

#### **Acknowledgements**

The Authors would like to thank Pascale Boistard, Isobel Duxfield, Tamara Eelsing, Axelle Gallerand, Maria Chiara Leva, Stéphanie Maillard, Geneviève Queeckers, Mirko Waldner for the valuable information they provided during the interviews implemented on the best practices they supervised (Section 2 of this study)

#### **Auteurs**



Roberta PAOLETTI, FGB SRL SB paoletti@fondazionebrodolini.eu

Silvia SANSONETTI, FGB SRL SB sansonetti@fondazionebrodolini.eu



B-1047 Brussels, Belgium +32 (0)2 283 23 01 left-communications@europarl.europa.eu www.left.eu

## **TABLE OF CONTENTS**

LIST	OF A	ABBREVIATIONS	4	
EXE	CUTI	VE SUMMARY	7	
INT	RODU	JCTION	9	
1.	FIRST SECTION: GENDER AND INTERSECTIONAL DIMENSIONS OF TRANSPORT USERS			
	1.1	Gender-disaggregated data on transports	13	
	1.2	Mobility of care	14	
	1.3	Sexual harassment and gender-based violence in public transport	15	
	1.4	The gender perspective in older transport users	17	
	1.5	Gendering Mobility poverty	19	
	1.6	Strategies for an environmentally sustainable mobility	20	
	1.7	Planning gender-sensitive sustainable transport services	22	
2.	SECOND SECTION: BEST PRACTICES			
	POLIS			
	Energy Cities – project MOV'ICI's			
	DIAMOND			
	National plan to combat gender-based harassment and sexual violence			
	Mobility of care, Mit dem Baby unterwegs (On the road with the baby)			
	Security Barometer Survey – STIB			
3.	THIRD SECTION: A CHECKLIST FOR TRANSPORT POLICYMAKERS AND PLANNERS			
	Gender-disaggregated data on transports			
	Mobility of care			
	Sexual harassment and gender-based violence in public transport			
	The gender perspective in older transport users			
	Gendering mobility poverty			
	Strategies for environmentally sustainable mobility			
	Mainstreaming gender into transport policymaking			
4.	CON	NCLUSIONS AND RECOMMENDATIONS	36	
BIB	LIOGI	RAPHY	39	

## LIST OF ABBREVIATIONS

ABBREVIATION	FULL NAME			
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women			
EEA	European Environment Agency			
EESC	European Economic and Social Committee			
EIGE	European Institute for Gender Equality			
EQLS	European Quality of Life Survey			
EU-SILC	European Union Statistics on Income and Living Conditions			
FRA	European Agency for Fundamental Rights			
FTE	Full-time equivalent			
GBV	Gender-based violence			
GHG	Greenhouse Gas Emissions			
GOAL	Growing Older and stAying mobile project			
ILO	International Labour Organization			
ITF	International Transport Forum			
LCT	Long-term care			
LGBTQ/LGBTQIA+	Lesbian Gay Bisexual Trans Queer Intersex Asexual +			
MFF	Multiannual Financial Framework			
NGO	Non-Governmental Organisation			
OECD	Organization for Economic Co-operation and Development			
SDGS	Sustainable development goals			
SHARE	Survey of Health, Ageing and Retirement in Europe			
STEM	Science, technology, engineering and mathematics			
TIDE	Transport Innovation Deployment in Europe			
TINNGO	Transport Innovation Gender Observatory			
UN	United Nations			
UNFPA	United Nations Fund for Population			
VAW	Violence Against Women			
WHO	World Health Organization			

FULL NAME		
Austria		
Belgium		
Bulgaria		
Cyprus		
Czech Republic		
Germany		
Denmark		
Estonia		
Greece		
Spain		
European Union		
Finland		
France		
Croatia		
Hungary		
Ireland		
Italy		
Lithuania		
Luxembourg		
Latvia		
Malta		
The Netherlands		
Poland		
Portugal		
Romania		
Sweden		
Slovenia		
Slovakia		
United Kingdom		
United States of America		



## **EXECUTIVE SUMMARY**

A sustainable approach to transport mobility requires reducing the environmental impact and guaranteeing high-quality accessible and affordable transports for all. To achieve this goal the needs of different social groups have to be taken into account when transport policies are planned, implemented and evaluated. Gender is one of the most important characteristic to explain people's mobility choices: therefore, a gender-sensitive approach to transport policy is necessary to properly achieve sustainability in transports.

Introducing the gender perspective into transport policy-making does not imply an increase in public spending. The additional investments of public funds that is needed for better targeting policies, can provide returns in additional savings and can support a more efficient use of public budgets.

Although the EU has been involved in transport policies since its foundation, only in 2009 a gender perspective was introduced in this area with the Communication: 'A sustainable future for transport: Towards an integrated, technology-led and userfriendly system' COM(2009) 279 of 17 June 2009. Thereafter, the EU institutions started to focus on research and policy development in two areas: women's employment in the transport sector of the labour market and women as transport users.

A review of the literature focused on transport users (see the First section of this study) confirms that whenever data is available, gender affects people's mobility patterns to the same extent as other factors, like: the employment status, the family status, the economic conditions, ethnicity, age, health status and disabilities, sexual orientation, etc.. Each factor (including gender) can condition transports users' needs, opportunities and behaviours. Furthermore, the combination (intersection) between these factors and gender, can amplify the effects. For instance, the gender difference in pension can impact more on mobility choices of old women. Finally, research reveals that gender stereotypes play a major role in conditioning transport users' behaviours, limiting LGBTQIA+ and women's access to public transport.

The First Section discusses the most relevant phenomena examined in the literature in respect of gender and mobility referring to concrete examples and highlights the lack of gender mobility data and statistics. At the same time in this section it is shown how gender-tailored mobility services can better meet people's mobility needs and support the fight against gender-based violence and harassment as these phenomena have a high prevalence on public transports.

The Second section of the study proposes some noteworthy gender-sensitive projects and policies that address the issues described in the First section. The experiences of gender mainstreaming in mobility reported, refer to the EU level, the national level or the regional/local level. They are analysed in details using documentation and first-hand information collected by means of qualitative interviews with authorities responsible for their implementation.

The Third section of the study includes a checklist for policy-makers that is designed according to the results of the literature review and the analysis of the good practices. The checklist includes the main elements that are worth considering when designing, implementing and evaluating gender-sensitive transport policies. The checklist includes specific indications for implementing a participatory approach with the active involvement of stakeholders that is particularly recommended in the transport policy area.



## INTRODUCTION

A well-functioning transport system should support greater social equality by enabling people's participation in society regardless of their gender, place of residence and their socio-economic position. At the same time transport should not impact on the environment but should support the achievement of a low carbon economy. Effective, eco-sustainable (green) and low-cost transports should allow all women and men to access work and education opportunities, healthcare, social services, culture and entertainment. Equal accessibility to green transport services is therefore crucial and should be a basic principle in transport policy.

Any discussion on transport cannot avoid its deep relation to the climate emergency, as fossil fuels still make up most of the transport's energy demand. The European Environment Agency (EEA)<sup>1</sup> reports that transport is a major contributor to greenhouse gas (GHG) emissions in the EU. In 2017, transport (including air transport emissions) was responsible for 24,6% of global emissions. In the pressing context of the climate crisis, this report places green transport as an indivisible goal to gender inclusivity.

According to the International Transport Forum (ITF), one of the main levers for combating global warming<sup>2</sup>, consists in encouraging walking and cycling or teleconferencing instead of commuting and business travelling. These behaviours characterised the quarantine periods during the COVID pandemic, a time when a reduction of CO<sub>2</sub> emissions decreased.

Unfortunately, those trends are currently not confirmed. Instead, passengers travel and freight are steadily increasing and will more than double in 2050 the level of 2015 with an increase in CO<sub>2</sub> emissions of approximately the 16%. This would overshoot the level needed to limit the global warming to 1.5 degrees by about three times.

Transport is one of the causes of the climate change and promoting the use of green means of transport is extremely important to intervene on the

phenomenon. In a strategic approach to the issue, the promotion of the use of public effective interconnected service of public transports, is pivotal. In addition, promoting public transports instead of private transports will contrast existing inequalities in the access to services and opportunities. Public transports need to be prioritised because people in disadvantaged socio-economic conditions in both developing and developed regions often experience transport poverty that involves isolation, and difficulties in getting quality services including healthcare and even healthy food. They may be also limited in their life opportunities including the quality of the jobs they can access.

The current energy and economic crisis can exacerbate the transport disadvantage as the costs for transports are on the increase and only people who are well-off can afford them. But, even in such tough times the 'green' measures for decarbonisation should be kept as the fight against the climate change that puts many people's lives at risk has to remain a priority. However, in a time of economic crisis the 'green' measures involving pricing need to be reconsidered with an understanding of the local context, the actual conditions of the addressees of the measures so to implement them fairly and effectively. One of the most important ways to align these goals is to move from mobility focused policies to accessibility focused policies.

Accessibility focused policies ensure that people have access to opportunities and goods without putting the focus on travelling more or travelling faster, and this will have advantages for people, environment, and economics. These are the policies to encourage: life in neighbourhoods where you can work, send your kids to school, shop, meet friends and when you need to go elsewhere in your region or in the city, you can easily access a transport hub where you can use public transport or shared mobility, using a variety of other sustainable means, ideally walking, cycling or scooters. It is time to abandon the private car centric model (traditionally used in

<sup>1</sup> EEA (2019). The first and last mile — the key to sustainable urban transport — transport and environment report 2019, EEA Report No 18/2019, European Environment Agency.
2 ITF Transport Outlook 2021. Available at: https://www.itf-oecd.org/itf-transport-outlook-2021

transport planning) that is more expensive and that induces more and more car traffic and air pollution and that leads to build more and wider roads. The literature shows that in cities, these policies have also significant impact on lowering demand for travelling: people travel 22% less. These principles of accessibility apply also to freight: moving from longer supply chains to shorter, more resilient supply chains. Freight can also achieve an 18% reduction in activity through shortened supply chains, asset sharing, consolidation of loads<sup>3</sup>. Real time travel information can contribute to optimising operations through data sharing and digitalisation.

An effective and environmentally sustainable transport policy for all can be achieved only if the needs of potential users are equally taken into account while proposing environmental-friendly solutions for mobility. Policymakers should keep accessibility for all as policy objective when planning and implementing environmental-friendly investment in transport. To this end it is important to investigate who are the users of what types of transport and what their specific needs are (including safety and how to increase the use of public transport). The social lenses in policy making in the transport sector are pivotal to ensure equal access to transport services.

For decades, transport policies have relied on a gender-blind approach<sup>4</sup>. Similarly, the needs of specific groups like people of different ethnic origins, LGBTQA+, old or young people, people with disabilities, etc, have been disregarded. The intersection between gender and these characteristics has been neglected. This study aims to provide pragmatic tools to assume a gender-sensitive<sup>5</sup>, intersectional and green perspective in the area of transport policy. It does so by drawing on the most recent research developments in the area.

The review of the literature body and research confirms that there is still a lot to investigate on the specific needs of women and men in respect of transport needs. Knowledge is even more limited concerning gender intersected with other grounds of vulnerabilities. However, the analysis of socioeconomic background together with projections and trends confirm that there are mobility disadvantages for women compared to men and that this gap worsens when gender is considered at the intersection with other vulnerabilities, i.e.: accounting also for

other grounds of possible discrimination and disadvantage in mobility such as sexual orientation, ageing and poverty.

Since its inception, the EU devoted considerable attention to transport policies by focusing on the development of a common EU framework for this area of intervention and by identifying a system of rights and obligations for transport users. More recently, the focus has been on sustainable mobility particularly in urban areas. Mainstreaming gender in transport policy is the EU's latest endeavour as the relevance of gender issues on transport mobility patterns has become increasingly evident in the scientific research literature. However, gendersensitive policymaking is still hindered by a lack of gender-disaggregated data on users of different types of transport which hinders the assessment of possible gender impact in transport policies.

The recent European Parliament study, Women in transport<sup>6</sup>, summarises the most recent available data at the European Union and Member State level and highlights the most recent achievements in gender and transport in the EU referring to both knowledge and policies on women in their double role of users and workers in the transport sector. The study, commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs at the request of the FEMM Committee, provides EU policy indications in the context of the European Green Deal to effectively support the enhancement of gender equality in transport.

Drawing on the results of that study, the present document develops a policy-oriented discussion. It focuses on how to implement gender-sensitive and environmental-friendly policies also accounting for intersectionality (sexual orientation, ageing and poverty). In addition, it provides tools and concrete policy examples that policymakers can adopt in their everyday activities.

Attention is devoted to the gender aspects that may interfere with and influence transport users adopting an intersectional approach. Focusing on users will allow us to better define the link between the efficiency of transport policy for people's daily life and the impact on the environment of people's mobility. Moreover, this research explores those

<sup>3</sup> ITF (2019). Decarbonising Transport Brochure, Available at: https://www.itf-oecd.org/decarbonising-transport-brochure

<sup>4</sup> Not considering the impact of gender on transport use.

By Gender Sensitive we mean programming that recognises different needs of women, men, boys and girls and acknowledges gender power dynamics but does not necessarily address these other than to try and integrate an understanding of these dynamics within programme design.

Gender Responsive is the programming which includes specific action to try and reduce gender inequalities within communities.

<sup>6</sup> Policy Department for Citizens' Rights and Constitutional Affairs - Directorate-General for Internal Policies (2021), Women and Transport. Available at this link: https://www.europarl.europa.eu/thinktank/it/document/IPOL\_STU(2021)701004

aspects of gender and social discrimination that still hinder an efficient and thus sustainable policy on transport planning. Finally, during the COVID-19 pandemic, many cities took initiatives to improve the conditions for walking and cycling, these initiatives may be the basis of more permanent strategies<sup>7</sup> that the present study would like to encourage.

#### The study is composed of three sections.

The first section offers an analysis of the available data on gender and transport users, setting out some basic concepts to be considered when developing gender-sensitive and environmental-friendly transport policymaking.

The second section presents a selection of good practices in policy-making and participatory transport planning from different EU Member States. It includes six best practices, carefully assessed through desk research and interviews with the authorities responsible for their design and implementation. The practices include criteria for their transferability to other European Union Member States. As gender mainstreaming in mobility interventions is recent compared to other policy areas (such as employment policies) in some of these best practices, only elements of gender sensitivity could be identified. In the examples, gender intersects with other grounds such as sexual orientation (LGBTQIA+ people) and age.

The third section introduces and discusses a checklist for transport policymakers and planners. The checklist hinges upon three elements: gender sensitivity, environmental sensitivity, and participation. The key question that this section addresses is: 'which elements should be considered when designing, implementing and evaluating gender-sensitive, intersectional and sustainable public transport policies in a participatory manner?' The active involvement of stakeholders is crucial to properly address the needs of users. Under specific conditions the process of stakeholders' involvement can ensure that an intersectional gender sensitive approach is assumed and that environmental objectives are achieved. Different needs and contexts are considered, and each element included in the list is accompanied by a description of why it is important and in which cases its implementation can be most effective. The proposed checklist is designed as a usable tool for policymakers and transport planners who can easily choose and adopt the element(s) more suitable to different policy conditions.

Nikitas, A., et al., 2021, 'Cycling in the era of COVID-19: lessons learnt and best practice policy recommendations for a more bike-centric future', Sustainability 13(9). Synthetic analysis encompasses two perspectives, looking at the system on its own level and looking at it on the level of its constituents.



## FIRST SECTION: GENDER AND INTERSECTIONAL DIMENSIONS OF TRANSPORT USERS

#### 1.1 **GENDER-DISAGGREGATED DATA** ON TRANSPORTS

(See Second Section – Best practice DIAMOND)

Collecting gender-disaggregated data on people's needs in transport is of extreme importance in order to develop an inclusive transport service. Transport planning activity is mostly related to a neutral citizen, who reflects himself as a male, Caucasian, heterosexual and full-time worker. Collecting information on real people's transport needs, allows for delivering an effective, efficient and sustainable transport service, also in terms of protecting the environment from greenhouse gas (GHG) emissions.

Having an efficient transport plan encourages people to opt for public transport instead of private one.

(See also paragraph 1.4 of this study)

A close attention of the European Union to the gender dimension in transport users began in 2012 with a focus on women's specificities in mobility needs in a European Parliament resolution on the role of women in the green economy9. The resolution called on the European Commission and on Member States to improve the quality (safety, comfort, and accessibility) and availability of innovative and environmentally friendly transport services (including at the local level and in rural areas) to better meet women's mobility needs. Two years later, in 2014, the Commission published a dedicated report with its plans for action in this area, 'She Moves - Women's issues in transportation'<sup>10</sup>.

A step forward was made in 2015 by the opinion requested by the European Economic and Social Committee (EESC), which supported the integration of a gender equality perspective in all aspects of transport (the opinion explicitly referred to the Strategy for Growth and Jobs).

The last update is the study commissioned by the European Parliament FEMM Committee on Women and transport, issued in 2021. This study stressed a lack of availability of gender-disaggregated data on transport usage. Available data included in the study are mostly the result of various non-systematic research referring to a few countries, or they only allow analysis at the EU level, without being able to go into the specifics of Member States' situations. More effort is therefore needed, primarily in the collection of data and information to be able to explore the topic in greater depth.

Although there is not enough gender-disaggregated data, the analysis conducted in the study pinpointed some fundamental aspects differentiating women and men as transport users.

Available statistics reveal that, when given the choice between urban public (including waking) or private transport, women in the European Union prefer to use urban public transport (31%, men 24%), while men are more likely to choose private means of transport. For this reason, women are more likely to be affected by delays due to connection failures, and thus they lose more time travelling<sup>11</sup>. Also a Eurobarometer<sup>12</sup> survey clearly indicates that more men (59%) than women (49%) own a private car, even though the number of women using a car every day has increased over the last decade.

<sup>9</sup> European Parliament Resolution of 11 September 2012 on the role of women in the green economy, 2012/2035(INI). Available at: https://eur-lex.europa.eu/legal-content/EN/

TXT/7/uri=CELEX%3A52012IP0321

10 European commission (2014), She moves. Women's issues in transportation. Available at: https://op.europa.eu/en/publication-detail/-/publication/c923ddff-636c-4ba8-87c2-07dzf06cd709/language-en

<sup>11</sup> EIGE (2016). Gender in Transport. Publication Office of the European Union. 12 Eurobarometer (2014). 'Quality of Transport', Special Eurobarometer Report, No. 422a.

The same survey highlights that women and men have different reasons for choosing a mode of transport. For men, most of their mobility is related to work (53%); whereas this share is only 23% for women. Women's leisure trips and those for personal purposes account only for the 4% of the total, although when more details are gathered, some women's personal trips are often made to take care of others (relating to women's greater social roles in care). Accompanying someone by car represents only 1.4% of men's trips while for women, this represents 20% of daily trips. Furthermore, other research reported in the EP study<sup>13</sup> found that individual characteristics - such as geographic location, age, class, economic position, and ethnic origin - influence the mobility behaviour of women, their capacity to own a private car and their likelihood to have a driving license.

In peripheral and rural areas lack of public transport provision means women's mobility needs are less often met, and therefore do not enable them to secure and maintain full-time employment opportunities, good quality jobs, and in some cases, the possibility to receive a proper education.

#### 1.2 MOBILITY OF CARE

(See Second Section – Best practices, IT – Mobility of care, Mit dem Baby unterwegs (On the road with the baby)

When planning inclusive transports for carers (for instance for those travelling with buggies) it is necessary to remove infrastructural barriers and to spread information about impediments on public transports or at stops. Busses and trains should be designed considering female ergonomics and caregivers' needs. Timetable and connections are also to be considered. Caregivers mostly travel in the neighbourhood, therefore local area transport plans should be prioritised (opposite to what more commonly happens as urban transport planning focuses on connections between peripheric areas and the city centre), Providing transport services to allow children to reach schools is also of great importance.

Collecting data on the mobility of carers helps to plan public transport services, more investments on data collection at the planning phase guarantees the provision of a more effective and efficient public transport service.

Women's mobility patterns are more complex than those of men. They often require different means of transport because women are primarily responsible for care within families. This phenomenon, and the characteristics that determine it in terms of transport use, has been referred to by experts as the 'Mobility of care'14. The concept helps in quantifying, assessing and making visible the daily travel associated with care work. Care work in this context refers needs to the unpaid labour performed by adults for children and other dependants, the mobility of care refers to the time spent in travelling to meet these care needs, whether taking relatives to the doctor, accompany children to school, sports and other activities, or doing shopping and carrying out other household duties at public offices or service providers.

Policy Department for Citizens' Rights and Constitutional Affairs - Directorate-General for Internal Policies (2021), Women and Transport. Available at this link: https://www.europarl.europa.eu/thinktank/it/document/IPOL\_STU(2021)701004
 Sánchez de Madariaga, I. (2013). 'The mobility of care: Introducing new concepts in urban transportation'. In: I. Sánchez de Madariaga and M. Roberts (eds.), Fair shared cities:

<sup>14</sup> Sánchez de Madariaga, I. (2013). 'The mobility of care: Introducing new concepts in urban transportation'. In: I. Sánchez de Madariaga and M. Roberts (eds.), Fair shared cities The impact of gender planning in Europe, Routledge.

Sánchez de Madariaga, I. (2018). The mobility of care, Lecture for the UNHABITAT – For A Better Urban Future Series. Available at: https://unhabitat.org/

Sánchez de Madariaga, I. and Zucchini, E. (2019). 'Measuring Mobilities of Care, a Challenge for Transport Agendas'. In: C. Scholten and T. Joelsson (eds.), Integrating Gender into Transport Planning. Palgrave Macmillan.

Usual techniques and tools developed in transport planning build on the notion of work are generally narrowly understood as paid employment and often mistake care for leisure or personal interests. The notion of care work, instead, brings attention to the fact that activities in everyday life, need to be understood as actual work and differ from personal business and leisure. The conceptualisation of mobility of care has significant implications for transport planning that have to be integrated in dedicated institutions and practices to better meet women's transport needs<sup>15</sup>.

The 'mobility of care' concept also included in EIGE's Gender Equality Index thematic focus on Work-life balance in 2019: "Inequalities in time spent on the mobility of care were considered in the 'commuting time for the population aged  $15+"^{16}$ .

Analysis of data collected in the city of Madrid surveying 800 people (50% women and 50% men), aged 30 to 45, about their mobility over 24 hours<sup>17</sup> shows interesting evidence about the mobility of care<sup>18</sup>: the number of trips made for working reasons almost equals the number of total trips made to carry out care duties (29% for the former and 33% for the latter). Women's urban transport mobility is widely related to care activities while men's urban transport mobility for the same purpose amounts to only 9%.<sup>19</sup>

#### 1.3 SEXUAL HARASSMENT AND GENDER-BASED VIOLENCE IN **PUBLIC TRANSPORT**

(See Second Section - Best practice, FR - National plan to combat gender-based harassment and sexual violence)

To eliminate risks of harassment and genderbased violence interventions on infrastructures and specific training to personnel are key. Providing lighted paths between connections of different means of transport allow women and people experiencing other vulnerabilities to travel safely. Providing transport security staff with training on gender issues and gender-based violence can ensure an efficient rescue response to people who report aggression. In addition, other measures like anti-violence free-toll number with trained staff, promote awareness campaigns against harassment and gender-based violence on transports for passengers and staff.

Collecting data on prevalence of this phenomena on public transports can help to plan effective interventions.

Developing sustainable mobility also means eliminating sexual harassment and gender-based violence on public transport.

Women's travel behaviour is also affected by safety considerations and the specific high risk of experiencing sexual harassment <sup>20</sup>. Sexual harassment toward women, whether they are walking on the street, taking buses, or riding trains, is a major problem. Due to different stereotypes and gender norms affecting EU societies, collecting data on sexual harassment in public spaces, including in public transport, is difficult, and thus the total amount is mostly underestimated and often underreported.

<sup>15</sup> In nearly half of EU Member States, women spend at least twice as much time caring for their children as men. The range of weekly hours spent on unpaid care work by women varies between a maximum of 50 hours in Austria, and a minimum of 24 hours in Greece. In comparison, men have a range between 29 hours in Sweden, and 10 in Czechia, so women dedicate on average 45% more time than men to looking after children. In Slovakia and the Netherlands, the average is above 40%, followed by Italy and Croatia with 35% more time. Similarly, housework also remains a predominantly female duty in Europe with significant variations across the EU countries

<sup>16</sup> EIGE (2019), Gender equality Index. Work-life balance. Available at: https://eige.europa.eu/publications/gender-equality-index-2019-work-life-balance Sánchez de Madariaga, I. and Zucchini, E. (2019). 'Measuring Mobilities of Care, a Challenge for Transport Agendas'. In: C. Scholten and T. Joelsson (eds.), Integrating Gender

into Transport Planning. Palgrave Macmillan.

17 Sánchez de Madariaga, I. and Zucchini, E. (2019). 'Measuring Mobilities of Care, a Challenge for Transport Agendas'. In: C. Scholten and T. Joelsson (eds.), Integrating Gender into Transport Planning. Palgrave Macmillan.

<sup>18</sup> The sample dimension for this survey includes participants from five different city areas: two central areas, two suburban areas and one semi-peripheral area. Out of the total 3 323 trips made, 66% were made by women, with the average exceeding 5 trips a day, and the remaining 34% of trips were made by men, with an average of 2.8 trips a day.

19 Synthesis elaborated by the European Parliament report on Women and transport, pp. 30-1.

20 Ortega Hortelano, A., Grosso, M., Haq, A., Tsakalidis, A., Gkoumas, K., Van Balen, M. and Pekar, F. (2019). Women in European Transport with a focus on Research and

Innovation, Publications Office of the European Union. Available at: https://publications.jrc.ec.europa.eu/repository/handle/JRC117687

As reported by the most recent European Parliament study on Women and Transport, an estimated 220 000 women had been sexually harassed on public transport in France alone over a two-year period<sup>21</sup>. Another study reveals that in the city of Paris women are afraid of being robbed or assaulted in these spaces <sup>22</sup>.

Private transport is often perceived of as safer by women, and thus whenever possible it is considered the better choice, despite having an impact on sustainability in terms of costs and environmental pollution. Preventative measures including public campaigns aimed at altering men's behaviour providing available security on public transport and staff trained on sexual harassment and gender-based violence, as well as lighting and the design of transport interchanges could contribute to the increase of women's safety<sup>23</sup> encouraging greater use of public transport by women.

However, fear of harassment<sup>24</sup> in public space is not only limited to women and girls, it is also prevalent in the LGBTQIA+ community. This effects their transport mobility and can limit their access to other services especially jobs, health care facilities, and education. Data collection on LGBTQIA+25 people's usage of transport is even less advanced than that on general men and women categories.

Gender non-binary and people with self-disclosed feminine identities reported significant levels of harassment in public spaces<sup>26</sup>, including public transport<sup>27</sup>. Intersecting gender identity and sexuality/ queerness with a migrant background often increases the situation of discrimination and violence towards LGBTQIA+ people<sup>28</sup>.

According to the results of the European Union Agency for Fundamental Rights (FRA) survey on LGBTI people in the EU, North Macedonia and Serbia, most LGBTQIA+ respondents (58%) reported having experienced over the previous five years harassment in the form of offensive or threatening situations at work and in public space, including on public transport. Further details about the most recent incident were provided by the respondents, among others about the context. Respondents described most incidents of physical or sexual attack as having taken place in public – in a street, square, park, parking lot or other public places (51%). Other commonly mentioned locations are a café, restaurant, pub or club (12%), and public transport (10%). In more than three in four cases (77%), the perpetrator of the most recent physical or sexual attack was a man.

The percentage of men as perpetrators of sexual attacks is even higher (84%) involving one or more male perpetrators<sup>29</sup>. Data collected in 2019 by the Observatori contra l'homofòbia<sup>30</sup> in the city of Barcelona revealed that episodes of harassment and/ or homo- and transphobic aggression principally occur in public spaces dedicated to leisure activities (39,3%) and in public transport (15,1%). The same organisation also developed a qualitative research study focused on the lesbo-phobia<sup>31</sup> funded by the Municipality of Barcelona, which reported a case of verbal aggression on public transport against a lesbian couple.

Studies from the US report how gay men are more usually physically attacked than lesbian women, who recounted encountering verbal violence more often<sup>32</sup>. Hate crimes in public spaces against LGBTQIA+ people are often under-reported, resulting in the underestimation, misrepresentation, or unrecorded nature of this phenomenon<sup>33</sup>.

<sup>21</sup> Ortega Hortelano, A., Grosso, M., Haq, A., Tsakalidis, A., Gkoumas, K., Van Balen, M. and Pekar, F. (2019). Women in European Transport with a focus on Research and Innovation, Publications Office of the European Union. Available at: https://publications.jrc.ec.europa.eu/repository/handle/JRC117687

The survey has been conducted on 50.222 people, 63,1% of those were women.

Institut Paris Region (2019), The feeling of insecurity in public transport in the Paris region in 2019. Available at: https://www.institutparisregion.fr/nos-travaux/publications/ le-sentiment-dinsecurite-dans-les-transports-collectifs-franciliens-en-2019/

<sup>23</sup> Chowdhury, S. and van Wee, B. (2020). 'Examining women's perception of safety during waiting times at public transport terminals', Transport Policy, 94, pp. 102–108. 24 European Commission (2014), She Moves – Women's issues in transportation, Publication Office of the European Union. https://op.europa.eu/en/publication-detail/-/

publication/c923ddff-636c-4ba8-87c2-07d2f06cd709/language-en

The use of LGBT or LGBTI will occur just when the present study is reporting references from other researchers and policy reports. Otherwise, it will adopt the acronym

<sup>26</sup> Lubitow, A., J. D. Carathers, M. Kelly, and M. Abelson (2017), Transmobilities: Mobility, Harassment, and Violence Experienced by Transgender and Gender Nonconforming Public Transit Riders in Portland, Oregon." Gender, Place and Culture 24 (10): 1398–1418.

<sup>27</sup> Dodds, C., P. Keogh, and F. Hickson, (2005), It Makes Me Sick: Heterosexism, Homophobia and the Health of Gay and Bisexual Men. Technical Report. London: Sigma

Research. Accessed 27 Jul 2020. Available at: https://researchonline.lshtm.ac.uk/id/eprint/1399

28 Fogg-Davis, H. G. 2006. "Theorizing Black Lesbians within Black Feminism: A Critique of Same-Race Street Harassment." Politics & Gender 2 (1): 57–76.

29 FRA (2020), A long way to go for LGBTI equality. Available at: https://fra.europa.eu/sites/default/files/fra\_uploads/fra-2020-lgbti-equality-1\_en.pdf

30 OCH (2019), ESTUDI SOBRE LES AGRESSIONS LGTBI-FÒBIQUES DEL 01/01/2019 A 31/07/2019. Available at: https://och.cat/wp-content/uploads/2019/08/Estudi-

<sup>31</sup> OCH (2014-2020), Visibilitzem la lebofòbia. Compilaciò recerca qualitativa lesbofòbia. Available at: https://och.cat/wp-content/uploads/2021/09/Visibilitzem-lesbof%C3%B2bia-

<sup>32</sup> Berrill, K. T. (1992), Anti-Gay Violence and Victimization in the United States: An Overview, In Hate Crimes: Confronting Violence against Lesbians and Gay Men, edited by G. M. Herek and K. T. Berrill, 19–45, London, Sage.

<sup>33</sup> TfL (2016), Action on Equality: TfL's Commitments to 2020. London: Transport for London. Accessed 27 Jul 2020. Available at: https://content.tfl.gov.uk/action-on-equality-tflscommitments-to-2020.pdf

Fear of experiencing discrimination and harassment represents a crucial barrier to the access of LGBTQIA+ people to most public services, including healthcare and public transportation. As is the case of violence against women, the lack of efficient coverage mechanisms discourages victims from reporting these episodes to public authorities. This situation often results in the decision of LGBTQIA+ to avoid using these services or change their habits to reduce the risk of violence (such as, for instance, resorting to private means of transport or avoiding the use of public ones at night)<sup>34</sup>. A sustainable approach requires considering the reasons why people prefer private rather than public transport, among them perceived and actual threats to one's personal safety. Awareness-raising initiatives and dedicated training for transport operators and staff would be welcome by LGBTQIA+ people. These might focus on sexual harassment, gender-based violence, and stereotypes to address verbal and physical abuse against passengers on their services<sup>35</sup>.

#### 1.4 THE GENDER PERSPECTIVE IN **OLDER TRANSPORT USERS**

(See Second Section - Best practice, BE Security Barometer Survey – STIB)

Older people often experience mobility impairments. Inclusive transport services should ensure accessibility to them as they mostly rely on public transport for their mobility when they cannot be assisted by relatives or friends. Disseminating information, on stops that allow barrier-free access to transport is of great importance. This can be done by free-toll telephone lines, smartphone applications or flyers, Older people mostly travel in the neighbourhood, urban transport plans should take this factor into account.

Collecting data on older people's transport needs helps to plan effective, efficient and sustainable services.

The European Union is facing significant population ageing, which has a significant impact on transport patterns. According to Eurostat 2010-based population projections, the EU-27 population will be slightly larger by 2060 (516.9 million compared to 503,7 million in 2012), while the age structure of the population will be much older than it is now. In the EU, life expectancy at birth is projected to increase from 76,7 years in 2010 to 84,6 years in 2060 for males and from 82,5 years in 2010 to 89,1 years by 206036.

Statistical data on older people as transport users revealed that only seven out 100 women above the age of 75 own a private car<sup>37</sup>. This value mirrors the lower number of women at that age holding a driving license. Most older women's mobility is related to their partners and when their partners pass away, they become dependent on public transport or relatives.

<sup>34</sup> Newton, A. 2014. "Crime on Public Transport." In Encyclopedia of Criminology and Criminal Justice, edited by G. Bruinsma and D. Weisburd, 709–720.
35 TfL (2017), 2016/17 Progress Report: Action on Equality. London: Transport for London. Accessed 27 Jul 2020. Available at: https://content.tfl.gov.uk/2016-17-progress-report-

action-on-equality.pdf

<sup>36 2012:</sup> observed population; 2060: data are projections. Source: Eurostat (online data codes: demo\_pjan and proj\_10c2150p). 37 EMTA (2007), Older people and public transport. Challenges and chances of an ageing society

Additionally, ageing impairments<sup>38</sup> can lead to significant mobility alterations after the age of seventy-five which are more frequent among women. Consequently, older people tend to make fewer journeys than other adults and often change their transport mode. Despite these difficulties, car ownership rates for older people seem to be on the increase, <sup>39</sup> despite also reporting more walking, less driving, and the use of more public transport, particularly for those aged 75 or older with the main reasons for moving at this age being shopping and leisure.

Available, effective, and affordable public transport services contribute to the quality of life of older people, their sense of independence and their freedom to move. The recent European Commission Union of Equality Strategy for the Rights of Persons with Disabilities 2021-2030<sup>40</sup> requires that public services vehicles be accessible to older people with disabilities, in accordance with the World Health Organization Checklist of Essential Features of Agefriendly Cities<sup>41</sup>.

To keep older people active, adequate public transport facilities tailored to their specific needs should be available. Impairments in mobility, whether visual, hearing, or cognitive<sup>42</sup> need to be considered in transport planning for older people. Clear, concise, accurate and timely traveller information is useful for them regardless of disability (and indeed the wider travelling public). A wide range of information may be needed, for example, of the public transport network, routes, stations and stops, services timetable, and ticket prices. Information detailing various aspects of public transport operations (timetable, accessibility, changes, fares, etc.) is very important in encouraging older people to use public transport. Vision, hearing, and other impairments may mean special information services are needed to deliver information, and older people may require additional items of information not typically asked for by other travellers, such as the location of lifts at multi-floored stations, and whether buses or trains will be low-floored and have adequate internal manoeuvring space<sup>43</sup>.

The transport information needs of older people have been investigated by the European Commission GOAL (Growing Older and staying mobile) project. Five different profiles of older people - based on a cross-national panel database comprising data on health, socio-economic status and social and family networks of more than 55,000 individuals aged 50 or over from 20 European countries, i.e. the SHARE database (Survey of Health, Ageing and Retirement in Europe)44 - were developed on the basis of different levels of health and mobility. The five categories were Fit as a Fiddle, Hole in the Heart, Happily Connected, An Oldie but a Goodie and Care-Full. Also, the findings from the TIDE (Transport Innovation Deployment in Europe)<sup>45</sup> project are of interest to investigate older people's needs, particularly innovative urban transport exploring mobility concepts.

Paper-based information, telephone inquiry, TV and radio transport information services are the easiest way to get information to older people. However, digital devices are becoming increasingly popular among older people, and are likely to become the favoured information tool in the near future. The development of apps can provide the availability of information at any stage of travel (pre-trip or during a trip), static as well as real-time information in a variety of formats (text, audio and visual) which could support the users' confidence, especially in cities with poor public travel information (e.g., CityMapper, Transit, Moovit). Digital literacy could also have a gender dimension, with biases about women's talents in ICT implying that women are less able to use such technologies although this theory would seem to be discredited by younger age groups.

All things considered, the demographic of older people is rapidly changing, becoming more digitally literate and taking up a larger share of the population. To really meet their transport needs a transport planning assessment should require a communitybased referral system involving doctors and health professionals, community workers, friends and families of older people and older people themselves holding diverse backgrounds and intersectional status.

 <sup>38</sup> EMTA (2007), Older people and public transport. Challenges and chances of an ageing society
 39 Mobilität in Deutschland 2008 – MID 2008 (Mobility in Germany) Information Meeting Add-Ons Bonn, 24 July 2007. Available at: http://www.mobilitaet-in-deutschland.de/pdf/Mobility%20in%20Germany%202008\_Projects%20Presentation.pdf

<sup>40</sup> European Commission (2021), Union of Equality Strategy for the Rights of Persons with Disabilities 2021-2030. Available at: https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8376&furtherPubs=yes

<sup>41</sup> WHO (2007), Checklist of Essential Features of Age-friendly Cities. Available at: https://extranet.who.int/agefriendlyworld/wp-content/uploads/2018/04/Age-Friendly-Checklist-WHOedit.pdf

<sup>42</sup> Wretstrand, Anders & Ståhl, Agneta. (2010). User needs and expectations-Findings from the Euro Access Project
43 N. B. Hounsell, B. P. Shrestha, M. McDonald and A. Wong, Open data and the needs of older people for public Transportation Research Group, University of Southampton,

<sup>44</sup> Available at: http://www.share-project.org45 Available at: https://cordis.europa.eu/project/id/313979

#### 1.5 GENDERING MOBILITY POVERTY

(See Second Section - Best practice, Energy Cities - project MOV'ICI's)

Poor people mostly live in peripheric areas or rural areas, which are often not served by an efficient transport service leaving them in a condition of isolation. This phenomenon is defined Mobility Poverty. Isolation amplifies poverty conditions, as it may impede the participation in public life or even to reach workplaces with the risk of losing the job.

Mobility poverty presents a gender dimension as women more often than men have no alternatives to public transports (they are less likely to have a driving license or to own a car).

Collecting data on the incidence of mobility poverty and provide targeted support for mobility to people experiencing such conditions can impact on everyday life of people by supporting their social inclusion.

Mobility poverty is a complex concept elaborated by academic researchers and statisticians that has never fully captured the attention of policymakers, and yet it is a problem that affects millions of people in the EU<sup>46</sup>. It is not just about low affordability, but the social exclusion that low affordability implies. The price of public transport and the residential proximity to travel terminals are important factors behind transport users' choices. When affordability and availability of means of transport do not meet the needs of users, compared to their available income, individuals' mobility decreases as well as their access to services and opportunities. In these conditions, poverty and social exclusion are reinforced<sup>47</sup>.

The definition of the concept of 'mobility poverty' is not universal. The lack of a clear definition and terminology has hindered its use and ability to design effective actions to contrast the phenomenon. Some characteristics however have been set by experts.

This study uses the reference of The Left MEP Leila Chaibi's, used in her TRAN Opinion on the Social Climate Fund, and adopted by the European Parliament on 22 June 2022<sup>48</sup>, as follows:

"Mobility poverty means the situation of a household with limited access to available and affordable mobility and transport services and unable to afford the necessary transport required to meet essential services as well as essential socio-economic needs, depending on national, regional and local circumstances and which can be caused by one or the combination of the following factors: low-level income, high fuel expenditure, lack of affordable or availability of quality and high-frequency public transport services, lack or limited availability of alternative and active mobility solutions and their accessibility and location, with a particular focus on households in rural, remote and other disadvantaged areas".

Mainstreaming gender in this area leads to further considerations. First, mobility poverty needs to be understood as an individual condition rather than a household condition<sup>49</sup>: in fact, one member of a household may experience it, whereas another member of the same household may not. These differences are polarised in respect of gender. Second, mobility is largely associated with the accessibility to goods, services and activities in different contexts (social, economic and geographical) over time, and this makes it difficult to elaborate a single comprehensive and exhaustive synthetic indicator representing all aspects implicated in the concept. With the purpose of enhancing clarity, experts propose to define this macro concept by listing its specific aspects as follows: transport poverty is explained as an overarching combination of cost and accessibility<sup>50</sup>: transport mobility poverty, the lack of means of transport; transport accessibility poverty, the difficulty of reaching certain key activities such as employment, education<sup>51</sup>.

Studies on poverty and in-work poverty signal the relevance of the gender dimension of the phenomenon. Working conditions are more disadvantageous for women in the EU than for men, and the choice to become mothers worsens their socio-economic condition. Women (30,2%) are more likely to have an involuntary part-time job than men (8,5%)<sup>52</sup>, and the gender pay gap stood in November 2020 at 14,1%<sup>53</sup>. The burden of unpaid care work

<sup>46</sup> The concept of 'transport poverty' is also defined in a report produced by the CIVITAS initiative in 2016. See: https://civitas.eu/ 47 Lucas K. (2021), Transport and social exclusion: Where are we now? Transport Studies Unit, University of Oxford

<sup>48</sup> Available at: https://www.europarl.europa.eu/doceo/document/TA-9-2022-0247\_EN.html

<sup>49</sup> Still statistical indicators in the EU report on poverty taking the household dimension instead of single persons and neglecting the intra-household differences in the actual access to economic resources, benefits and goods, due to the gendered division of labour within the household, the different roles everyone plays within the household. See also: De Micheli B., Capesciotti M., Paoletti R. and Sansonetti S. (2020), Working, yet poor. Gender Policy and indicators report, European Union's Horizon 2020 research and innovation programme under grant agreement No 870619

<sup>50</sup> Litman T (2015) Transportation Affordability. Evaluation and Improvements Strategies. Victoria Transport Policy Institute, Victoria, Canada.
51 Lucas k., Mattioli G., Verlinghieri E., Guzman A. (2016), Transport poverty and its adverse social consequences, Institution of civil engineers, UK

mostly falls to women, with a fluid career pattern with interruptions, or part-time employment periods with a final impact on the conditions of retirement. In 2019, women in the EU aged over sixty-five received a pension that was on average 29% lower than that of men<sup>54</sup>.

The European Parliament study on Women and Transport tries to gauge the extent of women's transport experience by income by relying on EU-27 available indicators. Unfortunately, all possible available indicators use the household information on income and expenditures - like in the case of other poverty and social exclusion indicators mentioned above - and therefore are not able to measure living conditions at the individual level<sup>55</sup>. Despite these relevant limitations the two indicators chosen (the 'share of expenditure for transport and transport services on household income') shed light on the phenomenon in different Member States also from a gender perspective.

To interpret the results the definitions of transport poverty elaborated by Lucas et al. (2016) are used. According to the study, an individual can be defined 'transport poor' if, in satisfying their daily basic activity needs, at least one of the following conditions apply: no transport options are available and/or suit the individual's physical condition and capabilities; the existing transport options do not reach destinations where the individual can fulfil their daily activity needs, which contribute to the quality of life; the necessary weekly amount spent on transport leaves a residual income below the official poverty line; time spent travelling exceeds leading to time poverty or social isolation; travel conditions are dangerous, unsafe or unhealthy for the individual.

Considering the living and working conditions of women, as presented above, can help in the interpretation of their experience with transport. In general, women are more likely to be at risk of poverty and social exclusion<sup>56</sup> as they are more likely to belong to vulnerable groups. Using the affordability metric of transport poverty above (Litman, 2015), if women are more likely to be on a lower income, then they are more likely to suffer mobility poverty as services are more likely to be unaffordable to them. Statistically, travel costs have a higher impact on women than on men.

#### 1.6 STRATEGIES FOR AN **ENVIRONMENTALLY** SUSTAINABLE MOBILITY

(See Second Section - Best practice, Polis)

To reduce CO, emissions and make public transports more sustainable, employing renewable energy is key, but it is not sufficient. An increased attention to people's transport needs in order to improve effectiveness through better targeted public transport services is also crucial. To this aim collecting data on real people's needs allows to improve efficient planning.

Interoperability is another strategy for transport sustainability: this can be achieved by better coordination between transport infrastructure (long distance and short distance).

The most important step to take for environmental sustainability is to increase the attention of everyday people on global warming and decarbonisation. Developing and spreading campaigns discouraging the use of private cars, while disseminating information on access to public transport and transport sharing is a way to raise awareness on how people in their daily behaviours can contribute to protecting the environment. Data show that men more than women need to be targeted in these campaigns as they are less sensitive to the issue and more likely to use private means of transport.

According to the Special Eurobarometer 501, women seem more sensitive to the environmental implications of pollution. 79% of women responded that a climate change is a very serious problem (men were 76%), and 80% of women totally agreed on the fact that environmental issues have a direct effect on our daily life and health (men were 76%), 69% of women think that we are not doing enough to tackle the climate change (men were 66%), and more women (85%) than men (82%) think that the EU legislation is necessary for protecting the environment also in their country<sup>57</sup>.

<sup>52</sup> Part-time employment as percentage of the total employment, by sex and age (%), https://data.europa.eu/euodp/en/data/dataset/TfgjUubhKGofk3|18|14LA. See also, European Commission, Flexible working time arrangements and gender equality, Report 2009, available at: https://op.europa.eu/en/publication-detail/-/publication/13a65488-9cd7-46f5-b9f4-d60e3dd09592.

<sup>53</sup> European Commission (2020), 2020 factsheet on the gender pay gap, 4 November 2020, Available at: https://ec.europa.eu/info/sites/info/files/aid\_development\_cooperation

 <sup>53</sup> European Commission (2020), 2020 factsneet on the genuer pay gap, a November 2020, Available at https://ec.europa.eu/eurostat/2020\_factsheet\_on\_the\_gender\_pay\_gap.pdf
 54 Eurostat (2019), Closing the gender pension gap? Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210203-1
 55 Policy Department for Citizens' Rights and Constitutional Affairs - Directorate-General for Internal Policies (2021), Women and Transport. Available at this link: https://www.europarl.europa.eu/thinktank/it/document/IPOL\_STU(2021)701004
 55 TOS (2021) Principles of the Internal Policies (2021), Women and Transport. Available at this link: https://www.europarl.europa.eu/thinktank/it/document/IPOL\_STU(2021)701004

<sup>56</sup> EIGE (2020). Beijing + 25: the fifth review of the implementation of the Beijing Platform for Action in the EU Member States, Publications Office of the European Union. 57 Eurobarometer (2020), Protecting the environment and clima. Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP\_20\_331

Additionally, according to the Eurobarometer 2020 on Mobility and transport, and considering the urban traffic and pollution from home delivery, fewer women (59%) than men (64%) buy goods online and have them delivered to their homes. More women (62%) than men (55%) are available to collect deliveries by themselves at a pickup point, or to wait longer for the delivery (43% versus 41%). Most respondents, especially women (61%), care about the environmental impact of their deliveries, men are 55%58, and this tendency is also confirmed by qualitative research studies both at EU and US level<sup>59</sup>.

The shift from private to public mobility with the aim to reduce CO<sub>2</sub> emissions is not pursued with the same commitment across EU Member States. The attention to the environmental impact of transport mobility although high among all EU inhabitants differs between women and men. According to the results of the Eurobarometer Survey 2020 on Mobility and Transport<sup>60</sup>, in cases where more environmentally friendly solutions for mobility are available, slightly more women (46%) than men (41%) would not adopt them because they could not meet the ticket costs requirements. On the other hand, slightly more men (26%) than women (23%) think that environmentally friendly mobility would necessarily be more expensive and that it is the responsibility of companies and authorities, not of citizens, to cover extra costs (24% men; 23% women).

Furthermore, transport poverty brings different environmental-related externalities, among them: the disproportionate direct exposure of certain population groups to traffic-related environmental consequences, such as air and noise pollution and traffic-related pedestrian casualties; negative impacts of transport infrastructure projects on the lives and livelihoods of the local communities who are living alongside them, as well as the disbanding and dislocation of communities as a result of building these projects<sup>61</sup>.

These externalities are gender related. As also reported by the European Parliament study on Women and Transport, on a typical day women combine several journeys due to their unpaid care work while men are more likely to move during peak hours<sup>62</sup>. Since women's carbon emissions from transport are on average lower than men's - mainly due to men having 44% more car mileage<sup>63</sup>, mostly for work and business<sup>64</sup> - it has been calculated that for instance in Sweden (see the RVU Sweden 2011-2014 - The Swedish National Travel Survey), on average, when the differences in transport behaviour are translated into daily CO2 emissions travel emissions of women are less than 70% of the emissions made by men.

The implementation of the European Green Deal offers the opportunity, unfortunately without being a binding requirement, to promote women's participation in transport planning. The aim is to more effectively meet women's needs and thus develop more effective and sustainable transport services saving resources and improving green performance<sup>65</sup>. A demonstration of this assumption is the fact that in 2012, the resolution of the European Parliament<sup>66</sup> on the role of women in the green economy gave the impetus of introducing more efficient means of public transport and to develop innovative and environmentally friendly means of transportation that would better meet women's mobility needs.

Mobility habits of women and men could affect their exposure to traffic-related environmental externalities (air and noise pollution), as well as traffic-related pedestrian dangers. As already said above, women are more likely to consider the environmental issues, and the impact of ordering home delivery; women are slightly more concerned about the price of greener transport and link this to the prior section on poverty; finally, women have a lower carbon transport footprint.

Planning transport services and designing appropriate infrastructure by mainstreaming gender equality could reduce negative impacts significantly.

<sup>58</sup> Eurobarometer (2020). 'Mobility and Transport', Special Eurobarometer Report, No. 495. Available at: https://europa.eu/eurobarometer/surveys/detail/2226

Goldsmith R.E., Feygina I., Jost, J. (2013), The gender gap in environmental attitudes: A system justification perspective. In Research, Action and Policy: Addressing the Gendered Impacts of Climate Change; Alston, M., Whittenbury, K., Eds.; Springer: Dordrecht, The Netherlands.
 Strapko N., Hempel L., MacIlroy K., Smith K. (2016), Gender differences in environmental concern: Reevaluating gender socialization. Soc. Nat. Resour., 29, 1015–1031.
 Eurobarometer (2020). 'Mobility and Transport', Special Eurobarometer Report, No. 495. Available at: https://europa.eu/eurobarometer/surveys/detail/2226
 Lucas k., Mattioli G., Verlinghieri E., Guzman A. (2016), Transport poverty and its adverse social consequences, Institution of civil engineers, UK

<sup>26</sup> European Commission (2014). She Moves – Women's issues in transportation, Publication Office of the European Union. https://op.europa.eu/en/publication-detail/-/publication/c923ddff-636c-4ba8-87c2-07d2f06cd709/language-en

<sup>63</sup> Winslott Hiselius L., Smidfelt Rosqvist L. (2018), Segmentation of the current levels of passenger mileage by car in the light of sustainability targets—The Swedish case. J. Clean. Prod. 182, 331-337

Smidfelt Rosqvist L., Winslott Hiselius L. (2019), Understanding high car use in relation to policy measures based on Swedish data. Case Stud. Transp. Policy, 7, 28–36.
 Kronsell, A., Smidfelt Rosqvist, L. and Winslott Hiselius, L. (2015), 'Achieving climate objectives in transport policy by including women and challenging gender norms: The Swedish case', International Journal of Sustainable Transportation, 10, 8, pp. 703–711.

<sup>66</sup> European Parliament Resolution of 11 September 2012 on the role of women in the green economy. 2012/2035(INI). https://op.europa.eu/en/publication-detail/-/publication/87d8f4b8-5c48-11e3-914b-01aa75ed71a1/language-en

## 1.7 PLANNING GENDER-SENSITIVE SUSTAINABLE TRANSPORT SERVICES

Collecting gender-disaggregated data is the first step in designing an efficient, affordable and sustainable transport plan. While accounting for gender also the grounds of diversity (age, ethnicity, disability, sexual orientation, ...) should be accounted for by intersecting them with gender. The knowledge gained on who are the potential users of public transport allows for targeting the transport service offered to the real needs of users.

Making local organisations part of the transport planning process through participatory planning is the best way to adapt the service to the territorial needs. Women's associations, but also LGBTQIA+, older people's associations, associations of people with disabilities, ethnic minorities' associations and organisations working on anti-discrimination.

Women suffer disadvantages in rural and urban spaces that are developed by men, primarily for other men. Most transportation planning is based on the assumption that the male 'journey to work' during rush hour by car is the main category of the journey in the urban area. Women workers often undertake intermittent, lateral journeys rather than radial journeys straight to and from the city centre. Although all these factors have been researched and recognised for more than 20 years, minor change has occurred in policy practice<sup>67</sup>.

The analysis conducted during this study points to the need for targeted transport plans addressing all diverse needs emerging from different vulnerabilities. Gender mainstreaming is essential to facilitate the recognition and inclusion of gender considerations in the spatial policy-making process, and to overcome the cultural and attitudinal bias towards women in the planning system. Many problems encountered by women (and possibly LGBTQIA+ people) are due

to a lack of consideration of their needs at the detailed levels of planning implementation, particularly regarding local design considerations.

Transport mobility planners should pay more attention to this area to ensure effective choices for women to travel and more effective transport planning for all. For example, developing standards and guidelines that include gendered needs, such as the width of sidewalks, lighting, rest areas and rest room needs and promoting gender equity in procurement and contracting practices would help<sup>68</sup>. Moreover, gender mainstreaming is not 'just' concerned with sidewalks and lighting. Gender affects both men and women and relates just as much to high-level strategic spatial and environmental policy issues such as city-wide land use, transport, and environmental policy<sup>69</sup>.

Finland and Sweden have the highest representation of women among transport policymakers and in transport administrations<sup>70</sup>, this is why referring to their experiences can be inspirational for policy makers in other EU Member States. There is a long tradition in Sweden which recognises the importance of paying attention to gender aspects in transport policy<sup>71</sup>. In 1997 and then in 2008 the Transportpolitik för en hållbar utveckling (Swedish Government Bill on Transport and sustainable development)<sup>72</sup> ensured an economically efficient and long-term sustainable transport plan for citizens and businesses throughout the country.

Evaluations of the policy-making processes in a gender perspective conducted in these countries highlight that the scarcity of women in leadership positions in policymaking and the lack of systematic methodologies to incorporate gender analysis in development and planning of mobility are the major causes of gender inequalities in transport. The transport system should respond equally to women's and men's transport needs, and this scope must be achieved together with road safety and improved environmental performance as well as improved health, with the aim of achieving net zero emissions of greenhouse gases to the atmosphere by 2050.

<sup>67</sup> Greed C. (2006). Making the divided city whole: mainstreaming gender into planning in the UK, pp. 267-280. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9663.2006.00519.x

<sup>68</sup> Sustainable mobility for all (2019), Global roadmap for action toward sustainable mobility – Gender. Available at: https://thedocs.worldbank.org/en/doc/229591571411011551-0090022019/original/GenderGlobalRoadmapofAction.pdf

<sup>69</sup> Transgen (2007), Gender Mainstreaming European Transport Research and Policies. Building the Knowledge Base and Mapping Good Practices, University of Copenhagen. Available at: https://www.osti.gov/etdeweb/servlets/purl/928105

To EIGE (2012), Review of the implementation in the EU of area K of the Beijing platform for action: women and environment - gender equality and climate change. Available at: http://eige.europa.eu/sites/default/files/Gender-Equality-and-Climate-Change-Report.pdf
 Konsell A., Smidfelt Rosqvist L., Winslott Hiselius L. (2015), Achieving climate objectives in transport policy by including women and challenging gender norms – the Swedish

<sup>72</sup> Available at: https://www.regeringen.se/rattsliga-dokument/proposition/1999/03/prop.-19979856/

Experts affirmed in this sense that "feminine norms will be better suited to accommodate climate and sustainability goals [...] and if masculinity is indeed the norm of the transport sector, [they] identify this as a problem to achieve climate and sustainability objectives"73. It is not only a matter of numbers of women and men involved in the development of transport policy and planning, it is, in fact, a matter of transforming priorities, perspective, and approach using a gender lens. This process should not entrench gender roles by creating a transport system which better accommodates separate gendered needs, but rather creates a new all-inclusive approach which can accommodate a safer, greener mobility, where care mobility needs can be managed more easily regardless of the eventual 'gender' performing them. Of course, this requires greater social change, but the reorienting of a transport system to accommodate all human needs, not just historically male centred commuting, can create in its own small way, a gender equality which dismantles rigid gender norms.

In other words, women's presence in transport policymaking and planning can mean that their norms, attitudes and behaviours can be brought into the policy and plan construction, and this could also benefit in the level of sustainability, energy efficiency and CO<sub>2</sub> emissions reduction<sup>74</sup>.

Participatory planning should overcome the household dimension of poverty and adopt a gender<sup>75</sup> and intersectional approach to transport poverty, in terms of accessibility of the infrastructure and vehicles, as well as inclusive design, which could also discourage aggression and gender-based violence.

<sup>73</sup> Konsell A., Smidfelt Rosqvist L., Winslott Hiselius L. (2015), Achieving climate objectives in transport policy by including women and challenging gender norms - the Swedish

case. Available at: www.regeringen.se
74 Kronsell A., Smidfelt Rosqvist L., Winslott Hiselius L. (2016), Achieving climate objectives in transport policy by including women and challenging gender norms—the Swedish

<sup>75</sup> Starkey P, Hine J. (2014), Poverty and sustainable transport. How transport affects poor people with policy implications for poverty reduction. Available at: https://sustainabledevelopment.un.org/content/documents/1767Poverty%20and%20sustainable%20transport.pdf



## SECOND SECTION: BEST PRACTICES

Several best practices have been identified in the EU countries for this study. Among them, two types were selected of a total of six best practices:

- Those adopting a gender lens in developing transport plans
- Initiatives for transport users aiming at promoting non-discrimination.

This section presents the results of an assessment of these practices. The evaluation exercise was conducted through data collection that included interviews with stakeholders responsible for the development and implementation of the best practices.

#### **POLIS**

POLIS set up a Just Transition Task Force to promote women's safety and security on private and public transport. The task force creates opportunities for continuous dialogue among cities, public transport operators and women's organisations on these issues and devotes specific attention to the identification and sharing of good practices. The focus is particularly on public transport as women are the main users, but it is also important to guarantee safety to women driving private vehicles (including bicycles, scooters and cars). This especially applies to new mobility transport services.

The logic of the intervention is to provide a forum for open discussion on gender issues in transport, exchanging good practices among organisational members and transport operators. With this aim, several working groups have been established to understand how to shape cities and transport around users' needs. As an example, in terms of safety and security, members are implementing ambitious actions to make transport gender equal, particularly in the region of Catalonia, Hungary, Île-de-France and Lisbon.

The initiative will further develop data collection to cover women's transport needs and demands, the safety and security of women in public transport, mobility of care, and women's employment in the transport sector.

The most urgent issues the initiative aims to tackle is safety of infrastructure and security from sexual harassment and aggression in transport. Data collection is also covering other gender-sensitive areas such as women's workers in the transport sector.

The initiative provides opportunities for the exchange of good practices across the EU. In particular, POLIS managing partners are very actively promoting the sharing of good practices among Member States and leading stakeholders' organisations in Europe.

According to the POLIS results, more funding on gender equality projects is needed to further promote transversal actions for gender equality, such as the digitalisation of services to promote more attention to gender equality,

#### **COVERAGE**

EU wide

#### **AREA OF INTERVENTION**

- Women's transport needs and demands
- Safety and security of women in public transport
- Mobility of care
- Women's employment in the transport sector

#### **IMPACT**

- Collection of genderdisaggregated data
- Sustainability of gender-sensitive mobility objectives
- Effective and efficient focus on antidiscrimination

#### **MEASURES** -

#### 'Active Travel and Health'

- Reallocation of space to promote active travel (COVID-19), including pop-up bike lanes, widening of sidewalks, etc;
- (Re)design of streets to create healthier and more liveable cities (including concepts as shared streets, healthy streets, etc.)
- Spatial interventions to regulate vehicle access to urban areas
- Improving walkability in cities;
- Walk & cycle to school, including design and implementation of school streets.
- Gender perspectives in active travel;
- Health impacts of active travel: harnessing the benefits and avoiding health problems related to sedentary lifestyles;
- Urban and transport planning and its relation with health;
- The 15-minute city concept;
- Noise abatement measures;
- Planning and management of public bike-sharing systems.

both in public policies and private initiatives in the sector. Establishing standards of quality at the EU level could also be a tool to enhance gender issues in public transport.

#### SIGNAL OTHER PRACTICES

#### **ENERGY CITIES - PROJECT MOV'ICI'S**

Mobility poverty has a relevant gender dimension. This initiative aims to investigate mobility poverty and to propose measures to tackle this phenomenon. MOV'ICI's is part of the EU-wide project, Energy Cities. A key player in this endeavour is the European Learning Community for Future-Proof Cities, which has established a network for exchanging best practices aimed at addressing and eliminating mobility poverty.

The project accounts for gender issues by considering vulnerable consumers (elderly, disabled and poor citizens) from an intersectional perspective. Poor mobility and access to transport can prevent women from entering the labour market or lead them to choose less profitable jobs because they are closer to home or easier to travel to, or decide not to work at all.

Data on the conditions of Grenoble citizens were collected<sup>76</sup> showing that the 14% of households in Grenoble are likely to suffer from transport poverty as they are both poor and vulnerable living in peri-urban areas. Furthermore, data shows that in Grenoble, people travel twenty-five kilometres by car on average every day, which means that they spend some EUR 50 on fuel every month.

The Grenoble's 'Plan de développement Urbain' (PDU 'Urban Development Plan')f or 2030 was drafted according to the project results and published in 2018<sup>77</sup>. The main objectives of the plan are to tackle energy and transport poverty and to help 'fragile' households. Within these objectives, the PDU identified two 'segments' of the population to target: 'People or households that are in a fragile position when it comes to having access to mobility as well as other aspects of daily life' and 'Households that highly depend on cars who would suffer from an unbalance in their budget from a high and constant rise in fuel prices.' The project MOV'ICI's goal was to 'Facilitate daily travels including in rural zones with public transportation.' By 'équité territoriale' ('territorial equity'), the project identifies the spatial dimension of social justice. People with disabilities, elderly and vulnerable people were targets in the PDU. The results and impacts of the project have been highly appreciated by citizens who have been able to use transport more widely when it is free and more accessible. Poverty and in-work poverty have a gender dimension. Addressing them in transport planning has a gender impact as an output. More and more cities are currently tackling transport poverty, which mostly impacts on women. The energy crisis has made this issue more urgent than before. Thanks to European Union support to these projects, European cities are ahead in providing targeted and adaptive solutions at the local level for their citizens, which have proven successful. However, to deploy appropriate policies in transport poverty, more precise definitions and measurement are needed.

#### **COVERAGE**

EU wide – Local | City of Grenoble, France

#### **AREA OF INTERVENTION**

Mobility poverty

#### **IMPACT**

- Data collection
- Tackle mobility poverty
- Sustainability of gender-sensitive and intersectional mobility objectives

#### **MEASURES**

- Collecting and analysing Gender-disaggregated data
- Intersect the gender dimension with other vulnerabilities
- Designing of the mobility plan according to the finding
- Tackle energy and transport poverty to help 'fragile' households
- Facilitate daily travel including in rural zones with public transportation
- Projecting of a mobile application connecting different means of public and sharing transport

<sup>76</sup> A study 'Energy and transport poverty in Grenoble' (2014) was published.

<sup>77</sup> It was developed by the Syndicat Mixte des Transports en Communis for Grenoble ('Mixed Union for Public Transportation') which promotes access to mobility with the slogan 'Mobility for All'. The PDU was financed by mandatory communities of Grenoble-Alpes Métropole and the Department of Isère.

#### SIGNAL OTHER PRACTICES

Another project in the EU-wide Energy Cities initiative, named Neighbourhood Travel Teams (NTT), is based in Merseyside (UK), and promotes access to employment for poor citizens, who do not own cars or have limited access to transport.

#### DIAMOND

The DIAMOND project aimed to cover fairness and inclusion in line with factors affecting women as users of public transport, automated vehicles and bike sharing and as employees in the transport sector.

According to project assumptions, the assessment and promotion of inclusiveness for women should be based on a multi-method approach (merging both quantitative and qualitative approaches) and apply to specific contexts and applications. Within the framework of the project, the opinion and level of satisfaction of more than 1,100 users of metro and railways in Catalonia, Ireland and Poland were gathered and analysed. The results pointed to significant gender differences in the level of satisfaction with fairness and inclusivity of public surface transport, mainly railways. Women are less satisfied and have more difficulties in their use of railways, and their greatest concerns are safety and security. However, this cannot be generalised for all women across all contexts. Issues around mobility, such as disability/ chronic illness and caring responsibilities, can have a significant impact on users' satisfaction with services. Ethnicity is also a significant factor for satisfaction as people. Predictions of general satisfaction highlighted salient characteristics such as 'frequency of service', 'value for money', 'information about the services offered and the app provided to access this information', 'travel satisfaction security', 'walking from station to destination', 'safe belonging' and 'comfort with available space'.

A 'fair' system seeks to minimise not only explicit discrimination, but also indirect discrimination<sup>78</sup>. This heterogeneity is often not clearly examined in national surveys (not only for women).

The development of a model is planned, as a benchmarking tool to support a balanced gender assessment of services and employment conditions.

Future transport planning needs to consider the mobility of care journeys; to include more women in decision-making jobs, planning and transport service delivery, including front-line services and maintenance services. EU and UK research has shown that transport has the lowest representation of women within the public sector at 6.25% and that women account for just 15% in most decision-making bodies and advisory boards<sup>79</sup>.

#### SIGNAL OTHER PRACTICES

The International Transport Workers' Federation and the International Association of Public Transport signed a joint agreement in March 2019 to strengthen women's employment in public transport. The practical recommendations cover nine core areas: working culture and gender stereotypes, recruitment, work environment and design, facilities (including

#### **COVERAGE**

EU wide

#### **AREA OF INTERVENTION**

- Women's transport needs and demands
- Women's fair access to public transport
- Integration of different means of
- Women's employment in the transport sector

#### **IMPACT**

- Collection of genderdisaggregated data
- Setting a multi-method approach (qualitative and quantitative)
- Sustainability of gender-sensitive mobility objectives
- Effective and efficient focus on intersectional antidiscrimination
- Exploring users' satisfaction by assessing elements of fairness and inclusion by service providers
- Identifying specific needs and barriers experienced by different subgroups considering sociodemographic characteristics and intersectionality
- Publishing key findings in a White paper
- Planning a model development

<sup>78</sup> Di Ciommo, F. et al. (2019), 'A behavioral framework for needs-based transport assessment', in *Measuring Transport Equity*, Elsevier, pp. 265–275 Sustrans (2018), Are we nearly there yet? Exploring gender and active travel. Available at https://www.sustrans.org.uk/media.

sanitation), health and safety at work, work-life balance, training, pay equality and corporate policy. But implementation is not yet strong: in Dublin, recent job advertisements for the Dublin Bus present non-diversified people.

#### NATIONAL PLAN TO COMBAT GENDER-BASED HARASSMENT AND SEXUAL VIOLENCE

In 2015, the Ministry of Internal Affairs (involving the Ministry of Transport) of the Government of France published a National Plan to combat genderbased violence harassment and sexual violence<sup>80</sup>. Among other issues related to gender-based violence, the government committed through the plan to twelve actions against harassment and sexual violence in transport to bring the issue of violence against women to the public attention and involved feminist collectives and associations.

Feminist associations took part in the consultation, as did SNFC transport operators, the police and the ministerial cabinets involved in shared planning, with the activation of a toll-free number; training of security agents on gender-based violence; and an awareness-raising campaign with municipalities and territorial authorities. A limited budget for the implementation of the plan did not allow for data collection.

The logic of the intervention was to support women's rights and fighting gender-based violence. The tools developed, however, also had an impact on other minorities, e.g. the LGBTQIA+ community or other people with intersectional characteristics related to ethnic origin, race and age.

The toll-free number that was activated was linked to public transport security staff and also used to prevent incidents of terrorism. Even in the absence of data, an increase in attention to the issue of gender-based violence in public transport was detected, with women organising events requesting increased lighting and video surveillance cameras.

Subsequent developments saw an increase in the debate on gender-based violence. However, the Ministry for Women's Rights depended on the budgets of other Ministries in terms of financial capacity for the project. This situation required cross-party agreements and suffered slowdowns in implementation. Therefore, many discussions remained without effective implementation of the project, and the change of government blocked further developments.

Adopting a feminist approach to managing violence against women highlighted the need for training security staff on gender issues, violence against women and LGBTIQA+ people, and harassment.

The project is not EU funded. However, by promoting it as a good practice, the EU could contribute to the EU Strategy for Gender Equality 2020–25 that includes the fight of gender stereotypes and against violence against women.

#### COVERAGE

National | France

#### **AREA OF INTERVENTION**

Safety and security of women in public transport

#### **IMPACT**

Supporting women's rights and fighting gender-based violence

#### **MEASURES**

#### **BETTER PREVENTION**

- 1. Participatory "walks" by women users to improve the safety of women in transport
- 2. An awareness-raising campaign in autumn 2015
- 3. Permanent messages at bus stops and train stations
- 4. Experimenting on-demand bus stops during the nights
- 5. Mobilising services combating GBV throughout country territory

#### MORE EFFECTIVE RESPONSE TO **SUCH SITUATIONS**

- 6. Effective Telephone service for women to combat GBV
- 7. Activation of SMS alert to report situations of violence and harassment
- 8. Development of new digital tools for alerting and reporting GBV episodes
- 9. Monitoring work of the phenomenon

#### BETTER SUPPORT FOR WOMEN, IN GENDER-NEUTRAL PUBLIC **TRANSPORT**

- 10. Training security staff on gender issues
- 11. Encouraging diversity among transport employee
- 12. Fighting sexism in transport messages

<sup>80</sup> Available at: https://www.gouvernement.fr/sites/default/files/action/piece-jointe/2015/07/plan-national-de-lutte-contre-le-harcelement-sexiste-et-les-violences-sexuelles-dansles-transports-en-commun.pdf.

#### SIGNAL OTHER PRACTICES

The *Project crocodiles* gathers testimonies of women victims of sexual and gender-based harassment. Initially focused on public spaces and street harassment, it has also received and drawn testimonies of harassment in the workplace, assaults, police failures in handling complaints, and, recently, obstetric and gynaecological violence.

## MOBILITY OF CARE, MIT DEM BABY UNTERWEGS (ON THE ROAD WITH THE BABY)

The Autonomous Province of Bolzano – South Tyrol South Tyrolean Provincial Administration, Users Transport Office published in June 2021 a website page reporting information for transport users travelling with children. Most babies like to be on the road and love the rocking movements of the stroller and slings, when for instance cycling. And parents enjoy being able to be mobile with their baby – as long as the baby is safe on the road.

#### By bus and train

Children under the age of 6 travel free of charge on South Tyrolean public transport and do not need a ticket. However, they may only use public transport if accompanied by an adult.<sup>81</sup> In most cases, trains and public city buses provide barrier-free access. While there are usually several marked spaces for baby prams on the trains, a maximum of two parking spaces for prams are provided on the city buses for safety reasons. On intercity buses, strollers can be folded up in the storage space of the bus (if available).

#### By bike

The child seat must comply with the legal requirements. Depending on the weight of the child, the seat can be mounted on the front or back of the wheel.

The logic of the intervention is to create a transport plan that is attractive overall for the needs of all people (accounting for intersectionality), which includes those needs related to work (both full-time, part-time and occasional), leisure time, care and assistance duties, etc., with an implicit relevant gender relevance. To meet these diverse needs, a continuous frequency of public transport throughout the day is ensured, without reducing the offer during off-peak hours. This guarantees ample supply of public transport at any time. To make the transport network attractive to both a typical worker and those who have to connect several routes for caring, transport lines within the province are planned providing for interconnection between different lines wherever possible.

Convenient tariff measures promote or facilitate, the mobility of those groups of people for whom mobility and social participation are more difficult for several reasons (children under 6 years of age are transported free of charge on public transport). Adopting different perspectives and considering needs beyond work when planning public transport allows diverse needs to be met.

Developing measures for better mobility of care has a gender impact.

#### **COVERAGE**

Local | Province of Bolzano - Italy

#### **AREA OF INTERVENTION**

- Women's transport needs and demands
- Safety of women and children in public transport
- Mobility of care

#### **IMPACT**

- Supporting care givers mobility
- Adopting different perspectives and considering needs beyond work when planning public transport
- Planning transport considering a gender and intersectional perspective

#### **MEASURES**

- Reserving a website page for spreading safety information
- Spreading information for combining different means of transport
- Assessing services for care givers and children safety
- Creating an attractive transport plan for all, which includes needs related to work (both full-time, part-time and occasional), leisure time, care and assistance duties, etc.
- Offering convenient tariffs for children and vulnerable target of users

#### SIGNAL OTHER PRACTICES

The reduction of fares for people over 65 (https://www.suedtirolmobil.info/it/ticket/65piu) as well as for schoolchildren and students (https://www.suedtirolmobil.info/it/ticket/abopiu).

#### **SECURITY BAROMETER SURVEY - STIB**

In 2021, Belgian Stib – Société des Transports Intercommunaux Bruxellois – launched a targeted Security Barometer Survey. The main objective of this survey (conducted by telephone interviews) was to investigate users' feelings of lack of security while using public transport. The survey was funded by internal resources and the results were circulated internally to develop a security strategy to respond to users' needs. Stakeholders have been involved in the definition of methodology. Data is now under analysis and includes gender-disaggregated data with an intersectional approach in data analysis.

The main goal of the survey is to bring data and metrics on feelings of insecurity into discussion and to understand how it affects users' behaviour in travelling by public transport: it investigates concrete events or facts such as aggression, as well as infrastructure which could or could not create a feeling of security or insecurity, for example, lighting in the corners of the subway. Ticket control is another area the survey investigates: if the presence of security staff in uniform checking the travel ticket is a reason for feeling safer or unsafe.

The staff responsible for this survey is pushing hard with top management for this data collection to become annual. Digital information for transport users is also a further development of this project.

Data collection is needed to develop a more efficient, effective and safer transport offer and experience. Collecting gender-disaggregated data allows for the implementation of gender-sensitive actions to respond to diverse needs coming from different users of public transport.

#### SIGNAL OTHER PRACTICES

Transport for London – UK: Consultations & surveys – Transport for London (tfl.gov.uk)

#### **COVERAGE**

Local | Brussels - Belgium

#### **AREA OF INTERVENTION**

Developing a security strategy in public transport

#### **IMPACT**

- Collection of genderdisaggregated data
- Sustainability of security mobility objectives
- Effective and efficient focus on antidiscrimination

#### **MEASURES**

- Creating alliance with stakeholders
- Selecting area of intervention
- Developing and submitting the survey to transport users
- Collecting Genderdisaggregated data
- Involving transport planners and responsible for transport security for further development of transport services according with the survey fundings



# THIRD SECTION: A CHECKLIST FOR TRANSPORT POLICYMAKERS AND PLANNERS

The lack of attention to gender and to the various grounds of possible discrimination (age, disability, sexual orientation, ethnic origin,...) affects public transport services, and provokes countereffects on users (for instance transport poverty particularly present among women contributes reinforcing the vicious circle of unemployment and poverty/social exclusion) and on the environment (for instance when the public means of transport are not effective between schools and homes the use of private means of transports by carers, often cars, is encouraged, increasing CO<sub>2</sub> emissions).

This checklist provides guidance on how to integrate the gender and anti-discrimination perspective into the planning process of public transports. It aims at promoting a change of point of view in public transport planning providing concrete tools for policy-makers responsible for transport planning.

They are guiding questions designed for the local and regional level but that can be easily adapted for the national level.

## GENDER-DISAGGREGATED DATA ON TRANSPORTS

Collecting gender -disaggregated data on transports is pivotal for planning effective public transport services. Data collection should aim at answering to the following basic guiding questions:

- What are the means of transports that respectively women and men in the relevant area (a municipality? A region? A country? Several countries?) use the most? (Bus, train, undergrounds, province or regional busses, private cars, private bicycles, private electric kick-scooters, shared cars, shared bicycles, shared electric kick-scooters, etc..)
- What are the usual itineraries of women and men in a typical day? Is there any difference if we consider women and men of different ages, different ethnic origins, etc...?

- What is the means of transport that women and men use to reach their workplace? Is there any difference if we consider women and men of different ages, different ethnic origins, etc...?
- What are the means of transports that women and men carers use with the people they care for? Is there any difference if we consider women and men of different ages, different ethnic origins, etc...?
- What are the means of transports that women and men use to go shopping? Is there any difference if we consider women and men of different ages, different ethnic origins, etc...?
- What are the means of transports that women and men use the most in their spare time (go to sport activities, go out with friends, etc...)? Is there any difference if we consider women and men of different ages, different ethnic origins, etc...?
- What are the means of transports that women and men adopt for long distance journeys? Is there any difference if we consider women and men of different ages, different ethnic origins, etc...?
- Are women associations involved in the design of data collection for transport planning activity?

#### **MOBILITY OF CARE**

Carers have specific transport needs. They cover every day the same complex journeys between home, work, day-care centres. They need transport services that ensure accessibility and is point to point. They often travel in the neighbourhood but need a high frequency service in certain time slots. The following guiding questions can support an effective planning to meet their needs.

• Do the transport timetable and connections consider the caregivers' mobility needs (for instance the typical daily paths of mothers and fathers, ...)?

- Is information on accessibility of the transport infrastructure available and easy to get for carers and for they cared ones (free-toll information number, booklets, websites and social networks providing continuous updates, ...)?
- Does the transport plan cover the neighbourhoods' paths?
- Does it exist a transport service for getting children to school?
- Considering stops and interconnections of public transport services do platforms, steps, and vehicles allow to travel with buggies, wheelchairs, ...?
- Are family and women associations involved in transport planning?

#### SEXUAL HARASSMENT AND GENDER-BASED VIOLENCE IN PUBLIC TRANSPORT

There is unfortunately a high prevalence of these phenomena on the public transports and it seems that victims are not only women. Sexual orientation is also a ground for this type of victimisation. Policy makers can act effectively to limit the phenomena. The following guiding questions indicate how.

- Are transport services on time especially in poorly frequented areas?
- Are stops, platforms, transit routes between transport connection hubs sufficiently enlightened and guarded?
- Are transport staff (drivers and clerks) trained on Gender Based Violence (GBV) and harassment issues? Do they have protocols to follow in case of GBV and harassment episodes?
- Is the transport security staff trained to intervene and support drivers and clerks? Do they follow specific protocols?
- Is there any campaign against gender-based violence and harassment on public transport in place?
- Are women associations specialised in GBV involved in transport planning?

## THE GENDER PERSPECTIVE IN OLDER TRANSPORT USERS

People with disabilities and older people encounter major problems in their daily journeys. Providing accessibility and specific support to them is required by the United Nation Convention on the Rights of Persons with Disabilities. There exist several tools to support planning and implementation in this area as much attention has been given to it. Here below few suggestions are provided also assuming a gender perspective into it.

- Do infrastructures allow people with impairments to travel on public transport autonomously? Are women specific needs also considered?
- Are information on stops and stations about barrier-free access sufficiently clear and available for all potential users (free-toll information number, booklets, websites and social networks providing continuous updates, accessibility is granted to people with different types of impairments...)?
- Does the public transport service connect local and sub-urban areas?
- Are people with disabilities and older people association involved in the transport planning activity?

#### GENDERING MOBILITY POVERTY

Difficulties in traveling may hinder participation to the labour market favouring precarious employment or unemployment and may trap people in the vicious circle of social exclusion and poverty. The right to mobility needs to be granted especially to the most vulnerable groups of the society, poor women are among them as it is well known that they are less likely to have alternatives (they are less likely to have a driving license and to own a private car) to public transports. Suggestions are provided below on how to implement fair public transports accounting for gender equality.

- Map the most common routes to work in the area and investigate about women and men travel habits.
- Is there an area of attraction for work? Is it well connected to other areas via public transports?
- What about local transports within limited geographical areas: are they well developed?

- Is there any economic support to the most vulnerable for the use of public transports? In case there are not consider introducing them.
- Involve representatives from the Unions and from civil society organisations fighting poverty in the participatory planning ensuring that women's rights are well represented.

## STRATEGIES FOR ENVIRONMENTALLY SUSTAINABLE MOBILITY

Decarbonisation is a priority to counteract the climate change that is threatening the lives of many around the world. At the same time, the costs of CO<sub>2</sub> reduction should not be borne by the most vulnerable groups in European societies. Therefore, the guiding questions for this issue are the following.

- Do the transport infrastructure and vehicles in line with the green transition recommendations?
- What are the transport needs of inhabitants and are you planning the mobility service accordingly, so to reduce CO<sub>2</sub> emissions? Are they different for women and men?
- Do the professionals in charge of transport planning own the expertise on how to protect the environment in a gender perspective?

- Awareness raising initiatives to discourage the use private cars and to promote public transport should be organised targeting the various groups of the society.
- Representatives of environmental organisations should be actively involved in participatory planning of public transports including women.

#### MAINSTREAMING GENDER INTO TRANSPORT POLICYMAKING

Finally, the guiding principles below indicate how to properly mainstream gender in transports.

- Is there a representation of women in the team in charge of transport policy design? Do they have a role in the decisional process?
- Is gender-disaggregated data on mobility needs already available and accessible to planners?
- Are people experiencing vulnerabilities duly represented in the process of transport planning?
- Does public transport affect women and men and their ability to attain gender equality goals?
- Is the decisional process for participatory planning transparent? Does it allow a genuine participation of all stakeholders particularly women's Non Governmental Organisations (NGOs)?



## CONCLUSIONS AND RECOMMENDATIONS

Despite a **growing attention on gender mainstreaming in transport policy**, as the literature review and the good practices analysis conducted show, the field is still relatively new.

Gender-disaggregated data on the phenomenon is still limited. More in general public authorities do not collect data on users' transport mobility needs and when they do the focus is rarely on gender or on other individual characteristics like ethnic origin, disability, age, sexual orientation, employment status .... As a result most of the transport plans are developed considering the need of a neutral citizen, men, Caucasian, heterosexual and full-time worker.

This gap of knowledge needs to be addressed as it does not allow to develop an efficient, affordable, and sustainable transport service. More specifically the gap of information on gender differences in transport use and needs causes gender biases into the transport policy.

Policymakers can properly address these biases in the area of transports only if adequately trained on gender issues. Gender training is the first step in gender mainstreaming implementation in any policy area including transports.

Mobility of care identifies caregivers' needs in transport. Caregivers are mostly women and travel several times in a day, mostly for care reason. Considering information on caregivers' mobility needs can impact on public transport planning (timetables and connections).

Gender-based violence and sexual harassment are also issues to be addressed when planning transports. Transport infrastructure is not designed according to a gender-sensitive approach and this aspect contributes to the proliferation of episodes of GBV and sexual harassment. Involving feminist and LGBTIQA+ association into the process of transport planning and in drafting guidelines for

inclusive transport infrastructures could be a tool for fighting GBV and sexual harassment. Designing campaigns against GBV and sexual harassment in public transport can increase awareness on the matter. Training transport staff and transport security staff on GBV and sexual harassment can guarantee a prompt response to the phenomena.

Introducing a gender perspective on old people as transport users is a way to build inclusive mobility services. According to the findings, many old people are women, and they are also more likely than men to be affected by mobility impairments while they are less likely than men to own a private car. When older women cannot be able to rely on relatives or friends for their mobility needs, mostly they turn to public transport services. Eliminating infrastructural barriers and disseminating information on accessibility of stops and stations can encourage autonomy among old people.

Poor transport services and their high prices do not allow the participation of the most vulnerable groups of the society in work and social life and prevent them from improving their living conditions. This phenomenon is defined transport poverty. Statistics reveal that women are more likely to be affected by it as they are more likely to be employed on low-quality job contracts, and to work part-time due to their role of main carers within the family. At the same time, women are also more likely to use public transports. Making public transport available and affordable in all peripheric areas will help guarantee women's access to employment and social life and to contribute to the household income.

Designing and planning public transport considering affordability, availability and sustainability is not just a socio-economic issue, but also an environmental issue. Counteracting the climate change by reducing CO<sub>2</sub> emissions is a priority but its costs should not be borne by the most vulnerable groups.

There are not one-size measures fitting all, and mainstreaming gender is not a matter of spending more money. It is instead investing money where there is a need, improve the quality of public spending reducing greenhouse emission.

Involving associations from diverse groups particularly women's NGOs into the transport planning process is a way to deliver effective, efficient, inclusive and thus sustainable mobility services.



### **BIBLIOGRAPHY**

- Ari, A., Leva, M. C., D'Arcy, L., & Kinahan, M. (2022). Fairness and Inclusion for Users of Surface Transport—An Exploratory Thematic Study for Irish Users. Sustainability, 14(11), 6480.
- Berrill, K. T. (1992), Anti-Gay Violence and Victimization in the United States: An Overview, In Hate Crimes: Confronting Violence against Lesbians and Gay Men, edited by G. M. Herek and K. T. Berrill, 19–45, London, Sage.
- Chowdhury, S. and van Wee, B. (2020). 'Examining women's perception of safety during waiting times at public transport terminals', Transport Policy, 94, pp. 102–108.
- De Micheli B., Capesciotti M., Paoletti R. and Sansonetti S. (2020), Working, yet poor. Gender Policy and indicators report, European Union's Horizon 2020 research and innovation programme under grant agreement No 870619
- Diamond EU project White paper: White Paper: Addressing gender-specific needs in Europe's current and future transport systems. Available at: <a href="https://diamond-project.eu/download/white-paper-addressing-gender-specific-needs-in-europes-current-and-future-transport-systems/">https://diamond-project.eu/download/white-paper-addressing-gender-specific-needs-in-europes-current-and-future-transport-systems/</a>
- Di Ciommo, F. et al. (2019), "A behavioral framework for needs-based transport assessment", in Measuring Transport Equity, Elsevier, pp. 265-275.
- Dodds, C., P. Keogh, and F. Hickson, (2005), It Makes Me Sick: Heterosexism, Homophobia and the Health of Gay and Bisexual Men. Technical Report. London: Sigma Research. Accessed 27 Jul 2020. Available at: <a href="https://researchonline.lshtm.ac.uk/id/eprint/1399">https://researchonline.lshtm.ac.uk/id/eprint/1399</a>
- Duchéne C. (2011). Gender and transport. International Transport Forum Discussion Papers, No. 2011/11, OECD Publishing
- EEA (2019). The first and last mile the key to sustainable urban transport transport and environment report 2019, EEA Report No 18/2019, European Environment Agency.
- EIGE (2012), Review of the implementation in the EU of area K of the Beijing platform for action: women and environment gender equality and climate change. Available at: <a href="http://eige.europa.eu/sites/default/files/Gender-Equality-and-Climate-Change-Report.pdf">http://eige.europa.eu/sites/default/files/Gender-Equality-and-Climate-Change-Report.pdf</a>
- EIGE (2016). Gender in Transport. Publication Office of the European Union. Available at: <a href="https://eige.europa.eu/sites/default/files/documents/ti\_pubpdf\_mh0116810enn\_pdfweb\_20170124171709.pdf">https://eige.europa.eu/sites/default/files/documents/ti\_pubpdf\_mh0116810enn\_pdfweb\_20170124171709.pdf</a>
- EIGE (2019), Gender equality Index. Work-life balance. Available at: https://eige.europa.eu/publications/gender-equality-index-2019-work-life-balance
- EIGE (2020). Beijing + 25: the fifth review of the implementation of the Beijing Platform for Action in the EU Member States, Publications Office of the European Union. Available at: <a href="https://eige.europa.eu/publications/beijing-25-fifth-review-implementation-beijing-platform-action-eu-member-states">https://eige.europa.eu/publications/beijing-25-fifth-review-implementation-beijing-platform-action-eu-member-states</a>
- EMTA (2007), Older people and public transport. Challenges and chances of an ageing society
- Eurobarometer (2014). 'Quality of Transport', Special Eurobarometer Report, No. 422a. Available at: <a href="https://data.europa.eu/data/datasets/s2017\_82\_2\_422a\_422b?locale=en">https://data.europa.eu/data/datasets/s2017\_82\_2\_422a\_422b?locale=en</a>
- Eurobarometer (2020). 'Mobility and Transport', Special Eurobarometer Report, No. 495. Available at: <a href="https://europa.eu/eurobarometer/surveys/detail/2226">https://europa.eu/eurobarometer/surveys/detail/2226</a>
- Eurobarometer (2020), Protecting the environment and clima. Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP 20 331
- European Commission (2009), Flexible working time arrangements and gender equality. Available at: <a href="https://op.europa.eu/en/publication-detail/-/publication/13a65488-9cd7-46f5-b9f4-d60e3dd09592">https://op.europa.eu/en/publication-detail/-/publication/13a65488-9cd7-46f5-b9f4-d60e3dd09592</a>
- European Commission (2014). She Moves Women's issues in transportation, Publication Office of the European Union. Available at: <a href="https://op.europa.eu/en/publication-detail/-/publication/c923ddff-636c-4ba8-87c2-07d2f06cd709/language-en">https://op.europa.eu/en/publication-detail/-/publication/c923ddff-636c-4ba8-87c2-07d2f06cd709/language-en</a>
- European Commission (2020), 2020 factsheet on the gender pay gap, 4 November 2020. Available at: <a href="https://ec.europa.eu/info/sites/info/files/aid\_development cooperation fundamental rights/2020 factsheet on the gender pay gap.pdf">https://ec.europa.eu/info/sites/info/files/aid\_development cooperation fundamental rights/2020 factsheet on the gender pay gap.pdf</a>
- European Commission (2021), Union of Equality Strategy for the Rights of Persons with Disabilities 2021-2030. Available at: <a href="https://ec.europa.eu/social/main.isp?catld=738&langld=en&publd=8376&furtherPubs=yes">https://ec.europa.eu/social/main.isp?catld=738&langld=en&publd=8376&furtherPubs=yes</a>
- European Commission (2022), Eurostat, 'Part-time employment as percentage of the total employment, by sex and age (%)' (Ifsa\_eppga), 2022. Available at: <a href="http://data.europa.eu/88u/dataset/TfgjUubhKGofk3|18|14LA">http://data.europa.eu/88u/dataset/TfgjUubhKGofk3|18|14LA</a>
- European Parliament Resolution of 11 September 2012 on the role of women in the green economy. 2012/2035(INI). Available at: <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52012IP0321">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52012IP0321</a>
- Eurostat (2019), Closing the gender pension gap? Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210203-1
- $FRA~(2020), A~long~way~to~go~for~LGBTI~equality.~Available~at:~ \underline{https://fra.europa.eu/sites/default/files/fra~uploads/fra-2020-lgbti-equality-1~en.pdf}$
- Fogg-Davis, H. G. 2006. "Theorizing Black Lesbians within Black Feminism: A Critique of Same-Race Street Harassment." Politics & Gender 2 (1): 57–76
- Garcia-Jimenez, E., Poveda-Reyes, S., Molero, G. D., Santarremigia, F. E., Gorrini, A., Hail, Y., Ababio-Donkor, A., Leva, M. C., & Mauriello, F. (2020). Methodology for Gender Analysis in Transport: Factors with Influence in Women's Inclusion as Professionals and Users of Transport Infrastructures. Sustainability, 12(9), 3656

- Greed C. (2006). Making the divided city whole: mainstreaming gender into planning in the UK, pp. 267-280. Available at: <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9663.2006.00519.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9663.2006.00519.x</a>
- Goldsmith R.E., Feygina I., Jost, J. (2013), The gender gap in environmental attitudes: A system justification perspective. In Research, Action and Policy: Addressing the Gendered Impacts of Climate Change; Alston, M., Whittenbury, K., Eds.; Springer: Dordrecht, The Netherlands
- Hail, Y., & McQuaid, R. (2021). The Concept of Fairness in Relation to Women Transport Users. Sustainability, 13(5), 2019
- Hounsell N. B., Shrestha B. P., McDonald M. and Wong A., Open data and the needs of older people for public Transportation Research Group, University of Southampton, 2016, Southampton, SO17 1BJ, UK
- Institut Paris Region (2019), The feeling of insecurity in public transport in the Paris region in 2019. Available at: <a href="https://www.institutparisregion.fr/">https://www.institutparisregion.fr/</a> nos-travaux/publications/le-sentiment-dinsecurite-dans-les-transports-collectifs-franciliens-en-2019/
- ITF (2019), ITF/UITP Positive Employer Gender Policy, Available at: <a href="https://www.itfglobal.org/en/reports-publications/">https://www.itfglobal.org/en/reports-publications/</a> itfuitp-positive-employer-gender-policy
- $ITF \ (2019). \ Decarbonising \ Transport \ Brochure, \ Available \ at: \ \underline{https://www.itf-oecd.org/decarbonising-transport-brochure}$
- ITF (2021), Transport Innovation for Sustainable Development: A Gender Perspective, OECD Publishing Paris. Available at: <a href="https://www.itf-oecd.org/transport-innovation-sustainable-developmentgender-perspective">https://www.itf-oecd.org/transport-innovation-sustainable-developmentgender-perspective</a>
- ITF Transport Outlook 2021. Available at: https://www.itf-oecd.org/itf-transport-outlook-2021
- Kronsell, A., Smidfelt Rosqvist, L. and Winslott Hiselius, L. (2015), 'Achieving climate objectives in transport policy by including women and challenging gender norms: The Swedish case', International Journal of Sustainable Transportation, 10, 8, pp. 703–711
- Kronsell A., Smidfelt Rosqvist L., Winslott Hiselius L. (2016), Achieving climate objectives in transport policy by including women and challenging gender norms-the Swedish case. J. Sustain. Transp. 10, 703-711
- Leva M.C, Kinahan M., Burns A., Thimnu A., Hail Y., Gorrini A., Santarremigia F., Presas Quintana M. (2021) Deliverable 4.4 of DIAMOND project. Integrated interdisciplinary analysis report. Available at: <a href="https://www.diamond-project.eu">www.diamond-project.eu</a>
- Litman T (2015) Transportation Affordability. Evaluation and Improvements Strategies. Victoria Transport Policy Institute, Victoria, Canada
- Lucas k., Mattioli G., Verlinghieri E., Guzman A. (2016), Transport poverty and its adverse social consequences, Institution of civil engineers, UK
- Lucas K. (2021), Transport and social exclusion: Where are we now? Transport Studies Unit, University of Oxford
- Lubitow, A., J. D. Carathers, M. Kelly, and M. Abelson (2017), Transmobilities: Mobility, Harassment, and Violence Experienced by Transgender and Gender Nonconforming Public Transit Riders in Portland, Oregon." Gender, Place and Culture 24 (10): 1398–1418
- Mobilität in Deutschland 2008 MID 2008 (Mobility in Germany) Information Meeting Add-Ons Bonn, 24 July 2007. Available at: <a href="http://www.mobilitaet-in-deutschland.de/pdf/Mobility%20in%20Germany%202008\_Projects%20Presentation.pdf">http://www.mobilitaet-in-deutschland.de/pdf/Mobility%20in%20Germany%202008\_Projects%20Presentation.pdf</a>
- Newton, A. 2014. "Crime on Public Transport." In Encyclopedia of Criminology and Criminal Justice, edited by G. Bruinsma and D. Weisburd, 709–720
- Nikitas, A., et al., 2021, 'Cycling in the era of COVID-19: lessons learnt and best practice policy recommendations for a more bike-centric future', Sustainability 13(9)
- OCH (2014-2020), Visibilitzem la lebofòbia. Compilaciò recerca qualitativa lesbofòbia. Available at: <a href="https://och.cat/wp-content/uploads/2021/09/Visibilitzem-lesbof%C3%B2bia-completo.pdf">https://och.cat/wp-content/uploads/2021/09/Visibilitzem-lesbof%C3%B2bia-completo.pdf</a>
- OCH (2019), ESTUDI SOBRE LES AGRESSIONS LGTBI-FÒBIQUES DEL 01/01/2019 A 31/07/2019. Available at: <a href="https://och.cat/wp-content/uploads/2019/08/Estudi-Barcelona-2019.pdf">https://och.cat/wp-content/uploads/2019/08/Estudi-Barcelona-2019.pdf</a>
- Ortega Hortelano, A., Grosso, M., Haq, A., Tsakalidis, A., Gkoumas, K., Van Balen, M. and Pekar, F. (2019). Women in European Transport with a focus on Research and Innovation, Publications Office of the European Union. Available at: <a href="https://publications.jrc.ec.europa.eu/repository/handle/JRC117687">https://publications.jrc.ec.europa.eu/repository/handle/JRC117687</a>
- Policy Department for Citizens' Rights and Constitutional Affairs Directorate-General for Internal Policies (2021), Women and Transport. Available at: https://www.europarl.europa.eu/thinktank/it/document/IPOL\_STU(2021)701004
- Polk M. (2004), The influence of gender on daily car use and on willingness to reduce car use in Sweden, Journal of Transport Geography, Volume 12, Issue 3, pp. 185-195. Available at: https://www.sciencedirect.com/science/article/pii/S0966692304000158
- Sánchez de Madariaga, I. (2013). 'The mobility of care: Introducing new concepts in urban transportation'. In: I. Sánchez de Madariaga and M. Roberts (eds.), Fair shared cities: The impact of gender planning in Europe, Routledge
- Sánchez de Madariaga, I. (2018). The mobility of care, Lecture for the UNHABITAT For A Better Urban Future Series. Available at: <a href="https://unhabitat.org/mobility-of-care-ines-sanchez-de-madariaga">https://unhabitat.org/mobility-of-care-ines-sanchez-de-madariaga</a>
- Sánchez de Madariaga, I. and Zucchini, E. (2019). 'Measuring Mobilities of Care, a Challenge for Transport Agendas'. In: C. Scholten and T. Joelsson (eds.), Integrating Gender into Transport Planning. Palgrave Macmillan
- Saunders, K. (2019,). The Real Reason Why Mobility is Not Women-Friendly. The Urban Mobility Daily. https://urbanmobilitydaily.com/the-real-reasonwhy-mobility-is-not-women-friendly/
- Sustrans (2018), Are we nearly there yet? Exploring gender and active travel. Available at https://www.sustrans.org.uk/media
- SHARE (2021), Survey of Health, Ageing and Retirement in Europe. Available at: <a href="http://www.share-project.org">http://www.share-project.org</a>
- Smidfelt Rosqvist L., Winslott Hiselius L. (2019), Understanding high car use in relation to policy measures based on Swedish data. Case Stud. Transp. Policy. 7. 28–36.
- Starkey P, Hine J. (2014), Poverty and sustainable transport. How transport affects poor people with policy implications for poverty reduction. Available at: https://sustainabledevelopment.un.org/content/documents/1767Poverty%20and%20sustainable%20transport.pdf
- Stark, J. and Meschik, M. (2018), 'Women's everyday mobility: Frightening situations and their impacts on travel behaviour', Transportation Research Part F: Traffic Psychology and Behaviour, 54, pp. 311–323
- Strapko N., Hempel L., MacIlroy K., Smith K. (2016), Gender differences in environmental concern: Reevaluating gender socialization. Soc. Nat. Resour., 29, 1015–1031

- Sustainable mobility for all (2019), Global roadmap for action toward sustainable mobility Gender. Available at:  $\frac{\text{https://thedocs.worldbank.org/en/doc/229591571411011551-0090022019/original/GenderGlobalRoadmapofAction.pdf}$
- Sustrans (2018), Are we nearly there yet? Exploring gender and active travel. Available at <a href="https://www.sustrans.org.uk/media">https://www.sustrans.org.uk/media</a>
- TfL (2016), Action on Equality: TfL's Commitments to 2020. London: Transport for London. Accessed 27 Jul 2020. Available at: <a href="https://content.tfl.gov.uk/action-on-equality-tfls-commitments-to-2020.pdf">https://content.tfl.gov.uk/action-on-equality-tfls-commitments-to-2020.pdf</a>
- TfL (2017), 2016/17 Progress Report: Action on Equality. London: Transport for London. Accessed 27 Jul 2020. Available at: <a href="https://content.tfl.gov.uk/2016-17-progress-report-action-on-equality.pdf">https://content.tfl.gov.uk/2016-17-progress-report-action-on-equality.pdf</a>
- Transgen (2007), Gender Mainstreaming European Transport Research and Policies. Building the Knowledge Base and Mapping Good Practices, University of Copenhagen. Available at: <a href="https://www.osti.gov/etdeweb/servlets/purl/928105">https://www.osti.gov/etdeweb/servlets/purl/928105</a>
- WHO (2007), Checklist of Essential Features of Age-friendly Cities. Available at: <a href="https://extranet.who.int/agefriendlyworld/wp-content/uploads/2018/04/Age-Friendly-Checklist-WHOedit.pdf">https://extranet.who.int/agefriendlyworld/wp-content/uploads/2018/04/Age-Friendly-Checklist-WHOedit.pdf</a>
- Winslott Hiselius L., Smidfelt Rosqvist L. (2018), Segmentation of the current levels of passenger mileage by car in the light of sustainability targets–The Swedish case. J. Clean. Prod. 182, 331–337
- Wretstrand, Anders & Ståhl, Agneta. (2010). User needs and expectations-Findings from the Euro Access Project

