COUNTING WOMEN SO THAT WOMEN COUNT

AN INTERNATIONAL SURVEY OF THE STATE OF TRANSPORT DATA AND GENDER
COUNTING WOMEN SO THAT WOMEN COUNT: AN INTERNATIONAL SURVEY OF THE STATE OF TRANSPORT DATA AND GENDER
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The FIA Foundation is an independent UK registered charity which supports an international programme of activities promoting road safety, the environment and sustainable mobility, as well as funding motor sport safety research. Our aim is to ensure ‘Safe, Clean, Fair and Green’ mobility for all, playing our part to ensure a sustainable future.

Written by: Heather Allen

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COUNTING WOMEN SO THAT WOMEN COUNT

AN INTERNATIONAL SURVEY OF THE STATE OF TRANSPORT DATA AND GENDER
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INTRODUCTION

FIA Foundation believes strongly in evidence-based policy. In the case of gender - as in every other area - it is important that we use the best possible evidence in order to build a case for change. This report reviews the state of play in terms of transport data, and the gaps in our knowledge about women’s transport behaviours, as reported in a survey of over 140 transport professionals. As this data is a crucial part of the evidence base for developing inclusive transport policies these are important gaps to fill, and the paper also begins to identify priority areas for improved data collection. Whilst this is a valuable contribution in itself, the paper also encourages further investigation towards the better understanding of women’s mobility patterns and needs.

The ability to move freely is considered to be an essential human right, and one that has been brought sharply into the spotlight with the recent COVID-19 pandemic. More than ever, it has become important to understand mobility behaviours, so that policy and systems can be tailored to people’s needs. This study helps to shed light on the evidence used to respond to women’s travel needs, as a component of inclusivity, and provides some guidance on areas for further investigation as a new Post-COVID-19 transport paradigm emerges.

Women represent just under 50% of the world’s adult population, yet the evidence base used to make most decisions about transport do not take their needs into account in a systematic way. Nor do women play a major role in shaping and framing transport developments or its delivery on the ground. As a sector it has traditionally attracted more men than women as a career.

This situation is centred around the premise that men go out of the house to work and earn money, while women stay at home, look after the children and perform household duties. Thus, it was deemed logical that transport should respond to the needs of men rather than women. The non-renumerated family caring and child-rearing roles, that are still mainly undertaken by women, nonetheless contribute to national and local economies. Moreover, women more frequently work outside of the home now, and the availability and affordability of transport therefore plays a significant role in women’s access and quality of life.

In addition to transport’s major contribution to economic growth, it also plays a crucial role in access to health and education, employment, intergenerational equity and promoting social cohesion. Despite an understanding that women and men travel differently, the knowledge about these differences is not widely used to develop transport systems, and progress towards inclusive and gender sensitive transport appears slow. Nonetheless, transport, as a key enabler, can make a big difference in increasing women’s productivity and promoting gender equality.

The visibility of these issues has been recently enhanced within the sector in a number of important meetings such as the gender sessions at the International Transport Forum (ITF), GIZ’s Transforming Urban Mobility Initiative (TUMI)’s first Women Mobilize Women conference and the annual FLONE Women and Transport in Africa conferences.

This report analyses the results of a survey of over 140 transport professionals, conducted to understand if women’s transport needs were being taken into account in transport data collection, and if, in their opinion, the current state of data collection was providing the best evidence on which to base inclusive transport policy development.

The majority of respondents were women, which means that this study is probably one of the first to present the collective opinions of female professionals who are active in the sector. Respondents were drawn from both
high and low-income countries as well as from the many
different aspects of transport; regulatory, planning and
organisation, operations and advisory, covering both the
public and private sectors. However, all of them were
active users of transport data.

The survey results show that there is much work still
to do and that the current evidence base is deeply
flawed in respect to the transport needs of around
50% of the global population that recognises itself as
female. The quantity and quality of the data currently
collected was questioned by nearly 65% of those
surveyed, with 88% suggesting that the way we collect
data needs to be modernised and updated.

Overall, the analysis generated some key take-aways
which could be applied to all aspects of transport.
These were:

1. ‘Business as usual’ is not an acceptable approach.
   It was widely agreed that inclusive transport could
   not be achieved without reflecting gender needs
   more effectively in the data.

2. Data is not an end in itself, but it is one of the main
tools that can be leveraged to inform decisions.
   Collecting better data on women’s needs is a first
   step towards more inclusive transport and can help
   address the challenges transport faces on gender.

3. What we collect as well as how we collect
   information has been brought into question.
   Transport data should be considered as a public
   good and therefore appropriately resourced and
   invested in, especially around the introduction of
   new technologies. Today there is little opportunity
   for sharing knowledge on gender issues in
   existing networks, and the value of this is not yet
   appreciated by those who make the decisions about
   transport investments and in project development.

4. There is a need for knowledge exchange and
   experience sharing in data collection and analysis
   of women’s travel and mobility needs.

5. Gender balance within the sector must be
   addressed at all levels, but especially at senior
   and leadership ones.

6. These takeaways should be seen as a partial
   contribution to the growing evidence base,
   contributing to a growing and increasingly
   compelling case for change, and may also help to
   identify pathways for more in-depth study.

The transport sector, particularly land-based
transport faces many challenges, from climate change
to congestion, and from poor air quality to road
safety, it is not delivering either on its environmental
or social potentials. For as long as women’s transport
patterns and needs are not considered as important
variables in data collection, we will not achieve
change in the sector.

It is also important to note the limitations of this study.
It was a rapid review and did not go into detail on
many of the more nuanced aspects of gender. It also
captured personal rather than organisational views.

2 CONTEXT

In addition to its major contribution to economic
development, transport plays a crucial role in access
to health and education, work, intergenerational equity
and promoting social cohesion. Thus, transport as a
key enabler can make a big difference in increasing
women’s productivity and promoting gender equality,
and the contrary is also true. Poor transport hampers
their development, impacts their ability to work, and
reduces their quality of life. Yet based on the outcomes
of the study undertaken here, the evidence base used
to make most decisions about transport currently do
not take women’s needs into account. Nor do women

play a major role in shaping and framing transport
developments or its delivery on the ground.

A Gender Perspective in the Transport Sector (World
Bank) in 2010 stated that ‘The different roles of
women and men need to be understood and recognised
in order to adequately plan and design the spatial and
temporal characteristics of the transport modes that
both women and men depend on for their travel to
undertake economic, domestic and social activities. Data
on user needs and access constraints should be gender-
disaggregated and collected through routine transport
project monitoring and evaluation processes. Where data on routine measures are not gender disaggregated or not available, capacity building might be necessary. Recommended data for establishing a baseline and for monitoring results should reflect both men and women travel constraints and needs.’

The recent EU Transport Research and Innovation Monitoring and Information System (TRIMIS) 2019 report also supports more data collection about women-specific travel characteristics. They also recommended research and innovation projects to collect gendered data in a comparable manner across the EU and internationally.

The issue is not new. Professor Caren Levy succinctly summarised the core problem with traditional transport planning and policy and inclusive transport as long ago as 1990. She stated that mainstream planning models and methodologies simplify the enormous complexity of travel and transport patterns with four basic, yet faulty, assumptions. Her observations appear as true, or possibly even more true, today than thirty years ago and include:

- Households no longer consists of nuclear families with a husband, a wife and children. Many are single parent households especially in urban areas and those in lower income quintiles are more likely female headed as well.

- The traditional gender division of labour in the family where the man takes the “productive” role of the income-earning “breadwinner” and the woman the “reproductive” role of the housewife or “homemaker” is no longer universally valid. Many women juggle productive and reproductive roles, single sex households with children are more common as well as ‘stay at home dads’ who assume the caring roles for families. On the other hand, embedded and persistent cultural and social norms remain as barriers to many females in both high and low-income countries.

Despite an understanding that women and men travel differently, knowledge about these differences does not appear to be widely used to develop transport systems, making progress towards inclusive and gender sensitive transport slow. Integrating the needs of women into current approaches to transport planning and investments is seen as challenging. The masculine bias in transport decisions to date has given more focus to infrastructure, vehicular movements and speed and uses them as benchmarks on which to determine the benefits and success of the sector.

The traditionally defined hierarchy where the transport needs of the “typical” male household head are the natural priority of urban transport planners and policy makers, is changing. Data should be able to indicate in which ways and what needs to be done. This does not seem to be case yet in many parts of the world. One of the main conclusions of the World Bank led SuM4ALL gender companion paper that reviewed the sector from a global perspective was that transport remains strongly male dominated, with women under-represented across all levels. It identified three entry points where there was potential to change this - women, as leaders and decision-makers, as transport users, and as employees and entrepreneurs in the transport sector. It also found that gender differences in transport needs were not well understood and that gaps in currently available data compromised this.

There has been a global thrust to promote sustainable development following the Brundtland Commission Report (1987) and a heightened interest in addressing climate change. At the turn of the century, the Millennium Development Goals set the scene with the Sustainable Development Goals (SDGs). A growing interest in women’s empowerment and a greater understanding of the changing roles of men and women has also brought this topic more into the open. A number of the SDG targets focus exclusively on empowerment and others have gendered elements integrated in them. However, transport has not been granted a standalone goal. It is rather seen as a major cross cutting theme, and a catalyst to poverty reduction. Thus, the intersection between gender, transport and progress towards the SDGs is both an opportunity and a challenge.

For many years now there have been global initiatives to get women into the labour market and to increase diversity in many sectors. Good progress has been made in the feminisation of some sectors such as financial, services while others, such as construction and transport remain resolutely male dominated. Most aid and development institutions such as the World Bank, Asian Development Bank, United Nations Environment Programme (UNEP), UK FCOD and other international agencies, now integrate gender concerns in transport analysis, have developed guidance for the transport sector, and encourage incorporating it in all their transport investments. Other initiatives such as Gender Labs and Observatories are also emerging and there are a growing number of academic papers highlighting the many gendered challenges that transport faces, several of which have been drawn upon for this paper.
In May 2018 the International Transport Forum - held annually in Leipzig and recognised as a major international forum for high level decision-makers and leaders in the sector - held a gender session which was complemented by GIZ’s Transforming Urban Mobility Initiative (TUMI) ‘Women Mobilize Women’ conference, also in Leipzig that year. These events brought together a core group of some 120 professional women active in the sector. In addition, the TUMI conference was live streamed and viewed by some 20,000 people from all parts of the globe. A number of events have followed, including the Transportation Research Board (TRB) International Conference on Women’s Issues in Transportation, and active engagement via blogs and social media (Twitter, LinkedIn and Facebook) which demonstrate a growing level of interest in this topic.

The recent pandemic has also deepened and broadened existing fault lines of inequality. In many respects, women have been hardest hit by the pandemic, losing livelihoods and at the same time as taking on greater duties of care within their families. Some reports indicate that in addition to the existing challenges faced by women, COVID-19 has created new ones and in extreme cases can be considered as ‘a disaster for women’s empowerment, as it will push women out of the jobs market and down the ladder after decades of incremental improvement’x. The clear economic and social impacts of the gendered transport-disadvantage that many women experience, especially in low-income economies, will not help in the post COVID world, reducing further the women’s ability to engage socially and economically, as well as impacting the intergenerational aspects of child rearing and care.

3 METHODOLOGY

The basis of the study was an internet survey circulated between March and June 2020, which was complemented by series of interviews undertaken in the same period. The study was supplemented with examples from an international literature review. The majority of responses were collected when the COVID-19 pandemic was in its early stages, but it is not expected that this experience has altered the findings.

The survey consisted of both open and closed questions and was designed to capture opinions about how data was collected and its quality. The comments and insights provided highlight specific concerns in terms of the particular transport needs of women. A copy of the survey questions can be found in Annex I.

The invitation to complete the survey was sent to more than 300 male and female experts who were known to be interested in the topic of gender and transport and was also circulated on LinkedIn groups and published on Twitter. Large interest group networks such as the Transportation Research Board (TRB) Women’s Issues in Transport committee, the International Transport Forum (ITF) and their Corporate Partnership Board, the city network POLIS, and the Latin American network Mujeres en Movimiento, amongst others, circulated the invitation to their networks. Professional and trade associations including Walk21, UITP, the International Association of Public Transport, International Civil Aviation Organisation (ICAO), International Maritime Organisation (IMO), the International Transport Workers’ Federation (ITWF), DG MOVE of the European Commission and UN bodies were invited to contribute. These networks cover a broad range of players including practitioners, policy, advisory and research communities. A number of semi-structured interviews were held with international experts to help to validate the findings and discuss specific aspects more fully.

From a total of 157 submissions received from all regions of the world, 142 cleaned responses - 102 women, 36 men, and 4 who preferred not to say - were used for the analysis. A number of semi-structured interviews were carried out with a selection of respondents. Nearly 40% of respondents were willing to be contacted for an interview which was encouraging to see, as this implies that people had strong views that they were keen to share. Interesting aspects of the key findings and quotes from the respondents are highlighted in the report.

As those who responded to the survey were predominately female, more men than women were interviewed. The views given were personal rather than organisational positions, and
participation in the survey was entirely voluntary. The study followed international guidelines on data protection and participants were assured of their confidentiality.

The majority of those taking part in the survey use data in their daily activities. Overall a clear majority - over 70% - were experienced in working with gender disaggregated transport data of some sort. Some 60% or more of those who gave their views were specifically interested and actively working on the issue of gender and transport. They were likely to need and use this sort of data on a frequent basis. 40% expressed that they had a general interest in gender and transport data and worked on it only occasionally. No formal definitions for what was meant by ‘data’ were supplied, but rather it was left to individual interpretation.

Efforts were made to include perspectives from both high and low-income countries. Some 39% of respondents came from the developing world or global south. The largest group were working in sub-Saharan Africa, closely followed by Latin America and Europe (around 20% each). This was followed by the United States and Canada, with fewer representatives from China, India, Indonesia, MENA region, wider Europe and Australia/New Zealand.

As Figure 1 shows, respondents came from many different aspects of transport from regulatory, planning and organisation bodies to operations and advisory groups, and included representatives of both the public and private sectors. The profile of respondents was very wide, and their interpretations of exactly what data was collected varied substantially across these different perspectives.

It is not surprising to note that Non-Governmental Organisations (NGOs) and universities/research institutions formed the largest group of respondents but nonetheless, there was a good level of response from national and regional bodies that are responsible for many aspects of transport planning also. The majority of views came from people active working internationally (38%) including the global south, with a good representation from policy development activities. A further 46% had regional or national perspectives and only 11% came from single cities or countries.

As Figure 2 shows, almost half of the respondents were aged between 31 and 45 years old and a further quarter were more senior (aged between 46 and 60 years old). Slightly less than 20% were under 30 and the remaining 9% were over 60 years old.
Taking into account the career levels and ages of respondents, it is also clear that the responses provide useful insights into the views of experienced people who have been active in the field for a number of years.

Most responses were received from individuals with general interest in transport despite outreach efforts being made to numerous representatives of modal actors in the rail, road, maritime and aviation sub-sectors. The main focus came from an urban perspective (60%) or one that combined both urban and rural, and only one response came from a purely rural perspective.

Traditional modes of transport dominated the respondents’ experiences with just under half considering their activities to fall in this domain. The majority worked in the road passenger area (50%) and nearly a quarter (24%) in both road and rail passenger. Another 11% worked in freight (road and rail combined) with some active in all sectors.

4 FINDINGS AND RECOMMENDATIONS

4.1 Findings

“Do we really measure how differently abled people, women, vulnerable socio-economic groups can have the same mobility as others? is it safe, frequent and reliable? Current data gaps include categories as simple as gender and age missing in most countries’ data on passenger movements.”

Respondents were unanimously critical of the current state of gender-disaggregated data, and supported both the need for new collection methods, and for improved analysis of the data which would result.

An overwhelming majority of participants (93%) felt that the data and information the sector currently collects is inadequate for making gender sensitive, inclusive transport decisions. 76% felt that despite the data being incomplete for basing inclusive transport policy decisions, it was not too difficult to change. (see Figure 3). Those located or working in the global north tended to be more positive about data then those in other regions, more often stating that it was generally good or could be improved. Latin American respondents were also slightly more positive than those based or working in Sub-Saharan Africa.
The majority of respondents felt that neither women nor the less-abled were currently well served in data sets - with over 50% agreed that data was poor for both groups (see Figure 4).

These views varied between subsectors - with aviation, maritime and rail perceived as having better quality data than the road-based mobility sector, in this regard.

**FIGURE 3: DO WE NEED TO CHANGE OUR APPROACH TO DATA COLLECTION AND ANALYSIS?**

Thinking about the data and information we currently collect and use for making gender sensitive, inclusive transport decisions.

- The way we do it now is OK
- It needs to be improved
- Must be significantly improved
- Current data is not comprehensive enough
- Could be made better but is good enough
- It is what we have and it fits our models
- Data lacks standardised ways of collection
- It is incomplete but it is difficult to change
- We do not collect data on gender but it is included in other ways

**FIGURE 4: QUALITY OF DATA COLLECTION ON DIFFERENT SOCIAL GROUPS INCLUDING WOMEN**

Thinking about the data and information we use for making transport decisions, do you think that we have the 'right' level of data about all the different social groups including the disabled and women?

- Poor for both groups
- We collect some data on these groups but it is not the right data for making decisions
- Yes for women
- Better for one than the other
- Don’t know
- Yes for all groups including the disabled
Moreover, it was suggested that current data sets cannot readily be used to inform decisions as to how to make our transport systems low carbon and sustainable, because they tended to focus excessively on the cost of change and reflected an ‘obsession’ with modal shift and substitution towards low carbon modes, without basing that on a full understanding of how people – in this case women – travel, for example their greater tendency towards multi-modal trips.

Respondents to this survey also highlighted this, and complained that a lack of understanding of the reasons for current transport preferences and behaviours and a path dependency based on current data collection regimes, were barriers to being able to guide people towards lower-emission choices.

A range of other important conclusions also emerged from the study (see figure 6). Data was perceived to be generally old and out of date, and therefore not representative of the real world,

"Our data is based on predict and provide from a mobility culture based on growth in car ownership which does not represent new mobility values going forward."
with for example too great a focus on motorised journeys. It was also suggested that a lack of standardised data collection methods hampers useful comparisons. In areas where better data was available, there was in any case a lack of proper analysis with much of the data not being used or being overlooked.

In addition, participants shared the view that the current ways in which we collect data in transport does not provide value for money. Even where new collection methods were used it was also noted that the resultant data frequently failed to fit with existing models, and so was not currently used.

Whilst there are obstacles which need to be overcome, the overwhelming feedback of the survey was that beneficial change is achievable, and that resources which are dedicated to achieving it would be well-spent.

Encouraging greater diversity in the sector, improving collection techniques through the use of technology and ensuring that best practice is shared globally, were all considered to be important elements of the change we need to see.

### 4.2 Recommendations

**GENDER DISAGGREGATED DATA**

Respondents to this survey were very clear that it is essential that we see a change in the way data is collected and disaggregated so that the patterns and habits of women are properly understood. This includes not only what data is collected but also the way we collect it. Data collection methods need to be modernised and updated (88% agreement), with standards and harmonisation of data so that it can be compared. It should also be recognised that not all women are the same, and this adds complexity. Additionally we need to review how we currently fund data collection.

In some cases, information on women’s movements can be integrated into existing data collection methods. However new technologies offer ways to consistently and more efficiently collect this data. For example, smart card information offers huge opportunities to capture the differences between male and female trips on public transport, although there are data privacy issues those taking part in the survey felt that they are not insurmountable.

However, if we are to progress and secure improvements, there needs to be someone who will take the lead. Respondents to this study agreed that this was the responsibility of national and regional governments (42%) and transport ministries (37%). Surprisingly aid agencies and multilateral banks/agencies were not seen as being the front runners on this point (8%) and nor were researchers, academia and NGO/CSOs.

**BUILDING CAPACITY IN DATA COLLECTION**

Survey respondents agreed that poor gender-disaggregated data is a global issue, but that the
skills base in high, medium and low income regions were also weak and needed to be strengthened in both data collection and analysis. Low institutional capacity and weak governance were also mentioned as challenges. Increasing the understanding of gender sensitive decision-making in transport and the improve the gender balance at national and local levels of transport ministries were seen as key ways to address this.

Furthermore respondents indicated confusion in terms of the meaning of some of the terminology currently used around this issue. ‘Gender neutral’ was the best understood by the majority of respondents 75% of whom felt confident that they could explain this to others. Only 53% felt they fully understood what ‘gender blind’ meant, implying that there is some work to do to build a more robust understanding of these terms.

Knowledge exchange between experts in the field and those who wished to learn more about gender sensitive data collection and policy is missing. However, programmes of exchange of experience – if done systematically – could help with this deficit. As UN Women stated in a recent report 80 per cent of the indicators for gender equality across the SDGs are lacking a good data source by which to measure progress. Action in this regard could therefore accelerate the achievement of Sustainable Development Goals (SDGs) on equity, equality and women’s empowerment.

In order to fully understand how women are represented in the sector, we need good data. Respondents were asked to rate how good or bad they thought the data and information base was for these entry points. All were seen as being data-poor with low levels of available gender-disaggregated data with data on women as transport users considered to be slightly worse than the others.

It is true that some data exists on women as workers in the transport sector, but it is of insufficient quality to allow us to set a baseline from which to measure progress. What data does exist does not make very positive reading. Women represent between 20 and 25% of transport workers, mainly in semi-skilled or low paid occupations. This can be explained by many factors from education through to cultural norms. Research has shown that there is a bias against female graduates in engineering particularly amongst employers.

Almost all (98%) respondents to this survey indicated widespread support for attracting more women to the sector in all areas from decision-makers, to those involved in transport delivery and from infrastructure design to entrepreneurs, particularly in developing MaaSxii services, IT platforms and other new areas of the transport ecosystem. This was regarded as advantageous both as a means of expanding female economic activity, but also because it was considered likely that a better understanding and recognition of women’s needs as users emerge if these perspectives were better represented within the sector.

INCREASING DIVERSITY IN THE SECTOR

Transportation professionals are in a unique position to be able to shape the way different people move around their communities, and they can influence the comfort and discomfort people experience as they do so. The lack of comprehensive data is seen as barrier to being able to develop transport to fully respond to people’s needs, tends to build in a path dependency linked to motorised transport and overlooks possible areas of high potential, that may include responding more directly to how women travel. The male domination of the sector was seen to influence the collection of data and therefore implicitly compounding an masculine bias into decision making.

In developed economies have serious car-dependency entrenched in infrastructure, institutional capacities, markets, and culture(to name a few systems that need to be addressed). Developing economies are typically keen to follow the same unsustainable development paths, and there is therefore a real opportunity to encourage them to leap frog directly to more sustainable patterns of development.

Representation really does matter.
CASE STUDY – GENDER BALANCE IN AIRLINES

Table 1 below shows an undeniable male dominance of senior positions in some of the major airlines. The majority of positions held by women at executive or management level were in the human relations, marketing and sales, whilst most Chief Executive Officers (CEO) were men. However there were some women CEOs - such as the the CEO of Air France and at Avios Cargo.

<table>
<thead>
<tr>
<th>AIRLINE OR GROUP</th>
<th>EXECUTIVE / MANAGEMENT BOARD COMPOSITION TOTAL</th>
<th>FEMALE</th>
<th>CHAIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED BOARD OF DIRECTORS</td>
<td>13 1 Female</td>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>IAG*</td>
<td>10 1 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>AIR FRANCE/KLM GROUP EXECUTIVE COMMITTEE</td>
<td>12 4 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>DELTA LEADERSHIP COMMITTEE</td>
<td>10 1 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>JAPAN AIRLINES (JAL)</td>
<td>10 0 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>AMERICAN AIRLINES GROUP - BOARD OF DIRECTORS - LEADERSHIP (EXECUTIVE)</td>
<td>10 6 1 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>EMIRATES</td>
<td>8 0 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>SINGAPORE AIR</td>
<td>9 1 Male</td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>LUFTHANSA GROUP EXECUTIVE BOARD</td>
<td>5 1 Male</td>
<td></td>
<td>Male</td>
</tr>
</tbody>
</table>

Source: Author based on internet search

The International Civil Aviation Organisation (ICAO)’s Global Aviation Gender Summit called for all airlines to publish global data on the numbers of female pilots. Data for the United States and the United Kingdom indicate that just over 4% of airline pilots are women, although women make up the majority of customer-facing airline (ground and airborne) staff. The International Air Transport Association (IATA) - the body that supports the airline sector globally with safety and security standards - has recognised that only 2% of pilots and 3% of CEOs are female. IATA’s 25by2025 programme looks to change this.
This study is one of the first to present the collective opinions on data of female professionals active in the transport sector.

The key conclusions of the study are:

1. **When it comes to data collection and analysis, ‘business as usual’ is not an acceptable way to proceed.** More inclusive and more sustainable transport models require better quality quantitative and qualitative gender-disaggregated data. Collecting better data on women’s transport patterns and needs is a first step towards more inclusive transport. There are freely available technologies that can improve both the quality and frequency of data collection, as well as its analysis, and these should be used where possible.

2. **Data is not an end in itself, but it is one of the main tools that is used to inform decisions.** Data is a ‘public good’ that needs to systematically include all groups in society, especially women who are already high users of public transport. The current lack of information means baselines cannot be set or properly analysed.

3. **The value for money of current collection methods is questionable and we need to revisit how we currently fund data collection.** The way we collect data should be modernised and updated with harmonisation around common standards. This would allow better comparisons between regions, countries and cities in order to highlight good and bad practice.

4. **There is a need for knowledge transfer and experience sharing.** Regional, national and city level leaders need to support and motivate the collection of gender-disaggregated data to increase the knowledge base about gendered travel needs and lead to more equitable transport. Public and private access to data needs to be balanced and international leaders in the field of statistics should offer their support because of the key role transport plays in delivering many of the SDGs (such as poverty alleviation, education, equality and inclusive cities).

5. **Increasing diversity within the sector is critical in order to shift transport onto a more equitable and sustainable footing.** Women should be encouraged to join the transport sector at all levels and in all roles. However, understanding how the male dominance of transport is changing is only possible with leadership and if we set baselines to establish where we currently stand.

6. **These conclusions suggest that there is a lot of work to be done, on many different aspects of gendered data collection and analysis and more in-depth study is required in this area.** In particular, this study has shown that it is vital that future studies take into account the views of professionals in the sector.
Research on gender and transport data

Q1
Please give us some general information. This is only for our internal tracking of responses.

Q2
Please indicate the type of organisation

Q3
Would you mind giving an indication of your age - this is not obligatory!

Q4
Would you say that your main function could be described as:

Q5
Please indicate the region of your experience (i.e. the perspective that you are using to answer this questionnaire)

Q6
Would you say that your main experience or reference area is:

Q7
Please indicate the region that you are currently working in

Q8
Broadly speaking, the scope of your current work could be described as:
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q10</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q11</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q12</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q13</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q14</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q15</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q16</td>
<td>Respondent skipped this question</td>
</tr>
<tr>
<td>Q17</td>
<td>Respondent skipped this question</td>
</tr>
</tbody>
</table>
Research on gender and transport data

Q18
If women, and those that assume family caring roles, make up nearly half of the global population, do you agree or disagree that we need to make more effort to take their transport needs into consideration?

Respondent skipped this question

Q19
Would you agree or disagree that the current models and tools that are widely used for planning and investment decisions take these needs sufficiently into consideration:

Respondent skipped this question

Q20
What needs to be changed (if anything) - if not just select disagree

<table>
<thead>
<tr>
<th>Agree</th>
<th>Dissagree</th>
<th>Possibly</th>
</tr>
</thead>
<tbody>
<tr>
<td>The way we collect data points</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Making statistics &amp; data collection more standardised (&amp; comparable)</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>How we fund data collection</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>It is not accessible to those in the public domain</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>It is not accessible to those in the research /academic domains</td>
<td></td>
<td>Possibly</td>
</tr>
<tr>
<td>Other ways - make a comment in the box provided</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q21
If improvements are required, in your view, who needs to take the lead?

Transport Ministries

Q22
Bearing in mind the SUM4ALL entry points - do you think we have good available data on the profiles of these groups in terms of sex disaggregated data:

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>I am not sure but I think so</th>
<th>I am not sure but I don’t think so</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport users</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Transport workers</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Decision makers</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Our equality and equal opportunity laws stops us from separating this data</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Research on gender and transport data

Q23
Do you think we have good available data on the gendered nature of infrastructure (i.e. in your opinion do we understand the different impacts that transport infrastructure may have on the gendered roles of society well and is this based on a robust evidence base).

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
<th>I am not sure but I think so</th>
<th>I am not sure but I don't think this is the case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport users</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision makers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q24
Thinking about the level of insights and data that we have on the gendered aspects of passenger transport - how good do you think this is? 80 - 100 being excellent and 20 or below being poor

Q25
Thinking about the level of insights and data that we have on the gendered aspects of freight transport - how good do you think this is? 80 - 100 being excellent and 20 or below being poor

Q26
Thinking about the level of insights and data that we have on the gendered aspects of women working in all the subsectors of passenger transport - how good do you think this is? 80 - 100 being excellent and 20 or below being poor

Q27
Thinking about the level of insights and data that we have on the gendered aspects of women working in all subsectors of freight transport - how good do you think this is? 80 - 100 being excellent and 20 or below being poor

Q28
Thinking about the information on senior and decision making positions held by women across the whole sector - how good do you think this is? 80 - 100 being excellent, 50 good and 20 or below being poor
Q29
In your opinion - do we need to attract more women to be more professionally active in the sector, at all levels?

Yes

Q30
If you answered yes to the previous question, in your opinion - where we need to attract more women to be active in the sector?

Yes, I agree this is important
No, I do not agree
We need good people (male or female)
I don't think women will add anything
I have never thought about it

As decision makers
Yes

Involved in delivery (planning, management, operations, driving etc) of transport
Yes

As entrepreneurs (in developing MaaS services, IT platforms, other new areas)
Yes

Involved in infrastructure (design, engineering, construction etc.)
Yes

All of the above
Yes

Q31
Thinking about these areas is there one that stands out to you more than the others in respect to data collection (either as being needy or being satisfactory) that we should focus most on? A second choice can be put in the comments box.

Least robust and lowest quality
Infrastructure aspect

Most robust and of highest quality
Transport users

Satisfactory for planning and investment decisions
Decision making and makers
Q32
Thinking about these areas what is the most important first steps that could be taken to make transport more inclusive? Please select your three most important.

<table>
<thead>
<tr>
<th>Improve the data and evidence base</th>
<th>Transport users, Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate platforms to attract more women to the sector</td>
<td>Transport users, Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</td>
</tr>
<tr>
<td>Invest in programmes to change the image of transport in education</td>
<td>Transport users, Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</td>
</tr>
<tr>
<td>Build capacity in Transport Ministries at national and local levels</td>
<td>Transport users, Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</td>
</tr>
<tr>
<td>Build capacity with NGOs and Civil Society</td>
<td>Transport users, Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</td>
</tr>
<tr>
<td>Build capacity with the research community</td>
<td>Transport users, Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</td>
</tr>
<tr>
<td>Change the laws/legal aspects to be more gender friendly</td>
<td>Labour &amp; transport workers, Decision making and makers, Infrastructure aspect</td>
</tr>
</tbody>
</table>

Q33
Do you think that this is more important in:

- Both

Q34
Do you feel quite confident that you fully understand and could describe to others the differences between

<table>
<thead>
<tr>
<th>Gender sensitive</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender blind</td>
<td>Yes</td>
</tr>
<tr>
<td>Gender neutral</td>
<td>Yes</td>
</tr>
<tr>
<td>Gender friendly</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Q35
Could you indicate your interest in this area

- I work on gender and transport issues (from time to time) and need statistics

Q36
Is there any additional information that you would like us to know about your interest in and commitment to diversity and inclusion?

Respondent skipped this question
<table>
<thead>
<tr>
<th>Q37</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you agree or disagree that it is important to increase the capacity and evidence base on this issue?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q38</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you consider yourself to be male or female (apologies for this binary question)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q39</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you like to be contacted for an interview?</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX II: ENDNOTES

1 This study focussed more on adult women but there are many aspects that impact the mobility of girls and it is also recommended to include this group in further research. Source of population statistics: United Nations Population Division’s World Population Prospects: 2019 Revision https://data.worldbank.org/indicator/SP.POP.TOTL.MA.ZS


12 MaaS - Mobility as a Service

13 IAG is the International Airlines Group that combines a number of major players such as British Airways, Iberia, Vueling, Avios, Air Lingus that carry in total 118 million passengers a year as well as cargo.