transport. More specifically, the objective of these focus groups is to complement the results of the desk research with real-world knowledge which is based on the local context, and deepen the understanding of the topics and issues to be addressed in the subsequent stages of the Inclusify project, such as: insufficient street lighting, dangerous road crossings, accessibility concerns, travel time, sexual approaches, etc.

This Deliverable contributes to the Output 01 (Women empowerment methodology). As a result of the focus groups that have been done, the methodology will be adjusted and detailed to engage women in the App in order to empower them in their active mobility and public transport trips. This methodology could be applied to other European cities.

This report, developed and written in March-April 2022, contains basic background information on mobility from a gender perspective in the metropolitan area of Barcelona and provides a summary of the methodology and the results of the focus groups. Additionally, this report includes final recommendations in order to take into account the design of the App. The sources of information used to carry out this report are both primary (focus groups) and secondary (official surveys of the metropolitan area of Barcelona and administrative registers).

The main results of this report are:

- As concluded from the DEL01 benchmark, the background of the Barcelona metropolitan area and the focus groups conducted, each local context has its own specificities. Despite this, the main difficulties for inclusive mobility are shared by the majority of women and in the different territorial realities.
- Accessibility and safety are the main concerns during the bus journey, especially when waiting at bus stops and during the journey inside the bus. The walking way to and from the bus stop should also be considered as part of this journey.
- The physical and social context (isolation, crowding, people with whom the journey is shared, visibility, lighting, maintenance, design and equipment of vehicles and bus-stops, etc.) is more relevant than the specific location (stop, bus, or route to stop) in defining the level of safety, accessibility or comfort.
- Most of the bus users have and use the existing mobility App, and are open to the possibility to report concerns, incidents and proposals.

2. Background on the metropolitan area of Barcelona

This section contains basic background information on mobility from a gender perspective in the metropolitan area of Barcelona. The aim is to contextualise the environment in which this project will initially be developed. Particularly includes:

- Firstly, we analyse what happens in the AMB area in relation to the mobility patterns of men and women. These data are analysed based on the Working Day Mobility Survey (EMEF), an annual data source that allows us to describe the daily mobility in the Barcelona area since 2003.
- Secondly, we present some results on victimization and perception of security in the public transport environment in the metropolitan area of Barcelona.

Additionally, this section includes some contextual information about the bus network in the Barcelona metropolitan area and the main competencies of AMB regarding mobility and transport.

Most of the information refers to the Barcelona Metropolitan Area (AMB), which is the metropolitan administration of the 36 municipalities of Barcelona and the surrounding area. This area has a surface of 635.4 km^2 and 3.24 million inhabitants (1.6 million in Barcelona).

Map 1. Municipal boundaries in the Barcelona metropolitan area

2.1.Overview of everyday mobility and safety from a gender perspective

Everyday mobility from a gender perspective

Women, who represent half of the population, when carrying out their daily activities have behaviours that are clearly associated with modes of transport with a lower environmental impact. In the Barcelona metropolitan area, almost 80% of women's trips are made by active modes or public transport, while these modes drop to 68% among men (EMEF 2019). These patterns, apart from responding to structural inequalities associated with gender roles shaping differentiated daily routines between women and men, also respond to cultural factors, where men prefer individual and motorised modes of transport. Consequently, when urban space is monopolised by private vehicles, not only does it move away from the paradigm of sustainable and healthy mobility, but it can also exclude women and other groups in society.

The higher presence of women in reproductive tasks and less in the remunerated labour market is evidenced by the data on the non-mobile population on a working day. The data show that a higher percentage of women do not leave the house on a working day (7.6% vs. 5.9%).

The purpose of the trips shows significant differences between women and men. There is a clear pattern in which women make fewer trips for work and more trips for personal reasons. In addition, among this personal mobility, women make more trips to cover necessary activities, which we call unavoidable personal mobility or care activities. These are activities related to routine shopping, going to the doctor, and accompanying other people. In terms of optional personal mobility, although the percentage is similar between men and women, there are some disparities in the type of activities carried out: men make more trips related to leisure and recreation and walk more. Women, on the other hand, make more visits to family or friends and do more non-daily shopping activities. Linked to this, the pendularity of journeys (to and from home) also differs according to gender: 78% of men compared to 73.5% of women, which shows that women make a greater number of journeys associated with different activities of daily life (triangulation of journeys).
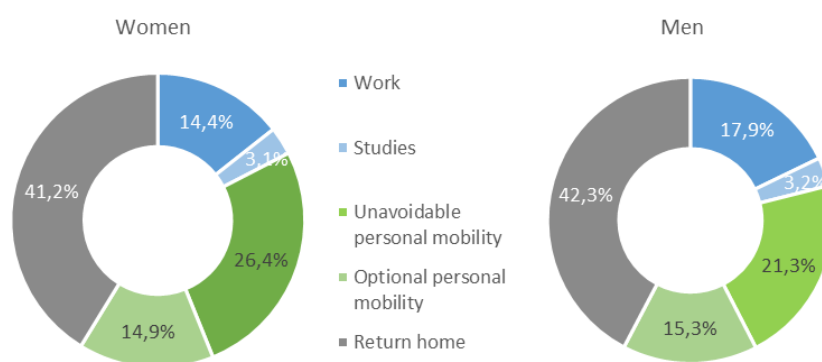

Figure 1. Distribution of trips according to reason. Residents in the AMB, 2019. Source: IERMB, from EMEF 2019 (ATM)

The greater proximity of women's trips to carry out reproductive and care tasks is reflected in their greater municipal self-containment (trips within the municipality of residence). In terms of the average times

declared for trips, the average duration of men's trips is slightly longer than that of women's, although the differences are not very significant. All these trends explain the use of different modes of transport.

	Women	Men	AMB
Perceived average duration	21,7	22,7	22,2
Municipal self-containment	74,1%	68,6%	71,5%

Table 1. Municipal self-containment (% of journeys in the municipality) and perceived average duration of journeys. Residents in the AMB; 2019. Source: IERMB, from EMEF 2019 (ATM)

As a result, it can be seen that, as women carry out more proximity activities, walking gains prominence in daily mobility. Among men, on the other hand, as they make more trips for work purposes, mobility by private vehicle becomes more important (work trips are clearly associated with private transport). Women also make more trips by public transport. Cycling, car as a driver, and motorbike are more clearly associated with men, while bus, car as a passenger and walking are more clearly associated with women.
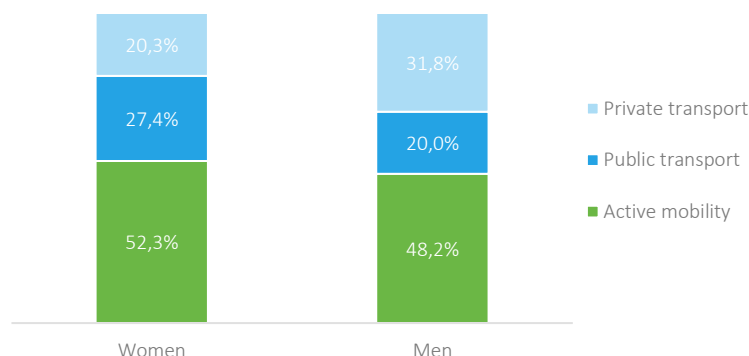
Means of transport	Women	Men	AMB
Walking	50,8%	44,8%	47,9%
Cycling	1,2%	2,7%	1,9%
Other active modes	0,3%	0,7%	0,5%
Active mobility	**52,3%**	**48,2%**	**50,3%**
Bus	10,5%	6,3%	8,5%
Subway	10,5%	8,5%	9,5%
Other rail system (FGC, Renfe, Tramway)	5,3%	4,2%	4,8%
Other public transport	1,1%	1,0%	1,0%
Public transport	**27,4%**	**20,0%**	**23,9%**
Driver's car	12,5%	21,1%	16,6%
Accompanying car	4,9%	1,6%	3,3%
Motorbike	2,6%	7,5%	5,0%
Van and other private transport	0,2%	1,6%	0,9%
Private transport	**20,3%**	**31,8%**	**25,8%**
Total	**100,0%**	**100,0%**	**100,0%**

Figure 2 and Table 2. Distribution of trips according to means of transport. Residents in the AMB, 2019. Source: IERMB, from EMEF 2019 (ATM)

Perceptions and opinion in mobility

There are no significant differences in terms of satisfaction with means of transport according to gender. Both women and men rate individual means of transport such as walking, cycling and private motorised means of transport more highly, while public means of transport are rated less favourably. However, men rate certain means of transport such as motorbikes and the subway more highly, as they allow them to experience greater speed and freedom of movement.

Where there are some differences is in the answers concerning the reasons for choosing the different modes of transport. With regard to the reasons for using public transport, men stated more than women that they had a lower risk of accidents and greater peace of mind when using public transport. On the other hand, women are more likely than men to use public transport because they do not have a car or a driver's license. In terms of the reasons for not using public transport, women are more likely than men to report problems of accessibility and mobility.
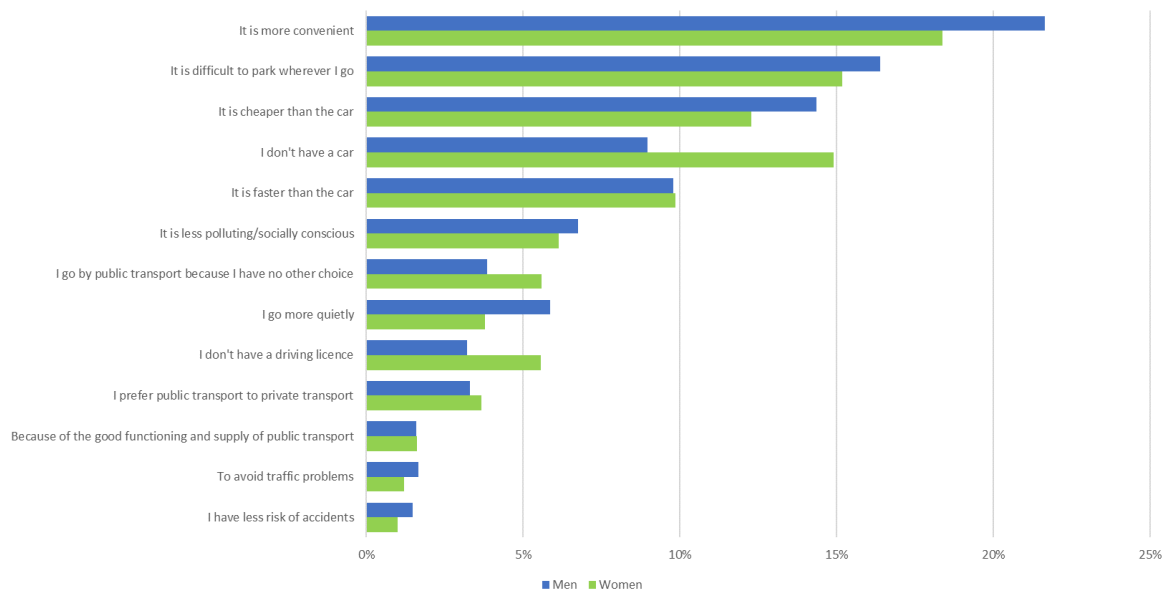

Figure 3. Reasons for using public transport (% responses). Residents of Barcelona's integrated fare system (STI). 2016 Source: IERMB, from EMEF 2016 (ATM)
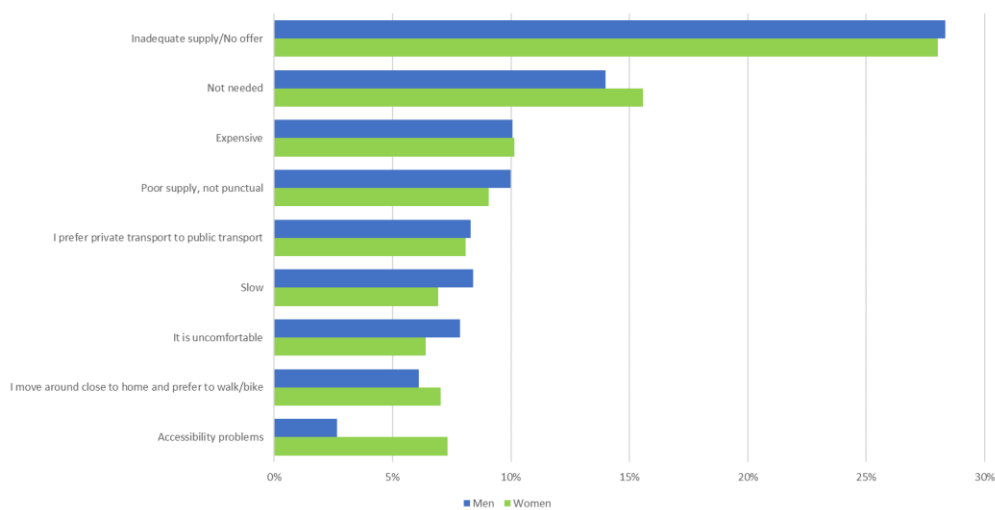
Figure 4. Reasons for not using public transport (% responses). Residents of Barcelona's integrated fare system (STI). Source: IERMB, from EMEF 2016 (ATM)

Gender, mobility, and security

Mobility patterns are different according to gender, but also victimisation and fears related to journeys are gendered (Ceccato, 2017). The prevalence of victimisation in public transport differs according to the characteristics of each city, the type of events and settings of each transport mode, but certain differential gender patterns are shared. Mobility does not only provide opportunities for victimisation. Also, public transport journeys can be experienced with fear, concerns or insecurity feelings. Perceptions of insecurity are not random, but modulated by individual characteristics, previous experiences of victimisation, and the particular settings of the environments in which journeys occur. The vitality of the spaces, their social use, their design, visibility, maintenance and cleanliness, are relevant aspects. Regardless of these particular contexts, the greater perception of insecurity among women has been widely documented, also in public transport, being is one of the factors that limits and conditions women's mobility and their access to and use of public space (Col·lectiu Punt 6; Ceccato, 2022; Ceccato 2020).

In short, although public transport is not a particularly unsafe place in comparison with other public spaces, it is one of the scenarios where violence against women takes place. Consequently, public transport prevent and address gender-based violences occurred in public trasnport journeys, will also contribute to progress towards a more inclusive transport system from the point of view of gender justice. In recent years, several studies have been carried out to capture women's experience of safety in public transport. This literature is diverse and includes academic articles to studies developed in the framework of urban planning and policy design. Although this diversity, the findings show some general and similar patterns:

- Sexual harassment in public transport is present in cities and metropolises all over the world. This does not mean that public transport is more unsafe than other spaces, but rather that it is one more arena where insecurities are expressed. The measure of the extent of harassment varies

substantially due to the different definitions and delimitations that can be given to this phenomenon, and the diversity of methodologies and ways of quantifying it.

- Harassment takes place in vehicles, stops, stations and their surroundings. It is difficult to establish which of these spaces is most risky, because ambiental and environmental factors, (both physical and social), play an important role. Some environments facilitate one type of harassment. For example, while a crowded bus may be an ideal setting for innappropiate approaches or touching, sexual assaults are more likely to occur at isolated places.
- Young women are the most victimised and also those who report the greatest sense of insecurity. However, in order to further study these particularities, it is necessary to consider intersectionality: age, economic situation, racialisation, or differences in physical and cognitive capacities must be added to the fact of being a woman. Advancing towards a non-binary vision of gender is also a challenge to address these particularities.
- Underreporting and low communication of cases, either due to the social normalisation of less violent episodes, or due to the lack of mechanisms or channels of communication and attention, means that sometimes these situations are not very visible for the institutions.
- Some environments generate greater perceptions of insecurity than others. The studies agree on at least two key factors: environments that are poorly surveilled, especially in terms of social informal control (low frequented places) and lacking of visibility (either because of lighting or design).
- Women's concerns, fear and victimisation are not only related to sexual violence and harrasment. Suffering thefts, falls or accidents are other safety concerns during the journeys.

Appart from this general patterns, it is important to take into account the particularites of each context, so the researchs must consider the features and specificities of the neighbourhood, city, metropolis or rural area that are going to be analyzed in order to provide evidence for designing policies and practices.

Experiences of victimization in Barcelona metropolitan area

According to the Victimisation Survey (EVAMB) women are more likely to suffer a crime on public transport than men. The greater use of public transport is clearly an explanatory factor, however, gender differences are also found in the type of events suffered during the journey on public transport. Wemen are more likely to suffer bag thefts and also sexual assault.
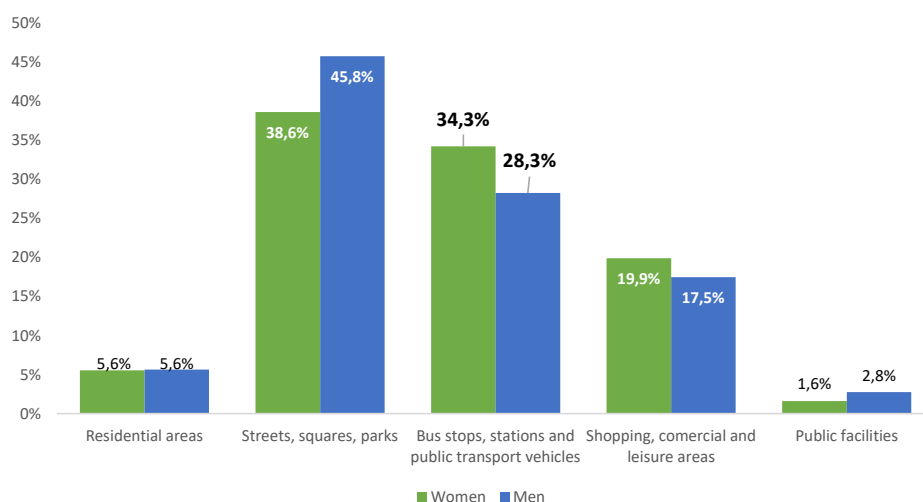
Figure 5. Place where victimisation occurs, by gender. Source: IERMB, from Victimisation Survey of the Metropolitan Area of Barcelona, 2021 (AMB)

Sexual harassment is a relatively common phenomenon in Barcelona's metropolitan public transport. According to tho the Sexual Harassment in Public Transport Survey (EASTP), more than a half of regular users have witnessed whistling, comments, or invasions of space and one third have testified obscene acts or exhibitionism towards other women. In terms of direct victimisation, about 40% reported having experienced unwanted sexual looks, and a similar proportion had experienced invasions of space and excessive approaches. Around 20% had suffered verbal harassment such as whistling, comments about the body or way of dressing, sexual comments, and 16% persecution and inappropriate touching. According to the results, other more serious situations such as sexual assaults are a less frequent phenomenon in metropolitan public transport. When considering the total number of incidents asked about, up to 56.3% of regular users report having suffered at least one of the incidents asked about in the previous two years. Among them, young women are the most exposed to these situations, while victimisation decreases as the age of the user increases.
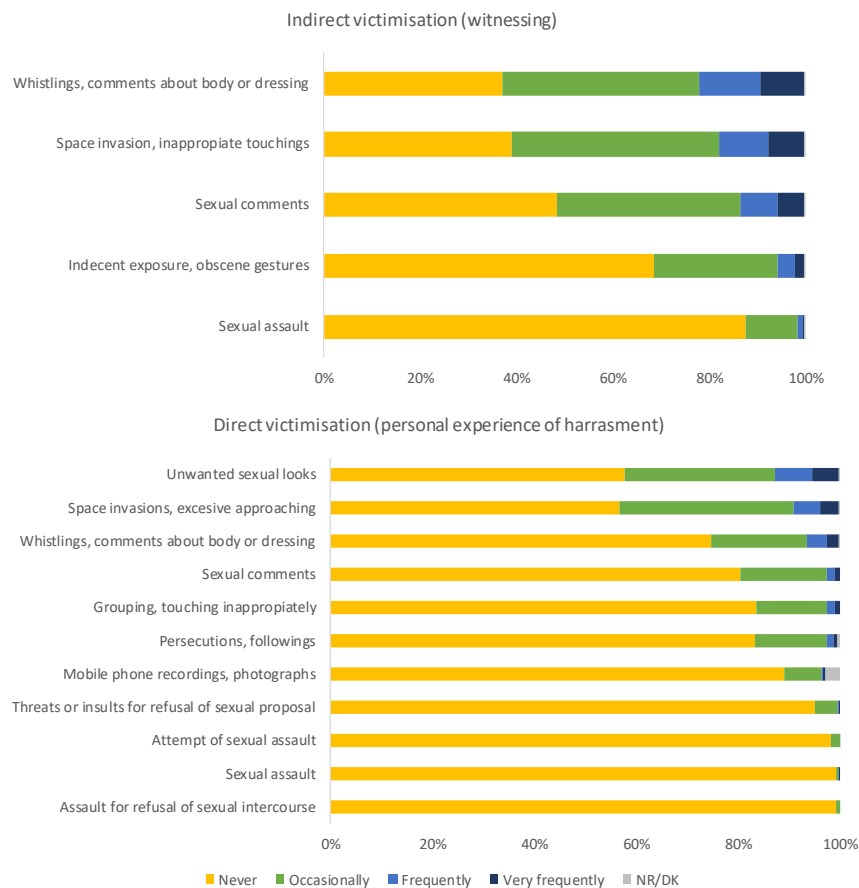
Figure 6. Types and frequency of sexual harrasment and assult in public transpor, women from the metropolitan area of Barcdelona. Source: IERMB, from Sexual Harrasment in Public Transport Survey (ATM).

Concerns, perception of insecurity and fear

Apart from suffering more crime and sexual harrassment, women perceive, with a significant difference compared to men, a greater fear of suffering different events while traveling in public transport. According to the mobility survey (EMEF), women are more worried than men about suffering thefts, sexual violence, and also non-sexual assaults. Besides, women report a greater fear of suffering an accident on public transport than men. When considering only sexual harassment and regarding the social and physical environment, women from the metropolitan area of Barcelona report insecurity feelings especially in isolated and with low visibility settings, but also during crowding.
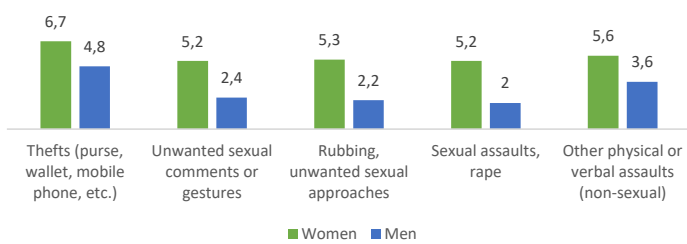
Figure 7. Fear of suffering the following events on public transport. Residents in the AMB, 2019. Source: IERMB, from EMEF 2019 (ATM)
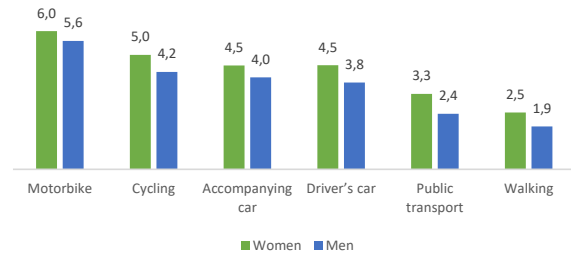

Figure 8. Average fear of being involved in an accident (scale 0-10). Residents in the AMB, 2016. Source: IERMB, from EMEF 2016 (ATM)

Figure 9. Fear of suffering sexual harassment or assault in different settings (0-10 scale), women from the metropolitan area of Barcdelona. Source: IERMB from Sexual Harrasment in Public Transport Survey (ATM)

2.2. Metropolitan bus network

The powers and services owned by the Barcelona Metropolitan Area in the field of urban transport include those services that run entirely within this area. These are the following:

- Planning and management of bus networks and other means of urban public passenger transport on the surface, except trams.
- Provision of underground public passenger transport services.
- Organisation of taxi services.
- Definition of the basic metropolitan road network and participation in traffic management, in collaboration with the Generalitat de Catalunya.
- Management of the "Rondes de Barcelona".
- Drafting and approval of the Metropolitan Urban Mobility Plan.
- Promotion of sustainable transport and mobility.

The regular integrated bus services managed by the AMB are managed indirectly, by means of administrative concessions, or directly through the public company Transports de Barcelona (TB). In 2021 the supply of regular bus services consisted of 105 indirectly managed daytime lines and 21 night-time lines. In 2021, there are 106 directly managed lines, mainly serving the city of Barcelona.

Integrated bus services	2021
Daytime service (Indirect management by AMB)	
Lines	105
Length (km)	1,235
Night service	
Lines	21
Length (km)	425
TB (Direct management)	
Lines	106
Length (km)	839

Table 3. Lines and length of integrated bus services in AMB. -2021. Source: AMB

Image 1. Image of AMB's indirectly managed bus servicel

The number of bus stops in the metropolitan area is almost 5,000, an increase of 2.1% compared to 2020.

	Total (Direct and indirect management)		
	2019	2020	2021
Bus stop	4,782	4,855	4,958
Bus stop pole	2,372	2,386	2,391
Bus stop shelter	2,352	2,360	2,395
Solar bus stop with information	47	100	102
Bus stop without information	11	9	70

Table 4. Bus stops of directly and indirectly managed bus services; 2019-2021. Source: AMB and TMB

The evolution of demand for these bus services has been growing since 2013, reaching an all-time high in 2019 of 305 million trips. Demand in 2020 was basically impacted by the Covid-19 pandemic, with severe mobility restrictions affecting demand for all modes of public transport. In 2021, there is a noticeable recovery in demand compared to 2020, although it falls short of the 2019 figures. Demand for indirectly managed bus services accounts for around 30% of total demand, with this proportion increasing slightly in recent years.
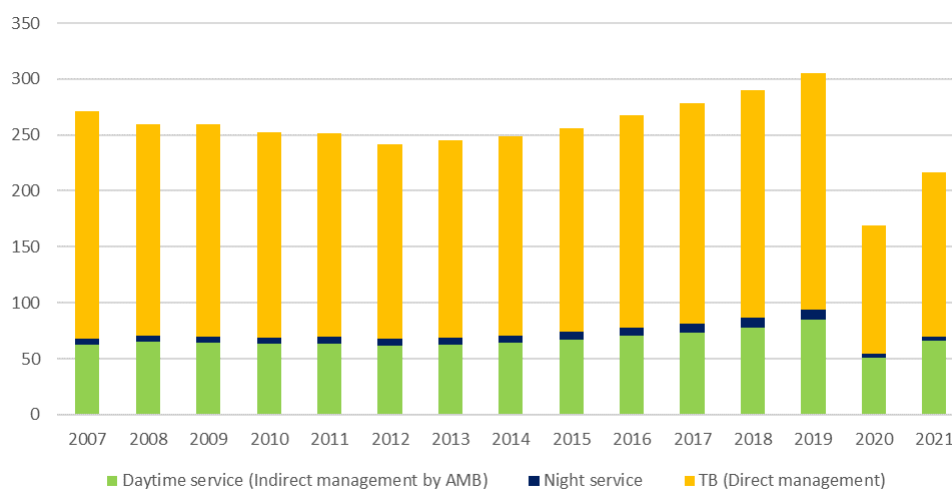

Figure 10. Journeys on regular integrated bus services (millions); 2007-2021. Source: AMB and TMB

3. Focus groups

3.1.Goals and main features of the focus groups

The participation processes have been carried out in face-to-face sessions for focus groups 1 and 2 (women bus users), and online for focus groups 3 and 4 (technical staff and public transport operators; and 3 women's and mobility associations, respectively).

FOCUS GROUPS 1 AND 2: FEMALE BUS USERS (BESÒS AND LLOBREGAT AREA)
OBJECTIVES
- Discuss and collect the main concerns about the metropolitan bus service.   - Locate and contextualise the main obstacles   - Select and prioritise the main points of the service where inclusion can be improved   - Obtain proposals for improvement   - Evaluate the creation of an App
SPACE (Classroom format)
Open-plan room with chairs available for working groups.   - Session1: Espai La CIBA, Santa Coloma de Gramenet (Besòs Area)   - Session 2: Citilab, Cornellà de Llobregat (Llobregat Area)
NUMBER OF PARTICIPANTS
8-10 women   - Session 1: Women regular users of the metropolitan bus lines in the Besòs area   - Session 2: Women regular users of the metropolitan bus lines in the Llobregat Sud
HUMAN RESOURCES
Anthesis Lavola Supervision of AMB and IERMB
DURATION
2 hours for each session
PARTICIPATION INCENTIVES
T-Casual, tote bag (AMB) and sharing the main results

FOCUS GROUPS 3 / 4
(3. Women and mobility associations; 4. Transport operators, planners, and mobility technicians)

OBJECTIVES

- Intervention needs
- Assessment of existing measures
- Proposals for the functioning of the App

SPACE (online)

Zoom Professional platform and Miro software for online participation.

HUMAN RESOURCES

One facilitator and one mobility technician

Supervision of AMB and IERMB

DURATION

1.5 hours

3.2.Methodology and development

Recruitment

The methodology for recruitment was multi-strategic and designed according to the type of group (female public transport users from Besòs and Llobregat area, women and mobility associations, and transport operators, planners, and mobility technicians).

- For the **recruitment of the female users focus groups**, the initial methodology included the dissemination of the by hanging posters at bus stops and vehicles. Posters were hung at 30 bus stops (15 from each area) and 28 buses (13 vehicles in Besòs and 15 vehicles in Llobregat). In the selection of bus stops and vehicles, the number of potential passengers and the ubication of the bus stops was considered. The posters were written in two languages (Catalan and Spanish) and included a QR code to access an online form for the inscription. Considering that some women do not have access to QR codes or the internet, a telephone number was also included in the posters. The recruitment methodology was reinforced with dissemination through direct contacts with people who live or work in the study areas, using a network of key contacts from city councils or people involved in the cities where the groups would be conducted. The posters were also held in the facilities where the groups took place.

- **Recruitment of women and mobility associations** was carried out through mailing and calls to a selection of associations in the two areas of study. The mails included a signed letter from the metropolitan mobility director, with an explanation of the project. To reinforce this methodology, citizen participation technicians of the city councils were also contacted, since they have privileged information about the more active associations and the reference persons of them in their city. A third strategy consisted in contact the associations with a Direct Message on Twitter. In case of the associations did not follow the account of IERMB, the first contact was made by means of a general tweet tagging the associations

- **Transport operators, planners and mobility technicians** were recruited through mailing and calls to a selection of reference people proposed by the AMB institution.

Methodology for conducting the groups

The participatory sessions carried out have been worked with Anthesis Lavola which has allowed promoting communication and stimulating the generation of contributions among the participants, thus favouring the generation of new behaviours and/or ideas. *STEP BY STEP DEVELOPMENT:*

FOCUS GROUPS 1 / 2: FEMALE BUS USERS (BESÒS AND LLOBREGAT AREA)
CONNECTION PHASE (30 minutes) Presentation and contextualisation: From an AMB reference person **Activity 1: The Word** The facilitator asks the participants: *Say the first words that come to your mind when you hear "mobility AMB".* **Activity 2: Connection rounds** Discussion rounds. In each round a different question is posed. • Round 1: What are the main challenges in the field of mobility in the metropolitan area? • Round 2: What is your perception of safety, accessibility, and comfort in the metropolitan bus system?
KNOWLEDGE PHASE (20 minutes) **Activity 3. Customer Journey Map** Customer Journey Map: It is a Design Thinking technique that makes it possible to map each of the stages that a customer goes through during the entire service cycle. It is not an objective analysis of each of the points that make up the service cycle but is focused on how the customer feels about each of them. Following the Customer Journey Maps (CJM) technique, we asked participants to rate the metropolitan bus service based on their perception of safety, accessibility, and comfort during their last trip. The CJM Touchpoints chosen by the participants were: going to and from the bus stop, at the bus stop, and on the bus journey.
COL·LABORATION PHASE (50 minutes) **Activity 4: Debate** The results were then discussed. The participants were asked to tell at what time of the day they think the critical points are most critical and for which ages. **Activity 5: Brainstorming** Afterward, through brainstorming, proposals for actions to improve the critical points were collected. In the brainstorming session, the possibility of creating an App was presented. The feasibility and usefulness they thought this tool could have, as well as the services it should have, will be asked.

COMMUNICATION PHASE (10 minutes)

Activity 6: App Questions

The facilitator posed questions about the structure that the App should have so that the participants could evaluate it. Some of the questions were:

- *Do you use the AMB Mobility App?*
- *Would you like to communicate ideas and improvements regarding the bus service through an App?*
- *Would you give the location of the incident?*
- *Would you like to see and comment on the contributions of other people?*
- *Would you like to receive updates on your contributions?*
- *Would you like to report issues with pre-codified items or with open fields?*
- *Do you think it would be useful to attach photographs of the incidents?*
- *Would you give your details to register in the App?*

CLOSING (10 minutes)

Acknowledgment of attendance and participation by someone from AMB or IERMB

FOCUS GROUPS 3 / 4
(3. Women and mobility associations; 4. Transport operators, planners, and mobility technicians)

Admission of participants by the Zoom facilitator

Presentation and contextualisation of the session by an AMB or IERMB reference person.

CONNECTION PHASE (15 minutes)

Activity 1: Expectative

Attendees were asked to write down on the Zoom card those aspects that they thought were most relevant in the face-to-face sessions.

KNOWLEDGE PHASE (15 minutes)

Activity 2: Results

The feedback was compared with the actual outcome of the face-to-face session. The facilitator shared the image of the result of the Costumer Journey Map.

COL·LABORATION PHASE (35 minutes)

Activity 3: Key intervention points and existing measures

With the result of the two previous sessions, a discussion was opened to obtain the existing measures. The participants explained which measures directly affect the critical points of the *Customer Journey Maps* obtained in the face-to-face sessions. The contributions were classified into two columns: *what we have* and *what is missing.*

COMMUNICATION PHASE (20 minutes)

Activity 4: App

;
CLOSING (5 minutes)
Acknowledgement of attendance and participation by someone from IERMB

3.3.Results

Session 1

Date	01/04/2022
Format	Face-to-face
Space	Espai La CIBA, Santa Coloma de Gramenet (public facility for women, innovation, and feminism)
Number of registered participants	12
Final attendants	3 (ages from 56 and 66 years)
Conductors	Xavi Benito, Irene Giralt (Anthesis Lavola)
Supervisors	Marta Murrià (IERMB), Anabel Rubio (AMB)

Block 1. Connection phase

The first question asked to the participants was **what come to their minds when they think about buses**. The words that appeared where **both positive and negative** in nature: long journeys - long waiting time - yellow colour - pleasant feelings - preference for bus instead of subway.

After breaking the ice with this first question, the attendants were asked about the **main mobility challenges** in the Barcelona Metropolitan Area related to **SAFETY, ACCESSIBILITY, and COMFORT**. The following list presents the contributions made by the participants with reference to these four elements.

SAFETY

- During the day, women do not feel insecure on the bus or at bus stops. The opposite is true for night journeys, where some of them say that they do not feel safe.
- Increasing the frequency of night buses and reducing the waiting times at the bus stops would help to improve the perception of security.
- Some users have been victims of theft on the bus.
- The attendants report difficulties to get on the bus when the driver does not park near the platform or the sidewalk, or to seat when there are steps to access the seats. This accessibility problems affect the perception of insecurity, because can pose a risk of falls.
- Due to the age of the participants, they do not mention experiencing insecurities related to sexual harassment or sexual assault, but they explain that when they were younger this was an important concern.

ACCESSIBILITY

- Users experience difficulties getting on and off buses, due to many gates. On occasions, users have observed that drivers stop far from the platform or sidewalk, making it more difficult to get off or get on.
- The attendants report that the presence of steps and slopes in the vehicles is a major difficulty for older people and those with mobility difficulties. They are grateful for the presence of buses without these different levels and platforms, where is easier to seat and move inside the bus.
- In relation to the accessibility to information, the participants think for elderly it is difficult to access the information which is posted on websites, apps, or other technologic channels. Nevertheless, the participants are trying to adapt this by learning how to use mobile applications related to mobility.
- Users appreciate the presence of timers at stops, which inform about the waiting times.
- About the accessibility to transport tickets, they comment that it would be a good idea to have transport ticket purchase points at bus stops.

COMFORT

- The low number of seats in some bus lines difficult for a comfortable journey, and they argue that the design of some buses is comfortable. Nevertheless, the participants feel that the bus journeys are in general, long, but comfortable.

Blok 2. Knowledge phase

The second block consisted of a collaborative **Customer Journey Map**. The attendants were asked to assess the level of concerns related to safety, accessibility, and comfort during three moments of the whole journey: walking from or to the bus-stop, waiting at the bus-stop and on the bus. The map obtained, as shown below, illustrates how during the walking from and to the bus-stop the attendants experienced a low level of worries, while waiting at bus-stops and travelling on the bus are the moments when more difficulties emerge. Regarding the bus-stops, there is no agreement about the comfortability of the stop, and nor about the level of security, some of them tend to experience feelings of insecurity during the waiting times, while other feel relatively safe. The accessibility is the main concern on buses, while this setting seems to be safer according to the participants.

Block 3. Collaboration phase

As can be seen in the Customer Journey Map obtained, some users show a low level of satisfaction regarding the safety they experience at bus-stops, as this is the time when they are most exposed to the victimisation. Loneliness and long waiting are factors that contributes to this concern, especially at night and on weekends. There are other users who do not experience this insecurity, because they do not use night bus services or isolated bus-stops.

Comfort at the bus stop is the second point of discussion among participants, as they use a wide variety of bus stops, some of which are better equipped than others. Participants appreciated the installation of bus shelters with seats and a timer.

Another point to highlight is the low level of satisfaction with the accessibility inside the bus, due to the presence of steps and different levels, which make it difficult for them to access and move around the bus.

Users agree on the high level of satisfaction in terms of safety, accessibility, and comfort going to and returning from the bus stop.

The second part of the collaboration phase consisted of a discussion about a possible App to report concerns and incidents and to make proposals. Despite their age, the attendants knew the mobility App from AMB. To consult the times and frequency, some used this App but one of them preferred Google Maps. The participants agreed that they would like to communicate ideas and improvements through an App, and were especially interested in receiving g feedback about their contributions from the transport services (in terms of response actions and practices) and from other users (in terms of sharing worries and proposals). Regarding the features and the App design, they said that giving the location of the bus-stops and attaching photographs would help to give a response from the bus services. There was no agreement about if they preferred open fields to write the concerns and incidents or pre-codified items to mark. They disagree also about the willing of giving personal data in the registration of the App.

Session 2

Date	05/04/2022
Format	On-site
Space	Citilab, Cornellà de Llobregat (citizen laboratory for social and technological innovation)
Number of registered participants	24
Final attendants	4 (ages from 20 to 48)
Conductors	Xavi Benito, Irene Giralt (Anthesis Lavola)
Supervisors	Montserrat Cabo (AMB) Neus T. Figueres (AMB) Núria Pérez (IERMB)

Block 1. Connection phase

The first question asked to the participants were **what come to their minds when they think about buses**. The words that appeared were **both positive and negative** in nature: Distress - Tranquillity - Red colour – Problematic.

After breaking the ice with this first question, the attendants were asked about the **main mobility challenges** in the Barcelona Metropolitan Area related to **SAFETY, ACCESSIBILITY, and COMFORT**. The following list presents the contributions made by the participants with reference to these four elements.

SECURITY

- Due to the age profile of the participants, mostly between 15 and 25 years old, women report feelings of insecurity and fear, especially during the night bus service. They ask for improvements to be implemented to increase women's safety on the night bus service, both on the bus and at the bus-stops.
- The design of the bus-stops contributes to the feeling of security or insecurity. They prefer bus-stops with shelters and good lighting.
- The fact that there is only one authority figure on the bus (the driver) increases the feeling of insecurity of female passengers.
- Women are worried about experiencing sexual harassment or sexual assaults. This contributes to feel fear. This perception of insecurity related to sexual violence is a general concern for all public transport, not only buses.
- The attendants agree that the validation machines are located too far from the driver, allowing people access the bus without paying. These people, according to the attendants, have anti-social behaviours, which can affect the safety of other passengers.
- They suggested better dissemination and communication about the night bus lines which offer on demand bus-stops.

ACCESSIBILITY

- Most of the attendants were young and with no mobility difficulties. Therefore, they had not experienced difficulties in inaccessibility. However, they were aware of the difficulties that people with mobility difficulties may encounter and agreed that it is necessary to reinforce awareness of the need to give up seats for the elderly, people with reduced mobility, pregnant women, etc.
- Users pointed out that there are too few stop-buttons on the bus, making it difficult to request a stop without getting up from the seat.
- In relation to the accessibility to information, the participants think for the elderly it is difficult to access the information which is posted on websites, apps, or other technologic channels.
- Users explained that there are bus-stops where the timers with waiting times do not work. Despite using the AMB Mobility App, they are grateful for the presence of these timers at stops.
- The attendants have the feeling that the adaptation of buses for people with serious mobility problems, for example, wheelchairs, should be improved.

COMFORT

- Some users feel that the seats are too narrow, which is a problem for their comfort.
- According to users, some behaviours hinder comfort: people putting their feet on the seat, using more space than necessary, sitting in the reserved seats, etc.
- Some of the vehicles are old and dirty.
- Comfort at bus stops is directly related to the feeling of safety, they feel more protected when the design is better, especially if the bus-stop has shelter and good visibility and lightning.

Block 2. Knowledge phase

Activity 3: Customer Journey Map

The second block consisted of a collaborative **Customer Journey Map**. The attendants were asked to assess the level of concerns related to safety, accessibility, and comfort during three moments of the whole journey: walking from or to the bus-stop, waiting at the bus-stop and on the bus. The map obtained, as shown below, illustrates that the participants agreed that the accessibility is better on a bus and during the walking from and to de bus-stop, but worse at the bus-stops. Regarding security, bus-stops are the most insecure settings, while on bus they feel safer. There was not an agreement about the security during the walking from and to de bus-stop, where some attendants feel safer than others. Comfort is the element with better ratings in general, despite some attendants assessing this item with lower scores when thinking about the journey inside the bus.

ANANT/TORNANT A LA PARADA   A LA PARADA   DINS L'AUTOBÚS

SEGURETAT
ACCESSIBILITAT
COMODITAT
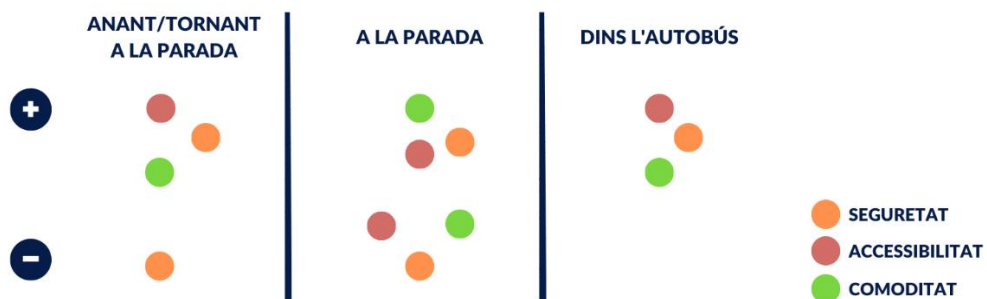
Block 3. Collaboration phase

As shown in the **Customer Journey Map**, users' opinions differ in some cases. During the collaboration phase, some users insisted that they were concerned about safety, especially at night. They attribute this fear to their trips were in lonely, isolated areas or areas with conflictive people. According to them, the creation of new bus-stops or their territorial redistribution would reduce distances and improve safety during the walking to and from the bus-stop.

Isolation and long waiting at the bus-stop are factors of concern, especially at night. There are some women who do not experience this insecurity, possibly because the stops they usually use are in better conditions or safer locations. To improve the feeling of safety, users suggest the installation of bus shelters and improve lighting.

Comfort at the bus stop is another point of discussion among the participants, as they use a wide variety of bus-stops, some of which are better equipped than others. The participants appreciated the installation of bus shelters with seats and a timer. On the bus, the level of satisfaction is positive in all aspects.

The second part of the collaboration phase consisted of a discussion about a possible App to report concerns and incidents and make proposals. All the attendants used the AMB Mobility App. Most of the users agree that using the app to communicate ideas and improvements is a good idea, but some of them were not sure about it.

The participants agreed that giving the exact location of the bus-stops would make it easier to detect incidents.

There was no agreement about if they would like to see and comment on the contributions of other people. Some were interested in the information that other people can contribute, others feel that the likes and comments could distract from the importance of the improvements proposed.

All the attendants would be interested in receiving feedback on their contributions.

Regarding the functionality of the App, some users would prefer menus with pre-codified items, while others found more practical to write the issues in an open filed. All of them agreed that attaching photographs helps to improve the understanding of the incident.

There was no agreement about the willing of giving personal details to register in the App. Some found it unnecessary to provide personal data, while others would be willing to do so.

The users highlight that to facilitate the use of the App, it should offer easy and fast ways to make contributions and receive the feedback.

Session 3

Date	07/04/2022
Format	Online
Number of registered participants	10
Final attendants	8 (4 representants of transport operators (Francesc Avellaneda – AVANZA ; Montse Solano – Soler i Sauret ; Eva Navas – TUGSAL ; Inés Dosil – MONBUS); 4 planners and technicians of AMB-mobility area (Marc Baches, Montse Castellví , Anabel Rubio, Laia Soriano-Montagut)
Conductors	(Xavi Benito, Irene Giralt (Anthesis Lavola)
Supervisors	Marta Murrià (IERMB) Mariona Conill (AMB)

Block 1. Connection phase

The first question asked to the participants was what did they think there were the main words that came to mind to the attendants of the face-to-face groups when they were asked about the word BUS? The results showed the profile of this group of participants, with technical words, slightly different from the ones obtained during the users focus groups: Transport - Mobility – Mode of transport - Pollution – Freedom.

When asked about the main mobility challenges in the Barcelona Metropolitan Area regarding safety, accessibility, and comfort, the responses were the following:

SECURITY

- Improve lighting at bus-stops.
- Prevent sexual harassment and sexual assaults and know the mechanisms to offer a response when these episodes occur.
- Provide safety environments both inside and outside the buses.
- Reduce waiting times at bus stops and increase frequency.
- Protection mechanisms for older people on their way home from the bus-stops.
- The lack of lighting and poor informal and formal control as a factor that contributes to experience fear, especially at night, and at isolated bus-stops.
- Provide bus-stops with security devices, such as alarm/help buttons.
- In isolated bus-stops or at night, formal surveillance (police officers patrolling around)

ACCESSIBILITY

- Encourage people of giving up seats for those with special needs.
- Installation of ramps.
- Improve accessibility for users with prams or with reduced mobility.

- Facilitate the access to the ticket validators, because are too high for children, people with wheelchairs, etc.
- Provide more accessible and adapted seats.

COMFORT

- Some seats are too narrow, which is uncomfortable, as well as some aisles.
- Improve the cleanliness of buses and bus-stops.
- Improve the design of the vehicles.
- Promote driving safety among drivers and encourage their friendliness.
- Facilitate access to information and keep it up to date.

Block 2. Knowledge phase

What do we have? The knowledge phase started by asking about the tools and mechanisms that the bus services are implementing to improve safety, accessibility, and comfort. The responses are listed below:

- 100% of the fleet is accessible, with the provision of ramps and systems to adapt to the high of the pavement, platforms, and sidewalks.
- Focus groups for drivers and inspectors to train them in the protocols to be followed in certain situations are being promoted.
- Alarm system for drivers.
- Current Apps in which bus waiting times are reported.

What is missing? After identifying current tools and practices, the participants were asked about other proposals for improving the bus service.

- Communication between users and drivers in case of emergencies.
- Interior and exterior camera surveillance.
- Promoting the use of Apps.
- Drivers' formation to know how to act and react in certain situations.
- Improve the accessibility of the walking route to and from bus-stops.
- Improve the design and maintenance of the bus-stops and their surroundings (toilets, accessibility, transparent materials, etc.).
- Participation of people with reduced mobility to know and define what the new vehicles should look like.
- Work on communication and sensibilization campaigns.
- Creation of educational and awareness-raising programs in schools.

Elements to consider about the App. The session concluded by discussing some elements of the contents and functionalities of the App. The proposals are listed below:

- Prioritise easy, intuitive reading for all audiences.
- Knowing the exact location of the incidences would facilitate the responses.
- Use short menus and pre-codified items to locate improvements at a general level, but also empty and free fields to explain them in detail.

- Decide the channels of communication between AMB (who manages the App) and the transport operators (in case of the incidences or worries are of their managing competence).

Session 4

Date	20/04/2022
Format	Online
Number of registered participants	11
Final attendants	9 Alba Gamez - COCEMFE Barcelona; Lola Ruiz - COCEMFE Barcelona; Noelia Garcberí - Federació ECOM; Emeka Okpala - Catalunya Camina; Sílvia Pascual - Deixem de ser invisibles; Aida Guitart - DID Associació ; Nuria Aleu - Consell de les dones de Sant Boi; Adriana - ATTA Permacultura;
Conductors	Xavi Benito, Irene Giralt (Anthesis Lavola)
Supervisors	Núria Pérez Sans (IERMB)

Block 1. Connection phase

The first question asked to the participants was what did they think there were the main words that came to mind to the attendants of the face-to-face groups when they were asked about the word BUS? The results showed the profile of this group of participants, the participation of functional diversity associations. All the words appeared were in a negative way. Suffering - Desperation - Lack of protection - Insecurity - Fear - Lack of accessibility

The participants in this session came from women's associations, organizations of people with physical disabilities and organizations for the protection of pedestrians. This meant that, during the session, most of the topics dealt with were related to accessibility and safety for people with disabilities.

SECURITY

- Associations observe a high risk of falls for people with mobility problems during bus journeys.

- Night buses travel too long distances. This means long waiting times at bus stops, which is a danger for women.
- It should be made known that there are night buses that allow stops to be made "on demand".
- It is proposed that increasing the frequency of buses would reduce crowding and waiting times at bus stops. These are two factors that increase the risk of aggression, physical approach, sexual harassment, etc.
- Protocols for harassment: users should be very aware of the protocols. Associations consider that there is a need for better education and training on this issue.
- People with pushchairs have problems with accessibility and insecurity in terms of falls.
- Mobility associations mention the importance of interconnections: all public transport must be accessible and safe for all people.
- In terms of harassment and assaults on public transport, the associations think that cameras should be installed to improve safety at stops and on buses.
- The associations note that better lighting at bus stops improves the feeling of safety among users.

ACCESSIBILITY

- Associations report that it is necessary to install signs on buses with ramps.
- They point out many problems with the functioning of ramps and ask for better maintenance.
- The associations call for all bus drivers to know how ramps work. There are situations where drivers do not know how they work (especially when they use them for the first time), which causes insecurity for users.
- Inclusive mobility associations highlight the importance of interconnections: all public transport must be accessible and safe for all users.
- Accessibility for the elderly, children, people with pushchairs, etc. must be improved.
- There is only space for one wheelchair on the buses. It is requested to increase the space (at least for 2 persons) and to improve the design of the buses to accommodate more wheelchairs.
- The ticket validation machines are too high for wheelchair users.
- The associations point out that it is necessary to work on improving accessibility for people with all types of disabilities: visual, auditive, etc.
- Finally, they comment that Apps should be more accessible to everybody and easier to use.
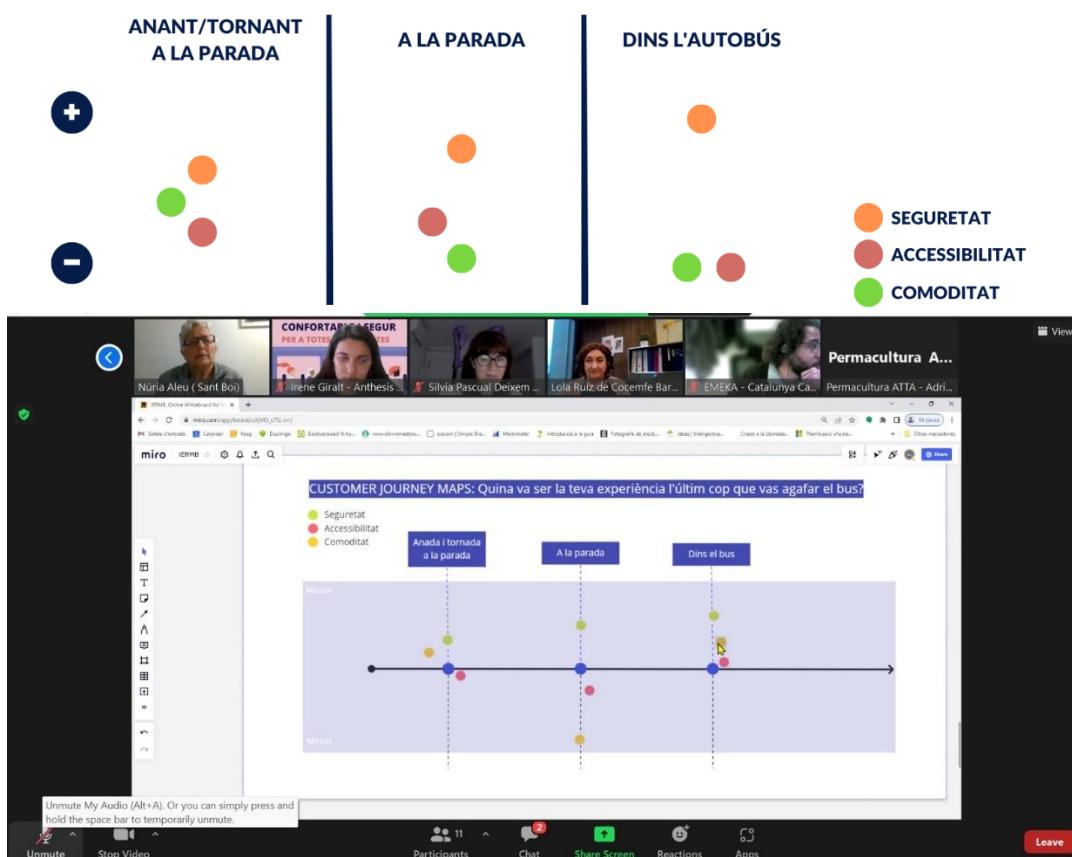
COMFORT

- The associations consider that the seats are too narrow. This is a problem of comfort for some people.
- They believe that there is a need to improve comfort at bus stops by installing more shelters, seats, or structures to lean on.

Block 2. Knowledge phase

In this session, the Journey Map was created with a previous consensus on each key point. The results show that accessibility is especially difficult on the bus, but also on the way from and to the bus- stop and at the bus-stop. Safety is not the main concern for this group, but they agreed that the way from and to the bus-

stop were the moment with more insecurities, while waiting at bus-stops and traveling on the bus is safer. They also agreed that vehicles and bus-stops are the most uncomfortable settings.

Block 3. Collaboration phase

The comments that emerged during the Customer Journey Mapping are:

- Associations generally have a negative perception of accessibility and comfort inside the buses.
- **Going to and from the bus stop**, the associations feel that users have a sense of insecurity as they feel exposed to different risk factors. They are also concerned about the accessibility and comfort of the journey, although they emphasise that these factors depend on the environment and the location of each bus stop.
- **At the bus stop**, they feel that safety depends on the lighting conditions, the presence of other people, open shops, the urban environment, etc. In terms of accessibility and comfort, they think that the presence of shelters is very important to improve the comfort of the space.

It is noted that accessibility, safety, and comfort of access to industrial estates are much lower than in urban areas. Bus stops located in these areas or at other isolated points are a greater risk factor for women.

- **Inside the bus**, the associations feel that female users have a greater sense of safety, although many aspects of accessibility and comfort for people with mobility disabilities need to be improved.

Regarding the creation of the App, some participants use the App and some do not.

The associations agreed that this is a good idea to use the App to make contributions and report incidences. Despite this, they stress that the App's complaints should be binding (obligation to respond and provide a solution to the problem).

The associations agreed that giving the exact location of bus stops would facilitate the detection of incidents. They also propose that the exact location of bus stops where cases of harassment and violence occur could be reported. They do not want that this information should be open to other users, but that it could be used to improve the safety and surveillance of the most critical bus stops.

Associations are interested in information from others and would you like to see and comment on the other people's contributions.

The participants would like to receive updates on their contributions and **to receive a response about the incidences. Also, they agreed that the suggested improvements should be implemented.**

Some associations find the use of dropdowns more useful, and others find it more practical to write the incidents in an open field.

The attendants agreed that adding photographs helps to improve the understanding of the incidence.

The associations agreed that they would be willing to provide their data. They stress that it would be advisable to be able to add information about whether people have any kind of disability.

The associations indicate that the App should be accessible for all disabilities.

4. Conclusions and Lessons learnt

About the methodology of focus groups

The greatest difficulties encountered were during the phase of recruitment, with lower-than-expected participation in the female user groups (face-to-face), which is also related to not having reached the expected diversity in terms of age, family status, economic status, disability, racialisation, etc. However, thanks to a methodology that also includes association and technical discussion groups, we have finally achieved quite a richness in terms of the results obtained.

To improve the recruitment and diversity of attendants in female users' groups we suggest:

a) Use multiple strategies considering the different profiles needed and their access to information and technologies:

- Posters on buses and bus stops.
- Social networks.
- Informers at bus stops.
- Posters in associations and public facilities.
- Direct contact with participation technicians of the city councils.
- Invite not only women's, mobility, and disabled associations to participate, but also young people, LGTBI+, ethnic minorities, etc.

b) Consider a sufficiently long schedule to recruit people (about a month) and during this phase, follow up on the registrations, confirm attendance beforehand and remind people of the dates on the day before.
c) Schedule the face-to-face sessions preferably during afternoons.

The methodology for conducting the groups has proved satisfactory and can be replicated in other contexts.

Finally, a methodology such as the discussion groups provides qualitative information that does not represent the whole population, so that, to detect priority elements to include in the app, it is recommended to complement the qualitative data with data from statistics, surveys or other sources of information that can provide information on the aspects that most concern bus users. Especially, those items where the gender perspective and differences are particularly relevant. The existence of surveys on sexual harassment in public transport, mobility, and victimisation in the context where the App is going to be developed is particularly useful, as data at the aggregate level of countries hide the specificities of each territory.

About the concerns and issues to include in the App

The focus group methodology has been useful in detecting those issues that most concerned the participants, but the fact of not having reached the desired maximum diversity may have hidden some concerns of groups that were not present.

Among the people who participated, each profile had different concerns, as their daily activities, difficulties and constraints, views, and needs are different. Despite this, the general elements that were repeated most often in the sessions are shared and are related to accessibility and safety. Comfort is a cross-cutting element of lesser concern and, typically, improvements in comfort contribute to an increase in the feeling of safety and vice versa, while improvements in accessibility and safety make the journey more comfortable. Other general aspects that emerged in relation to the former are related to service: access to information, frequency, or access to ticket purchase.

Another relevant aspect is that stops, buses and the way to and from the stop have a different physical and social context and therefore concerns differ for each. However, the social and urban environment (natural surveillance, design, equipment, maintenance, etc.) of each place (bus, stop, surroundings) is more relevant than the place itself. In general, the main concern about bus stops is the insecurity they produce if they are ubicated in isolated places, during hours of low frequentation, and when there is a lack of lighting or visibility, such as during the night. On the buses in particular, accessibility problems were reported: small seats, different levels, steps to get to the seats, few buttons, tall validation machines, etc. The way to and from the bus stop seems to be the smoothest moment of the journey, and only presents problems when it takes place during the night, in problematic environments or when there are difficulties for people with reduced mobility. More specifically:

SAFETY

Concerns about safety differ according to the profile of the participants. While young women are more concerned about harassment and sexual assaults, the elderly show less perception of insecurity and when they express it, it is related to theft and falls. Users with mobility difficulties also experience insecurity in relation to the risk of falling inside the buses.

Regarding fear of sexual violence, night-time hours and environments without formal surveillance contribute to fear. Perceptions of insecurity are higher at bus stops than in other environments, especially when there is no lighting, visibility or formal or informal surveillance. Buses seem safer because of the presence of at least one driver, although sometimes this is not enough.

Users and women's associations put forward the following proposals for improvement:

  - Extend the frequency of night and weekend buses.
  - Improve the conditions of the bus-stops, installing shelters and providing good lighting.
  - Draw up a protocol for dealing with cases of gender-based violence on buses.
  - Train workers and users on the protocol to be followed in cases of gender-based violence on buses.
  - Install security cameras at bus stops and inside buses.
  - Have customer service points at bus stops in the event of an emergency, from which users can quickly and directly contact an operator.

- Have officers to carry out night-time patrols at bus stops.
- Improve the dissemination of information about night buses that allow stops to be made according to the needs of users.
- Prioritise safety improvements at bus stops located in industrial estates and isolated and high-risk areas.
- Implement the presence of a second authority figure, apart from the driver, on the bus.

ACCESSIBILITY

Users and representatives of women's associations observed various shortcomings in Barcelona's metropolitan bus service in terms of physical accessibility for people with mobility difficulties, and at the same time they also reported some difficulties in terms of access to information. The users noted the need to improve accessibility to the buses for the elderly and for people travelling with babies and children. The elderly women who participated in the sessions commented that getting on and off the bus is the point where they experience the greatest difficulties in access, and that they feel very insecure when getting on and off the bus when it is moving.

On the other hand, the representatives of associations of people with physical disabilities state that they have experienced problems with the proper functioning of the ramps on the buses, which often do not work, and that there is a lack of training for drivers on how to use them correctly. In short, the vehicle is the environment with the most accessibility problems, and the stops and the way to and from them the least. They also stress the importance of improving transport interconnections to make transport fully inclusive.

In relation to the accessibility of information, users feel that there is too much use of technology, which is a difficulty for many older people. However, the participants try to adapt to the generational change by learning to make use of mobile applications.

The users and women's associations make the following suggestions for improvement:

Physical accessibility:
- Ensure the proper functioning of all bus ramps.
- Train all drivers in the use of ramps.
- Increase the frequency of buses with ramps.
- Install visible signs on buses with ramps.
- Extend the space for transporting more wheelchair users on buses (at least 2 persons).
- Reduce the height of the ticket "punching" device.
- Raise awareness of the need for users to give up their seats for people with mobility difficulties.

Accessibility of information:
- Make Apps simpler and more intuitive.

- Adapt access to information for all types of disabilities (visual, hearing, etc.).
- Install more timers at stops to make it easier to check waiting times.
- Improve the maintenance of the timers at bus stops.
- Provide transport ticket purchase points at bus stops.

COMFORT

Comfort on buses is a factor that, compared to safety and accessibility, seems to be of less concern to users and women's associations. However, users feel that improved comfort at bus stops or on the bus is closely associated with a perception of greater physical safety and favours accessibility. The importance of improving comfort at bus stops is generally emphasised, as they feel it gives them a greater sense of security while waiting.

Users and representatives of women's associations put forward the following proposals for improvement:

- Improve comfort at bus stops by installing more shelters, seats, or structures to lean against.
- Design wider seats on buses.
- Increase the number of seats on buses.
- Improve seating comfort on buses.

About the App purpose, design, and functionality

The users are in favour of the creation of an App to communicate ideas and improvements to the bus service and the representatives of associations added that complaints registered in the App should be binding. In general, the main contribution commented on in all the sessions is that the app should be simple, intuitive, and easy to access. They emphasise that the process of introducing incidents should be agile.

The need to facilitate the location of incidents was highlighted and it should be possible to enter the location of stops where there are cases of harassment, gender violence, theft, etc., privately for the rest of the users, to improve safety at the most problematic stops.

Regarding the option of being able to comment on the incidents of other users, the participants differed, and while some agreed, others stated that the presence of comments would make it difficult to use the App and could distract users from the focus of attention. They are of the opinion that an app for reporting incidents should not have the functions of a social network.

As for providing personal data to access the App, some users believe that, although it is a relevant factor to have control over the people who access the App, it could also be an inconvenience that would make access and speed of the process more difficult.

Finally, they emphasise that, for the creation of the App, priority should be given to its inclusive nature, so that anyone can make use of it.

The table below resumes the level of agreement in the different questions the participants addressed, where green means general agreement in favour of the proposal, and yellow controversial issues.

Use of the AMB Mobility APP	🙂
Willingness to communicate ideas and improvements through an App	🙂
Preference to report issues with pre-codified items or with open fields	😕
Willingness about giving the location of the incidence	🙂
Usefullness to attach photographs	🙂
Possibility of see and comment on the contributions of other people	😕
Expectation to receive updates on their contributions	🙂
Willingness you give personal details to register in the App	😕

Apart from the contributions of the participants, some elements around the app should be addressed:

- The App should allow for the reporting of specific incidents, general concerns, and proposals for improvement.

- The aim of the App is social transformation and women's empowerment, and not to create a social network of complaints and demands. It is suggested that the incidents reported should not be shared with other users, and instead of this, a proposal for improvement would be public and could be shared and commented on by all the users.

- Due to the lack of agreement on preferences regarding the level of concreteness of the contents (open or pre-coded questions), an intermediate solution is suggested: first offering closed general fields with examples, and then offering open fields where the concern, incident or proposal can be better explained with the words of the participant.

- It must be accessible (for blind people, for example).

- The iconography must be inclusive (show different population profiles).

- The terms used, such as accessibility, are not always easily understood by people. Clear terms or, alternatively, examples and clarifications should be used.

- The people who contribute to the App expect a response from the administration. The channels of response and the type of responses that can be given should be foreseen.

- To protect the privacy and facilitate participation, it is suggested that it should not be compulsory to share location, and to offer alternatives for locating incidents.

- When registering, it is recommended that a few personal details are requested: gender (including non-binary), mobility difficulties, and age range.

- Apps should not replace other channels of participation and communication with users. Not everyone has access to technology, nor, if they do, the same skills or desire to participate.

5. References

Publications

- COL·LECTIU PUNT 6 (2021). Movilidad Cotidiana con Perspectiva de Género: Guía metodológica para la planificación y el diseño del sistema de movilidad y transporte. CAF (Banco de Desarrollo de América Latina).
- COL·LECTIU PUNT 6 (2018). Nocturnes la vida quotidiana de les dones que treballen de nit a l'àrea metropolitana de Barcelona.
- CECCATO, V. (2017). Women's victimisation and safety in transit environments. Crime Prevention and Community Safety, 19(3), 163–167. https://doi.org/10.1057/s41300-017-0024-5.
- CECCATO, V., LOUKAITOU-SIDERIS, A. (2022). Fear of sexual harassment and its impact on safety perceptions in transit environments: A global perspective. Violence against women, 28(1), 26-48.
- CECCATO, V., LOUKAITOU-SIDERIS, A. (Eds.). (2020). Transit crime and sexual violence in cities: International evidence and prevention. Routledge.Informe mobilitat i genere vostre

Secondary Data (Surveys)

- Enquesta de Victimització de l'Àrea Metropolitana de Barcelona (EVAMB). Àrea Metropolitana de Barcelona. Available at: https://iermb.uab.cat/ca/enquestes/convivencia-i-seguretat-urbana/
- Enquesta de Mobilitat en dia Feiner (EMEF). Autoritat del Transport Metropolità. Available at: https://www.atm.cat/comunicacio/publicacions/emef
- Enquesta sobre l'Assetjament Sexual al Transport Públic (EASTP), Autoritat del Transport Metropolità. Forthcoming publication.

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