

Travelling in a Woman's Shoes

**UNDERSTANDING WOMEN'S TRAVEL NEEDS IN IRELAND TO INFORM THE FUTURE OF
SUSTAINABLE TRANSPORT POLICY AND DESIGN**

JULY 2020



Achieving gender equality and women's empowerment is integral to each of the 17 goals (SDGs). Only by ensuring the rights of women and girls across all the goals will we get to justice and inclusion, economies that work for all, and sustaining our shared environment now and for future generations.

UN Women

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SURVEY DESIGN AND EXECUTION

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CEO Foreword

As a leading transport agency within Ireland's transport community and the body directly responsible for delivering transport infrastructure and operating public transport systems, TII has a responsibility to provide sustainable transport networks for all on the island of Ireland. With women accounting for half of the population, TII recognises the importance of understanding and addressing the different mobility patterns and needs of both women and men.

This study, which investigates the needs and travel behaviours of women, is the first of its kind in Ireland, and TII is delighted to be part of an essential step towards developing deeper insights into the transport experience for women.

This deeper understanding of women and transport is not only important in terms of improving Ireland's transport networks for all users; it is also critical in the fight against climate change and urgent need to transition the sector to carbon neutrality by 2050.

Now is the time for Ireland's transport community to step up and commit to evolving our transport systems and networks for the benefit of all groups, including women, in a truly sustainable manner.

Transport is often seen as gender-neutral, providing benefit to all equally. However, a growing body of international research highlights that this is not the case. Women and men can have different needs, constraints and expectations for using transport. If women feel more empowered and safe to use sustainable transport modes such as walking, cycling, public transport and carpooling, there will be less dependence on cars, more public transport trips taken across the day and night, and enhanced quality of life for all. At the same time, the planning and design of a safe, reliable and equitable transport system will also encourage men to become less car dependant and give them more sustainable transport mode choices as part of their daily routine.



In the context of the climate change targets, and TII's mission, we as a public agency need to promote these sustainable forms of transport. Exploring the experiences of women travelling in Ireland, their mobility barriers, and the challenges that they face, is a critical part of the sustainability agenda. Without a better understanding of women's needs, we will struggle to achieve modal shift.

Travelling in a Woman's Shoes tells real-life stories that demonstrate the characteristics of women's mobility in Ireland. The stories shed light on the disparities and the realities that women face every day, introducing a multiplicity of perspectives and enriched data that applies a gender lens to travel behaviour.

Ireland is not alone in exploring issues of equity in transport. In 2014, the United Nations Commission on the Status of Women found a male bias in the planning, provision and design of transport systems. This study will help identify the patterns, constraints and issues associated with women's mobility and the resultant social, societal and economic repercussions of gender bias within the transport system.

At an international level, there is increasing pressure on countries to implement plans to meet the commitments of the United Nations 2030 Agenda for Sustainable Development. This study was guided by the Sustainable Development Goals (SDGs), and in particular:

- Goal 5: Gender Equality
- Goal 11: Sustainable Cities and Communities
- Goal 13: Climate Action

This study is the first step, a building block, towards improving women's travel experiences in Ireland. The report was finalised during the recent worldwide Covid-19 pandemic and we recognise that life as we know it has changed dramatically. Never has there been such a need to rapidly address and promote sustainable and active modes of transport such as walking and cycling. This is a huge opportunity for the Irish transport sector to come together and work collaboratively with our partners, stakeholders and communities so that the findings from this report can influence modal shift and inform future policy and decision making - making sustainable transport options feel safer, more attractive and more accessible to everyone.

I am very proud of this ground-breaking study and hope that together we can plan, design and operate our transport networks to create a more resilient and sustainable system—for all.

Michael Nolan
Chief Executive
Transport Infrastructure Ireland

Travelling in a Woman's Shoes

How do we design sustainable transport that everyone will use and love?

Supporting women and their travel needs will help Ireland transition to a carbon-neutral transport system.

Historically, transport has not been designed with the needs of women in mind. This study seeks to fill important gaps in our understanding, in order to encourage wide adoption of sustainable transport.

The study explores the drivers of car dependency for women including transport infrastructure, significant caregiving responsibilities, safety concerns and equality of access to quality services. Throughout the report policy opportunities are identified to provide a way forward. This study shows us that designing transport that people will use and love requires new ideas and a new level of gender-sensitivity in policy and practice.

KEY STATISTICS

Women rely heavily on the car

Outside of Dublin,

81%

of women own or have access to a car

95%

of women consider the car to be a necessity

In Dublin,

66%

of women own or have access to a car

79%

of women consider the car to be a necessity

Women shoulder more caring responsibilities

84%

of women in families take on the primary or lion's share of childcare duties

30%

of women provide primary care to another adult

Mobility of care drives women's travel patterns

Women's primary reason for travelling is to drop off and collect children or family members, while men's primary reason is travelling for work

Women are impacted by safety issues

Safety is an issue for all people

1 in 3

public transport users have seen or experienced some form of harassment or violence while using public transport

7%

of women in Dublin report having experienced sexual harassment on public transport

55%

of women stated that they would not use public transport at night

34%

of women stated that feelings of insecurity have prevented them from travelling

*“It’s easier to have a car with a baby,
you can just put him in his car seat
and be done with it”*

Natalie (35-44, Dublin)

KEY FINDINGS

1 MODES OF TRANSPORT

How can sustainable transport modes compete with the car?

For most Irish women today the car is their preferred mode of transport, supporting their basic functional needs as well as higher-order experiential and emotional needs. While women view cycling as good for health, this is negated by the perception that it is the least safe way to travel. Likewise, while women support the idea of public transport in general, they prefer the car as they perceive it to be attractive from a functional and experiential perspective.

To compete with the car, public and active transport modes need to get the basics right—safety, reliability, accessibility, convenience—while also delivering on higher-order needs—comfort, inclusion, joy, community, belonging.

Policy opportunities:

- Gender mainstreaming
- A “20 minute city” that is accessible by foot
- Safe cycling lanes and lessons
- Better public transport coverage
- New solutions for end-to-end mobility
- Better real-time information

2 FAMILY ROLES

From an early age, attitudes and perceptions of transport are shaped by the family. To support independence, some families are keen for young women to learn to drive, while other families encourage early public transport use. Most women learn to use public transport independently before age 18, often in their early teen years.

As women grow older and start to juggle work, household duties and childcare, their public transport habits are often eroded as the appeal of the car, perceived as family friendly and reliable, grows.

Habitual use of the car solidifies as women move through adulthood, becoming a daily routine that is hard to break. However, on weekends or holidays many women look to walking, cycling or public transport as a welcome “break from the car”

Policy opportunities:

- Enable children’s independent mobility
- Design child-friendly public transport and adjoining public space
- Promote car-free travel on the weekends to establish new habits

3 BEING SAFE

How can transport feel and be safe for women?

Staying safe is a top priority for many women when travelling, remaining vigilant at all times, particularly at night or when alone. As has long been the case, society places the primary responsibility on a woman to keep herself safe irrespective of the threats she may face. As a result, women often develop strategies like avoiding travelling at night, carrying car keys in their hands as a makeshift weapon or feigning listening to music while staying alert. Fortunately for most women, violent and unsafe incidents do not happen every day but the impact of such trauma is felt every day.

A single incident often has a lasting impact on women's sense of safety and daily choices.

For women, a lack of safety infrastructure and support from fellow passengers, often exacerbates women's feelings of isolation and vulnerability when travelling. To build trust in alternative modes of transport, it is essential to create physical and psychological safety through social and physical infrastructure.

Policy opportunities:

- Joined-up solutions and partnering
- Better data
- Co-create with women
- Quality lighting around stops and streets
- Apply a gender lens to staff training and rosters
- Effective incident-reporting
- Women's safety audits
- School education for boys and girls
- Evaluate safety initiatives

4 BEING INCLUSIVE

How can transport consider the diverse needs and contexts of all women?

Not all women have equal access to mobility, or experience mobility in the same way. Women from Dublin use public transport regularly, shaping a more positive perception of it than those with less exposure, as confidence and comfort in using public transport is acquired through use. Women with higher household income are more likely to own or have access to a car and, therefore, are less dependent on public transport.

Women with lower household income are more dependent on public transport and more likely to witness or be victims of violent behaviour and sexual harassment.

Exposure to risk, inconvenience and vulnerability can be amplified for the most disadvantaged women, for whom low income can intersect with health issues, disabilities, reliance on social services, lack of family or partner support and lack of opportunities.

Policy opportunities:

- Design for range of disabilities and age and health related issues
- Build a gender lens with diverse partners
- Promote diversity and inclusion through communications
- Understand local neighbourhood transport challenges
- Take an integrated approach to land use
- Expose rural children to urban transport environment

"If my son takes the bus, it saves me half an hour sitting in traffic"

Amanda (25-34, Dublin)

5 DRIVING CHANGE

How can we accelerate sustainable behavioural change?

There is a high level of general awareness of climate change in Ireland, but this does not translate into significant transport behavioural change. To inspire change, there is a need to do more than discuss the benefits of decarbonisation, as for many the link between individual transport behaviour and sustainability is unclear. Policies need to recognise this gap, as well as the limitations of the existing car-centric land use and infrastructure in Ireland. Policies that promote practical and realistic ways of reducing car use may be more successful in the short term: including **promoting car-share schemes, ridesharing, multi-modal park and ride or switching to electric vehicles (EV)**. It is essential to ensure that efforts to reduce car use do not directly or indirectly penalise women. With school-aged children strongly influencing the attitudes and behaviours of the family unit, **schools can play a key role in the transformation**. The research showed that women in Ireland were generally open to change. We saw this particularly for women in Dublin, where public transport and density make it a more viable choice. There is an opportunity to leverage this openness to encourage behaviour change.

Policy opportunities:

- Improved walking and cycling infrastructure and amenities
- Facilitate multi-modal travel
- Apply a gender lens to carpooling and ridesharing schemes
- EV incentives
- Ramp up climate change education for all age groups
- Plan for changing flexible work and mobility patterns in wake of Covid-19

“I don’t like places with bushes, I’m not saying they would, but someone could jump out and fight you, that would put me off for good, then I’d never go anywhere”

Josie (45-54, Dublin)

Note to readers: A detailed list of all policy takeaways and design challenges can be found in the Conclusion section. Here, we have only highlighted select opportunities.



Introduction & Context

INCLUSIVE DESIGN AND SUSTAINABILITY

The climate crisis poses an urgent need for a fundamental reimagining of how we live and how we get around.

At a national level, Ireland has set out a Climate Action Plan (2019) to drive the decarbonisation of our transport system. As the national body charged with delivering transport infrastructure and services, Transport Infrastructure Ireland (TII) has been advancing this agenda - key aspects of which include major new infrastructure and service delivery projects such as the new Luas system in Cork and MetroLink in Dublin and demand management strategies to facilitate a modal shift from private, low-occupancy transport to public transport modes. A new challenge in this transition is the global Covid-19 health crisis which has reduced public transport patronage and increased anxiety about shared mobility in the short term. Nevertheless, TII is clear that for long term well-being and prosperity in Ireland, it must continue to pursue safe, decarbonised mobility solutions.

NTA, 2020¹

290 million

Public transport passenger journeys were provided by Dublin Bus, Bus Éireann, Iarnród Éireann, Luas and Go-Ahead Ireland on 'Transport for Ireland' Public Service Obligation (PSO) services in 2019

9% rise

since 2018

While millions of public transport journeys are already taken every year, this endeavour is challenging in Ireland because of the country's historical land use policies and car dependency. Pre-pandemic, 75% of all trips were made by private vehicle, and the share of journeys made by public transport had fallen since 2014.² Car dependency is high, while EV penetration is low, at just 0.18%.³ From our primary research, we know that while awareness of the climate crisis is increasing, people don't yet associate it with a strong impetus to change their own daily behaviours. Transitioning Ireland to sustainable transport modes will, therefore, require both new infrastructure and land use approaches as well as behaviour change efforts.

It is now well established that transport is not gender-neutral. Women and men have different mobility realities. Global research by organisations such as the UN, show that women tend to have more complex patterns of mobility characterised by trip chaining (making numerous small trips as part of a larger journey such as running errands and buying groceries on the way to work) and caregiving duties (known as the 'mobility of care').⁴ Globally, personal safety is the most widespread concern for women when travelling.⁵ Women worry about their safety when travelling alone, at night, waiting in or moving through empty or isolated locations and in poorly lit or overcrowded transport spaces.

Meanwhile, gaps in gender disaggregated data in Ireland make it challenging to pinpoint and identify specific issues that need to be addressed. **In 2014, a male bias was found by the United**

◀ **Transport Infrastructure Ireland (TII) is responsible for Ireland's national road network, and the delivery and operation of public transport systems (in partnership with National Transport Authority) including the Luas Light Rail System and the upcoming MetroLink.**

◀ **A note on gender identity and roles**
We acknowledge that gender is not binary. A spectrum of identities exists other than or in between "male" and "female", though limitations of data and literature today have led us to focus on these two groupings. Further, we note gender roles continue to evolve and studying gender differences should not be confused with gender stereotyping (that is making assumptions about differences between men and women in a way that is inaccurate, limiting or harmful to one or both sexes).

“I would absolutely support measures for less cars on the road, if the alternative is good enough, you can't do one without the other.”

Karen (45-54, Cork)

Nations Commission on the Status of Women “in the planning, provision and design of transport systems”, due to women’s under-representation in the sector.⁶ We see that traditionally male-dominated leadership and management has contributed to an unintended male bias in the design of transport systems, resulting in adverse outcomes for women.

In light of these challenges, **this study seeks to understand how women in Ireland experience transport and mobility today: why they make the choices they do, their daily challenges and aspirations and opportunities for improvement.**

Study and Understand Women's Mobility is the first principle of the Transformative Urban Mobility Initiative's (TUMI) 5 Principles to Empower Women in Transport.⁷ Filling this data gap is crucial for designing future sustainable transport systems.

This study contributes to ongoing global research and policy exploring how sustainable transport can be inclusive, attractive and encourage wide-scale adoption.

THE ADDED VALUE OF DESIGNING FOR WOMEN

Studying and designing for women's mobility compels us to step out of our comfort zone of traditional transport policy making and planning. It requires us to confront a level of discomfort or scepticism, increasing our collective and personal gender awareness. It requires us to listen differently—to stories of people not often heard in consultation forums—mothers, young women, older women and importantly, children. It requires us to think about purpose driven investment— what functions and purposes do we need to facilitate through good mobility to ensure resilient and sustainable communities?



¹ NTA. (2020). Massive Jump in Passenger Journey Numbers as Commuters Flock to Public Transport. Retrieved from nationaltransport.ie: <https://www.nationaltransport.ie/news/massive-jump-in-passenger-journey-number-as-commuters-flock-to-public-transport/>

² Department of Transport, Tourism and Sport. (2018). Transport Trends, An Overview of Ireland's Transport Sector 2018. Dublin: DTaS.

³ Fitzgerald, C. (2019, August 29). 'We are on the road to nowhere': Are electric cars and chargers enough to cut our transport emissions? Retrieved from thejournal.ie: <https://www.thejournal.ie/ireland-transport-climate-4785268-Aug2019/>

⁴ Sánchez de Madariaga, I. (2013). The mobility of care. Introducing new concepts in urban transport. Fair shared cities. The impact of gender planning in Europe., 33-48.

⁵ Ng, W.-S., & Ashley, A. (2018). Understanding Urban Travel Behaviour by Gender for Efficient and Equitable Transport Policies. Paris: OECD.

⁶ Badstuber, N. (2019, May 21). Mind the gender gap: the hidden data gap in transport. Retrieved from themandarin.com: <https://www.themandarin.com.au/109874-mind-the-gender-gap-the-hidden-data-gap-in-transport/>

⁷ Women Mobilize Women. (2019). TUMI'S 5 PRINCIPLES TO EMPOWER WOMEN IN TRANSPORT. Retrieved from womenmobilize.org: <https://womenmobilize.org/publications/>

CASE STUDY

VIENNESE GENDER MAINSTREAMING

Incorporating gender perspectives systematically into transport and city planning is entirely possible. In Vienna, making the city work for both women and men has been considered a priority since the 1990s. Before a project begins, data is collected to determine how different groups of people will be impacted by the project including women, a step that improves project outcomes for all.

Examples of its implementation include school yard design that ensures girls and boys enjoy yard space, gender-sensitive traffic planning, public lighting and roads and paths design. Areas of the city have been designed to allow convenient access for women to the essential services they are statistically more likely to access, e.g. childcare, medical centres, schools and parks. Pavement and footpath expansion are also practiced in order to provide greater space for women with buggies and children or elderly people on foot. Many of the limitations of car-free mobility have been identified and embedded in the design of systems, removing hassle and making everyday journeys more comfortable and convenient.



Aspern Seestadt has an explicitly family-oriented design, with a specific emphasis on taking women's needs into account in its planning. Photograph: Daniel Hawelka for Seestadt

INTRODUCTION & CONTEXT

A SNAPSHOT OF HISTORY

THE RISE OF THE CAR

Throughout the 20th and early 21st century in Ireland, a swelling workforce and economic growth drove household incomes up, enabling car ownership and catalysing car-dependence.

20th century: *Extensive public infrastructure characterised by rail, tram and bus services.*⁸

With an extensive railway system across Ireland and tramways all over Dublin, at the time the country was considered to have one of the most impressive public transport systems in the world. However, by the 1940s the rise of the bus service in the city eventually led to a decline in tram services.

1990 onwards: *Ireland's car culture is spurred by rapid economic growth.*

The “Celtic Tiger” brought about increased employment, higher wages, new development and land use patterns and more affordable private vehicles.⁹ The influx of wealth led to an increase in car ownership and use, which has continued to grow thereafter. As women’s participation in the workforce has grown, reaching 77% rates in 2018¹⁰, there are more dual-income families owning and using two cars.

Car dependency is widespread across Ireland spanning all income brackets.¹³ Irish households are spending more on transport than in previous years, despite owning and running a car being a financial burden on some households.

The number of licensed vehicles in Ireland increased by

183%

from **960,000** in 1985-1989 to **2.7m** in 2018¹¹

The 2016 Census found that

77%

of urban and

91%

of rural households now own **at least 1 car**¹²

15%

of total household expenditure was spent on transport¹⁴

Average weekly household expenditure on transport was

€125

in 2015-2016 (increased from €116 in 2009-2010, largely driven by car purchases).¹⁵

⁸ McNamee, M. S. (2015, August 29). Dublin used to have a pretty amazing public transport system. Retrieved from thejournal.ie: <https://www.thejournal.ie/dublin-transport-system-rip-tracks-change-2294938-Aug2015/>

⁹ The Celtic Tiger refers to a period of rapid economic growth driven by foreign investment, it spanned the mid-1990s to the late-2000s.

¹⁰ European Commission. (2020). The EU and Irish Women. Retrieved from ec.europa.eu: https://ec.europa.eu/ireland/node/684_en

¹¹ CSO. (2019). Environmental Indicators 2019. Retrieved from CSO.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-eii/eii19/transport/>

¹² CSO. (2016). Travel patterns. Dublin: CSO.

¹³ Ng, W.-S., & Ashley, A. (2018). Understanding Urban Travel Behaviour by Gender for Efficient and Equitable Transport Policies. Paris: OECD.

¹⁴ CSO. (2016). Household Budget Survey. Retrieved from CSO.ie: <https://www.cso.ie/en/statistics/housingandhouseholds/householdbudgetsurvey/>

¹⁵ Ibid.



THE RISE OF WOMEN

Parallel to the rise of the car and the country's overall economic growth story, the role of women in Irish society has changed dramatically in the last two centuries.

For centuries, women in Ireland were bound by the country's traditional patriarchal society that defined them as homemakers. Economic growth and liberation movements through the 20th century led to advancements in women's participation in education and work. Today, often balancing a dual role of homemaker and salary earner,¹⁶ Irish women have more rights and more responsibilities than their mothers, grandmothers and great grandmothers before them.¹⁷

Education

Irish women today are more likely to have a third level qualification than men.

55%

of women aged 25-34 have a third-level qualification degree (compared to **43% of men**).¹⁸

Employment

While women's employment rates have been rising gradually for many years, women still participate in the workforce less than men. Female employment at all levels tends to dominate certain sectors such as education, healthcare, social work, hospitality and food services, and includes more part-time work.¹⁹

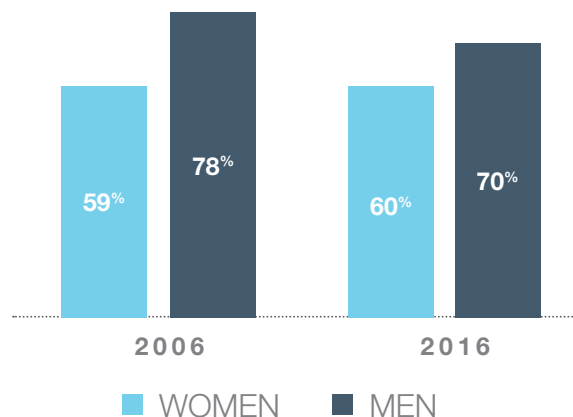
In 2016,

18%

of female first-year graduates started in the 'Health and Social Work' sector (compared to **4% of men**).²⁰

Employment rates for women

The 2016 rate is currently the lowest in the EU (compared to EU average of 61%)²¹



Caregiving roles

Existing research shows that in Irish households, women are still the primary caregivers, providing care and assistance to children, the elderly and family members with special needs. Women also perform the majority of household chores.

45%

of Irish women provide care for others on a daily basis (compared to **29% of men**).²²

Women spend

21 hours

a week on average providing care (compared to **11 hours for men**).²³



¹⁶ Sheehan, A., Berkery, E., & Lichrou, M. (2015). Changing role of women in the Irish society: an overview of the female consumer. *The Irish Journal of Management*, 162-171.

¹⁷ European Commission. (2020). The EU and Irish Women. Retrieved from ec.europa.eu: https://ec.europa.eu/ireland/node/684_en

¹⁸ Lynott, L. (2017, October 18). Latest CSO data reveals key differences between men and women in Ireland. Retrieved from independent.ie: <https://www.independent.ie/irish-news/news/latest-cso-data-reveals-key-differences-between-men-and-women-in-ireland-36240295.html>

¹⁹ CSO. (2016). Employment. Retrieved from cso.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2016/employment/>; National Women's Council of Ireland. (n.d.). Women and Employment. Retrieved from ncwi.ie: https://www.ncwi.ie/discover/what_we_do/womens_economic_independence/women_and_employment

²⁰ CSO. (2019). Higher Education Outcomes - Graduation Years 2010-2016. Retrieved from CSO.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-heo/highereducationoutcomes-graduationyears2010-2016/wheredograduateswork/>

²¹ CSO. (2016). Employment. Retrieved from cso.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2016/employment/>

²² ESRI. (2019). Caring and Unpaid Work. ESRI.

²³ Ibid.

RESEARCH METHODS

To understand women's travel needs, the report stitches together studies from Ireland and around the world, as well as from new primary research, from an ethnographic study and a quantitative survey.

DESKTOP RESEARCH

As a starting point for our research, we reviewed a wide range of existing datasets for women's travel patterns and behaviours. We found limited relevant or gender disaggregated data.

For example, the CSO publishes data on transport, crime, and women and men in Irish society. Transport behaviour and elements of access (physical access and financial access) to transport are disaggregated by gender, but few sources capture women's experiences of safety, access, reliability or convenience and comfort. Without this granularity within such data there is an incomplete picture of women's mobility experiences and needs.

To enrich our understanding, we examined studies from Ireland, Europe, Australia, the United States and South America. The review spanned academic work of women's mobility trends, studies from transport agencies, including LA Metro, and reviews from inter-governmental agencies, such as the European Institute for Gender Equality (EIGE) and the Organisation for Economic Co-operation and Development (OECD).

The literature makes clear how mobility patterns and trends differ between women and men, with women experiencing a greater 'travel burden' overall. Women's travel is inherently complex, shaped by the activities they undertake and the experiences they have along the way. Women are more likely to travel outside of peak times making them more dependent on lower frequency services. The destinations women travel to, often for work, health or child-related services, can be poorly served by public transport, requiring more stops, transfers and longer journey times.²⁴ Across the literature, four direct factors commonly influence women's mobility: **safety, access, reliability, and comfort and convenience**. Alongside, studies identified that transport policy and design need to consider the impacts of mobility on women such as **economic opportunities, social life and engagement, and health and well-being**.

The following studies were included in our review:

Central Statistics Office: The Transport Omnibus 2018, The Household Travel Survey 2018, The National Travel Survey 2016, The Women and Men in Ireland Survey 2016, The Household Budget Survey 2016, The Recorded Crime Survey, The measuring distance to everyday services in Ireland survey, Commuting in Ireland 2016.

Department of Transport, Tourism and Sport: Transport Trends - An Overview of Ireland's Transport Sector 2018, Transport Trends 2016.

National Transport Authority: The National Household Travel Survey 2012 and 2017, The Greater Dublin Area Household Survey 2006, Customer Satisfaction Research 2017.

Road Safety Authority: Cyclist injuries, A review of 2012 Casualties.

The Economic and Social Research Institute: Caring and unpaid work in Ireland 2019, The Determinants of Mode of Transport to Work in the Greater Dublin Area 2008.

Plan International: Safe in Ireland 2018.

Transport Infrastructure Ireland: Luas Anti-Social Behaviour 2016 Survey, M50 Travel Surveys.

²⁴ Loukaitou-Sideris, A. (2011). What Is Blocking Her Path? Women, Mobility, and Security. In E. a. National Academies of Sciences, Women's Issues in transport: Summary of the 4th (pp. 103-121). Washington: The National Academies Press.

CSO, *Crime and Victimization 2019*²⁵

36%

women felt unsafe walking in their local area at night (compared to **13% of men**).

Plan International, *study of women in Dublin 2018*²⁶

1 in 3

women have been subjected to physical harassment in public

6 in 10

women don't feel safe taking the bus

47%

of women will choose a longer walking route if they perceive it as safer.

SAFETY

Safety and the perception of safety are shaped by the design of transport and public space, cultural context, socio-economic factors, security, confidence in reporting and emergency response mechanisms, and in particular the 'last mile' journey home.

Across the world, safety is consistently the primary concern for women's mobility, with 'not feeling safe' the strongest deterrent of public transport use.²⁷ This is not without reason, in France 87% of women declared they had been victims of sexual harassment, sexual assault or rape on public transport.²⁸ Similarly, a UK survey found that 28% of women who used public transport in the past 12 months had experienced unwarranted staring, sexual comments, bodily contact, wolf-whistling and exposure. These statistics are echoed widely and likely understate the magnitude of the problem. It is estimated that 96% of incidents go unreported,²⁹ owing largely to fears of further victimisation or trivialisation.³⁰

Across the literature, there is a growing understanding that all incidences of harassment are severe, with none being 'less bad' than another, as all unsafe experiences have the potential to escalate. As a consequence, women modify their travel patterns to feel safer, such as by avoiding independent travel, avoiding certain routes, carrying items for self-defence, or avoiding travel altogether.³¹

With respect to cycling, women cycle considerably less than men in most countries with statistics ranging from 2.5 to three times less. In the UK, women account for only 27% of cycling trips. The Netherlands, which is known for high quality bike infrastructure, is a notable exception with women making 55% of cycling trips.³² Yet globally, women are deterred from cycling, due to the risks, as well as sexual harassment.³³

ACCESS

Access to transport encompasses: the physical accessibility, including gaps between the platform and vehicle, steps and narrow turnstiles; the quality of roads, paths and cycling infrastructure leading to and from transport; parking infrastructure for all modes; the location of passenger information, access to ticket machines and customer service staff; and transport affordability.

Despite progress in gender equality, women still perform the majority of caring and household duties.³⁴ In Ireland in 2016, 98% of people whose economic status was 'looking after the home or family' were women.³⁵ The journeys prompted by these responsibilities, referred to as 'mobility of care', are characterised by stress, many interchanges and access difficulties.³⁶ Consequently, women spend more money on transport as ticketing and fare structures are often not designed for trip chaining of this nature.

RELIABILITY

Reliability means that users can trust the system to be punctual, to run a frequent and predictable service, to provide reliable ticket machines, real-time passenger information and that services are safe and usable upon arrival.³⁷

A reliable transport system is attractive to women and men alike. However, women's complex travel patterns and needs leave them unequally impacted by unreliable services. Services that do not show up, are early or late, do not allow passengers on, or have unreliable journey times leading to missed connections or delay all have an impact. This is most felt by women who: are travelling at off-peak times; are chaining many trips together; feel unsafe waiting; are travelling alone; or are taking care of someone. Women are more likely to accompany others to medical appointments, with delays leading to missed appointments and repeated journeys. To accommodate these delays, women must leave hours ahead of time.



Building on these four factors, the literature suggests that transport policy and design need to consider the impacts of mobility on women such as economic opportunities, social life and engagement, and health and well-being.

ECONOMIC OPPORTUNITIES

Globally, women's participation in the labour market is significantly hindered by poor access to transport. Employment opportunities for women improve with good access to safe transport.⁴² By contrast, unsafe or traumatic experiences using transport can lead to absenteeism and decreased productivity in women. Gender roles can further impact economic opportunities, with many women working closer to home than their male counterparts in order to juggle work with caring and household responsibilities,⁴³ termed 'spatial entrapment'.⁴⁴

CONVENIENCE & COMFORT

Convenience is the 'absence of effort' in using transport services that are 'fit for purpose'.³⁸ Factors include, waiting times, crowding, ease of finding a seat, availability of toilets, small toilets or change tables, cleanliness and visible efforts towards cleanliness and the presence of vandalism.

Convenience and comfort can determine whether a transport service is ultimately used. The characteristics of women's mobility make them attuned to efforts to make transport easy and inclusive.³⁹ The absence of this effort can lead women to avoid travel or opt to use the car.⁴⁰ The car is seen as the convenient 'hassle-free' travel option by providing easy access, door-to-door service, seating, space for companions and belongings and the freedom to travel at any time.⁴¹

SOCIAL & PUBLIC LIFE

Equality for women and girls depends on mobility and the active citizenship that this facilitates. Barriers such as poor transport contribute to the continued exclusion of women from quality education, high paying jobs and essential services. It can also hinder participation in community and public life. For many women, undertaking significant care or household duties leaves them time poor, and many have to forgo certain trips and sacrifice personal or leisure activities as a result. This reinforces gender inequalities such as the pay gap and precludes women from pursuing life affirming opportunities.⁴⁵

HEALTH & WELL-BEING

Poor mobility options for women can impact on their health and well-being, by limiting their use of walking and cycling, by inducing stress or trauma, with long journeys leaving them time poor, or by contributing to isolation. Time poverty was cited by the EIGE as an important indicator of well-being, in part as leisure or self-care activities are often the first to go.⁴⁶

²⁵ CSO. (2020). Crime and Victimisation. Retrieved from CSO.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-cv/crimeandvictimisation2019/perceptionofcrime/>

²⁶ Plan International. (2018). 'SAFE IN IRELAND' REPORT FINDS A THIRD OF WOMEN SUBJECTED TO PHYSICAL HARASSMENT IN PUBLIC. Retrieved from plan.ie: <https://www.plan.ie/stories/2018-10-10-safe-in-ireland-report/>

²⁷ Ng, W.-S., & Ashley, A. (2018). Understanding Urban Travel Behaviour by Gender for Efficient and Equitable Transport Policies. Paris: OECD.

²⁸ FNAUT. (2016). Inquiry into Sexual Harassment and Sexual Violence against Women on Public Transport. Paris: Fédération Nationale des Associations d'usagers des transports (FNAUT).

²⁹ Allen, H. V. (2016). Safe and Sound: International Research on Women's Personal Safety on Public Transport. FIA Foundation.

³⁰ Stark, J. a. (2018). Women's everyday mobility: frightening situations and their impacts on travel behaviour. Transport Research, 311 - 323.

³¹ Saunders, K. (2019). The Real Reason Why Mobility is Not Women-Friendly. Retrieved from urbanmobilitydaily.com: <https://urbanmobilitydaily.com/the-real-reason-why-mobility-is-not-women-friendly/> <https://urbanmobilitydaily.com/the-real-reason-why-mobility-is-not-women-friendly/>; Stark, J., & Meschik, M. (2018). Women's everyday mobility: Frightening situations and their impacts on travel behaviour. transport Research Part F: Traffic Psychology and Behaviour, 54, 311-323; Loukaitou-Sideris, A. (2011). What Is Blocking Her Path? Women, Mobility, and Security. In E. a. National Academies of Sciences, Women's Issues in transport: Summary of the 4th (pp. 103-121). Washington: The National Academies Press.

³² Buehler, R., Pucher, J. (2007) Making Cycling Irresistible: Lessons from The Netherlands, Denmark and Germany, In Transport Reviews (pp. 495-528). Retrieved from: <https://www.tandfonline.com/doi/full/10.1080/01441640701806612>

³³ Williams, L. (2019, November 25). Harassment adds more danger for women cycling in Dublin. Retrieved from irishtimes.com: <https://www.irishtimes.com/opinion/harassment-adds-more-danger-for-women-cycling-in-dublin-1.4093485>

³⁴ European Institute for Gender Equality. (2016). Gender In Transport. Vilnius: European Institute for Gender Equality.

PRIMARY RESEARCH

42 hrs

of in-home
interviews

1,000

respondents
across Ireland

A review of global literature allows us to understand the universal challenges of women's mobility. While a useful foundation, the studies are rooted in their respective context and driven from localised data sources. With methods for collecting and categorising data non-standard between research, meta-analyses can only go so far. In order to shape policy for Ireland, local concerns and characteristics are essential dimensions. Primary research is required to fill this gap and make recommendations for Ireland. Translating the themes surfaced in global studies into hypotheses for our own research allowed us to build upon academic and professional research, while ensuring local relevance.

Taking the global literature review as a starting point, we designed a bespoke methodology to validate the identified themes within an Irish context and discover new context-specific behaviours and constraints. Our goal was to capture how social, societal and economic factors translate into individual mental models, concerns, motivations and choices. We focused on both the daily challenges people experience as well as positive drivers to identify the levers that can be used to design more user-friendly transport systems.

What motivates or constrains Irish women to select different mobility options?

What are women's travel aspirations, needs, current experiences and barriers today?

We designed a two-step research process, first uncovering behaviours and needs, then validating the findings quantitatively.

STEP 1. DISCOVERY ETHNOGRAPHIC STUDY

Ethnographic interviews and observations with a small sample of female respondents to observe behaviours in context and uncover patterns, motivations and constraints.

These generate rich and unexpected insights about the barriers, challenges and mental models driving mobility choice, specific to the Irish context.

STEP 2. VALIDATION

QUANTITATIVE SURVEY

A robust nationally representative survey to validate the hypotheses generated from the literature review and ethnographic research.

These validate findings and identify correlations between gender, age, location, disability, income, with different travel behaviours and motivations. It allows us to size particular issues or pain points uncovered.

²⁵ CSO. (2016). Employment. Retrieved from [cso.ie](https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2016/employment/): <https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2016/employment/>

²⁶ Sánchez de Madariaga, I. (2013). The mobility of care. Introducing new concepts in urban transport. Fair shared cities. The impact of gender planning in Europe., 33-48.

²⁷ Directorate-General for Mobility and Transport. (2014). She moves. Women's Issues in transport. Luxembourg: Office for Official Publications of the European Union.

²⁸ Wardman, M. (2014). Valuing Convenience in Public Transport. Leeds: OECD/ITF.

²⁹ Chowdhury, S. (2019). Role of Gender in the Ridership of Public Transport Routes Involving Transfers. transport Research Record: Journal of the transport Research Board, 855-863.

³⁰ Ryan-Christensen, A. (2019, 11 11). More Irish women drive to work than men. Here's why. Retrieved from RTE: <https://www.rte.ie/brainstorm/2019/0920/1077145-irish-women-driving-to-work-cars/>

³¹ OECD. (2014). Valuing Convenience in Public Transport. OECD/ITF.

³² International Labour Office. (2017). World Employment Social Outlook: Trends for Women 2017. Geneva: International Labour Organization.

³³ Aloui, S. N. (2018). Gender in Public transport. Sadaqa - Friedrich Ebert Stiftung.

³⁴ Waddell, P. (1996). Accessibility and Residential Location: the Interaction of Workplace, Residential Mobility, Tenure and Location Choices.

³⁵ European Institute for Gender Equality. (2016). Gender in Transport. Vilnius: European Institute for Gender Equality.

³⁶ European Institute for Gender Equality. (2016). Poverty, gender and intersecting inequalities in the EU. Luxembourg: Publications Office of the European Union.

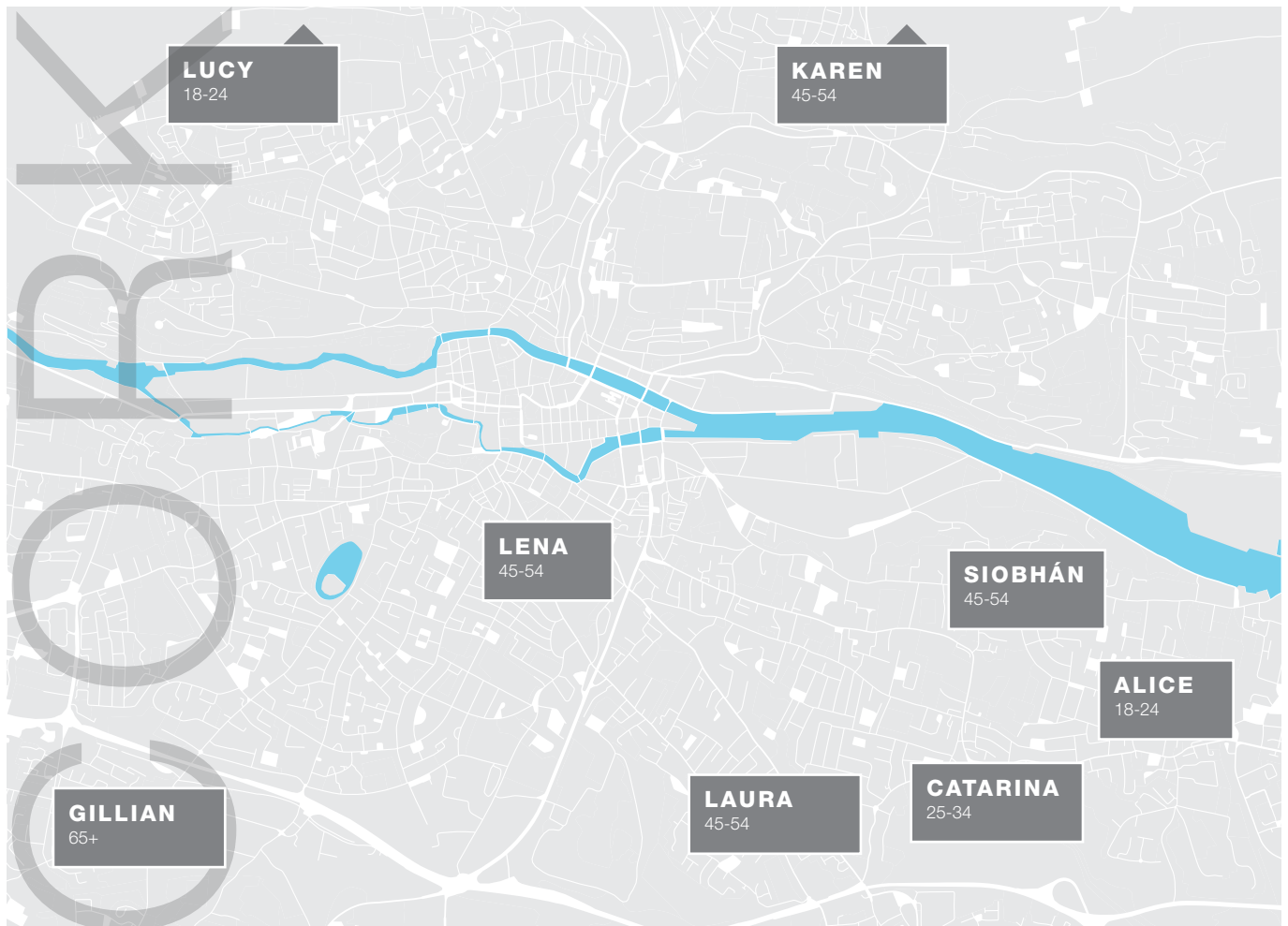
ETHNOGRAPHIC RESEARCH

Research participants were selected to represent diverse demographic and geographic backgrounds and varied daily transport behaviours. The women interviewed had a range of occupations including student, unemployed, childminder, play school teacher, nail technician, legal freelancer, psychologist, engineer, business partner, government administrator, full time mums and retired women. Their family status spread across single, partnered, married, with dependants or caring for others. All names used in this report are pseudonyms to protect the participant's privacy, in accordance with GDPR regulations.

21

in-home interviews
with women in
Dublin & Cork

Cork interviews





Dublin interviews



QUANTITATIVE SURVEY

A survey was issued to 1,000 respondents representative of the Irish population. The survey was co-designed, issued and managed by Spark, an International Insights and Research Agency based in Dublin. The table below summarises the demographics of the respondents.

GENDER MIX	Male 48.8%			Female 51.2%			
AGE MIX	18-24 11.2%	25-34 20%	35-44 20.1%	45-54 15.8%	55-64 14.5%	65+ 18%	
EMPLOYMENT STATUS	Working full time 35.4%	Working part time 15.7%	Self-employed 4.5%	Student 8.1%	Unemployed 8.6%	Retired 19.1%	Home-maker 8.6%
REGION	Dublin 28%		Rest of Leinster 27%		Munster 27%	Connaught / Ulster 18%	
LIVING CONTEXT	City/urban area 43%		Small town 29%		Rural 28%		
NUMBER OF CHILDREN	None 38%		1-2 child 38%		3 or more children 24%		

INTERPRETATION AND LIMITATIONS

Throughout this report, when comparing differences (such as between men and women), we will only note differences of 5% or greater to ensure statistical significance for the sample size of the study.

Like all surveys, the findings draw from, and are limited to, the self-reported perceptions and behaviours of the respondents. Many psychological factors influence a person's ability to answer a question accurately. For example a lack of self-awareness and various cognitive biases, like confirmation bias and the "halo effect". Confirmation bias is where people tend to view a choice that they have already made in a more positive light than the alternatives. Take the example of a consumer survey comparing automanufacturers. Typically, respondents will ascribe the highest scores to brands they are already using. The "halo effect" is another form of this bias, where the positive impressions of one thing extend to its associated factors. For example, the studies have found that when survey respondents rate people as good-looking, they also tend

to believe that the person has positive personality traits and is more intelligent.⁴⁷ In a similar vein, in user research, there is a known gap between what people say and what they do. Gender research, for instance, has often found discrepancies between men and women's reported versus actual household contributions.⁴⁸ With the limitations of the research methods in mind, the findings explore the survey data, ethnographic research and literature together to construct a robust picture of perceptions, attitudes and behaviours.

It is important to note Covid-19 will have implications for social life, gender roles, work and transport demand. At the time of writing, these implications were largely unknown. The report discusses plausible implications, as appropriate, but acknowledges a degree of uncertainty.

While the survey was undertaken at the beginning of Ireland's Covid-19 lockdown period, respondents were asked to answer the questions with their usual behaviour in mind.

⁴⁷ Cherry, K. (2020, February 09). Why the Halo Effect Influences How We Perceive Others. Retrieved from verywellmind.com: <https://www.verywellmind.com/what-is-the-halo-effect-2795906>

⁴⁸ Miller, C. C. (2020, May 8). Nearly Half of Men Say They Do Most of the Home Schooling, 3 Percent of Women Agree. Retrieved from nytimes.com: <https://www.nytimes.com/2020/05/06/upshot/pandemic-chores-homeschooling-gender.html>



Research Findings

Research findings from the survey and ethnographic interviews explore the reasons why 95% of women in Ireland (excluding Dublin) and 79% in Dublin view the car as a necessity.

By examining the experiences of women we explore the appeal of the car and compare cycling, walking and public transport to highlight how these modes could be improved to increase their competitiveness. Moving beyond modes, we explore three central themes of the research: that is, how family, safety and diversity shape transport choices.

Reflecting Ireland today, the traditional family unit is central to many women's lives. However, a traditional family narrative does not fit all women or all experiences. Women who identify as LGBTI+ or single were included in this research but numbers were too small to provide meaningful data. By contrast, the impacts of traditional heterosexual family were clear across all interviewees and the survey. Reflective of this majority, the research findings emphasise the influence of the traditional family unit. Further research can address the needs of LGBTI+ women, as well as unpack the differences in needs between single and partnered women in Ireland.





Heuston
Heuston



RESEARCH FINDINGS

WOMEN’S MOBILITY PATTERNS AT A GLANCE

Irish men and women rely heavily on the car. Car reliance is the highest outside of Dublin, where both density and provision of public transport is lower.

WOULD YOU CONSIDER YOUR CAR A NECESSITY FOR EVERYDAY LIFE?	MEN	WOMEN
Yes – Dublin	88%	79%
Yes – Rest of Ireland	93%	95%

▲ *The car is seen as a necessity for everyday life, especially outside Dublin.*

Drawing on existing and original survey data we can better understand women’s travel. Data shows that men and women’s travel patterns differ, both the modes they choose and their reasons for choosing them.

Despite lower car ownership women use the car at a higher rate, travel locally more and undertake more journeys for education, household duties, and family and child-related pick up and drop offs. Their reliance on the car is driven by caregiving responsibilities, a lack of access to adequate public transport and cycling infrastructure, and safety issues experienced when walking, cycling or using public transport.



⁴⁹ CSO, (2016), National Travel Survey 2016 - How We Travelled. Retrieved from cso.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-nts/nts2016/hwt/>
⁵⁰ 21st to the 31st of March, 2. 24th to the 28th of June, 3. 24th to the 30th of September, 4. 25th - 30th of November. These results summarise all 4 waves.
⁵¹ Interactions Ltd. (2019), Debrief Pack. M50 Users 2019 Report (pp. 1-36). Dublin, Ireland: TII, Interactions Ltd.
⁵² CSO, (2016), National Travel Survey 2016 - How We Travelled. Retrieved from cso.ie: <https://www.cso.ie/en/releasesandpublications/ep/p-nts/nts2016/hwt/>

WOMEN HAVE LESS ACCESS TO CARS

Consistent with the literature, we found a universally high dependency on cars in Ireland, particularly outside of Dublin, where 81% women and 85% men either own or have access to a car.

CAR OWNERSHIP	DUBLIN		REST OF IRELAND	
	MALE	FEMALE	MALE	FEMALE
I own or can access a car	80%	66%	85%	81%
Own a car (sub-total)	67%	50%	79%	70%
Don't own but can access (sub-total)	13%	16%	7%	11%
No, can drive but no access	10%	14%	7%	7%
No, and not able to drive	10%	20%	7%	12%

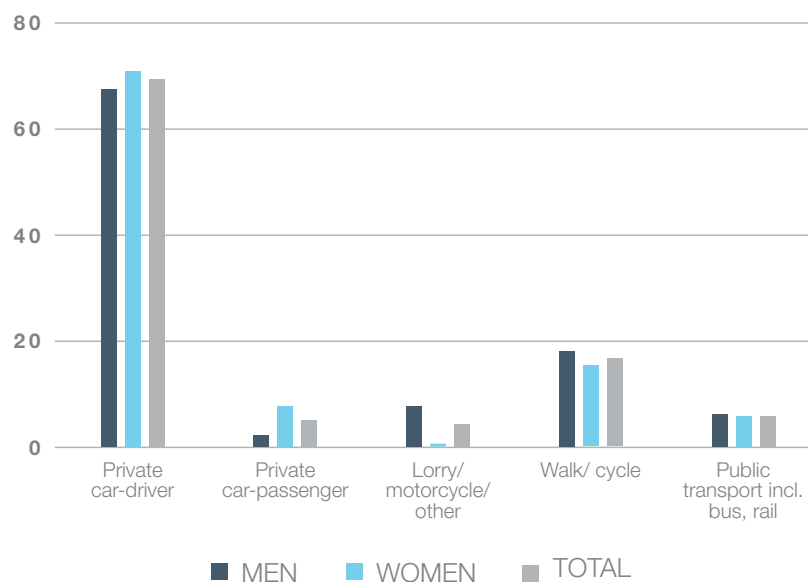
The discrepancy between men and women is amplified in Dublin, where only 66% women own or have access to a car (compared to 80% men). Compared to all other categories, women in Dublin are most likely to not be able to drive (20% women). This data suggests less dependency on the car and a higher reliance on alternative transport modes, particularly for women in Dublin.

WOMEN RELY ON THEIR CARS MORE

While our survey found that women are less likely to own a car, the 2016 Census found that women are marginally more likely to make a trip by driving a car.⁴⁹

By comparison, the recent 2019 M50 Travel Surveys⁵⁰ found that, for a given day, more men travel on the M50 motorway, while women are significantly more likely to have never travelled on the M50.⁵¹

Each source explores different aspects of car ownership and use. However taken together we can see that, women who own cars will use them more and make more frequent local trips. It could also suggest that women without access to a car are more limited in their mobility and are making fewer journeys.



In 2016, females were more likely than males to travel by car as the driver, with 71.2% of journeys taken by females compared with 67.4% of journeys by males. This differed from 2013 and 2014 where males and females were equally likely to travel by car as the driver.

In 2016, females were nearly four times more likely to travel as a passenger in a private car than males. Travel by public transport (including bus, rail, DART and Luas) was largely similar for both males and females.⁵²

CARING RESPONSIBILITIES SHAPE CAR USE

Consistent with global trends, our survey found that in addition to work and education, women in Ireland are responsible for the largest share of society's caregiving, childcare and household responsibilities.

Amongst women with children,

84%

women consider themselves to have the sole or lion's share of responsibility for childcare (compared to 48% men)

30%

of women surveyed provide primary care to another adult, either in a professional or personal setting.

Caring and household responsibilities heavily influence travel patterns. Comparing the daily travel of men and women with families, men's primary reason for travelling is work, while for women it is picking up or dropping off children or family members.

Looking at the table to the right, we also see a higher proportion of women with families travelling daily to pursue education, reflecting broader demographic data on the rising higher education levels being pursued by women in Ireland.

CHILD CARE RESPONSIBILITIES	WOMEN n=364	MEN n=325
Has sole or primary responsibility for childcare	84%	48%
Shares equal childcare responsibility with a partner	12%	33%
Partner or other person has primary responsibility for childcare	5%	19%

FREQUENCY OF JOURNEY TYPES PERCENTAGE OF MEN AND WOMEN MAKING THESE TRIP TYPES DAILY	WOMEN WITH FAMILY n=364	MEN WITH FAMILY n=325
Drop and Collect Children/Family	21.4%	14.0%
To and From Work	20.5%	26.4%
To and From Education	14.7%	7.6%
Self-Care/Health (e.g. gym/yoga/shopping for pleasure etc.)	12.0%	10.3%
Family Time (e.g. day trips, leisure activities with family)	9.7%	12.8%
Household Shopping or Other Domestic Errands	6.5%	9.9%
Socialising With Friends (e.g. at restaurants/pubs)	6.5%	5.1%
Community Engagement (e.g. volunteering/church work etc.)	3.2%	3.7%
Other	5.5%	10.2%

USE OF PUBLIC TRANSPORT AND CYCLING

Women in Dublin use public transport at the highest rate, on average 2.6 hours a week, accounting for 14% of their total travel time, while all other groups use public transport for less than 2 hours a week. Travelling to education or to work were the primary use cases for public transport for women.

Men outside of Dublin cycled the most, on average 1.3 hours a week, while women outside of Dublin cycled on average for only 0.5 hours a week. For women, cycling was most frequently used to travel to school or other education.

HOURS A WEEK PER TRANSPORT	DUBLIN		REST OF IRELAND	
	MALE n=169	FEMALE n=111	MALE n=326	FEMALE n=394
Walking	4.6	5.8	6.1	5.2
	26%	32%	34%	29%
In a car	4.7	4.1	5.7	5.6
	26%	23%	32%	31%
On public transport	1.9	2.6	1.7	1.4
	11%	14%	9%	8%
On a bicycle	1.0	0.8	1.3	0.5
	5%	5%	7%	3%
In a taxi	0.3	0.7	0.4	0.2
	2%	4%	2%	1%
Total travel time (hours)	12.5	14.0	15.1	12.8

▲
Hours per week women spend in each travel mode, also represented as a percentage of their total travel time.



SAFETY CONCERNS AND WORKAROUNDS

Of particular note was the experience and outsized impact of safety issues on behaviour for both men and women. Up to 1 in 3 public transport users have seen or experienced some form of harassment or violence while using public transport. While safety is an issue for both sexes, women, and especially women in Dublin, are particularly vulnerable to sexual harassment and assault.

1 in 3

public transport users have seen or experienced some form of harassment or violence while using public transport.

55%

of women say they would not use public transport after dark/late at night **compared to 35% of men.**

34%

of women say their feelings of insecurity when travelling have stopped them on occasion from going out **compared to 24% of men.**

81%

of men and women think women can, on average, feel more unsafe on public transport than men.

As a consequence of these unsafe experiences and associated safety issues, 55% of women stated that they would not use public transport “after dark/late at night”, and 34% of women stated that feelings of insecurity have stopped them from travelling on occasion. While safety incidents and concerns are experienced by both sexes, men and women both overwhelmingly agree that safety disproportionately impacts women when using public transport.

EVER EXPERIENCED

	FEMALE	MALE
Verbally harassed or made to feel uncomfortable	21%	19%
I witnessed violent behaviour or sexual harassment happening to someone else	14%	18%
I was the victim of violent behaviour	3%	4%
I was the victim of sexual harassment	4%	1%
I was the victim of sexual assault	2%	1%
Prefer not to say	5%	5%
None of the above	62%	61%

▲

Negative experiences by sex, for all of Ireland

CHALLENGES AND OPPORTUNITIES FOR SUSTAINABLE TRANSPORT IN IRELAND

With an understanding of the experiences and perceptions of women, we focus on 5 questions in order to help policy makers to drive sustainable and inclusive transport, which meets the needs of women.

MODES OF TRANSPORT

How can sustainable transport modes compete with the car?

FAMILY ROLES

How can an understanding of the family unit influence sustainable mode choices?

FEELING SAFE

How can transport feel and be safe for women?

BEING INCLUSIVE

How can transport consider the diverse needs and contexts of all women?

DRIVING CHANGE

How can we accelerate sustainable behavioural change?



RESEARCH FINDINGS

MODES OF TRANSPORT

HOW CAN SUSTAINABLE TRANSPORT MODES COMPETE WITH THE CAR?

This chapter starts to unpack how sustainable transport modes can compete with the car and encourage use by women. By contrasting women’s current experiences across various transport modes, we highlight why the car is the preferred choice for most travel today and identify potential ways to nudge changes. Exploring how, despite the car’s disadvantages, a mistrust in cycling and public transport reduce their use over time.

It is easy to see why the car dominates women’s travel in Ireland. Across the survey and interviews, the car is considered the most pleasant, least stressful, safest, most child-friendly option. It gives women ‘me time’—second only to walking—and is even viewed as good for health—third to walking and cycling. Walking was also praised by respondents, showing it is an important part of the Irish mobility story. However, the limitations of distance and sprawling land use planning across much of Ireland make it difficult for walking to contend with the car alone. This suggests the potential for multi-modal solutions that include walking. Cycling and public transport have the ability to compete directly with cars, but currently fail to meet many women’s needs.

RANK OF MODE BY ASSOCIATION FOR ALL WOMEN IN IRELAND							
	Pleasant way to travel	Good for my health	Less stressful	Time to myself	Safe	Child friendly	I can rely on it
most ↑	Car	Walking	Car	Walking	Car	Car	Car
	Train	Cycling	Walking	Car	Walking	Walking	Walking
	Walking	Car	Train	Train	Train	Train	Train
	Cycling	Bus	Bus	Bus	Bus	Bus	Bus
	Bus	Train	Cycling	Cycling	Taxi	Taxi	Cycling
least ↓	Taxi	Taxi	Taxi	Taxi	Cycling	Cycling	Taxi

▲ *The car and walking rank the highest for women across seven indicators driving mode choice.*



“The car is my happy place, you can have a chat and a laugh. You feel safe together... I always get out of the car and think ‘wow’ about the time spent.”

Dora (55-64, Dublin)

Women’s perceptions of each transport mode are consistent with the average number of trips taken using each mode each week. On average, the car is the most popular way for women to travel, followed by walking, then public transport.

CAR

Conflicting feelings for the car

Today, compared with the alternatives, the car offers some women independence, joy and safety. For Dora, the car is the ideal way to travel with her three grandchildren and spend quality time together.

However, for many women the situation is more conflicted and the car falls short of meeting key needs. Throughout the interviews, respondents (e.g. Amanda, section 4) felt the exhaustion of constantly driving and the anxiety caused by traffic and parking. **Siobhán** (45-54, Cork) *complained about driving into town, “I love the independence of the car...but it’s a hassle to take the car into town where the gym is. Parking and paying for parking is a hassle. In the last 5 years the traffic has become a lot busier all the time. There is a huge quantity of cars on the road.”*

Despite these shortcomings, many women who rely on driving have learned to live with these issues. Both nervous drivers, Natalie and Gillian dislike driving and are cautious about the places they go. Out of necessity and after many years of practice, they have become used to managing their discomfort and anxiety.

Despite its inconveniences, the car is recognised by the women surveyed as the preferred option of modes available today. In part, this can be explained by confirmation bias, the tendency to reaffirm one’s existing choices, a known phenomenon in consumer and behavioural research. With high car dependency in Ireland, it is unsurprising that people defer to the car positively, an unconscious justification of their choices. However, a preference for the car can also be explained by land use planning and limitations of current infrastructure. It raises questions about local neighbourhood ‘place making’ including services and shops available on foot or by bike. The appeal of the car is accentuated in the winter months where inclement weather and shorter daylight hours can further deter use of alternative modes. However, weather alone does not need to have this impact. In many countries, for example Sweden and the Netherlands, similar annual rainfall does not deter use of public transport, cycling or walking. This can be explained by high quality and user-friendly infrastructure.

ON AVERAGE HOW MANY TRIPS A WEEK DO YOU COMPLETE FOR EACH MODE	FEMALE
Car	8
Walking	5
Public Transport	2
Bicycle	1
Taxi	0

“I really don’t like driving, I never have, but I just have to do it”

Natalie (35-44, Dublin).



CYCLING

A lack of safe cycling infrastructure negates the appeal of the health benefits

Many of the women interviewed enjoy cycling for leisure on the weekend, but most do not consider it appropriate for commuting due to a lack of safe cycling infrastructure and culture. Without adequate infrastructure women require a high level of experience and confidence to cycle in urban areas. Unlike driving or taking the bus, fewer women are introduced to cycling at a young age and are able to practice and build the confidence needed, in large part due to unfriendly road design. Without adequate infrastructure and experience, the perceived danger of cycling is a stressful and unappealing proposition, ultimately outweighing any appeal of health benefits.

“No one taught me how to cycle on the road - I wish someone would teach me now... I hope my son grows up to be confident enough to cycle on the road.”

Amanda (25-34, Dublin)



Lilian (45-54, Dublin) *loves cycling, she fondly remembers renting an e-bike in Central Park with her family on a trip to New York. When at home, Lilian relies heavily on her car for her everyday travel, but will occasionally cycle locally to maintain good health. Her husband worries about her when she is on her bike, concerned for her safety as there is no bike path and winding roads make it hard for vehicles to see her.*

“I love cycling—it is independence—you can go anywhere and it doesn't cost you anything”

Josie (45-54, Dublin)

With Covid-19 challenging conventional notions of safe transport design, Ireland, like much of the world, is promoting and investing in cycling as a sustainable and socially-distanced mode of transport. With growing public interest in cycling, there is an opportunity to advance cycling mode share and diversify its users, including women. For any new cycling investment, it is important to consider the interdependence of infrastructure, training and established habits, to encourage everyday use.



PUBLIC TRANSPORT

Needs to be more attractive to be a woman's first choice

Public transport is neither preferred, nor unlikeable, and ranks as the middle choice for most attributes (see table on page 23). Despite being rarely the first choice, public transport is often enjoyed. Throughout the interviews, many women shared anecdotes or commended the services.

Primary reasons for not using public transport

For **Anna** (25-34, Dublin), mother of two, her journey to work on the private coach bus is one of the highlights of her day. Seated in a quiet space, feeling respected, she has the time to listen to podcasts, text friends, talk on the phone and unwind between work and caring for the family. Anna enjoys the extra privacy and comfort the coach bus affords her, compared with the public bus. The public bus can be a social space for young women. **Emily** (18-24, Cork) enjoys taking the bus with friends and whenever there is a nice view along the route.

However, enjoyable moments are often negated by poor services or unpleasant experiences getting to, from or on transport. The largest detractors are limited services, poor reliability, slow speeds, sparse stops and long walking distances from home. The last mile of travel, that is the journey to or from home to a public transport stop, is often a significant pain point, with women being frequently deterred from using public transport because of the distance, poor quality, overgrown or dark routes, and unsafe spaces to wait.

WHAT WOULD BE THE MAIN REASONS YOU WOULD NOT CONSIDER USING PUBLIC TRANSPORT FOR SOME OR ALL OF YOUR JOURNEYS?	FEMALE
Limited Public Transport availability in my area	42%
Transport is too slow / journeys take too long	27%
The pick-up / drop off points are too far from my house	27%
It is too inconvenient	23%
The pick-up / drop off points are too far from my destination	25%
Services are not on time or fail to turn up	23%
Total time required to get to and from Public Transport	18%
It is expensive vs. other alternatives	19%
The Public Transport in my area is not physically accessible	13%
I don't feel safe on Public Transport	8%
I don't feel comfortable taking Public Transport alone	7%
N/A - I use Public Transport for all my journeys	4%
I have health requirements preventing me from taking Public Transport	4%
I cannot travel with children/person I need to take care of on Public Transport	4%
I don't know what Public Transport to take	3%



A failure to deliver on these basic needs can have severe consequences for women's lives by taking up valuable time, impacting school, work or other responsibilities, and constraining their independence directly or indirectly (by making those they take care of more reliant on them).

Emily (18-24, Dublin) *is a young student who relies on the bus to get to university. She always checks the TFI bus app before leaving the house to see whether the bus is delayed or cancelled. As this is the only way for her to get to university, Emily will have to wait for the next bus if it is cancelled, making her late or absent from class.*

Lilian (45-54, Dublin) *has three school-aged sons. Where they live, there is only one local bus route, which runs once an hour. To fulfil their travel needs, Lilian spends much of her day driving them 15 minutes to and from the nearest Luas stop, leaving her with less time for her own activities.*

Over time, a lack of reliability begins to erode trust, and many women who once relied on public transport start looking for alternative modes.

"I used to take the bus everywhere... but it is not reliable anymore. The bus sometimes decides to change direction and you don't know when that is happening until it is happening [even with the app]. If the bus was accurate and reliable, I would definitely use it more as it is so expensive to park in the city"

Gillian (65+, Cork)





We draw on Maslow's Hierarchy to better understand women's unmet needs. The framework explains how people are motivated to meet higher order needs once their more basic needs are met. Through this framework, we see the importance of providing for basic needs, like sanitation, in order to enable women to achieve higher-order goals, like education attainment. As a starting point, public transport coverage, reliability and safety must be improved to make public transport more viable for women. However, to make it an attractive choice, consideration needs to be given to a woman's higher order needs: belonging, self-actualisation and esteem.

Self-actualisation	<p>Avoiding travel for any of these reasons limits a woman's quality of life and potential by restricting social life, access to jobs or education.</p> <p>Alice (18-24, Cork) and her friends cancelled their St Patrick's Day plans and decided to postpone a friend's birthday to avoid having to go into town at night.</p>
Esteem	<p>Those with special health needs or hidden disabilities often feel unable to ask or judged by other passengers when asking for assistance or priority.</p> <p>Lucy (18-24, Cork) suffers from fatigue as a result of a recent stroke, but worries she will be judged by other passengers if she requests a seat on the bus.</p>
Love / belonging	<p>It is difficult to travel with children or as a family when there is not adequate space or seating.</p> <p>Ciara (35-44, Dublin) finds it difficult to use the bus with her double buggy, as it is hard to alight and find a space for it on board. During busy periods, there will often already be a wheelchair user or other buggy occupying the designated space.</p>
Safety <i>See section 3.3 for more detail about safety</i>	<p>Women feel unsafe on and around transport, particularly after a traumatic experience.</p> <p>After Hermione (25-34, Dublin) experienced unsafe incidents on the Luas while living in Smithfield, she moved to a different part of town with her sister, so she could take the DART and travel with her sister each day.</p>
Physiological	<p>Inadequate sanitation facilities along the journey are problematic for women, the elderly and young children, especially when experiencing long journeys or waiting times.</p> <p>Amanda (25-34, Dublin) recalls having to get off the bus to change her baby's diaper, wait for the next bus, then get on again.</p>

▲ Consideration of women's transport needs with respect to Maslow's hierarchy of needs.

RESEARCH FINDINGS

MODES OF TRANSPORT SUMMARY

SUMMARY OF FINDINGS

- For most Irish women, the car is the preferred mode of transport today as it largely delivers on both basic functional needs and higher-level, experiential and emotional needs.
 - While women view cycling as good for health, this is negated by unsafe experiences and a perception that it is the least safe way to travel because of a lack of quality infrastructure.
 - While women support the idea of public transport and find aspects of the car tiring and anxiety-inducing, they continue to drive.
 - Alternative transport modes need to get the basics right (by being reliable, accessible, convenient, safe) while also delivering on higher-level needs (comfort, inclusion, health, joy, community, belonging).
-

POLICY TAKEAWAYS

- Gender mainstreaming in policy to introduce gender-sensitive perspectives across all aspects of the transport industry (including gender budgeting as needed).
- **Walking**
 - Improve 'last mile' walking journeys to unlock more public transport journeys.
 - Consider policies that support the '20 minute city' where key services are accessible locally.
 - Improve and widen walking paths to prioritise pedestrians.
- **Cycling**
 - Improve cycling infrastructure to increase safety.
 - Establish clear cycling etiquette and laws to increase safety and confidence for cyclists.
 - Promote cycling lessons and information about safe equipment and practices for all to establish cycling habits.
 - Improve driver awareness about cyclists.
- **Public transport**
 - Better public transport coverage and new solutions for end-to-end mobility.
 - Reduce walking distance between stops and minimise waiting times.
 - Improve the reliability of information, including better real-time information.
 - Increase physical and psychological safety.
 - Design for the 'mobility of care' and those with health and special needs.
 - Promote civic duty and social, respectful culture on public transport.
 - Actively promote the positive attributes of public transport.



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RESEARCH FINDINGS

FAMILY ROLES

HOW CAN AN UNDERSTANDING OF THE FAMILY UNIT INFLUENCE SUSTAINABLE MODE CHOICES?

This chapter discusses the role of the family in shaping women’s transport choices and explores how this shifts over a lifetime. It looks at how the opinions held by families can be passed down, the role of women in the family and how caregiving responsibilities can lead to car dependency. It explores the opportunities to grow the use of sustainable modes by families.

A woman’s relationship with various modes of transport changes throughout her life. From an early age, **habits and perceptions of transport are often socialised in families**, with parents often projecting their experiences and views of different modes onto their children and nudging them accordingly.

In many Irish families, knowing how to independently use public transport is a vital skill and is actively encouraged, offering many girls and young women the opportunity to travel without supervision at an early age.

In other families, learning to drive and getting a car is a coming of age moment, but can be considered a priority for young women in particular. **Siobhán** (45-54, Cork) has a daughter aged 21 and a son aged 24. For Siobhán, making sure that her daughter has access to a car was crucial. Siobhán and her husband both encouraged their daughter to learn to drive from a young age while they didn’t encourage this as much for their son. “It’s very important for a girl if you’re ever in an awkward situation that you aren’t happy with that you get your car keys and leave.”

43%

of women surveyed started using public transport independently between 11 to 15.

Before the age of 18,

77%

had used it independently.



▲ Natalie buckles her son into the car

“It’s easier to have a car with a baby, you can just put him in his car seat and be done with it”

Natalie (35-44, Dublin)

“As I’ve learned over the years of having children, sometimes when you’re driving you can ask the most awkward questions because there’s no escape”

Siobhán (45-54, Cork).

As a young woman enters adulthood, life becomes more complex, and we observe women juggling many duties at once - work, education, household responsibilities and community activities.

Having a child is often a turning point for a woman's relationship with mobility. With children and a pram in tow, women often find that it is neither convenient nor enjoyable to use public transport. At this point, many women who previously used public transport switch to the car, perceiving it as the most reliable and child-friendly transport option. For many, this involves purchasing their first car, which often shifts their habits permanently.

Both **Amanda** (25-34, Dublin) and **Gillian** (65+, Cork) were confident public transport users growing up, relying on it to get to school, work and to visit friends. When the women had their first child and established their own home, both found it difficult to navigate public transport with a pram and groceries, and instead learnt to drive or bought their first car.

Care responsibilities often influence a woman's daily mode choice. **Ciara** (35-44, Dublin) lives in Clontarf, an area well served by public transport, and has two daughters aged three and one. Although she loves public transport and uses it often, there are many factors which she has to consider if she's taking her daughters with her on a trip to town. Ciara considers the following factors when deciding which mode to use: time, facilities, distance and drop off.

From this point onwards, driving becomes a habit, established as part of family life. As children grow up, start school and build lives of their own, the car remains integral to the family dynamic. Often, it falls on the mother to act as the family “chauffeur”: picking up and dropping off children to activities until they are fully independent. **Emily** (18-24, Dublin) has graduated from secondary school and is currently working part-time in retail while pursuing a degree in Beauty and Spa therapy. She lives at home, but travels independently to school and work by public transport. Occasionally, late at night, or if the bus is cancelled, she calls on her mum for a lift, even though both her parents and her older brother have cars and full time jobs. Many women view driving children and family members as not just a duty, but also a joy. Driving a child to school or to friends' houses gives them time to catch up, chat and listen to music together, a time that is often cherished.

Ciara's Mental Checklist

What she thinks about before using public transport with her children.

- Time** – how busy will the bus be? Will there be a space for the pram as there is usually already a pram or wheelchair user onboard when it is busy?
- Facilities** – is the lift in the closest DART station working? I can't carry the pram up the stairs to the platform so I need the lift.
- Distance** – should I walk to the further DART station where the lift usually works or take a chance by walking to the closer one, where the lift might not work?
- Drop off** – Will the DART bring me to where I want to go in town? The station isn't located in a convenient location for where I want to go.



“Cillian would ring me first, I’m the first port of call, and if he can’t then he’ll ring his dad, and if he can’t get his dad it’ll definitely be his brother”

Josie (45-54, Dublin)

Even for women who primarily use public transport to commute, having a car is often still seen as a ‘necessity’ for undertaking daily chores and the occasional emergency. Because many women carry the collective worry within their households, the car provides them with reassurance, knowing that they can go where they need to when they need to. As opposed to public transport which “I can’t control”, the car is seen to be reliable and to give them the control they desire. The need for control and reliability drive a perception that the car is a necessity for women, particularly as their work and household duties grow.

“It’s the freedom and independence that driving gives you and the reassurance of knowing that the car is there. That’s just too important.”

Karen (45-54, Cork)

Survey data reflects the same trend, with young women using public transport regularly, but these habits are replaced by the car as many women have a family. Once a woman grows used to the convenience of the car, she will tend to favour this mode of transport for the majority of trips.

“Once I’m in the car, I’ll stay in the car”

Siobhán (45-54, Cork)

ON AVERAGE HOW MANY TRIPS A WEEK DO YOU COMPLETE FOR EACH OF THE FOLLOWING?	FEMALE					
	18-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	65+ YEARS
Car	7	7	10	10	7	4
Walking	8	5	5	6	5	4
Public Transport	4	3	2	1	0	1
Bicycle	1	2	1	1	0	0
Taxi	1	1	0	0	0	0

Women aged between 35 and 54 take on average 10 journeys per week by car in comparison to only 7 journeys for those aged between 18 and 34. For women aged between 18 and 34, walking and public transport makes up the majority of their weekly journeys (8 - walking, 4 - public transport), whereas for women aged 45-54, these figures fall (6 - walking, 1 - public transport). This further exemplifies how women become more dependent on their cars as they progress through life.

Similarly, on a daily basis women tend to favour staying in the car to complete all their journeys.

Despite this dependency on the car, most women are open to sustainable modes of transport, with women with children tending to enjoy using it on occasion. Women view downtime on the weekend as a chance to avoid the car, especially if walking, cycling or public transport can get them where they need to go while offering a change of pace, or fitting in with other weekend needs - such as relaxing as a family.

"I value that on the weekends you don't have to get into a car, you can walk to the shop. All of the kids' weekend sports activities are within walkable distance"

Karen (45-54, Cork).

For some, public transport can even be an adventure or a break from their daily routine. For example, **Dora** (55-64, Dublin) takes her grandchildren on the bus when they come to visit her. "My grandchildren like the bus because they are so used to their mum driving them everywhere, going on the bus is a huge novelty for them—'can we sit on the top'—they always ask?" Dora hopes that her grandchildren will want to use public transport for more than just the novelty as they grow up. In other cases, families with young children who are very accustomed to public transport see that their children find trips in the car and car seats restrictive and unpleasant. Women's desires to have breaks from the car and children's appetite for public transport provide opportunities to introduce alternative modes of transport and establish new habits that gradually shift behaviours away from the car.

RESEARCH FINDINGS

FAMILY ROLES SUMMARY

SUMMARY OF FINDINGS

- Attitudes and perceptions of transport are shaped by families from an early age.
- In Ireland most women learn to use public transport independently before age 18, often in their early teenage years.
- As many women grow older and life become more complex with work, family and caregiving responsibilities, public transport habits are replaced with car use, as it is seen to be more family-friendly and reliable.
- Car habits are solidified as women move through adulthood.
- Many women turn to walking, cycling or public transport for a break from the car on weekends and holidays.

POLICY TAKEAWAYS

- **Start early:** encourage sustainable transport habits from a young age through community, school and families.
- **Be child-friendly:** design child-friendly public transport and adjoining public space. Enable children's independent mobility.
- **Be reliable:** help women feel that they don't need to own a car "just in case".
- **Form new habits:** promote car-free travel on the weekends to establish new habits.
- **Infrastructure and route planning:** design systems and services that go where women need to go at hours they need to travel.





RESEARCH FINDINGS

BEING SAFE

HOW CAN TRANSPORT BE AND FEEL SAFE FOR WOMEN?

Safety is a primary concern for women and influences their daily travel choices. Many will not take public transport at night, opting for a taxi, asking for a lift or choosing not to travel. This chapter explores how and why women feel unsafe, and points to policies which could improve women’s experiences and increase their use of transport.

Safety concerns impact nearly half of Irish women, causing anxiety and a heightened sense of vigilance on a daily basis. Persistent feelings of insecurity can influence major life choices such as where to live, who to live with and what activities to do. It can affect well-being and lead women to avoid going out, especially at night. Over half of the women surveyed, 55%, would not use public transport after dark or late at night, with a further 34% of women stating that this insecurity has, on occasion, stopped them from going out altogether.

	MEN	WOMEN
I have no concerns about my safety on public transport	44%	34%
I would not use public transport after dark/late at night	35%	55%
My feelings of insecurity when travelling have stopped me, on occasion, from going out	24%	34%

Also from the survey, 1 in 3 public transport users have seen or experienced some form of harassment or violence while using public transport. Both men and women across Ireland are equally likely to experience violence, but sexual harassment and assault are predominantly experienced by women, especially in Dublin.



“I don’t like places with bushes, I’m not saying they would, but someone could jump out and fight you, that would put me off for good, then I’d never go anywhere”

Josie (45-54, Dublin)

◀ Harassment, violence and sexual assault by sex and location

	FEMALE		MALE	
	DUBLIN	REST OF IRELAND	DUBLIN	REST OF IRELAND
Verbally harassed or made to feel uncomfortable	26%	19%	27%	15%
I witnessed violent behaviour or sexual harassment happening to someone else	23%	11%	23%	15%
I was the victim of violent behaviour	4%	3%	5%	4%
I was the victim of sexual harassment	7%	3%	0%	1%
I was the victim of sexual assault	3%	1%	2%	0%

Whilst unsafe and violent incidents are not an everyday occurrence for most women, they have an outsized impact on a woman's sense of safety, well-being and her travel choices. One bad incident is enough to fundamentally alter a woman's relationship with transport.

Siobhán (45-64, Cork) *was attacked by 3 men while going to the bank when she was 8 months pregnant. 20 years on, she remains hyper-aware of her surroundings, “Even now in the middle of the day, there are certain places I wouldn’t walk to for no rational reason at all. There are just alarm bells going off.” Each day she will check her car before getting in, is wary of enclosed parking garages and drives with her car doors locked. “This has impacted everything - that fear factor is there. I would get into a car at any time of the day and I’d be very conscious. I try not to let it impact my day to day life, but it does.”*

In a similar way, the experiences of friends, family or those heard on the news can make women more vigilant or prepare accordingly when going out. This builds on the fact that women have historically been victim to more harassment and violence, especially sexual harassment. *After hearing of violent incidents at her nearby Luas stop, **Elizabeth** (45-54, Dublin) has started to worry about the safety of her teenage daughters. She used to feel comfortable with them walking alone the short distance home, but now insists on her or her husband going to collect them.*



SAFETY IS IMPORTANT ALONG THE END-TO-END JOURNEY

Safety issues are not confined to riding on transport, but extend to the journey to and from a stop or station. In many cases, this was a woman's primary concern or reason for avoiding public transport. Many women remarked about feeling unsafe when walking through large open spaces or parks, especially at night or when there are not many people around.

Unreliable services can leave women waiting for extended periods in poorly lit, isolated or unsavoury places. This concern is often felt both near to home and in town. Many reported that both bus stops and train stations attracted anti-social behaviour and were to be avoided, whenever possible.

Lucy (18-24), a student from Cork, doesn't drive and relies on public transport to get to her classes and her part-time job. She has started to feel unsafe as she has noticed several people at the bus stop in town who are under the influence of drugs. "There are people who are very high on drugs and they're shouting, banging their heads on the bus stop. I don't feel very safe on my own." Filled with angst, when she gets off the bus close to her house, she picks up her walking pace so she can get home as quickly as possible.

Josie (45-54, Dublin) tried walking from the Luas stop back home one night. It is a walk she does frequently during the day but found it frightening at night and would not do it again. "When you're coming up that road, there are bushes either side and it's an open road. You have your wits about you if you're walking home, especially if you've had a few drinks. I did it one night and I ended up running home, I didn't feel safe."



STRATEGIES FOR STAYING SAFE

Many women employ strategies to feel and be safe when travelling. Strategies include: stringently planning their route; travelling one stop further than required to avoid an unsafe station; holding keys in their hand when walking home as a makeshift weapon; calling someone along the way; or asking that someone meets them at that station. Many women spoke of dressing down to avoid attracting attention. This affects a woman's sense of security and limits her independence and expression. It also impacts on her ability to be spontaneous.

When **Dora** (55-64, Dublin) is travelling on public transport she always dresses in comfortable shoes and she doesn't wear tight clothing "I like to blend into the crowd and not stand out." Similarly, for **Josie** (45-54, Dublin), "I try to have sensible shoes on, so if I need to run, I need to run".

Hermione (25-34, Dublin) and her friends will call each other if someone starts interacting with them in a way that they are not comfortable with.

When confronted with harassment, women often try to avoid eye contact and confrontation as much as possible.

"I just keep my head down and mind my own business"

Josie (45-54, Dublin)

For some, these workarounds have not helped, and the persistent feeling of insecurity and lack of safety has forced them to relocate. **Hermione** (25-34 Dublin), a young law graduate originally from Tipperary, moved to Dublin for work. She often felt unsafe travelling home when she lived in Smithfield, she "hated the journey to work on the Luas" and would often come across people drinking, on drugs or approaching her for money. One night, she saw someone rummage through a girl's backpack. While nothing was stolen, it frightened her and she doesn't travel with a backpack anymore, instead holding her handbag close to her body. Over time, the combination of feeling cramped on the Luas and dreading the prospect of walking home, led her to move to a more expensive area. "It was a particular winter where the commute was really horrible, cramming onto the Luas and feeling unsafe. I realised I would prefer to feel safer than to save money and am a lot more relaxed now". Now, she lives with her sister and they travel together to work. Her parents feel much more comfortable knowing they can look out for one another.



◀ The overgrown and underlit path to Josie's Luas stop.



PASSING ON ADVICE AND WORKAROUNDS

Women often pass on their experiences to their children, shaping their perceptions. Often, parents pass on their traumas, fears or biases, teaching their children to be vigilant and aware of their surroundings when travelling and urging girls and women to be especially careful.

Laura (45-54, Cork) has two teenage daughters. Her eldest, aged 13, is starting to travel by bus to the local shopping centre by herself to meet with friends. To ready her for independent travel, Laura advised her daughter to avoid sitting on the upper deck of the bus, don't go to McDonalds on the main street and about what to do when she felt unsafe or found herself in an uncomfortable situation: "I've already given her a strategy - she has learnt the knack of sitting on the outside seat on the aisle when there are two seats together. So, if someone came and sat next to her and she wasn't comfortable, she wouldn't be pinned in".

"People make a place safe"

Lena (45-54, Cork)

WHAT WOULD MAKE WOMEN FEEL SAFER?

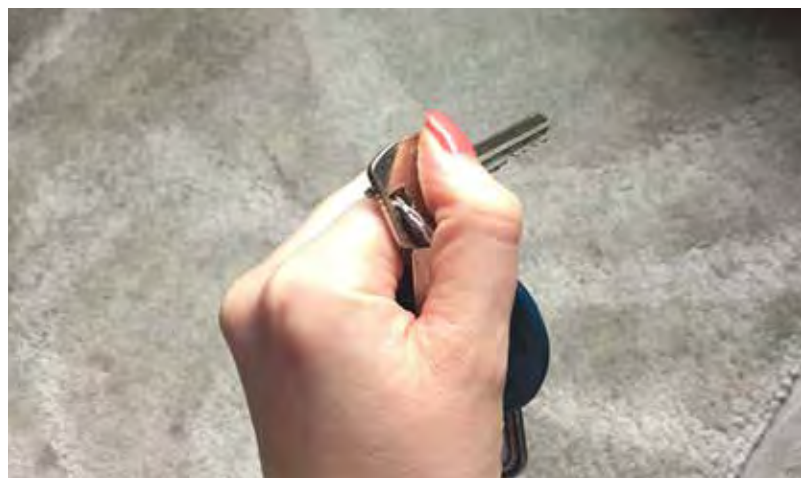
When women recount traumatic incidents they have experienced when travelling, the lack of support from bystanders contributes to feelings of anger, helplessness and vulnerability. **Skye** (25-34, Dublin) vividly recalls sitting on the top deck of a bus looking out the window when she was younger. Despite many seats being available, a man sat down next to her, staring, coming progressively closer, eventually breathing on her face. Skye was most frustrated by other passengers who ignored the interaction, despite her vulnerability and visible fear.

By contrast, support from a friendly or familiar face can help women to feel comforted and safer. For instance, **Josie** (45-54, Dublin) used to be anxious about her autistic son taking public transport alone. Over time, Josie and her son got to know the drivers. "The bus drivers would wait for him if he was late, drop him out the front of his school so he didn't need to cross a busy road. There were four bus men on that route and they all knew us, they were absolutely amazing." One day, he left his school bag on the bus and the driver rang the school so Josie could retrieve the bag before he returned to the depot. The driver's attentiveness and kindness reassured Josie that her son was in safe hands, relieving her anxiety. While women can feel alone when trying to manage the safety of their children, a sense of community support and familiarity can help to ease anxieties and allow children and their mums to be more independent.

Infrastructure, services and amenities can also contribute to a woman's sense of safety and reduce anxiety. Infrastructure that directly and indirectly improves safety is necessary, throughout a woman's journey on the streets and in the vehicle. Important aspects of infrastructure and services identified through our survey included: more trained staff, increased frequency of services (especially at night), street lighting and improved visibility, better technology and easier ways to report incidents. The women interviewed also relied on nearby shops and cafés to feel safe while waiting for transport, showing us that convivial placemaking is also key. For men, more direct action and visible security measures were preferred.



Compared to 59% of men, only 50% of women would like more security guards or customer personnel. Like many women, those interviewed felt heavily responsible for their own safety and tended to prefer good infrastructure and convivial places. This may suggest a certain realism about the ability to police public space. It also alludes to an uncertainty about what feels safe. A report into Protective Service Officers in Melbourne investigated numerous complaints against security staff of 'predatory behaviour towards members of the public', which led women to feel unsafe and intimidated in their presence.⁵³



Many women, like Skye, carry their keys in their hand in order to feel safe. ▲

WHAT WOULD HELP YOU FEEL SAFER USING PUBLIC TRANSPORT?	DUBLIN		REST OF IRELAND	
	MALE	FEMALE	MALE	FEMALE
More security guards / customer personnel	59%	50%	41%	40%
More frequent services, especially at night	34%	34%	30%	36%
Better lighting at the bus stop / stations, etc.	25%	41%	27%	40%
Better visibility around the location of the bus stop / station	29%	33%	24%	33%
Better safety related technology	26%	28%	24%	21%
Easier / clearer incident reporting process	20%	17%	17%	21%
Family friendly areas on public transport	13%	21%	17%	20%
I already feel completely safe using public transport	12%	11%	21%	15%
None of the above	6%	4%	10%	12%
Other	3%	2%	2%	2%

Attributes that would make men and women, inside and out of Dublin, feel safer when using public transport. ▲



NOT JUST A WOMAN'S RESPONSIBILITY

When talking about safety, most women viewed it as their responsibility, and were hesitant to express issues they were experiencing out of fear for not being believed or being seen to be dramatic. Some women worried that they would lose their independence if they told others. Instead, women often try to resolve these issues by limiting what they do or instituting elaborate workarounds. This discourse is often passed down within families, who often send different messages to young boys and girls growing up. *"My dad would always tell me to pinch them at the back of the neck if someone were to come at you. If I were a boy, I don't think he would have taught me that"* **Hermione** (25-34, Dublin). **Lilian** (45-54, Dublin) has one daughter and three younger sons. *Growing up she encouraged the boys to travel on the Luas and bus, but never expected her daughter to take public transport alone, instead chauffeuring her around.*

Compounding the message shared within families, discourse in the workplace and educational institutions can also perpetuate the harmful idea that it is up to women to protect themselves. Increasingly, women, especially younger women reject this notion, expecting a more open discourse about gender and violence, as well as education targeted to both sexes. *When the HR department at Skye's* (25-34, Dublin) *workplace held a seminar to teach women how to protect*

themselves and stay vigilant against sexual assault she was appalled.

While appreciating that the intent was to educate women, she felt it unduly placed responsibility only on women. "Why is it targeted towards women - the victim and not the perpetrator?" Skye complained about the seminar to HR in an attempt to improve the programme.

With 81% of men acknowledging that women, on average, feel more unsafe using public transport than men, there is an opportunity to work with men to build on this understanding. This might include learning how their own behaviour and choices can improve or exacerbate a woman's experience. The 'Walk like a Woman' campaign from Plan International sets out five tips for men to support women feeling safe in public: keep your distance, don't run up from behind, don't stare, keep comments to yourself, keep your friends in line, be an active bystander and educate others.⁵⁴



▲ An example of a woman's walk home.

⁵³ IBAC. (2016). 'Transit Protective Service Officers: An exploration of corruption and misconduct risks'. Retrieved from <https://www.ibac.vic.gov.au/docs/default-source/research-documents/transit-protective-services-officers---an-exploration-of-corruption-and-misconduct-risks.pdf?sfvrsn=4>

⁵⁴ Plan International. (2020). 'Walk like a Woman'. Retrieved from <https://www.plan.org.au/get-involved/join-the-movement/walk-like-a-woman>

BEING SAFE SUMMARY

SUMMARY OF FINDINGS

- Staying safe is a primary concern for many women. Staying vigilant when travelling, particularly at night, is a common practice.
- Women have developed strategies to stay safe, including avoiding travelling at night, on certain modes of transport or going out altogether.
- While unsafe or violent incidents do not occur every day, for most women, the impact of a traumatic incident has a lasting impact on a woman's sense of safety, well being and travel choices.
- Mothers pass on their experiences and strategies to their children, teaching them to be vigilant and aware of their surroundings. This can perpetuate a car culture and limit choices.
- The 'last mile' from a stop or station is often perceived as unsafe and deters travel.
- A lack of support from fellow passengers can make women feel more isolated and unsafe.
- Current social norms typically make a woman responsible for her own safety. There is little focus on the role men can play in ensuring women's safety.
- Creating physical and psychological safety is key to building women's trust in active and public transport modes.

POLICY TAKEAWAYS

Social infrastructure

- Increase presence of transport staff throughout the network.
- Apply a gender lens to staff training and rosters to build community relationships and foster a sense of safety.
- Cultivate a more supportive bystander culture.
- Provide joined-up solutions and partnering by working with key stakeholders like universities and schools. Provide adapted training programmes for both sexes on issues of safety, violence, assault and consent.
- Build awareness around support and counselling for women who have experienced violence or harassment of any kind.
- Co-create solutions with women.

Physical infrastructure

- Collect better data to enable gender analysis of projects.
- Undertake regular women's safety audits and develop effective incident reporting mechanisms.
- Plan for end-to-end mobility, including quality lighting and visibility at all points along the journey.
- Improve service frequency, especially for night services.
- Enhance safety related technology.
- Plan for convivial place-making.

RESEARCH FINDINGS

BEING INCLUSIVE

HOW CAN TRANSPORT CONSIDER THE DIVERSE NEEDS AND CONTEXTS OF ALL WOMEN?

This chapter discusses how challenges relating to transport are not evenly distributed, but vary based on where someone lives, their income and other special needs. In order to build an inclusive transport system, consideration needs to be given to diverse needs and the most vulnerable populations.

DUBLIN COMPARED TO THE REST OF IRELAND

Dublin is Ireland's largest city with the country's most comprehensive public transport system. Across the survey findings, transport experiences and perceptions varied considerably between women living in Dublin and elsewhere in the country. These differences and some of the drivers are explored below.

AVAILABILITY OF SERVICES

Availability of services is a large driver of the discrepancy between use.

48%

of women outside of Dublin said they would not consider using public transport for all or some journeys given limited availability, compared to only

20%

of Dublin women.

MODE USAGE

Women outside of Dublin drive more and use public transport and walk less than those in Dublin.

ON AVERAGE, HOW MANY TRIPS A WEEK DO YOU COMPLETE FOR EACH OF THE FOLLOWING?	DUBLIN	REST OF IRELAND
Car	5	8
Walking	7	5
Public Transport	4	1
Cycling	1	1
Taxi	1	0



EARLY SOCIALIZATION

Women in Dublin are significantly more likely to have taken public transport independently by the time they are 18.

WHAT AGE DID YOU FIRST START INDEPENDENTLY USING PUBLIC TRANSPORT?	DUBLIN	REST OF IRELAND
Under 10	12%	13%
11-17	73%	63%
18-29	10%	17%
30-49	3%	1%
50+	1%	2%
Never used public transport independently	1%	4%

STRESS

Women in Dublin are more likely to consider driving as stressful, while those outside of Dublin are more likely to find using the bus stressful.

IT'S LESS STRESSFUL	DUBLIN	REST OF IRELAND
Walking	66%	76%
Car	18%	27%
Train	27%	21%
Bus	20%	12%
Cycling	9%	6%
Taxi	7%	4%
None of these	2%	3%

HARASSMENT OR ASSAULT

Perhaps given a higher rate of use, women in Dublin are also significantly more likely to have experienced or witnessed violent behaviour or been verbally harassed or sexually assaulted on public transport.

WHICH, IF ANY, OF THE FOLLOWING SITUATIONS HAVE YOU EXPERIENCED USING PUBLIC TRANSPORT?	DUBLIN	REST OF IRELAND
Verbally harassed or made to feel uncomfortable	26%	19%
I witnessed violent behaviour or sexual harassment happening to someone else	23%	11%
I was the victim of violent behaviour	4%	3%
I was the victim of sexual harassment	7%	3%
I was the victim of sexual assault	3%	1%

SAFETY

When asked how safe each mode felt, women across all of Ireland ranked walking highly. This shows the role for walking in any multi-modal transport planning and the importance of the last-mile for unlocking women's mobility. The low performance of the car in Dublin can be explained by safety related concerns around parking, carparks and making the journey alone by foot.

IT FEELS SAFE	DUBLIN	REST OF IRELAND
Walking	62%	72%
Car	23%	26%
Train	15%	23%
Bus	24%	19%
Cycling	11%	13%
Taxi	10%	9%
None of these	5%	5%

The findings demonstrate a strong correlation between access to public transport with early and regular use, and confidence or comfort in the mode. Young women who grew up in rural areas can feel unprepared, experiencing shock and heightened vulnerability when moving to a city and using public transport alone for the first time. **Alice** (18-24, Cork) moved from a small village outside of Cork into town, there's no public transport where she is from so her journeys in Cork are her first experiences. She uses public transport regularly, but she doesn't feel comfortable waiting at the stop in town or taking the bus at night. By contrast, **Amanda** (25-34, Dublin) grew up in Dublin using buses from an early age. While she uses the car a lot these days for family, at 26 she still knows the routes and reliability of many of the buses off by heart. Amanda shows resilience and confidence in using public transport and attributes this to her early socialisation.

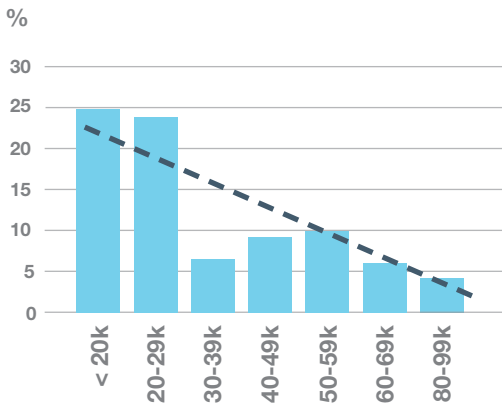
It is worth noting that attitudes to public transport are in flux and Covid-19 may encourage more people into their cars or onto active modes.



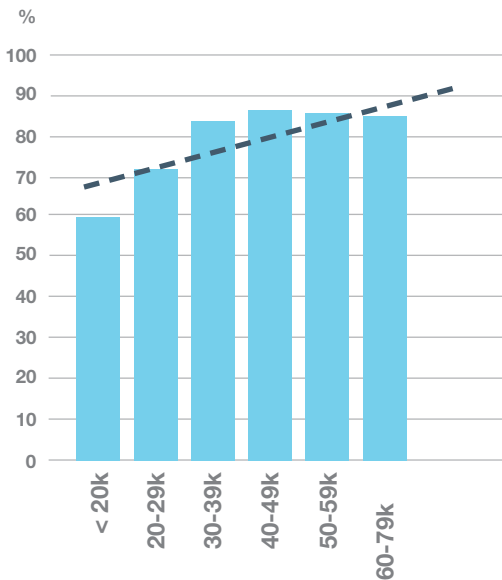


BY INCOME

Personal and household income affects the transport options available and affordable to women. It affects the neighbourhood they can live in, educational options and childcare support. Women with a higher household income are more likely to own a car and less likely to be public transport users.



Percentage of women using public transport by income level.



Percentage of women who own a car or have access to a car by income level.

It is critical that public transport is seen as a viable option for all, not just for those of lower income households. Middle class women are open to public transport; however, many still defer to the car as their mode of choice. Urban sprawl means many middle income suburban neighbourhoods are not well served by public transport or cycling infrastructure. **Lilian** (45-54, Dublin) is a full time home mum living in the suburban neighbourhood of Enniskerry. The suburb is only served by a single bus route, running hourly. The closest Luas stop is in Sandyford, a 15 minute drive away. Even if they wanted to use public transport, the options nearby aren't adequate. Instead, Lilian spends a considerable amount of time each day chauffeuring the boys to school, extracurricular activities or the Luas.

More dependent on walking and public transport and often living in poorer neighbourhoods, women with lower household income tend to be exposed to safety issues. These women are more likely to witness or be victim to violent behaviour or sexual harassment.

For the most vulnerable women, limited financial means can be paired with a lack of family support, low education attainment, dependency on social services, experiences of racism, health issues, disabilities and unemployment. This cumulative disadvantage heightens a woman's vulnerability and compounds daily mobility hardships.

Natalie (35-44, Dublin) is a single mum with two boys, aged thirteen and two. As their sole carer, Natalie does not work and relies on social services and family support. "It isn't fair (having to take care of the kids alone) but I've gotten used to it. Some weeks, I feel it's fine and sometimes it's not, I do what I can". Natalie had been on the Council housing waiting list for a long time, holding out for a place near her mum's house. Her mum lives in the area where Natalie grew up, this is where her son goes to school and where her community is. When her previous landlord decided to sell their property, she had no choice but to take any Council house on offer. Unfortunately, the one she moved into is far from her mum's house, and in an area where Natalie doesn't feel safe. "At night, I don't feel safe because you hear of muggings and people being attacked".

The neighbourhood feels especially unsafe at night and Natalie worries about her son being hassled if he is out walking. "There are gangs around the corner so I prefer if my son doesn't walk by himself. Once, when he was at the shops with my friend, the other kids shouted at him and called him fat."

As her own car is broken, Natalie has borrowed a car from her brother and uses it for most of her trips. Despite considering herself a nervous driver and feeling overwhelmed by the expense of driving, she thinks of it as the only convenient option for travelling with her youngest son. Each week, petrol costs her €60 to €70, consuming a sizeable portion of her government benefits. As she is constrained for money, Natalie typically tops up €5 or €10 of petrol at a time, a practice that has left her broken down a number of times after running out of petrol and having to walk to a garage or call on family for help.

Despite having free access to public transport, Natalie does not use it every day, as she finds it inconvenient with children and, at times, unsafe.

“Sometimes, you’ll get a bus and there will be a group hanging around, people on drugs, that sort of thing. But you just try to avoid sitting near them.”

For Natalie, most days are stressful, with little childcare support or time for herself. Her financial situation is a constant concern and she worries about how her children will manage in the future. Pressures of daily life leave her with very little mental capacity for long term planning. Her current transport options add to this stress, as she chooses between the anxiety she feels driving across town to see family or friends, or struggling with her son and their many bags on public transport.



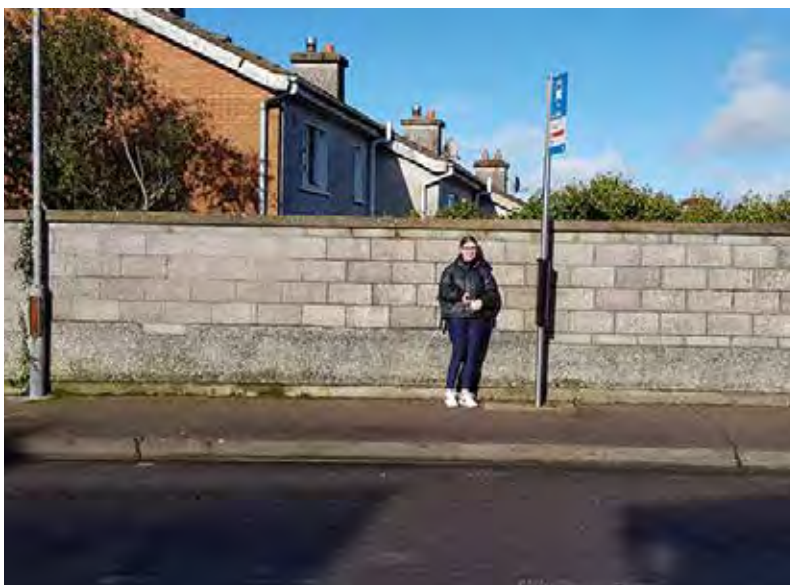


BY AGE AND HEALTH NEEDS

Health issues influence a woman's sense of independence and mobility choices. The research found that, for example, those with disabilities are less likely than the general population to be able to drive, own or have access to a car.

OWN A CAR	WOMEN WITH DISABILITIES	WOMEN WITHOUT DISABILITIES
I own a car or have access to a car	72%	78%
No – I can drive but have no access to a car	5%	9%
No and I am not able to drive	23%	13%

While health issues can impact all women, they tend to worsen as women get older. Fear of losing one's ability to drive, thus having to ask family members for help and losing independence, was a concern for many ageing women, like Gillian who shares her story in Section 4.



Health issues and disabilities can make active modes of travelling such as walking and cycling particularly challenging. **Lucy** (18-24, Cork) had a stroke when she was eight years old, which has left her with weakness in the right side of her body causing fatigue and migraines. "I can walk perfectly, but it's just fatigue at the end of walking that would get me." When she is travelling, Lucy is always mindful to conserve her energy along the way.

For women with health needs, public transport has the potential to provide them with independence and reduce their reliance on others. Today, unreliable and unsafe services impact disproportionately on women with disabilities, often preventing them from using public transport. Data shows that 12% of women with disabilities are not comfortable taking public transport alone, while 22% of women with disabilities stated that health requirements prevent them from using public transport, indicating that existing infrastructure does not adequately provide for the needs of these women.

◀ Without any shelter, seats and proper lighting, Lucy often feels vulnerable waiting long periods at the bus stop.



BARRIERS PREVENTING PUBLIC TRANSPORT USE	WOMEN WITH DISABILITIES	WOMEN WITHOUT DISABILITIES
Services are not on time or fail to turn up	30%	22%
I don't feel safe on public transport	17%	6%
I don't feel comfortable taking public transport alone	12%	7%
I have health requirements preventing me from taking public transport	22%	2%

Health needs and disabilities can be challenging to design for, particularly as many of these needs are invisible. In addition to the inconvenience and physical pain women experience when travelling, many also feel judged or scrutinised when asking for support. **Lucy** (18-24, Cork) was recently waiting for the bus into town to go to the gym when it didn't show up. There is another bus route a 10 minute walk away, but she decided to wait rather than expend energy walking and be tired when she arrived in town. The bus is small, operates a long route and has infrequent services, meaning the bus is often full and Lucy won't get a seat. As Lucy's disability is not obvious, she often feels embarrassed or unable to ask for a seat. Even after spraining her ankle and using crutches, nobody offered her a seat and instead she experienced scrutiny for asking to get on the bus first, "I looked around and got off". When she was forced to stand on the bus "there's nowhere to put your crutches and there's nowhere to lean. I stumbled a few times."



◀ Lucy is often left waiting at the bus stop, waiting 30-45 minutes for the next bus to turn up.



BY RACE AND ETHNICITY

While there is general openness and acceptance of immigration in Ireland, everyday racism and xenophobia is still felt. This has significant impacts on women's mobility, including the cost and well-being.

For **Amanda** (25-34, Dublin), *growing up as one of the only mixed race people in the area, she experienced regular racism. "I didn't know what to do then, I just told myself I needed to toughen up my skin."*

Lena (45-54, Cork) from Poland has lived in Ireland for over 10 years. She and her two sons are very connected with their local community, *"they all smile at me, they say hello, I feel I'm part of a community."* Despite this, on many occasions, taxi drivers have taken her the long route, assuming she is not from Ireland. *"Sometimes, I'll take a taxi back from the airport and they'll hear my accent and think I'm not from here, then I say the address and they'll take me the long way around."*

RESEARCH FINDINGS

BEING INCLUSIVE SUMMARY

SUMMARY OF FINDINGS

- Women in Dublin view the car more negatively and are slightly less dependent on it than those living elsewhere in Ireland.
- Women in Dublin have more exposure to and use public transport more frequently. Their perception of it is also more positive.
- Confidence using public transport and active modes is acquired over time.
- Women with higher household incomes are more likely to own or have access to a car and to be less dependent on public transport.
- Women with lower household income are more likely to witness or be victims of violent behaviour and sexual harassment.
- Everyday racism and xenophobia are still felt by minority ethnic or non-Irish backgrounds and impact the mobility of women today.
- Exposure to risk, inconvenience and vulnerability can be amplified for the most disadvantaged women, for whom low income can intersect with health issues and disabilities, reliance on social services, lack of family or partner support, and a lack of employment or education opportunities.

POLICY TAKEAWAYS

- Design for a range of disabilities and age and health related issues.
- Promote diversity and inclusion to foster understanding and encourage supportive behaviours on and around public transport.
- Improve public transport coverage and quality in regional and rural Ireland.
- Take an integrated approach to land use and understand local neighbourhood transport challenges.
- Build a gender lens with diverse partners to protect the most vulnerable women, bringing transport policy together with land use planning, social and justice services, childcare and education.
- Expose rural children to urban transport environment.

RESEARCH FINDINGS

DRIVING CHANGE

HOW CAN WE ACCELERATE SUSTAINABLE BEHAVIOURAL CHANGE?

At the heart of this project is Ireland’s ambitions to achieve a low carbon and sustainable future. In addition to improving public transport, walking and cycling infrastructure, as described in previous sections, how can public policy accelerate this shift? This chapter discusses the lessons learnt from our research to identify how to get people to rally behind this challenge and change their own behaviour.

72%

of women say they are concerned about the environment and climate change.

45%

would consider changing their transport routine to help the environment.

Only

12%

of women recognise public transport as eco-friendly.

CLIMATE AWARENESS IS A WEAK MOTIVATOR

Across Ireland, awareness of climate issues is high. Amongst those surveyed, 72% of women stated that they are concerned about the environment and climate change. 45% said they would consider changing their transport routine to help the environment. However, these concerns about the environment don’t translate into actions. As we know, car ownership and use is high and, in fact, only 6% of women place “environmental friendliness” into their top eight decision-making factors when deciding how to travel.

TOP 8 TRAVEL DECISION FACTORS	FEMALE	MALE
It will get there quickly	21%	23%
It feels safe	17%	14%
I can rely on it	13%	13%
It’s a cost-effective option	11%	11%
It’s easy to access	9%	9%
It’s environmentally friendly	6%	6%
It’s less stressful	5%	5%
It’s a pleasant way to travel	4%	4%

“Dad thought that global warming wasn’t real, but now he said, you’re onto something, climate change is everywhere”

Alice (18-24, Cork)

In part, this inaction can be attributed to a limited understanding of the link between individual transport behaviour and climate change. During the ethnographic interviews, most women referred to recycling, purchasing reusable items, reducing consumption of red meat and protecting wildlife and natural habitat when talking about day-to-day sustainability actions. Quantitatively, only 12% of women surveyed considered public transport to be eco-friendly. A more targeted public policy campaign is needed to build an understanding of the link between transport choices and climate.

For women who are aware of the role of transport in climate action, they often described it as a difficult area to change. *“I know it’s selfish: I fly to see family or go on vacation every other week, it’s terrible the amount of pollution I cause”* **Skye** (25-34, Dublin). *Despite being the most educated and passionate interviewee on climate issues, Skye would still like to own a car. Living in central Dublin, Skye is deterred by the high cost of renting a parking space near her house. Instead, she and her boyfriend use a car subscription service, called Go Car, giving them easy access to a car when needed. Skye’s story demonstrates that the cost of parking is an effective disincentive for owning a car; that car share schemes can provide women with the reassurance they seek from car ownership.*

COST OF PARKING AND COST OF THE CAR AS AN OPPORTUNITY

Like Skye, many other women pointed to the high cost of parking, particularly in the inner city, as one of the strongest, if not only, effective motivators to avoid the car. The full cost of a car is rarely taken into account when women compare transport options. The women interviewed often didn’t consider the upfront or upkeep cost of the car; instead, they often compared petrol and parking costs with the cost of a public transport ticket, giving the illusion that the car is more cost effective than it actually is. To shift behaviour, showing the holistic cost of the car could prove effective for policymaking for influencing women’s transport choices based on cost.

PROMOTING PRACTICAL PATHWAYS FOR MODAL SHIFT

Shifting women away from their cars is a sizeable challenge in Ireland, given high car dependency rates, a mindset that the car is a necessity and the time required to provide adequate cycling and bus infrastructure. In the short term, it is unlikely that women will have the appetite or ability to give up their cars altogether. Instead, promoting practical pathways like multimodal park and ride, car-sharing, ride-sharing or electric vehicles (EV) are more likely to be effective at influencing behaviour change today and start to shift women away from car ownership in the long term. *For example, Amanda* (25-34, Dublin) *wants Ireland to invest in more EV infrastructure and provide better subsidies to help families transition. When she was upgrading her car a few years ago, she looked into getting an EV but decided against it as she wasn’t able to get a charging station installed at the council flat she rents. Laura* (45-54, Cork) *has also considered switching to an EV, but felt it was not suitable for her long distance travel needs.*

WOMEN'S OPENNESS TO CHANGE

As discussed earlier in the report, the research showed that women in Ireland were generally open to change. We saw this particularly for women in Dublin where public transport and density make it a more viable choice. There is an opportunity to leverage this openness to encourage behaviour change through targeted programmes and policies. It also demonstrates the potential for change in rural communities across the country where public transport will be provided.

	FEMALE		MALE	
	DUBLIN	REST OF IRELAND	DUBLIN	REST OF IRELAND
Already taken action to reduce car use	39%	34%	44%	29%
Have considered taking action to reduce car use	47%	38%	34%	42%



▲ Emma loves walking to work alongside the canal





THE INFLUENCE OF CHILDREN AND FUTURE GENERATIONS

As discussed, changing long-established habits can be challenging and is often met with resistance. However, women interviewed who had school-aged children were often more open to change than their peers. Many referred to instances where their children have come home from school with information about and a passion for climate issues, challenging them to think about their own behaviours and institute new practices at home. Most women were supportive, and often impressed, by their children's civic mindedness and were eager to support along the way.

Lilian (45-54, Dublin) *noted how her 13 year old son was more engaged with topics like gender and climate than her older sons, aged 18 and 20 are. Lilian considers him part of a new generation, where he proactively brings home challenging discussions, applies pressure on her to consume sustainably (e.g. biodegradables), challenges her use of gender stereotypes and is much less enthusiastic about learning to drive. Lilian believes that the city needs to improve cycling infrastructure to support these changing attitudes and adapt to "what the kids want". "I think for kids going forward, they seriously need a much better transport system. In this area, kids are being forced into driving because they can't get around. They don't have the type of transport options that they need."*



◀ Living close to her office, Laura walks home from work with ease each day

IT TAKES A VILLAGE: CHANGE REQUIRES FAMILY AND SOCIETAL SUPPORT

It is important to note that, while behaviour change from women is an important dimension in Ireland's decarbonisation, collective effort is required by all. A broader reflection is needed on how we all live and define a good life. Today, women's choices are shaped by the options they have available to them, as well as:

- Narratives passed on by family and society
- The type of transport options their peers are using
- The actions of men and bystanders on and around public transport
- Division of labour, roles and responsibilities in the home

For women to feel more confident and comfortable using sustainable transport modes, services and infrastructure need to cater to the needs of the entire family.

COVID-19 AND FLEXIBLE WORKING ARRANGEMENTS

We have discussed how a woman's many responsibilities put them under constant time pressure, especially for women who are working and have children, such as Karen (45-54, Cork). In Ireland, as in many other countries, Covid-19 has enforced an unprecedented closure of both schools and offices throughout March, April and May 2020. Throughout this period, the dual responsibilities of working from home and caring for children has placed greater pressure on many working women. However, attitudes to remote and flexible working having relaxed, particularly amongst men and may extend beyond Covid-19. This may reduce pressure on women, challenging the necessity of commuting during peak hours and giving men and women more flexibility to explore alternative transport options.



RESEARCH FINDINGS

DRIVING CHANGE SUMMARY

SUMMARY OF FINDINGS

- There is general concern for climate change; however, the link between individual transport behaviours and sustainability is not well understood.
- Cost of parking is a strong incentive to reduce car use, whilst the full cost of running a car is often underestimated.
- Support practical pathways to reduce car use through car share schemes, ridesharing or switching to EV.
- Women in Dublin are the least likely to use a car and are most willing to reduce their car usage even further.
- School-aged children play a central role in shifting attitudes and behaviours in the family.
- Behaviour change requires the full support of society and families.
- Beyond Covid-19, flexible working arrangements could influence the distribution of household duties and travel demand.

POLICY TAKEAWAYS

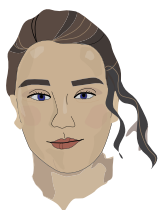
- Facilitate multi-modal travel by understanding connectivity through a gender lens.
- Design for households as well as individuals.
- Apply a gender lens to carpooling and ridesharing schemes to improve services and reduce car use.
- Provide EV incentives and infrastructure to reduce barriers for households switching to EVs.
- Ramp up climate change education for all age groups and promote ways individuals and families can reduce their carbon footprint through their transport choices.
- Plan for changing flexible work and mobility patterns from Covid-19. Prioritise integrated approaches to work, caregiving and mobility - understanding that flexible work arrangements, parental leave and affordable childcare all impact on mobility choices.



Stories From The Field

FIVE WOMEN ACROSS FIVE LIFE STAGES

Through this series of women's stories, we explore how different modes of transport make up a woman's journey and daily life, over a lifetime. Each story is the real experience of one of the women we interviewed. One-by-one, the stories invite us into a moment in a woman's life and immerse us in her experiences. Steeping us in their lives, we explore experiences and perceptions of transport modes, family roles and responsibilities, safe and unsafe experiences and privilege and disadvantage as they influence women and travel.



Alice | Cork
19 years old

▼ University student and part-time barista, wanting to explore and socialise but struggling to feel safe after dark.



Karen | Cork
45 years old

▼ Associate director at engineering firm and mum of four young kids, balancing a career and childcare together with her husband.

◀ Participant names, details and faces have been anonymised to protect their identities.



Amanda | Dublin
26 years old

▼ Single mum, childminder and soon-to-be psychotherapist, juggling her responsibilities and ambitions, tethering her to the car.



Gillian | Cork
70 years old

▼ Retired but busy helping to take care of her grandkids, worried about losing her ability to drive.



Josie | Dublin
48 years old

▼ Stay-at-home mum and multi-generational carer, balancing caring for the family with her own wellness.



ALICE

For Alice, 19, a young woman just entering university, her new found independence comes with its challenges as she explores a new city. After some unnerving experiences, being out after dark requires extra vigilance.

ABOUT ALICE

- ▼ 19 years old
- University student
- Cork

Alice lives in the suburbs of Cork with her grandparents. She moved in with them so she could travel easily to university as there is no public transport from her village. In addition, she appreciates being able to save on rent while enjoying the comforts of family.

Balancing part-time work as a barista, studying nutritional science and maintaining a relationship with her boyfriend keeps her busy. Alice aspires to own her own home, have a car and explore the world one day. She knows she will need a good job for that.

Alice prefers to make her own way around Cork without burdening her ageing grandparents for a lift. The bus is her main way of getting to school, to work or to see friends.

“I just want a job where I get paid enough that I don’t have to live pay cheque to pay cheque, I want to be able to buy a house, get my licence and a car and I’d like to be able to travel around. I want to see the world a bit”

Originally from a small village, Alice finds that the city can be a scary place, especially lately, given many recent news stories of violent crime. These reports, combined with her own late night experiences, like getting cat-called or harassed by groups of men at night, have put her and her friends off going out at night for now.

BEING OUT AFTER DARK FOR A YOUNG WOMAN IN CORK



▲ Internet cafe Alice waits inside

Coming home from work

Navigating independence and feeling safe.

Waiting for the bus in a nearby internet cafe

Alice finishes work in town at 8pm. She doesn’t feel safe waiting at the stop as there is a soup van set up next to it, attracting men who linger around. Instead, she takes refuge in an internet cafe down the road and runs to the bus when she knows it’s about to arrive.

Keeping quiet so she isn’t an inconvenience

Even when Alice has negative experiences, she prefers to keep quiet rather than bothering her grandparents by asking for help.

“I wouldn’t tell my grandparents what happens because then my nan would make my grandad come and pick me up from everywhere and I don’t want him to have to do that.”

A night out with friends

Preparing for a night out

Alice and her friends are always thinking ahead when getting ready to go out. They have developed their own workarounds to feel safe - by bringing a coat to cover up, wearing sensible shoes to run at any time, always keeping an eye on their drinks and staying in groups.

Survival strategies as a group

Alice and her friends are often harassed by men on a night out. It often starts with cat-calling and name-calling and sometimes escalates to groups approaching or becoming aggressive when the young women don't engage. They will always stick together at all times and if situations become unmanageable, they will hide inside a venue or leave abruptly to avoid any further escalations.

Educating girls and boys

On reflection, Alice would have appreciated being taught better coping strategies in school, but thinks it is equally important for boys to be educated on how their behaviour affects women.

"You want to draw the least attention to yourself as possible. I bring a big coat so I can wrap up and hide in it. If you need to run, you don't want to waste time getting your heels off."

"It's about safety in numbers, we're constantly watching out for our group. We'd be holding hands walking, bringing our drinks to the bathroom. If one of us wants to leave - we all leave".

"I wish that, in schools, they taught you how to handle yourself. When you're younger, you don't know what to do, you have to learn from experience. Oh, and boys too, they need to be taught how they make people feel, a lot of the time they just think they're having a laugh, but I don't know any girl who likes it - respect people's boundaries!"

"There's no fear [among the perpetrators] anymore, [crime and harassment] is too widespread. I'd rather wait to go out until it quietens down"

POLICY CHALLENGE

How can sustainable transport policy empower Alice to live a full life—working, exploring and socialising anywhere in town and at any time of day —without worrying about her safety?

Implications for:

- Transport policy and planning.
- Land use policy.
- Security measures.
- Transport infrastructure.
- Community education.
- Cross-departmental collaboration.



AMANDA

At 26, Amanda's life is built around juggling multiple responsibilities as a single mum, a university student and a childminder. Financially constrained, Amanda does her best to care for her son, while striving for her own future. The car enables her to get all of this done, but constant driving has become a burden.



ABOUT AMANDA

▼
26 years old

Single mum, childminder and soon-to-be psychotherapist

Dublin

Amanda lives with her 9 year old son in social housing in Dublin. Dependent on social support, she works as a childminder for a family of three small children, so that she can save on childcare and spend time with her son. On the weekends, she is pursuing a part-time degree in psychology to secure a better future for herself and her family.

"I had a baby at 16, so I never got to have a career - this is important for me."

Managing pick-ups and drop-offs for four children every day, household duties and her own commute to school leaves Amanda with little contingency for delays. At first, getting a car was liberating for Amanda, it gave her more time in her day to get everything done. Over time, her reliance on it and seemingly endless hours driving, has become a burden.

"If we're late in one part [of our daily children pickup routine] that's going to screw us up picking up everyone else".

Growing up taking the bus, Amanda knows the Dublin route map by heart. Being the only person of colour in a poor neighbourhood, she endured routine verbal harassment on public transport. Yet looking back, she sees these experiences as confidence- and empathy-building. Amanda wants her son to have the same confidence and encourages him to take the bus to his jiu jitsu classes twice a week. It saves her time sitting in traffic too. Cycling is a different story, she never learnt to cycle on the road and is afraid to do it now, but wants her son to learn so that he isn't held back.

"Him taking the bus saves me half an hour sitting in traffic. He's mature beyond his age, so it's pretty much safe, and it's right beside my mum's house"



▲
In the car

“I drive pretty much all the time, driving kids from A to B all the time.”



THE CONTRADICTIONS OF THE CAR

The car as freedom

When Amanda was living closer to town, she didn't need a car. But when she moved to this new apartment block as a new mum, the distance to the grocery shop made walking with a child and groceries challenging. Her brother bought her a car for her 21st birthday.

The car as a burden

Amanda spends her weekdays in the car doing pick ups and drop offs for her son and the children she minds. For her, the car is the only way to make all of these trips possible, though sitting in traffic daily is exhausting and repetitive.

“I think you need a car if you've got a child, you've always got heavy stuff.”

Public transport as freedom

When Amanda finishes university and becomes a psychotherapist, her routine will change. By then, her son will be in secondary school so the school she selects must be easy for him to get to on his own. No longer having childminding responsibilities and with her son travelling independently, Amanda hopes to be out of her car and onto public transport.

“Wherever he goes to secondary school needs to be within walking distance or on a good bus route because I'm going to be working”

When her son takes public transport independently, it gives Amanda extra time in her day. However, when things go wrong, it can require Amanda to drop everything and can be more of a hindrance than a help. Once, her son was on his way to jiu jitsu and the bus didn't arrive; fortunately, he had a mobile phone with him that day and was able to call on her.

POLICY CHALLENGE

How can sustainable transport policy enable Amanda to continue her complex childcare and education routines, without always feeling dependent on a car?

Implications for:

- Child-friendly design for public transport.
- Real-time route information, planning tools.
- Planning bus routes and frequencies that suit women's travel needs, including social housing and schools.
- Services supporting children travelling independently.
- Cycling infrastructure and services for beginners.

JOSIE

Josie, mum of two and wife to Paul, runs the household with impressive efficiency. Her daily routine is structured around caring for her autistic son, with a goal to help him gradually become more independent. Alongside her duties as a mum, it is important for Josie to be social and active every week.



ABOUT JOSIE

▼
45 years old
Stay-at-home mum, multi-generational carer and avid cyclist
Dublin

Josie and her husband live with their two sons, Joseph, 23 and Cillian, 19 who has autism. When Cillian was diagnosed at 3 years old, Josie quit her job to be his full-time carer. Her husband Paul is enrolled in a Master's degree alongside his job - this demands a large portion of his time and Josie supports him however she can.

She makes sure she has enough time for herself: by being active at the gym or on her bike, and by having nights out or coffee dates with friends. This year, she and "the gym girls" are training to do the Ring of Kerry cycle route. Josie loves a challenge and cycling is one way she can push herself and feel a sense of personal achievement.

"I don't want to end up like my parents. I don't want to rely on other people to come and help me [when I'm old], so since I turned 40 I've been getting fit."



▲
Josie unpacking her shopping at home.

Josie plans her days carefully and drives only when she needs to. For local trips, she prefers walking or cycling. On top of caring for her immediate family, Josie helps her elderly father go grocery shopping. While he can take the bus, he relies on a lift from Josie for shopping and other big errands. Josie doesn't mind helping but finds it frustrating when her dad expects more of her than they have planned.

"My dad will always ask me for help. He thinks 'Josie can do it, she doesn't work'."

Josie worries about her son and works tirelessly to grow his independence, and, with it, her own. Using transport is a skill she is keen for him to master. Over the years, Josie has supported Cillian by cycling alongside him to school as he learnt to ride on the road or even hiding in the bushes as he walked to the Luas alone for the first few times.

ACQUAINTING CILLIAN WITH TRANSPORT

A year on the bus together

When Cillian started at a new school that was too far for him to cycle to, Josie taught him how to use the bus. At 13, he had taken the bus with Josie before but needed some practice to be ready for travelling alone. Josie accompanied him to school each day for almost a year, getting to know the four bus drivers along the way. Now, he can confidently take the bus, the Luas or walk wherever he needs to go.

“My son’s independence is so important to me, it means he’s not attached to me. I know parents who can’t go anywhere [without their autistic child].”

Familiar bus drivers provide much needed reassurance

Josie couldn’t help but worry about Cillian travelling alone, but her initial concerns were allayed by familiar bus drivers who assured her that cameras allow them to keep an eye on him. Diminishing her stress, these bus drivers gave Josie the time to go to the gym and see friends. Josie felt their empathy when one day Cillian left his bag on the bus and they notified his school and waited for her to pick it up.

“The drivers knew when to expect him and it was almost as though they would wait for him each day at the bus stop and always drop him out the front of his school so he didn’t need to cross a busy road”

Silently communicating with others about Cillian

When Josie travels with Cillian on public transport she sometimes worries that people won’t understand his behaviour. She is conscious not to label him by telling everyone of his autism directly, instead she uses subtleties in her communication with him to signal his disability to others. Mostly, she finds that people are kind and make allowances for him.

“I don’t like to label him so I’m subtle about it but it’s obvious from the way I’m talking to him [that he has a disability].”

POLICY CHALLENGE

How can sustainable transport policy alleviate some of the stress Josie feels when her disabled child is travelling alone and give her some time back to pursue the things she loves—socialising, volunteering in the community and being active?

Implications for:

- Services supporting disabled children and adults to travel independently.
- Customer service training for transport staff.
- Public awareness and education campaigns.
- Community cycle lanes.





KAREN

Karen, 45, and her husband juggle their high-powered careers with the care of their four young children. Whoever has the kids has the car, without it, there wouldn't be enough time. Environmentally conscious, they would love to be on public transport more but instead, they do their part with an electric car.

ABOUT KAREN



45 years old

Associate Director
in an international
consultancy and
mum

Cork

Karen, 45, and her husband live in the suburbs of Cork with their four children aged 12, 11 and twins aged 5. At work, Karen is responsible for 280 employees, managing clients and large projects. Work can be stressful and, for leisure, Karen enjoys keeping fit and sailing as a family in the summer.

Karen and her husband John work in the same company, have similar routines, and share household duties almost equally. They share one car in the family and plan ahead to work around complex childcare arrangements and work schedules. Fairness is important, so they alternate drop-off duties. For Karen and John, their biggest constraint is time, so predicting their travel time is important for scheduling, despite congestion on their commute, they rely heavily on the car for this.

"It's the freedom and independence that driving gives you and the reassurance of knowing that the car is there in case you get a call saying the kids need to get picked up. That's just too important."

Karen's work keeps her informed about the climate and she tries to make more conscious choices in her own life. The family is too dependent on the car to get rid of it and instead, they have bought an electric car. If she could, she would take public transport more and delights in the fact that, on the weekend, they can walk to the shops and the kids' sporting activities.

"Our preference would be to use public transport, but we have just bought an electric car because we recognise that a lot of the trips are very local so there's no need to have a petrol or diesel car."

"When you're picking up a child, what I would feel most is anxiety, you need to get there on time."

TRANSPORT OPTIONS NARROW WITH A GROWING FAMILY

Public transport is associated with youth and freedom

Karen spent eight years living in London when she was younger. Being able to explore the city and go anywhere using the Tube and the bus was a highlight for her. She misses the time she had to herself when travelling.

“I quite enjoyed the bus because it’s half an hour to read. You don’t get that [time to yourself] driving.”

Car size grows with the family

When Karen moved to Cork and started a family, they bought a sedan, as the reliability and frequency of buses were incompatible with picking up kids at a specific time. For a long time, they used the car in combination with public transport and her husband’s motorbike. The car was for family use, while public transport was reserved for work commute or going places alone. As Karen’s family grew, she found herself using public transport less. Eventually, they needed an even bigger car and upgraded from a 4-seater to a 7-seater SUV.

“When we had twins, we had to go for a 7-seater. Previous to that, John had a motorbike and that kind of went by the wayside too.”

BALANCING IDEALS AND REALITY, CONVENIENCE AND LOCATION

Karen and her husband are both committed environmentalists who support decarbonisation transport policies. However, they are realistic that with the current policy and their current family needs, they still require a car, but have tried to make it an electric vehicle to offset climate impact. They are discussing moving further away from Cork in the future to a bigger home that can accommodate the expanding family and are wary that public transport won’t be available there, requiring a second car.

“I would absolutely support measures for less cars on the road, if the alternative is good enough, you can’t do one without the other.”

ENSURING FAIRNESS BY ALTERNATING DRIVING DUTY

As they only have one car, Karen and her husband decide who will take it on a given day. One of them will do the drop-offs in the morning and the other will take the bus to work at around 7:30am.

If she has the car for the day, she leaves at 7:50am to drop the twins off at preschool and the older children with their minder. Afterwards, she makes the 25-45 minute journey in the car to work, where she has an allocated parking space.

The twins’ crèche closes at 6pm, so she has to leave work at 5pm as the roads are congested. Next, she collects the older children from the childminder and they all head home.

If she takes the bus to work, she will travel back the same way.

“We would share (the car) so one person would probably use public transport, the other person would drive, and it depends on who’s taking the children.”

POLICY CHALLENGE

How can sustainable transport policy encourage Karen to act on her environmental consciousness, while not taking time away from her thriving career and family demands?

Implications for:

- Gender-sensitive decarbonisation policy
- EV infrastructure and car pool policies
- Park and ride
- Public transport route coverage





GILLIAN

Gillian, 65, spends most of her time in retirement caring for her grandchildren. Despite being a nervous driver, it is an essential part of her role as a carer. As she gets older, she worries how long she'll still be able to drive.

ABOUT GILLIAN



65 years old

Retired but busy helping to take care of her grandchildren

Cork

Gillian has been married to Jim for 40 years. Together, they have two daughters and three grandchildren. Until recently, Gillian was caring for her elderly father, who recently passed away. Now, she helps more with the care of her grandchildren. Gillian keeps herself active with water aerobics and looks forward to an occasional drink in town with Jim.

Her father and another neighbour both recently passed away and her husband suffers from Crohn's disease. This makes Gillian think more about herself ageing. Appreciative of the good life and health she has, Gillian is more committed than ever to spending time with family. She is set on exercising and staying healthy to remain independent and nimble for as long as she can.



▲ Gillian during the interview.

“You get used to the hassle of driving, then you just take it on the chin, it is what it is”.

DRIVING IS AN ASPECT OF IDENTITY SHE HOLDS ONTO, EVEN IF IT IS NOT ENJOYABLE

Gillian describes herself as a nervous driver and has never enjoyed it. Despite that, she sees it as an essential life skill. When she became a mum, she learnt to drive to take the kids to school and appointments. Driving expanded her world. Before that, she could only take the children to and from home and her parents' house.

Having taken care of others her whole life, Gillian worries about the day she won't be able to drive and will have to rely on her kids to get around. She would encourage everyone to learn to drive because of the independence it affords them.

“I saw it with my dad when he had to stop driving. Not having the independence of a car and being able to pop into his children's houses for a cup of tea was upsetting him - it is an awful drawback of getting older.”

LOSING TRUST IN THE BUS OVER TIME, EVEN IF IT'S FREE

When she was a young student, the bus was the only form of transport Gillian had and she used it for everything. Over time, her confidence in the bus diminished, and even though, as a senior, the bus is virtually free, she would rather pay for parking than use it. Today, Gillian will only take the bus if she can't drive, usually when visiting town for a drink with her husband. If they weren't travelling together, she wouldn't feel comfortable to use the bus.

Lack of reliability made her lose the bus habit

Gillian used to think the bus was reliable, but this is no longer the case. When she was young, she knew she could rely on the schedule and could easily make plans around it. Today, she has enough stories of unreliability to have turned her off using it. Most recently, she and Jim were waiting in the torrential rain for the bus that never came. Now, out of habit and with little incentive to try again, Gillian prefers to drive whenever she can and park in the city despite the expense.

“We would definitely use the bus more often if the bus times were accurate and the bus actually came!”

Scary incidents make her nervous taking the bus alone

Several times, Gillian and Jim were on the bus in the evening when teenagers threw stones at the bus, forcing the driver to terminate the service. With no alternative, they had to walk home, on one occasion more than 20 minutes in heavy rain. Now, she doesn't take the bus alone anymore and will only go with Jim.

“There have been two or three occasions when Jim and I have been on the bus when it was attacked with stones. Legally, the bus driver is not allowed to continue driving so you have to get off the bus and risk it. You would then have to walk home and I would not want to walk home if that happened so I prefer taking a taxi if I am going out without Jim.”

New tech with bad data erodes trust even further

Gillian was intrigued to try the new Bus Eireann app, which they were introduced to by their children. Gillian started using it to plan their trips, but soon realised that the app couldn't be trusted either, as sometimes the bus decides to change direction suddenly and you wouldn't know until it is happening.

“You usually don't know what is happening until you get onto another bus and someone says that the bus came by and changed direction half an hour ago but the app is not showing that the bus is being pulled and it says that the bus is still coming.”

POLICY CHALLENGE

How can sustainable transport policy help Gillian to continue to travel independently as she ages and sustain her role in the family?

Implications for:

- Bus service for the elderly
- Service frequency and reliability
- Real-time information and planning apps
- Safety and security



Conclusion

TOWARDS A BETTER TRANSPORT SYSTEM: SUSTAINABLE, SAFE, INCLUSIVE

CALL TO ACTION

Considering women's needs through co-creation

Stitching together qualitative and quantitative data, this report sets out the complex landscape of mobility patterns and behaviours in Ireland, while pointing towards opportunities for sustainable modal shift. Ireland's current petrol and diesel fuelled car dependency is a product of many factors including: lack of cycling, public transport and EV infrastructure; as well as entrenched habits and perceptions. Irish women's mobility is hindered by existing household gender dynamics that largely place the burden of care onto women. Women are also adversely impacted by being and feeling unsafe in public; in particular, when walking and using public transport. Social norms persist that place the responsibility of safety on those most at risk, including victims of sexual harassment and assault.

Despite these challenges, the report found that there is a widespread desire to contribute towards a more sustainable Ireland, particularly amongst women in Ireland. Women are generally open to cycling, public transport and EVs. Yet, tangible support is needed to make switching an easier choice.

Thus, designing sustainable transport infrastructure becomes synonymous with designing inclusive, safe and high-quality experiences that consider women and the needs of their family. Doing so will require a highly integrated approach, including a number of physical, social and policy interventions across public and private bodies. The solutions to many of these issues are woven into the women's stories. Highlighting the opportunities for joining up land use planning, cycle and public infrastructure design, signage, child-care policy, parental leave, social housing, gender and climate programming in schools.

It is worth noting that research has found that, in some instances, policy nudges intended to encourage sustainable mobility by increasing cost can disproportionately increase the time or financial burden for women. This further exacerbates gender roles in families.⁵⁵ These lessons learned point to the importance of directly involving women users in the co-creation of policy to reduce the chance of unintended consequences.



Below, we have listed some early provocations for policy design, along with relevant global case studies. These should not be viewed as conclusions, but starting points grounded in data and evidence to encourage consideration of what might good policy and infrastructure design look like. As a next step, we suggest a process of co-creation that brings together different stakeholders, importantly including women and women's organisations to identify appropriate solutions. This could, for instance, take the form of a series of design workshops on specific topics. The outcomes of co-creation can include:

- Tangible implications for infrastructure, rolling stock, services design.
- A checklist tool that would assist policy makers, planners and project managers to ask themselves new questions and consider alternative perspectives to ensure transport programmes meet the needs of women and girls.
- Practical pathways to enable women to shift to sustainable transport at all stages of their lives.



FIVE DESIGN CHALLENGES

The following provocations for co-creation are grounded in the research findings.

1 ■ HOW CAN SUSTAINABLE TRANSPORT MODES COMPETE WITH THE CAR?

LESSONS FROM RESEARCH

To compete with the car, walking, cycling and public infrastructure have to deliver on the breadth of women's needs.

- Functional needs: being reliable, safe, accessible and convenient.
- Experiential needs: provide comfort, inclusion, joy, community and belonging.

GENERAL LESSONS:

- Gender mainstreaming in policy to introduce gender-sensitive perspectives across all aspects of the transport industry (including gender budgeting, as needed).

LESSONS FOR WALKING:

- Improve 'last mile' walking journeys to unlock more public transport journeys.
- Consider policies that support the '20 minute city' where key services are accessible locally.
- Improve and widen walking paths to prioritise pedestrians.

LESSONS FOR CYCLING:

- Improve cycling infrastructure to increase safety.
- Establish clear cycling etiquette and laws to increase safety and confidence for cyclists.
- Promote cycling lessons and information about safe equipment and practices for all to establish cycling habits.
- Improve driver awareness about cyclists.

LESSONS FOR PUBLIC TRANSPORT:

- Better public transport coverage and new solutions for end-to-end mobility.
- Reduce walking distance between stops and minimise waiting times.
- Improve the reliability of information, including better real-time information.
- Increase physical and psychological safety.
- Design for the 'mobility of care' and those with health and special needs.
- Promote civic duty and social, respectful culture on public transport.
- Actively promote the positive attributes of public transport.

Lessons on how to improve safety are specifically found in Challenge 3 (overleaf).

CASE STUDIES

MAPPING FOOTPATHS (VIENNA)

GIS-based analytic maps were developed for all municipal districts of Vienna in the context of the Gender Mainstreaming Model Districts project. These maps comprise both qualities and deficiencies of the footpath network. Network qualities include highlighting parts of the maps which show sufficiently wide pavements, while network deficiencies show areas where the paths are too narrow or accident danger zones for pedestrians. The maps also highlight destination zones which usually experience high volumes of pedestrian traffic. This helps to support planning future measures.⁵⁶

THE 20-MINUTE NEIGHBOURHOOD (MELBOURNE)

In 2018, Melbourne launched the 20 minute neighbourhood programme which is about living locally - giving people the ability to meet most of their daily needs within a 20 minute walk. It assessed the walkability of suburbs, focusing on pedestrian safety and convenience, facilities and the character of local shops. The project found planning and service delivery were divided between government departments and councils leading to fragmented delivery and gaps. It found that 'place based' planning was effective, meaning integrated responses focused on local place making including good walking, cycling and public transport options specific to a neighbourhood.⁵⁷

CYCLE YOUR CITY (LONDON)

In 2020, TfL launched a Cycle Your City campaign to run a series of workshops and events with the intention of encouraging more women to take up cycling. Through the campaign, TfL will work with a diverse group of women and organisations to help build a picture of women's experiences of cycling across London. TfL aims to 1) Inspire a change in perceptions about cycling by highlighting women's personal stories about the benefits of cycling, 2) Commission new research to better understand the barriers to cycling faced by women and 3) Establish what further work TfL can do to tackle these barriers.⁵⁸

⁵⁶ European Institute for Gender Equality. (n.d.). Transport. Retrieved from [eige.europa.eu: https://eige.europa.eu/gender-mainstreaming/policy-areas/transport](https://eige.europa.eu/gender-mainstreaming/policy-areas/transport)

⁵⁷ Victoria State Government. (2019). 20-Minute Neighbourhoods, Creating a More Liveable Melbourne. Melbourne: State of Victoria.

⁵⁸ Transport for London. (2020, March 6). TfL launches campaign to support women into cycling. Retrieved from [tfl.gov.uk: https://tfl.gov.uk/info-for/media/press-releases/2020/march/tfl-launches-campaign-to-support-women-into-cycli](https://tfl.gov.uk/info-for/media/press-releases/2020/march/tfl-launches-campaign-to-support-women-into-cycli)

2. HOW CAN AN UNDERSTANDING OF THE FAMILY UNIT INFLUENCE SUSTAINABLE MOBILITY CHOICES?

LESSONS FROM RESEARCH

By considering family needs, routines and habits, policymakers can potentially support and influence a large part of the population.

- **Start early:** encourage sustainable transport habits from a young age through community, school and families.
- **Be child-friendly:** design child-friendly public transport and adjoining public space. Enable children's independent mobility.
- **Be reliable:** help women feel they don't need to own a car "just in case".
- **Form new habits:** promote car-free travel on the weekends to establish new habits.
- **Infrastructure and route planning:** design systems and services that go where women need to go at hours they need to travel.

CASE STUDY

MAKING LONDON CHILD-FRIENDLY FRAMEWORK

In 2020, The Mayor of London released Making London Child Friendly: Designing places and streets for children and young people, a comprehensive framework for measuring and improving children's independent mobility. The multi-faceted project included gender as a core component for designing better mobility for children. Numerous projects were rolled out exploring road closures, safe transport teams, assessing student mobility patterns and including children as stakeholders in workshops to think about alternative modes of transport and life without cars. The report identified the need for further research into independent mobility in lower density areas to understand the relationship between different housing typologies, streets, transport and independent mobility.⁵⁹



⁵⁹ Mayor of London. (2020). Making London Child Friendly - Designing Places and Streets for Children and Young People. London: Greater London Authority.

3. HOW CAN TRANSPORT BE AND FEEL SAFE FOR WOMEN?

LESSONS FROM RESEARCH

A combination of social and physical infrastructure is required to create physical and psychological safety for women.

SOCIAL INFRASTRUCTURE

- Increased presence of transport staff throughout the network.
- Apply a gender lens to staff training and rosters to build community relationships and foster a sense of safety.
- Cultivate a more supportive bystander culture.
- Provide joined-up solutions and partnering by working with key stakeholders like universities, schools. Provide adapted training programmes for both sexes on issues of safety, violence, assault and consent.
- Build awareness around support and counselling for women who have experienced violence or harassment of any kind.
- Co-create solutions with women.

PHYSICAL INFRASTRUCTURE

- Collect better data to enable gender analysis of projects.
- Undertake regular women's safety audits and develop effective incident reporting mechanisms.
- Plan for end-to-end mobility, including quality lighting and visibility at all points along the journey.
- Improved service frequency, especially for night services.
- Better safety related technology.
- Plan for convivial place-making.

CASE STUDY

HARASSMAP (EGYPT)

Smartphone apps have become ubiquitous and, along with websites, are now being used in the mapping of women's experiences in cities. These create spaces where women can share their experiences, report incidents, track passengers and create maps with hotspots where these incidents happen, such as HarassMap in Cairo, Egypt. Websites such as 'Hollaback' in London and New York and elsewhere allow women to report when and where they were harassed, including in and around public transport, allowing the authorities to see zones where women may be at more risk.⁶⁰

DIFFUSED STREET LED (AUSTRALIA)

In 2019, Arup partnered with XYX Lab in Australia to consult with 600 women about current street and transport lighting. They discovered that current lighting practices did not make women feel safe. Current design focuses heavily on the evenness and intensity of light, these being requirements in engineering and design standards. However, the effect of this intense spotlighting made women feel like they were on display and unable to see someone in the dark. The project found that diffused LED lighting was more effective in creating a feeling of safety amongst women.⁶¹

RAISE THE ALARM CAMPAIGN (FRANCE)

In 2018, French transport operators RATP and SNCF launched a major public awareness campaign "Never Minimise Sexual Harassment: Victims and Bystanders, raise the alarm!"⁶² Notable features of this campaign were:

- New transparency on the forms and frequency of unsafe experiences of women using public transport.
- Employment of extra customer service and security officers with the idea that 'nothing replaces a human presence'.
- Expanded training to officers dealing with victims in partnership with experts.
- Insight into the back office - what happens when you call a panic button and how long will it take?
- Buses stopping on demand after 10pm.
- Understanding the impact of beauty on feeling safe.

⁶⁰ Hollaback. (n.d.). About us. Retrieved from ldn.hollaback.org/about/

⁶¹ Arup. (n.d.). Making Cities Safer for Girls and Women. Retrieved from [research.arup.io: https://research.arup.io/story/cities-for-girls](https://research.arup.io/story/cities-for-girls)

⁶² RATP. Press Service. (2018). Campagne de lutte contre le harcèlement dans les transports " Ne minimisons jamais le harcèlement sexuel". Retrieved from [ratp.fr: https://www.ratp.fr/groupe-ratp/newsroom/secureite/campagne-de-lutte-contre-le-harcement-dans-les-transports-ne](https://www.ratp.fr/groupe-ratp/newsroom/secureite/campagne-de-lutte-contre-le-harcement-dans-les-transports-ne)

4 ■ HOW CAN TRANSPORT CONSIDER THE DIVERSE NEEDS AND CONTEXTS OF ALL WOMEN?

LESSONS FROM RESEARCH

A wide range of policy will be needed to encourage the adoption of sustainable transport modes and protect and serve those with a low income or particular vulnerabilities:

- Design for a range of disabilities and age and health related issues.
- Promote diversity and inclusion to foster understanding and encourage supportive behaviours on and around public transport.
- Improve public transport coverage and quality in regional and rural Ireland.
- Take an integrated approach to land use and understand local neighbourhood transport challenges.
- Build a gender lens with diverse partners to protect the most vulnerable women, bringing transport policy together with land use planning, social and justice services, childcare and education.
- Expose rural children to urban transport environment.

CASE STUDY

TRAMLAB (AUSTRALIA)

In 2019, the Victorian Government initiated the TramLab project in partnership with several universities,⁶³ focused on improving public transport for women and girls. The project includes a major co-creation element with stakeholders of diverse backgrounds and experiences. It included:

- Designing a women-led reporting tool for women to report incidents.
- Asking women to prioritise areas for further research.
- Developing a women's safety checklist to provide to all levels of government for getting to and from PT, waiting and interchanging and travelling on PT.
- Seeking women's feedback on advertising and safety campaigns and how they impact on perceptions of safety.
- Imagining perfect mobility for women.
- Reflecting on place of technology in improving women's mobility.
- At the time of publication, this work is still in progress.

GENDER AUDITING CHECKLIST (UK)

The Department for Transport in the UK published its first Guidance and Checklist for Gender Auditing on Public Transport in 2002. The checklist is intended to inspire and provide support to public transport providers in carrying out a gender audit in their company and of their services. In 2006, the Department also implemented the Gender Equality Scheme Action Plan 2007-2010 in order to oblige all public authorities to produce a gender equality scheme with the intention of eliminating sex discrimination and sexual harassment and, ultimately, promote gender equality.⁶⁴



⁶³ Taft, A., & Ison, J. (2019). Tramlab: Improving the safety of women and girls on public. Retrieved from latrobe.edu.au: <https://www.latrobe.edu.au/news/announcements/2019?a=1081601>

⁶⁴ European Institute for Gender Equality. (n.d.). Transport. Retrieved from eige.europa.eu: <https://eige.europa.eu/gender-mainstreaming/policy-areas/transport>

5 ■ HOW CAN WE ACCELERATE SUSTAINABLE BEHAVIOURAL CHANGE?

LESSONS FROM RESEARCH

In addition to improving current infrastructure, a mix of incentives, campaigns, strategies and policies can be leveraged to accelerate and encourage adoption:

- Facilitate multi-modal travel by understanding connectivity through a gender lens.
- Design for households as well as individuals.
- Apply a gender lens to carpooling and ridesharing schemes to improve services and reduce car use.
- Provide EV incentives and infrastructure to reduce barriers for households switching to EVs.
- Ramp up climate change education for all age groups and promote ways individuals and families can reduce their carbon footprint through their transport choices.
- Plan for changing flexible work and mobility patterns from Covid-19. Prioritise integrated approaches to work, caregiving and mobility - understanding that flexible work arrangements, parental leave and affordable childcare all impact on mobility choices.

CASE STUDY

CAR FREE DAY (BOGOTA)

In Bogota, 70% of car trips were made for journeys under 3km. The city decided to close 120km of road to cars for seven hours each Sunday to enable people to walk, ride, jog and skate. People have found a new social life and enjoy the drop in pollution. The initiative is well supported with nine out of ten people agreeing with the car free day.⁶⁵

LIVEABLE STREETS EDUCATION (NEW YORK)

The Liveable Streets Education programmes in New York City help teachers and schools bring important ideas about urban living into their classrooms. With a focus on people, LSE works to help redesign communities around public transport; walkable, bikeable streets; and healthy, liveable and affordable urban environments through special projects.⁶⁶

⁶⁵ Green Learning Canada. (2010). Sustainable transport Case Studies. Green Learning Canada.

⁶⁶ Eckerson, C. (2009). Introducing Livable Streets Education. Retrieved from nyc.streetsblog.org/2009/03/26/introducing-livable-streets-education/





**FOR MORE INFORMATION,
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