Toolkit for Gender Inclusive Mobility Planning

Best practices and case studies for urban planners and designers

Gender Inclusive Mobility Toolkit

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1 Overview

Mobility is fundamental to daily life. Mobility is the ability to move freely, and it shapes our access to education, employment, healthcare, and community. Every day, people rely on transportation to get to school, work, grocery stores, doctor's offices, parks, and public spaces. While transportation is the system that enables this movement, it has not always been designed to serve everyone equally, impacting the mobility of more than half the population.

Women and gender minorities make up more than 50% of the population. However, current mobility systems have been consciously and unconsciously planned for men, reinforcing disadvantages for women, girls, and gender minorities.[1] Transportation systems have historically been designed for a "default male user" who commutes to and from work during peak hours. It is time to consider the travel patterns and experiences of women and gender minorities in transportation planning. How can we ensure that every person, regardless of gender, can move freely and safely through their entire journey—from the first mile to the last?

This toolkit is an introduction to gender-inclusive mobility planning, meant to serve as a resource for designers, planners, and policymakers seeking to integrate gender-inclusive mobility into the planning process. The toolkit aims to collect and distill existing information in order to:

1. **Understand the Problem** – How transportation systems systematically underserve women, gender minorities, and girls.
2. **Provide Practical Solutions** – How gender-inclusive planning can be applied at each stage of the planning process.
3. **Discuss Real-World Applications** – Case studies from municipalities in the European Union, United Kingdom, and United States in gender-inclusive mobility planning.

How to Navigate the Toolkit

The toolkit provides added insight on key phases of the planning process, including:

1. **Visioning & Scoping**
   Establishing a shared vision and goals

2. **Data Collection & Analysis**
   Closing the gender data gap

3. **Public Participation**
   Focusing on community-based research

4. **Design & Implementation**
   Co-designing for safety, function, and enjoyment

5. **Monitoring & Maintenance**
   Ensuring longevity and project success

Each section will delve into how **gender-inclusive planning and design** can be applied based on relevant literature and current practices. Sections also highlight case studies from a range of cities, including leaders in gender-inclusive design, like Umeå, Sweden and Vienna, Austria. While there are many differences between the planning process in the European Union, United Kingdom, and the United States, local planners and residents often face similar challenges.

It is important to note that the purpose of this toolkit is to provide an introduction to gender-inclusive mobility planning and design and is not comprehensive. Gender-inclusive mobility planning and design is a nuanced topic that varies based on culture, geography, and population and cannot be covered in one document. Rather, this toolkit is meant to be a starting point for re-examining mobility planning on the local level. A Key Resources page has been included for those who want to dive deeper into the topic and readers are encouraged to do so.

"Research shows that when gender is not explicitly part of the planning process, the solutions are most likely to primarily benefit men. Whereas the explicit consideration of gender throughout the process of planning, design, implementation, monitoring, and evaluation is more likely to create more gender equal solutions."[2]

2 Key Terms

Built environment

The architectural, infrastructure, and physical characteristics of place. This can include buildings, streets, public spaces like parks and plazas, transportation systems, and land use patterns.[3]

Co-design

A design methodology that uses creative and participatory approaches with the aim of sharing knowledge and power in the design process.[4]

Equity

The concept that people should reach an equal endpoint through the provision of benefits, resources, and opportunities that meet their specific needs.[5]

Gender

Gender refers to the characteristics of women, men, girls and boys that are socially constructed. As a social construct, gender varies from society to society and can change over time.[6]

Genderqueer/gender or sexual minority

Persons whose sex, gender, sexual orientation, gender identity and/or gender expression differ from those of the majority of the surrounding society.[7]

Gender-inclusive

An approach that takes an inclusive view of gender, considering people of all genders and sexualities as well as intersections with factors such as race, ethnicity, income, class, age, and ability. This approach ensures that the voices of people of all genders are heard and their needs are addressed and integral to project design, delivery, and evaluation, with the goal of promoting gender equity.[8]

Gender disaggregated data

Data collected and tabulated separately based on gender. It allows for the measurement of differences between genderqueer, men, and women on various social and economic dimensions and are one of the requirements in obtaining gender statistics.[9]

Gender mainstreaming

The process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels.[10]

Gender non-conforming

An adjective for people who do not subscribe to societal expectations of typical gender expressions or roles. The term is more commonly used to refer to gender expression (how one behaves, acts, and presents themselves to others) as opposed to gender identity (one's internal sense of self).[11]

Intersectional feminism

A term used to illustrate the interplay between gender and other kinds of discrimination, such as race, age, class, socioeconomic status, physical or mental ability, sexual identity, religion, or ethnicity. The term was pioneered by Dr. Kimberlé Crenshaw.[12]

Mobility

The ability to move freely, includes access to transportation options, affordability, and the quality of those options.[13]

Mobility of care

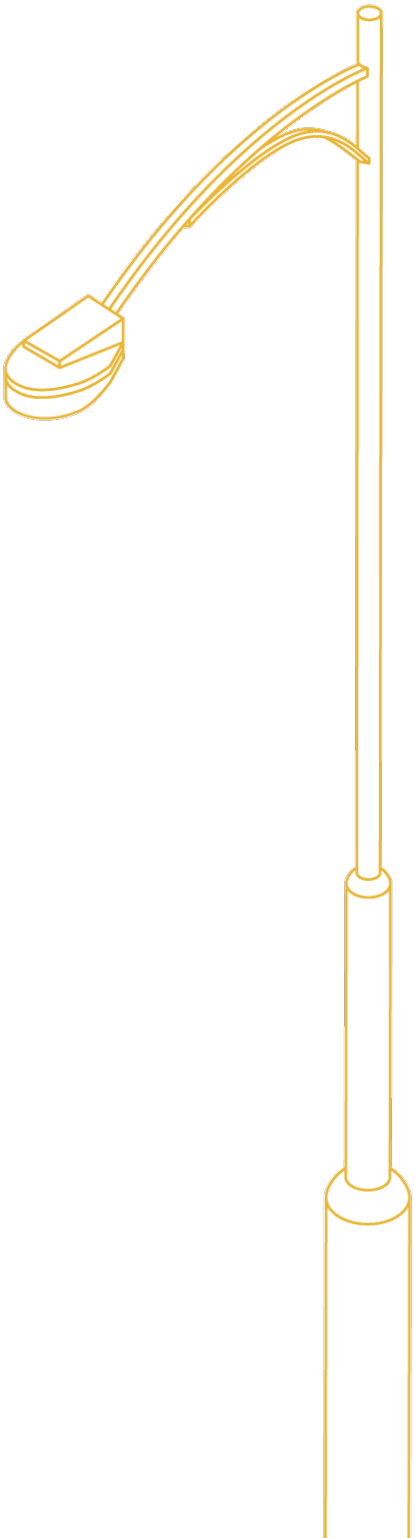
A term coined by Dr. Sanchez de Madariaga, illustrates how women more often complete household and care-taking tasks that affect their travel patterns.[14]

Transportation

The means by which people and goods move from one place to another, using various modes like cars, public transit, walking, biking.[15]

Trip chaining

Making multiple stops during a single trip, for example picking up a child and going to the grocery store on the way from work to home.[16]



3

Introduction

What is gender-inclusive planning?

Gender-inclusive planning centers the voices and experiences of women, gender minorities, and girls of all ages and abilities in the urban planning process. While urban planning is broad, this toolkit focuses on transportation and mobility planning. Transportation is the act or system of moving people while mobility is the ability to be able to freely move or be moved.[17] Together, they are powerful tools of self-determination—shaping access to health care, education, employment, recreation, and participation in public life.[18]

But why focus on gender? Transport and mobility are not currently planned or designed for all users. In the United States, our built environment has largely been shaped for generations by and for men, with planners and decision-makers using the commutes of cisgender, able-bodied men as a prototype. For example, most public transit systems are designed to serve nine-to-five, office workers, assuming a trip without any detours or stops. However, research has shown that women's commutes are more complex, as they balance paid and unpaid work. Though women are more likely to rely on public transit than men, they're more poorly served by it.

Although the concept of non-sexist cities has been discussed for over four decades, a significant gap remains between research and practice—particularly in the United States. Research consistently shows that gender identity shapes how people move through space,[19] but gender-specific transportation needs continue to go unmet. A 2022 study of 129 U.S. public transit agencies examined how providers understood and addressed gender equity in transit. While providers acknowledged its importance, implementation was limited: 79 agencies has "low to no gender inclusivity," 41 had "low to moderate gender inclusivity," and only 9 had "high gender inclusivity."[20]

This toolkit aims to help to fill the gap between theory, research, and practice by serving as a resource for local planners and municipal governments working in urban areas. Multiple studies have found that women display different travel patterns than men, including:

Travel Modes and Time Use

- Women tend to use public transit more than men, often accounting for more than 50% of overall ridership.[21]
- Women are more likely than men to need to travel during off-peak hours—times with fewer transportation options.[22]
- Women tend to walk more than men.[23]

Complex Trips

- Women's travel patterns are more complex than men's travel patterns. Women are more likely than men to trip-chain, or link multiple non-work trips.[24]
- Women are more likely than men to use multiple transportation modes in a day.[25]

Economic & Safety

- Women and members of the LGBTQ+ community are more concerned about safety when traveling and are more likely to experience sexual assault and harassment.[26] While both groups express considerable safety concerns during peak periods, they tend to report being most afraid during evenings.[27]
- Women are more likely to travel with younger and older dependents and often cover their fare or cost of travel.[28] A lack of accessible transportation options, like paratransit, further compound this issue.

"Women's travel patterns are more complex as they are defined by their caregiving roles, familial obligations, as well as income generating activities or employment. They are usually responsible for accompanying children to school, attending to medical needs, shopping for daily needs, and caring for the elderly. Hence, women often make multiple trips with breaks, or combine different tasks with breaks – referred to as "trip chaining."[29]

This toolkit illustrates planning and design processes focused on addressing the needs of women and gender minorities based on travel patterns like those found above, as well as the concepts below:

- **Mobility of care** illustrates how women more often complete household and care-taking tasks that affect their travel patterns.[30] This could look like wider sidewalks and curb ramps to accommodate walking with a stroller or small children.
- **Trip chaining**, or making multiple stops on the way to one destination.[31] Women tend to have more complex travel behaviors than men, often engaging in trip chaining on the way to and from home or work in response to mobility of care. This could look like providing reliable transit at off-peak hours and flat fares or fares based on time period rather than per trip.
- Women, girls, and gender minorities place **greater emphasis on personal and traffic safety** when planning how and when to travel.[32]Accommodating this might include well-lit streetscapes with businesses operating at various hours to increase "eyes on the street" and enhance perceived sense of safety. From a service perspective, it could involve flexible or on-demand bus stops at night, allowing riders to request stops closer to their destination. In terms of traffic safety, this may take the form of protected bike lanes or off-street trails, rather than unprotected bike lanes.

Gender-inclusive planning has been highlighted in recent books like Leslie Kern's "Feminist City"[33] and Caroline Criado-Perez's "Invisible Women."[34] Gender-inclusive planning has been a point of discussion in the United States since the 1970s. Feminist critiques of urban planning and theory in the 1970s demonstrated how planners created gendered environments that primarily situated the needs of men and heteronormative family structures of that era.[35] In response, people began to explore what a "non-sexist city" might look like.[36]

"The result of this deeply male-dominated culture is that the male experience, the male perspective, has come to be seen as universal, while the female experience – that of half the global population, after all – is seen as, well, niche." [37]

How does this research translate into everyday life? Imagine a woman who relies on public transit in X city where she lives. The city doesn't have flat fares, but she is worried about traveling alone on the X line at night. She spends $X more than the $Y it would have cost, just to feel safer on her commute home, likely paying fares for any children with her. This is one example of how our current transportation systems make it harder for women, girls, and gender minorities to travel safely and freely.

The idea of centering women and girls in the public realm is often referred to as **gender mainstreaming**. Gender mainstreaming was endorsed by the United Nations Economic and Social Council (ECOSOC) in 1997 and is defined as,

> "The process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality."[38]

Women and gender minorities are underrepresented in the planning process and in the organizations that shape where we live, work, and move. Although the proportion of women in the workforce has steadily increased since the 1950s, they remain underrepresented in engineering and the transportation industries.[39] According to a 2019 study, women make up only 15% of the transportation workforce in the United States and only 22% of state transportation directors and commissioners.[40] This lack of representation in decision-making roles and planning processes has contributed to the development of mobility systems that fail to meet the needs of women, gender minorities, and girls.

It is essential to recognize the differences among women and gender minorities. Factors such as ethnicity, race, age, socioeconomic status, cultural background, educational background, sexual orientation, ability status, lifecycle stage, and even personality traits can all influence travel needs and behaviors.[41] Gender-inclusive planning should be grounded in intersectionality — the understanding that gender, race, class and the social advantages or disadvantages tied to these identities are inseparable.[42] Legal scholar and civil rights advocate, Dr. Kimberlé Crenshaw, who developed the concept of intersectional feminism, explains, "If you don't have a lens that's been trained to look at how various forms of discrimination come together, you're unlikely to develop a set of policies that will be as inclusive as they need to be."[43]

Planners and municipal governments must acknowledge how planning theory and practice have historically excluded the needs of residents based on demographics like gender, but also race and class. While gender-related needs were often underrepresented through omission, race and class were the basis for intentional discrimination. The same male-dominated planning approaches of the late 19th and early 20th centuries actively harmed communities of color through practices such as redlining, which enforced segregation and denied Black Americans access to homeownership, as well as the construction of highways that destroyed Black and Hispanic neighborhoods.[44] People of color, particularly women and gender minorities, face racial barriers to safe and accessible transportation. These include disconnected street networks, limited transit options, and the compounding effects of historic underinvestment, racist housing and zoning practices, and economic disenfranchisement.[45]

In the United States, "All forms of transportation have been used to enable and implement racism."[46] It is the responsibility of planners and decision-makers to learn about and understand how history and systems of oppression have shaped today's mobility systems. The Key Resources page includes recommended articles and books that may serve as a starting point. Understanding the relationship between transportation and race, and centering the experiences and voices of people of color, especially women and gender minorities, is essential to advancing gender-inclusive mobility.

This toolkit frequently refers to "women, gender minorities, and girls" as a collective group. However, gender minorities are often overlooked in the planning process, whether during data collection or when designing for user experience. Even within gender-inclusive efforts, gender minorities are frequently given less consideration than cisgender women during the planning process. "There is far less understanding of how the built environment works for **sexual and gender minorities** (Forsyth, 2001; Doan, 2016) and an ongoing assumption that "gender inclusion" simply means "women's issues" — without taking into account the relationships between genders or the cumulative impacts of gender, sexuality, ethnicity, race, income, class, ability, and age."[47]

While "Gender is not a binary form but a set of performed activities,"[48] it must be considered in mobility planning and design. There is a growing body of research focused on LGBTQIA+ perspectives on mobility. Research has confirmed that both women and the LGBTQIA+ community have similar, critical safety concerns, particularly regarding public transit, and face comparable level of harassment. However, "Trans*women and **gender non-conforming** queers suffer most from acts of violence."[49] It is the responsibility of planners and decision-makers to learn from current research on how mobility planning has failed gender minorities, and to revise their planning processes so that LGBTQIA+ community members are active participants throughout.

Planners and decision-makers must learn from current research and actively partner with LGBTQIA+ community groups and members throughout the planning process. The Key Resources page includes research that provides an introduction into 'queer mobility'.

Case study: **Vienna, Austria**

To better understand what gender-inclusive planning and design looks like in practice, we can turn to Vienna, Austria. The City of Vienna is a leader in gender-inclusive planning due to its more than 25 years of practice.[50] It has become standard procedure to consider the experiences of women and girls in municipal planning. How did Vienna become a pioneer in gender-inclusive planning and design?

Even following the EU's adoption of gender mainstreaming in the mid-1980s, planning in Vienna remained a male-dominated field. In 1991 a young planner in Vienna, Eva Kail, worked with a women's organization to hold an urban planning workshop that resulted in an exhibit titled "Who owns public space?—Women's Everyday Life in the City". The exhibit drew over four thousand visitors and brought attention to women's travel patterns and safety concerns for the first time at the municipal level of government.[51]

The exhibit led to the establishment of the Women's Office in 1992, initially called the Frauenbüro and led by Kail. A few years later, a Coordination Office was established, also led by Kail, to "Set up to work across 12 planning and traffic departments to ensure fairer urban development."[52] Led by Kail, the city of Vienna has planned, designed, and implemented a series of gender-inclusive housing projects, parks and playgrounds, and transportation projects. Gender-inclusive mobility projects were tested in Mariahilf, a pilot district in Vienna for gender mainstreaming that focused on ease of mobility and traffic safety, such as:

- Widened sidewalks
- Barrier free curb ramps and spaces
- Traffic signalization that prioritized pedestrians
- Added pedestrian crossings
- Added seating

> "In 1999, the City Women's Office conducted a large-scale survey on gendered transportation use, which resulted in a long-run focus on improving pedestrian access, from widening crosswalks to providing more lighting." [53]

These new and adjusted designs were a direct response to community-based research where the City asked residents "how and why they traversed the city."[54] While the link between wider sidewalks, added seating and gender might be obscure, it is a question of ensuring equality of opportunity and access.[55] Added seating or a safer route, may "Make the difference between participating in the city or remaining at home."[56]

When asked about the success of transforming the city of Vienna, Kail responded with the following:

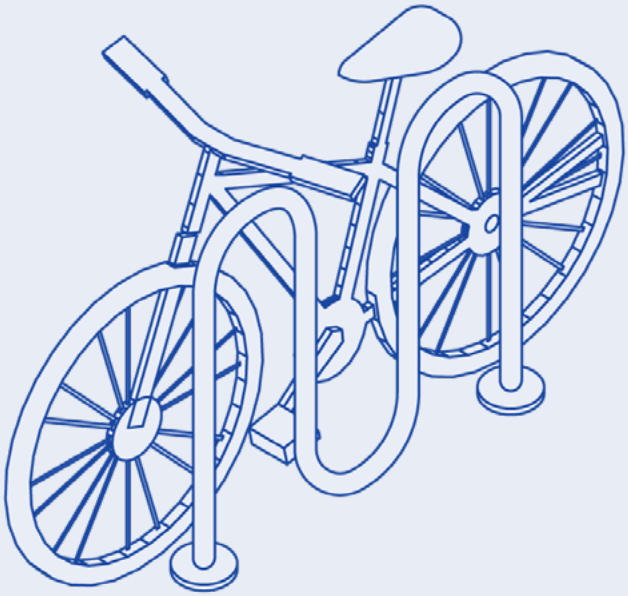
> "Looking back, I think an important factor of our success was the chosen strategy to realize, first, **pilot projects** which let politicians gain an easier understanding of the aims of a gender sensitive approach; after that, having **good resonance in the media** was also important for the politicians. And with this **political support**, we could develop our new methods. In the coordination office for gender sensitive planning in Vienna which I headed for eleven years, we were three planners and three planners working eleven years, which [sic] means a lot of personal resources."[57]

Gender mainstreaming does have limitations. The City of Vienna noted that "There's a danger of reinforcing already existing gender norms around paid and unpaid work."[58] Similar to how a "default male user" has been a prototype used by planners and decisionmakers, there is often a "default female user" planned for in urban settings. "A married, able-bodied mother with pink- or white- collar job."[59] This default female user is not representative of the population and "Suggests there are large groups of women whose needs may be unmet by gender mainstreaming."[60]

Vienna continues to serve as a leader of gender-inclusive planning and design by focusing on gender in each step of the planning process. From institutionalizing gender-disaggregated data to assessing bidders for social housing construction contracts on their gender impact. It is no coincidence that a city focused on designing for all of its residents has received multiple awards for "most livable city" and "highest quality of life."[61]

Case study: Vienna

Figure 1: A pedestrian crossing in Vienna with a wide crossing and pedestrian refuge, clear pedestrian and bicycle signal, lighting, and a bicycle parking next to a covered bike shelter.



4 The Planning Process

1. Visioning & Scoping

One of the first steps of any transportation project is visioning and scoping. When thinking about a project or program vision, it's important to have a clear understanding of the question "What is the problem that we want to solve?" Clearly defining the problem helps refine the vision and guide scoping. A scoping plan can include:

- Data analysis requirements
- Community engagement plan
- Expected cost, schedule, and responsibilities for the analysis.[62]

1. Work across municipal departments

While the project team typically drafts a scoping plan, information should be collected from all internal departments who may be involved and affected. Working across municipal departments from the start of the planning process can achieve multiple departmental goals through one project — for example upgrading stormwater infrastructure or expanding tree canopy through a streetscape project based in gender-inclusive design.

2. Create a project working group with a community engagement specialist

The creation of a project working group can be helpful in developing a project scope and vision, while also maintaining communication and consensus throughout the project. This group should include a representative from each affected or interested department. One of the most important internal working group members during the scoping and visioning process, and throughout the entirety of the project, is a community engagement specialist. A scoping plan defines a project, and who better to craft this narrative than a community engagement specialist and the community itself.

3. Integrate co-design throughout the planning process

Most scoping plans are administrative by nature and are used internally to keep the project team on track and information organized. However, the project vision and goals should be created in collaboration with the community. Visioning will be one of the first opportunities for co-design during the planning process. Co-design is, "A design methodology that uses creative and participatory approaches with the aim of sharing knowledge and power in the design process."[63]

Gender-inclusivity can be integrated into the scoping and vision process in a few ways.

- The first is by designating an internal gender expert. Some cities, like Umeå, Sweden, have gender experts (or gender equality officers) that work within municipal governments to ensure gender equity is considered throughout all government programs and projects.
- Ensure that the project vision makes clear commitments to gender-inclusive design.[64]
- Co-design with women, gender minorities, and girls through existing municipal advisory committees. Expand engagement by working with community leaders and organizations, as well as with schools, religious groups, recreational hobby and sports teams, and more.

Establishing a shared vision and goals during the scoping plan process ensures that the project team and the community are aligned. To better understand the process of creating a gender-inclusive scope and vision, we can turn to the city of Umeå, Sweden.

Case study: **Umeå, Sweden**

A gender equality committee has focused on the City of Umeå's policies from a gender perspective since 1978.[65] Over the past four decades, Umeå has integrated gender equity into its urban planning, earning international recognition including being named a "model town for gender equality" by the Observatory of the European Charter in 2014.[66] Today, the city has two Gender Equality Officers that ensure gender mainstreaming is included in city projects and processes.

Projects include a transportation hub featuring gender-inclusive design and a pedestrian underpass that integrates public art. Stationstunneln, or the LEV! Tunnel, was re-designed and opened in 2012. The 150-meter underpass connects the residential neighborhood of Haga to the central train station. "The previous tunnel was a cement square, it was dark, very narrow and a bit steep. Many people avoided using the tunnel because it was perceived as unsafe in many aspects. People would take a different route which would be more unsafe, like going on a street with cars."[67] While the project was initiated by an adjacent railroad project, gender-inclusive design was included early on in the redesign of the tunnel. Project members from across departments traveled to Stockholm, Sweden as an observational study, which helped build an understanding of gender-inclusive and accessible planning internally.[68]

The redesigned tunnel features a wide entrance, a widened sidewalk and bike path, and rounded corners. These elements improve sight lines that make it harder for an individual to hide behind a corner or approach someone while unaware - they address fear of harassment or harm that were present in the previous tunnel. Additional lighting and white tiles were used to brighten the space.[69] An additional exit was created mid-way through the tunnel to create another exit point and to provide more natural lighting. The other side

of the tunnel is visible from the entrance and visitors can leave through the additional exit halfway if they don't feel safe.[70] The tunnel also features glass artwork along the walls with quotes from Swedish author Sara Lidman. Annika Dalén, a Gender Equality Officer with the City of Umeå notes, "The single most important thing to increase perception of safety is other people. If you have a nice tunnel, people will choose to use it and there will be more people passing through."[71]

Dalén also notes the roles of gender-inclusive planning and design in challenging norms. "Can you guarantee that nothing will ever happen here? No, it's still a physical space used by real people and we can't control them. Planning, building, and urban design are important factors, but it's also important to simultaneously work to challenge norms and behaviors."[72]

Figure 2: The redesigned tunnel, Stationstunneln, links the district of Haga with central Umeå and, at the same time, is a tribute to author Sara Lidmam.[73]

2. Data Collection & Analysis: The Gender Data Gap

Collecting and analyzing data allows planners to identify community needs. Whether it's spatial data, mobility data, or public comments, all of this data helps to form a project base that shapes the project vision, goals, timeline, and outcome. Public transit agencies, metropolitan planning organizations, and other transportation decision-makers often do not collect data on gender. "Historically, data collection has mirrored the gender imbalances of transportation design, under-representing women and over-representing heterosexual, able-bodied, cisgender men."[74] Planners and decision-makers must be intentional in their strategies and processes to collect gender-inclusive data.

> "Gender segregated data on travel behavior, trips, needs and concerns in mobility is either not collected or not analyzed systematically. This creates an unconscious bias towards men in transport and mobility planning and design."[75]

The data gathering process for mobility projects often doesn't include gender differences, especially regarding differences in travel behavior. This means that planners are potentially missing out on the needs of 50% of the community.[76] Centering women, gender minorities, and girls during data collection and analysis is the first step in moving towards a gender-inclusive planning process.

When considering gender-inclusive data collection and analysis, the first step is collecting and considering gender disaggregated data.

Gender disaggregated data is "data collected and tabulated separately for women and men. [This allows] for the measurement of differences between genderqueer, men, and women on various social and economic dimensions and is one of the requirements in obtaining gender statistics."[77] Through the use of disaggregated data, existing research shows that mobility is not gender neutral. Disaggregated data may help illuminate how the travel behaviors of women and gender minorities differ from those of men.

The International Transport Forum created a list of Gender Indicators" that offer "A point of reference for the application of gender analysis to transport projects or policies."[78] Indicators include share of passenger mode by gender and transport cost by gender. The Gender Indicators are publicly available here and can also be found on the Key Resources page.

When collecting new data, planners should include a clear option for respondents to identify their gender as shown by the example below.[79]

1. Female
2. Male
3. Nonbinary
4. Gender not listed here (open-ended text box provided for fill-in response)
5. Prefer not to say

This bias towards male users may also be built into transportation models. Models may only account for the time it takes to cross an intersection from the perspective of an able-bodied, adult male. The following case study, the Los Angeles Department of Transportation's Changing Lanes report, illustrates how gender-inclusive data can be collected and analyzed.

Case study: **Los Angeles, USA**

The Los Angeles Department of Transportation (LADOT) published Changing Lanes in 2021, a study aimed to increase the amount of data "pertaining to the unique experiences and needs of women navigating Los Angeles' transportation system."[80] Changing Lanes built upon a 2018 study, LA Metro's Understanding How Women Travel, a study that focused on understanding gender differences in travel behavior in the region. Changing Lanes provides an example of how local governments can collect and analyze data for gender-inclusive mobility systems.

Before collecting new data, the project team collected and analyzed existing datasets from the "City of Los Angeles, LADOT, Metro (Los Angeles County Metropolitan Transportation Authority), Trust for Public Land, Bureau of Street Services (BSS), Bureau of Engineering (BOE), Bureau of Street Lighting (BSL) and the US Census Bureau."[81] In addition to collecting data from existing sources, the project team collected data through Community-Based Research (CBR), "A participatory approach that pairs researchers with community members across all phases of a research process."[82]

Also known as Community-Based Participatory Research (CBPR), this approach can increase the validity and applicability of research, while empowering community members.[83] Community groups in each of the participating neighborhoods trained and hired neighborhood residents to "Complete surveys and travel interviews with members of their community."[84] Working groups were also formed, made up of 5-8 residents of "Diverse gender identities, preferred languages, and ages."[85] Working group members met over a series of 12 meetings held in both English and Spanish to provide feedback on data collection, help to develop and implement engagement strategies, provide insights on neighborhood context, and to ensure that research findings, "Aligned with their lived experiences and perceptions of the neighborhood."[86]

The complete study can be found on the Key Resources page or at: Changing Lanes: A Gender Equity Transportation Study.

3. Public Participation

Public participation is one of the most important aspects of the planning process. If done well, it can ensure that the final outcome mirrors and meets the needs of the community. As referenced above, a public participation plan will not include just one point of contact with the community but rather multiple touchpoints throughout the planning process.

Methods like Community-Based Research (as mentioned above), co-design, and other types of participatory planning can be applied to better understand community needs and to craft solutions ranging from visioning to maintenance of completed projects. But how can planners include women, gender minorities, and girls in participatory planning? Meeting people where they're at – for example by partnering with existing women's and LGBTQIA+ organizations, collaborating with schools and parent-teacher organizations, tabling at local events and transit stations, and advertising through social media and flyers – can all be effective ways to reach community members. A diversity of engagement types like in-person workshops, targeted community meetings, and print and online surveys helps to capture a broader audience. For example, Transport for London (TfL) undertook an initiative focusing on gender gaps in the public transportation system. Through speaking with 140 different women's groups, TfL was able to draft an action plan and a four-year initiative called Action on Equality.[87]

Frequency of public participation opportunities, as well as content and context, are also key to an inclusive process. Participation opportunities, events, and materials should be accessible for all participants, including:

Language – Avoid planning jargon and provide materials and participation opportunities for those who do not speak the predominant language. Demographic data should seek to capture the array of identities that participants may identify with.

Ex. Which of the following best describes your ethnicity or race? (mark all that apply):[88,89]

- American Indian or Alaskan Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- White
- I prefer to self-identify as (fill in blank)
- Prefer to not answer

Images - The types of images shown in the materials matter, so make sure all of your population is represented in photos or graphics. People should be able to see themselves represented in meeting, engagement, and all project materials.

Format – Provide materials for all ages, including paper/hard copies, as well as digital materials that are formatted for computer and phone use. All materials should include easily legible, large text.

Accessibility – To ensure that community members can access information, meeting places should be compliant with accessibility guidelines, such as the American Disabilities Act (ADA) Standards for Accessible Design in the United States. Online meetings should be adapted to meet ADA standards (ex. Having closed captioning), as well as all materials.

Time – Find diverse opportunities for engagement, including times of day. For example, it's important to capture the experiences of night shift workers and their mobility needs, especially women and gender minorities who face a unique set of challenges commuting at off-peak hours.

Place – Meet community members where they're at. While some residents may be able to attend an online or in-person meeting, this requires time and potentially arranging for childcare. Try and meet residents at places they normally frequent like school pick-up, grocery stores, religious institutions, and community events. Provide engagement activities for children, or better yet childcare at in-person meetings. Be aware that not all community members have addresses, and work with local housing support organizations to reach these residents. Meeting people where they're at, as illustrated by Kiel, Germany, can reduce the time burden of participation and can create a safe and comfortable environment for residents.

Case study: **Kiel, Germany**

Kiel, Germany had an innovative response to public participation, specifically "meeting people where they're at". The city created a Tiny Rathaus, or Tiny Town Hall, a miniature, mobile version of the main town hall. The project aimed to get administrators and planners out speaking with people, rather than working from their desks.

The Tiny Rathaus was conceptualized and built through a partnership with the City of Kiel, the Smarte Kiel Region, and Anscharcampus, a creative community.[90] The concept went through three iterations including internal prototyping, external prototyping (three different locations in the city gave feedback), and finally building and using the Tiny Rathaus as a functional space.[91] The project was funded through multiple groups including the City of Kiel, regional government, and social innovation partnerships.

Tiny Rathaus has been used for a number of projects, including mobility-related projects, and has been welcomed by residents. It offers a flexible space for city administrators and residents to exchange information, ideas, and feedback, all in the neighborhood or area where a project is being focused.[92] Women can face challenges accessing civic participation opportunities due to care work. For example, women with children may not be able to attend a community meeting in the evening due to childcare responsibilities. In addition, people tend to feel more comfortable in their own environments and neighborhoods, and it's important to create safe spaces for women and for gender minorities to engage in civic life. Tiny Rathaus offers an example of how meeting people where they are at can build participation and trust with the public.

Figure 3: Small group discussions from the first season of the Tiny Rathaus.[93]

Spotlight: Bridget Moy O'Brien

Engaging communities around gender-inclusive planning and design can start outside of municipal government. Authors and artists have long focused on exploring the built environment through different mediums. Bridget Moy O'Brien, a Berlin-based artist and filmmaker, explored the relationship between gender and the built environment in her 2024 exhibition titled "Unseen Voices: Unveiling Silence in Urban Design." Moy O'Brien worked to create an "audio-visual spatial installation that exposes a profound silence within our urban spaces: an enduring neglect of FLINTA voices in urban design."[94]

Moy O'Brien interviewed eight people from the FLINTA community who interact with the built environment in different ways, including a first-time mother, a wheelchair user, a trans woman, and an Aboriginal Australian woman. While editing the interview footage, Moy O'Brien noted, "I realized how similar everyone's experiences were, even though they had such different backgrounds."[95] The exhibition ultimately featured five components, including an hour-long documentary as well as interactive installations. The exhibition posed the question, "What does a space look like when it's not planned for your body or you're not included in the design?"[96] The installations required visitors to fit themselves into awkward positions to be able to experience the artwork, "To give people pause; to look, to reflect, and to recognize that this is the real world that so many people, like those interviewed in the documentary, have to deal with."[97]

Art and exhibits like Unseen Voices invite the public to engage with topics like gender-inclusive planning – topics that often shape daily life in subtle, unnoticed ways. Featured in the 48 Stunden Neukölln art festival, the exhibit brought attention to gender-inclusive planning through a creative and accessible approach – different from standard community meetings or municipal outreach. Unseen Voices is a clear example of how art can offer a meaningful way to educate the public, encourage reflection and dialogue, and foster acdeeper understanding of complex issues.

To learn more about Bridget Moy O'Brien's work click here.

Figure 4: People viewing and interacting with the Unseen Voices exhibit in Berlin, Germany.[98]

4. Design

Design is often a blend of public participation and existing best practices, and it can be an opportunity for municipalities to test new concepts. As mentioned in the "Public Participation" section, input from community members should be integrated throughout the planning process, including during the design phase. The integration of public participation and design is often referred to as co-design, as mentioned earlier, "A design process that ideally engages a range of people – including those with 'lived experience' of the issues – to explore and test possible solutions."[99]

From Vienna's Seestadt Aspern to Femmedina in Tunis, more cities are focusing on co-designing housing, mobility, and public spaces to better serve women, girls, and gender minorities. In 2024, the London Legacy Development Corporation (LLDC) published Creating places that work for Women and Girls: Handbook for Local Authorities, Developers and Designers. The handbook, included on the Key Resources page, "Explores how planning and design can benefit women and girls and address gender disparities."[100] Highlighting design interventions such as lighting, land use and site layout, and mobility infrastructure, it serves as a comprehensive resource for those looking to better understand gender-inclusive urban design. Safer Parks: Improving Access for Women and Girls, also found on the Key Resources page, is another resource focused on gender-inclusive design.

Since design is a broad topic, this section will focus specifically on the co-design of gender-inclusive streetscapes, while also touching upon topics like bus stops and lighting. Streetscapes "Can be the most active public spaces in a community; however they can also be spaces of trepidation, stress, and fear if designed in a way that is not inclusive to all genders, ages, abilities, and needs."[101] In order to improve streetscapes, planners can apply design concepts that enhance walkability and activate streets and public spaces. Walkable streetscapes and complete streets encourage activity and use but also improve pedestrian safety and increase perceived personal safety. Design elements may include:

Traffic Safety

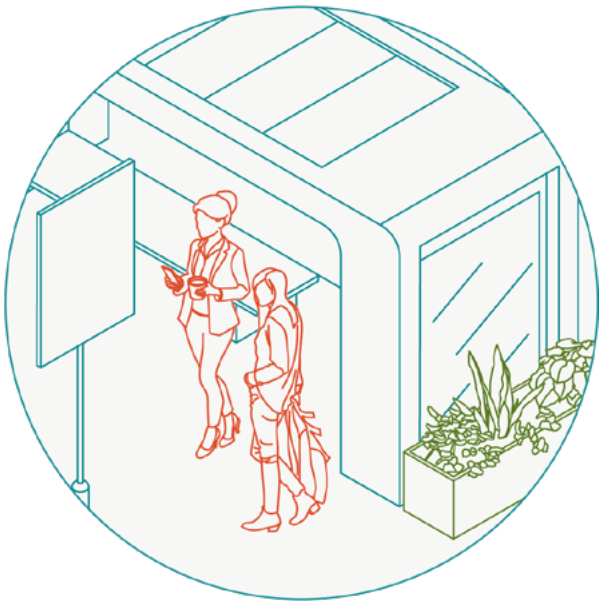
- Separated or buffered area between motorized traffic and pedestrian pathways where possible.[102]
- Separated or buffered area between motorized traffic and bike lanes.

Ease of Use

- Sidewalks and walking paths that are sufficiently wide, adequately paved, and free from parked cars or barriers (ideally a minimum of 6 feet in width).[103]
- Wide curb ramps at pedestrian crossings.
- Signage that is informative and accessible, whether temporary or permanent. It should have a positive effect on people's behavior and perceptions of the streetscape.[104] Signage should be reflective so it's visible at night.
- Consider the prioritization of different modes. For example, to promote sustainable mobility, make it easier to access transit with centrally located transit stops or easier to bike with wide, protected bike lanes.
- Keep accessibility in mind "What some people don't even consider a problem can pose a significant barrier to others, yet with simple design changes, it can become accessible for all."[105] For accessibility guidelines within the United States, refer to PROWAG Guidelines, also included on the Key Resources page.

Personal Safety

- Maintain visibility and openness along pedestrian areas like sidewalks and paths. No high, solid boundary walls. Shrubs and bushes should be kept low alongside paths and tree canopy should be raised above 6' where possible.[106]
- Bus stops, transit stations, sidewalks, and bike lanes should be well-lit, especially in transit-rich areas. Lighting is often faced toward the road but should be positioned to illuminate bike lanes and sidewalks as well.
- Visually transparent bus stops with seating options, good lighting, and real-time schedule information.
- Digital information from phone apps, websites, and digital displays at waiting areas with real-time schedule information.[107]
- Including spaces for small businesses, newsstands, or street vendors near bus stops to increase "eyes on the street" and perceived sense of personal safety.



Spotlight: Safety

One of the main components of gender-inclusive mobility design is safety. Public transport is a common site of sexual harassment and other forms of sexual violence towards women, gender minorities, and girls. Harassment can take many forms, including nonverbal (such as staring, making gestures, or taking photos), verbal (such as catcalling), and physical (such as touching or groping).[108] It's hard to know the full extent of harassment as it's often unreported. A 2017 study found that 77% of 140 female university students reported experiencing sexual harassment on New York City public transport, but only 4% reported it to authorities.[109] Some cities, like Mexico City, Mexico and Tokyo, Japan have created women-only passenger cars to address safety on public transport.[110]

The LGTBQIA+ community experiences higher levels of harassment on public transport. "Transport for London found that LGBTQ passengers were three times more likely to encounter unsolicited sexual behavior on public transport in London compared to heterosexual people."[111,112] There is a heightened risk of harassment for public transit users with intersecting identities, for example for BIPOC trans and genderqueer individuals who also may experience racism.[113]

While some individuals can make monetary sacrifices to increase their safety by taking a taxi or rideshare, many people are dependent on public transport. Those dependent on public transport reported planning their day around feeling safe when traveling. This planning involved strategies such as picking the safest route, considering when they could run errands, whether they could attend an event after dark, and what they should wear to avoid attracting attention.[114]

While there needs to be a "shift toward preventing perpetration,"[115] there are ways to improve safety through design. Waiting areas, such as bus stops and subway stations, should be designed with gender-inclusive design principles at the forefront. How women and gender minorities feel while waiting at bus stops or train stations has a significant impact on their public transit use. It can influence whether they modify their route, or even stop using public transit altogether. There is a substantial body of research on this subject that planners can draw from to improve waiting areas to make these areas safer for all users.

Waiting times are an especially vulnerable part of transportation, and experiences during these times can impact the overall travel experience.[116] The environment in which women and gender minorities wait for public transit plays a crucial role, especially as many women and gender minorities report feeling anxious and unsafe during this part of the trip.[117] Waiting areas should be designed with adequate lighting and clear sight lines, and the elimination of nooks, corners, and isolated areas.[118] Reliable service, real time information displays installed in waiting areas,and transparent waiting shelters all can contribute to a safer mobility network.[119]

Maintenance is also essential to the success of mobility systems, including streetscapes, public transit stations and waiting areas, and public transit vehicles like buses and trains. Without proper upkeep, infrastructure can deteriorate, but maintenance also plays a crucial role in shaping how a space is perceived. For example, a broken light in an underpass or overgrown vegetation along a walking path can make women, gender minorities, and girls feel less safe, leading them to adjust their travel patterns. Gender-inclusivity can be integrated into maintenance plans by:

- **Managing vegetation:** "Visibility and openness - the ability to see around for a good distance and be seen by others,"[120] is crucial for public spaces to feel safe. This idea extends to mobility systems including bus stops, walking paths, and sidewalks. Shrubs and bushes should be kept low alongside paths and tree canopy should be raised above 6' where possible.[121]
- **Managing litter:** Keep travel paths including sidewalks, walking paths, and bike lanes, free of litter or debris.
- **Reporting:** Use digital tools or create a system for community members to report maintenance issues through a phone number and online system. This topic will be discussed further in the "Monitoring" section of the toolkit.

Case study: **Berlin, Germany**

Bergmannstraße is a local road at the heart of Bergmannkiez, a vibrant neighborhood in Berlin's Kreuzberg district. Bergmannstraße is a well-used street that supports a range of daily needs, including grocery stores, pharmacies, healthcare, childcare, and many restaurants. Bergmannstraße has been the focus of a decade-long engagement process and has become a testing ground for multiple roadway reconfigurations. While gender-inclusive design was not the primary focus of the project, gender-inclusive elements were incorporated. There is a growing body of research exploring how complete streets and the concept of the 15-minute city can serve as a platform for gender mainstreaming.

To understand the transformation of Bergmannstraße, one first has to understand the municipal planning structure of Berlin. Berlin is a city-state with the Berlin Senate overseeing large, arterial roads, while 12 city districts oversee smaller, neighborhood streets. Each of Berlin's 12 districts have their own "local planning" office that oversees planning within their distinct districts (Bezirke) and neighborhoods (Kieze).[122] The street of Bergmannstraße is located within the district of Friedrichshain-Kreuzberg where the District Office of Friedrichshain-Kreuzberg, Street and Green Space Office managed the streetscape project.

In 2011 the Berlin Senate funded temporary measures to improve conditions for pedestrians, including, "Car-blocking boulders, bright-yellow street furniture called "parklets" for residents to mingle on, and green dots painted on the road to slow down traffic."[123] The project received negative feedback on a local and national level for being "costly and ineffective" and was largely removed, with parklets being moved to a less busy section of the street. After the removal, the District Office of Friedrichshain-Kreuzberg and the district council regrouped and began an extensive engagement process to try again.

The district council engaged with "300 locals, representative of the population in terms of age and gender," on what they thought of the plans in a series of workshops.[124] Staff members of the District Office staged events where roads were temporarily shut down to car traffic and the public was invited to engage with plans, free coffee was distributed, and games were provided for children. The events were held on weekends to increase participation and to better meet people where they are.[125] Results showed that the public wanted fewer cars and more green space.[126] All plans were temporary and were implemented through a phased approach:

Phase 1: The first phase included "residents only" traffic on most surrounding streets while also reducing the speed limit to 20 km/h (12 mph).

Phase 2: The second phase included a portion of road for one-way vehicular traffic with a two-way bike lane protected by temporary planters and parking.

Phase 3: A one-way street system was introduced on some surrounding roads.[127]

Throughout these phases temporary bump-outs and new crossings were installed to improve pedestrian safety, and were complemented by traffic lights with pedestrian recall.[128] Traffic calming measures were implemented on connecting roads, including, "One-way streets with restricted access for non-resident and delivery traffic."[129] Bike lanes were separated from vehicular traffic with planters. The project built on existing features like clearly marked bus stops, most with transparent and covered bus stops with ample room and seating. Additionally, street furniture and seating outside the local market hall and other restaurants provides a constant stream of people, increasing the perceived sense of safety by activating the space and providing "eyes on the street".

"Eyes on the Street" is an urban design principle introduced by Jane Jacobs, based on the idea that people feel safer when they can be seen by others in public space. It is particularly important for women and gender minorities, as they feel more vulnerable in spaces that are isolated and where there are no pedestrians, shops, cafes, or street vendors. "The presence of people, vendors, and familiar service providers make a space livelier and more active, thereby providing a sense of safety to all."[130] In addition to passive surveillance, those who work or volunteer in public spaces can be trained as active bystanders, empowered with the confidence and skills to intervene safely.

While this project did not specifically focus on gender-inclusive planning, it illustrates how an iterative planning process and complete streets design principles can serve as a platform for gender mainstreaming by providing accessible pedestrian infrastructure, preventing harassment and improving safety, and supporting age-friendly environments.[131]

Figure 5: A two-way bicycle lane is separated from vehicular traffic with planters. Temporary speed bumps help to calm traffic.

Figure 6: Bike lanes also serve as a buffer between pedestrians on the sidewalk and vehicular traffic. Bump-outs and the planters created a shorter crossing distance for pedestrians while providing a pedestrian refuge area.

Case study: **Berlin**

5. Monitoring & Evaluation

Monitoring and evaluation are essential for measuring the success of a project and form the basis for refinement and future planning. "Without effective planning, monitoring and evaluation, it is impossible to assess if work is going in the right direction, whether progress and success can be claimed, and how future efforts might be improved."[132] Despite their importance, monitoring and evaluation are not always included in the planning process due to time and cost constraints. However, they can be relatively straightforward to implement and can ensure the longevity and effectiveness of a project.

Safer Parks, included on the Key Resources page, provides guidance on gender-inclusive park design grounded in both research and practice. It forms part of the Green Flag Award program, which sets the benchmark standard for the management of recreational outdoor spaces across the UK and around the world. The document resulted from a partnership between the University of Leeds, the Mayor of West Yorkshire, West Yorkshire Combined Authority, Keep Britain Tidy and Make Space for Girls.[133] *Safer Parks* outlines ten design principles and provides guidance on monitoring that can be applied to gender-inclusive mobility projects. Partnerships between municipalities and local universities can be especially valuable in establishing effective monitoring and evaluation strategies that benefit both groups. These strategies can be supported by indicators that help to measure the success of gender-inclusive mobility projects.[134]

- Are women, gender minorities, and girls reporting greater access to mobility systems?
- Are they reporting that they feel safer?
- Are there more women, gender minorities, and girls using public transit, bike lanes, and sidewalks after the project was implemented?
- How have travel behaviors and travel usage changed since the project was implemented?

New and existing tools can be used to answer these questions. Existing tools, like the National Household Travel Survey (NHTS), can be used to track trends in personal and household travel behavior. However, the NHTS only includes travel behaviors for "male" and "female," limiting its ability to capture the experiences of genderqueer populations. Municipalities can create new tools to monitor and evaluate projects, like:

Surveys and feedback

- User surveys can help capture the experiences and needs of mobility users. Surveys can be delivered online or through social media, and advertised at train stations, bus stops, bike share stations, and in public spaces via flyers. Older adults can be reached through care facilities or community groups, with the option to complete surveys either online or in hard copy. Partnerships with employers, schools, and childcare facilities may help to reach a broader audience.
- *Safer Parks* recommends "Repeating visitor surveys at regular intervals, typically every 3-5 years, can demonstrate changes over time. There needs to be consistency in the survey questions and the sampling methodology to ensure robustness of data."
- Qualitative questions can also be collected for more detailed discussions. Focus groups or existing stakeholder groups can be interviewed.

Data

- Public transit agencies generate data during their daily operations. However, "Very few agencies track ridership by race and gender, and the majority of publicly available ridership demographic data are limited to work trips - a shrinking of total trips."[135] Public transit agencies can start collecting gender disaggregated data to evaluate baseline and post-implementation data.
- Observational studies can be another way to collect data on a smaller scale. Observe or count users and user patterns and behaviors before and after an intervention in a specific place.
- "Recording the level and pattern of usage," whether through count data, apps like Strava, or through observation, can help collect baseline and post-implementation data.

Case study: **Leeds, UK**

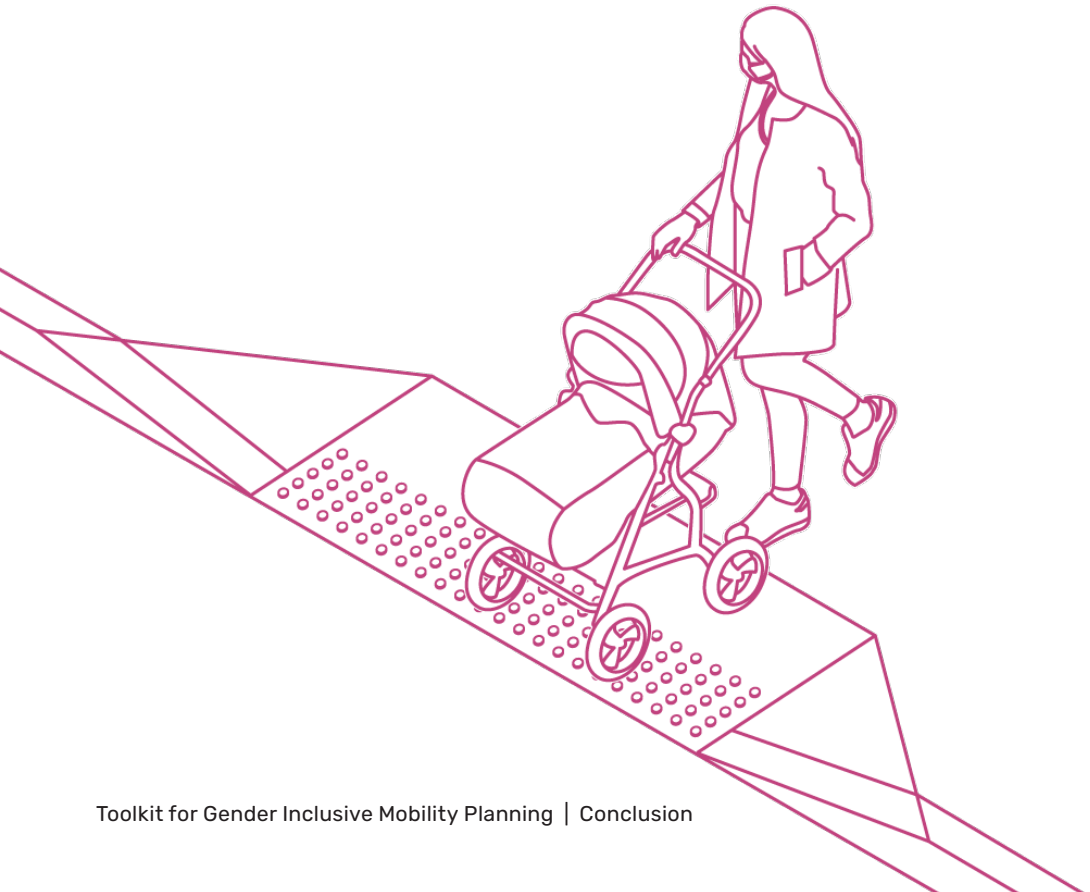
Safer Parks, mentioned above, used open-source spatial data to assess safety in parks and monitor progress. Based in Leeds, United Kingdom, the project builds on *Safer Park*'s goal of improving safety and access to parks for women and girls by developing an open data dashboard. Data was collected on what makes a park feel safe and unsafe, taking into account factors like park layout and access, lighting and vegetation, and crime rates.[136] The dashboard will be used to create "Interactive maps of parks which can be used to highlight areas that already promote feelings of safety, identify feasible 'quick-win' improvements, and suggest areas for future investment to enhance the overall safety and usability of parks."[137]

While not focused specifically on transportation, *Safer Parks* serves as an example of how to collect data and monitor project progress. A similar approach, using open-source spatial data, could be applied at train stations, bus stops, or city-wide, to gather before-and-after data on gender-inclusive mobility projects and ensure that outcomes are functioning as intended.

5 Conclusion

When interviewed about her exhibit, artist Bridget Moy O'Brien noted, "For anything, we can design a world that suits everyone — but we just don't. Often, it's simply not thought about as a necessity."[138] This observation highlights a common issue in urban planning: gender-inclusive design is possible, but frequently overlooked. Cities like Umeå, Sweden and Vienna, Austria demonstrate that municipal governments can successfully incorporate gender considerations into mobility planning. In doing so, these cities have generated positive outcomes such as improved safety and more efficient transportation systems that benefit residents, regardless of gender.

Designers, planners, and policymakers can center the voices of women, gender minorities, and girls throughout the mobility planning process. However, gender-inclusive planning is not a one-size-fits-all solution, rather it's shaped by geography, demographics, and intersecting identities. This toolkit is intended to be a starting point for engaging in this nuanced work. While mobility planning differs between places, including the European Union, United Kingdom, and the United States, many of the challenges and opportunities are shared. This toolkit serves as a resource for knowledge exchange, so that municipalities can learn from one another to design a world where all people can move freely, safely, and happily.



6 Key Resources

Changing Lanes: A Gender Equity Transportation Study[139]

The Los Angeles Department of Transportation (LADOT) commissioned this study to gather data pertaining to the unique experiences and needs of women navigating Los Angeles' transportation system. This resource focuses on introducing gendered travel patterns and behaviors, filling the gender data gap, and community-based research.

Creating places that work for Women and Girls: Handbook for Local Authorities, Developers and Designers[140]

The London Legacy Development Corporation (LLDC) engaged with over 600 women and girls, listening to their experiences and perceptions of safety in Queen Elizabeth Olympic Park and the surrounding area. This resource focuses on understanding the lived experiences of women and girls, mainstreaming gender-informed processes, and planning and design interventions.

Designing Streetscapes for Gender Inclusivity[141]

This study highlights case studies from within the United States, focusing on infrastructure that supports walking, biking, and waiting areas at transit stops. This resource focuses on existing strategies for gender-inclusive mobility planning.

Feminist City[142]

This book by Leslie Kern is foundational in understanding the nuances of gender-inclusive planning and design.

Gender and (Smart) Mobility[143]

This green paper was developed by Ramboll Smart Mobility in partnership with and supported by the Ramboll Foundation, Helsinki Region Transport (HSL), Region Stockholm and Trafikverket in Sweden and VBB in Berlin, Germany. This resource focuses on introducing and offering solutions to fill the gender data gap.

Handbook for Gender-Inclusive Urban Planning Design[144]

Authored by the World Bank Group, with Eva Kail as a consultant, this is a comprehensive, internationally-focused resource. This resource focuses on introducing gender-inclusive planning and design, plan and project guidelines, and case studies.

International Transport Forum Gender Analysis Toolkit for Transport[145]

The International Transport Forum (ITF), "Offers a hands-on, easy-to-use method for incorporating a gender-inclusive perspective into transport projects, plans and policies." This resource includes a Gender Checklist, Gender Indicators, and a Gender Questionnaire.

Public Right-of-Way Accessibility Guidelines[146]

The United States Access Board published guidelines under the Americans with Disabilities Act (ADA) that addresses access to sidewalks and streets, crosswalks, curb ramps, pedestrian signals, on-street parking, and other components of public right-of-way. This resource focuses on accessible streetscape design guidelines.

Safer Parks: Improving Access for Women and Girls[147]

This document was prepared by Keep Britain Tidy, Make Space for Girls, the University of Leeds and West Yorkshire Combined Authority to provide guidance on gender-inclusive park design. This resource includes design guidelines, case studies, and high-quality design graphics.

She Rises: Responsive, Inclusive & Equitable Spaces. A Framework for Caring Cities[148]

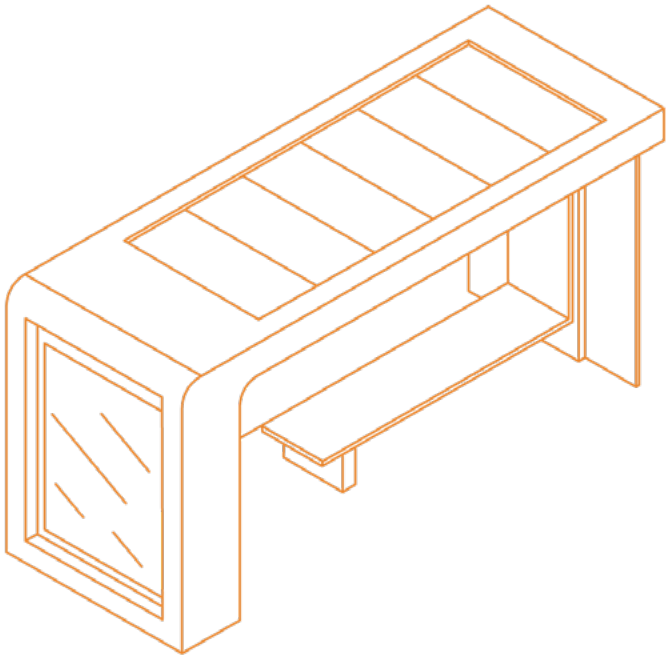
This resource was authored by Safetipin, a social enterprise and technology platform that works to make cities safer by collecting and providing safety-related data on a large scale. This resource focuses on public spaces and infrastructure, services and amenities, mobility and public transport, and responses to gender-based violence.

NACTO Urban Street Design Guide[149]

The National Association of City Transportation Officials (NACTO) represents 98 North American cities and transit agencies. The Urban Street Design Guide was developed in response to the growing complexity of streetscapes, "Streets must accommodate an ever-expanding set of needs. They must be safe, sustainable, resilient, multimodal, and economically beneficial, all while accommodating mobility demands." This resource includes comprehensive streetscape design guidelines.

Why We Need Queer Urbanism[150]

An article from the American Planning Association (APA) highlighting the need for queer urbanism that "Centers identity, breaks norms, and gives people agency to adapt a space to meet their needs." This resource focuses on planning with and for the LGBTQIA+ community.



Practitioner Guide

7 Practitioner Guide

The Practitioner Guide provides an overview of the full toolkit, highlighting key points and recommendations.

This toolkit serves an introduction to gender-inclusive mobility planning and is intended as a resource for designers, planners, and policymakers looking to integrate gender-inclusive practices into mobility and transportation planning. It is important to note that this toolkit offers an overview and is not intended to be comprehensive. Gender-inclusive mobility planning and design is a nuanced topic that varies based on culture, geography, and population and cannot be covered in one document. Rather, this toolkit is meant to be a starting point for re-examining mobility planning on the local level.

Women and gender minorities make up more than 50% of the population, yet current mobility systems have been consciously and unconsciously planned for men, reinforcing disadvantages for women, girls, and gender minorities.[151] Historically, transportation systems have been designed for a "default male user" who commutes to and from work during peak hours. However, research shows that women often have different travel behaviors and preferences, including:

Travel modes and Time Use

- Women tend to use public transit more than men, often accounting for more than 50% of overall ridership.[152]
- Women are more likely than men to need to travel during off-peak hours — times with fewer transportation options.[153]
- Women tend to walk more than men.[154]

Complex Trips

- Women's travel patterns are more complex than men's travel patterns. Women are more likely than men to trip-chain, or link multiple non-work trips.[155]
- Women are more likely than men to use multiple transportation modes in a day.[156]

Economic & Safety

- Women and members of the LGBTQ+ community are more concerned about safety when traveling and are more likely to experience sexual assault and harassment.[157] While both groups express considerable safety concerns during peak periods, they tend to report being most afraid during evenings.[158]
- Women are more likely to travel with younger and older dependents and often cover their fare or cost of travel.[159] A lack of accessible transportation options, like paratransit, further compound this issue.

Bridging the Data Gap

Differences in travel behaviors and preferences should not be assumed. Instead, disaggregated data - categorized by male, female, and other gender identities - should be collected to reveal the specific transportation needs and existing inequalities for women and gender minorities.[160]

Designing "With" Instead of "For"

Planners can also learn about the transportation needs of women and gender minorities through community engagement, employing methods such as:

- Community-based research (CBR) "A participatory approach that pairs researchers with community members across all phases of a research process."[161]
- Co-design,[162] a design methodology that uses creative and participatory approaches with the aim of sharing knowledge and power in the design process.

Meeting people where they're at is an important component of engagement. For example, planners can reach community members by partnering with existing women's and LGBTQIA+ organizations, collaborating with schools and parent teacher organizations, or tabling at local events and transit stations.

Important Design Considerations

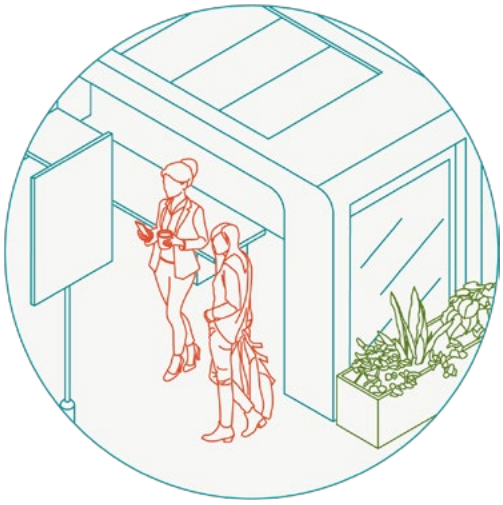
Traffic Safety

- Separated or buffered area between motorized traffic and pedestrian pathways where possible.[163]
- Separated or buffered area between motorized traffic and bike lanes.

Ease of Use

- Sidewalks and walking paths that are sufficiently wide, adequately paved, and free from parked cars or barriers (ideally a minimum of 6 feet in width).[164]
- Curb ramps at pedestrian crossings.
- Signage that is informative and accessible, whether temporary or permanent. It should have a positive effect on people's behavior and perceptions of the streetscape.[165] Signage should be reflective so it's visible at night.
- Consider the prioritization of different modes. For example, to promote sustainable mobility, make it easier to bike with wide, protected bike lanes or easier to access transit with centrally located transit stops.
- Keep accessibility in mind "What some people don't even consider a problem can pose a significant barrier to others, yet with simple design changes, it can become accessible for all."[166] For accessibility guidelines within the United States, refer to PROWAG Guidelines, included on the Key Resources page.

Personal Safety



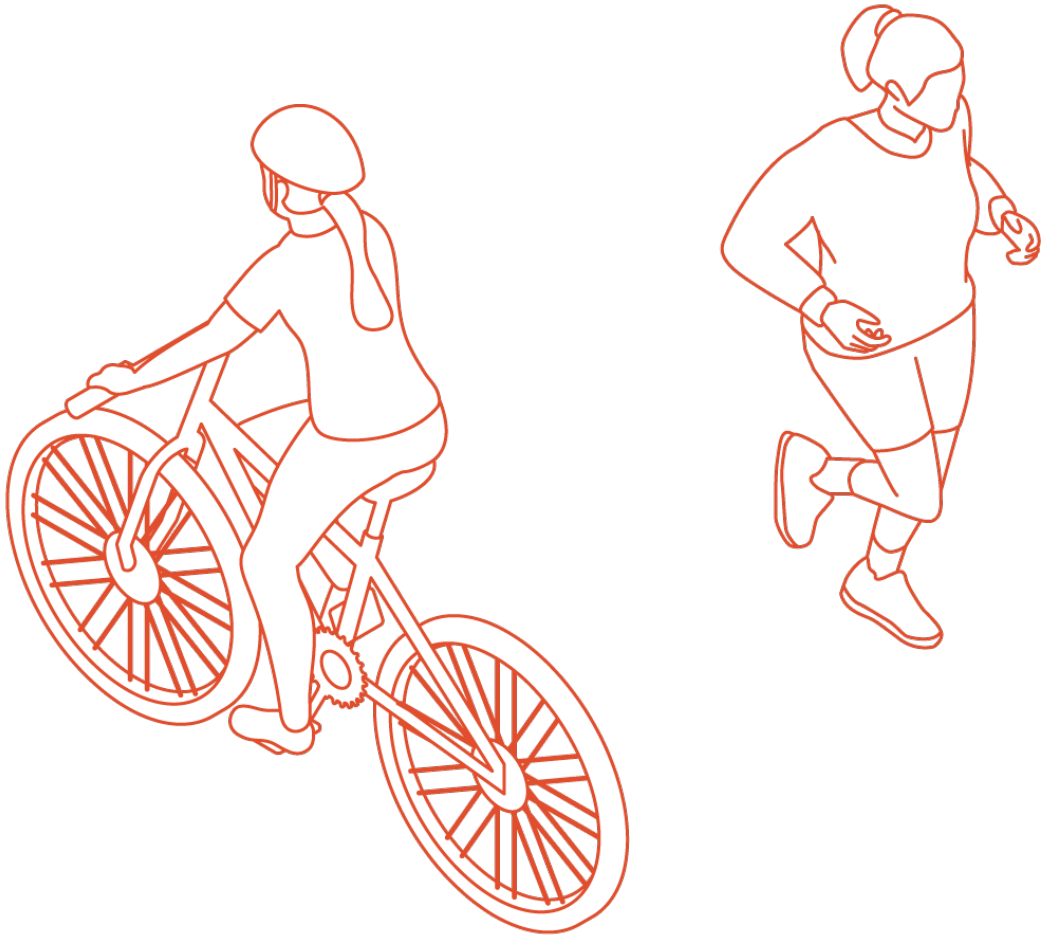
- Maintaining visibility and openness along pedestrian areas like sidewalks and paths. No high, solid boundary walls. Shrubs and bushes should be kept low alongside paths and tree canopy should be raised above 6' where possible.[167]
- Bus stops, transit stations, sidewalks, and bike lanes should be well-lit, especially in transit-rich areas. Lighting is often faced toward the road but should be positioned to illuminate bike lanes and sidewalks as well.
- Visually transparent bus stops with seating options, good lighting, and real-time schedule information.
- Digital information from phone apps, websites, and digital displays at waiting areas with real-time schedule information.[168]
- Including spaces for small businesses, newsstands, or street vendors near bus stops to increase "eyes on the street" and perceived sense of personal safety.

Adjusting Based on Feedback

Monitoring and evaluation are key in measuring the success of the project and serve as the basis for fine-tuning and future planning. Consider trying a pilot project or surface improvements first, then make adjustments based on community feedback and data collection before moving to final design and construction. Many of the projects highlighted as case studies began as pilot projects. Collecting pre- and post-implementation data can help to ensure a project is working as intended and ensure the longevity of a project.

Moving Forward

Designers, planners, and policymakers can center the voices of women and gender minorities throughout the mobility planning process. However, gender-inclusive planning is not a one-size-fits-all solution, rather it's shaped by geography, demographics, and overlapping identities. This toolkit is meant to serve as a starting point for re-examining mobility planning at the local level and is not comprehensive. It serves as a platform for knowledge exchange, supporting municipalities in learning from one another to design a world where all people can move freely, safely, and happily.



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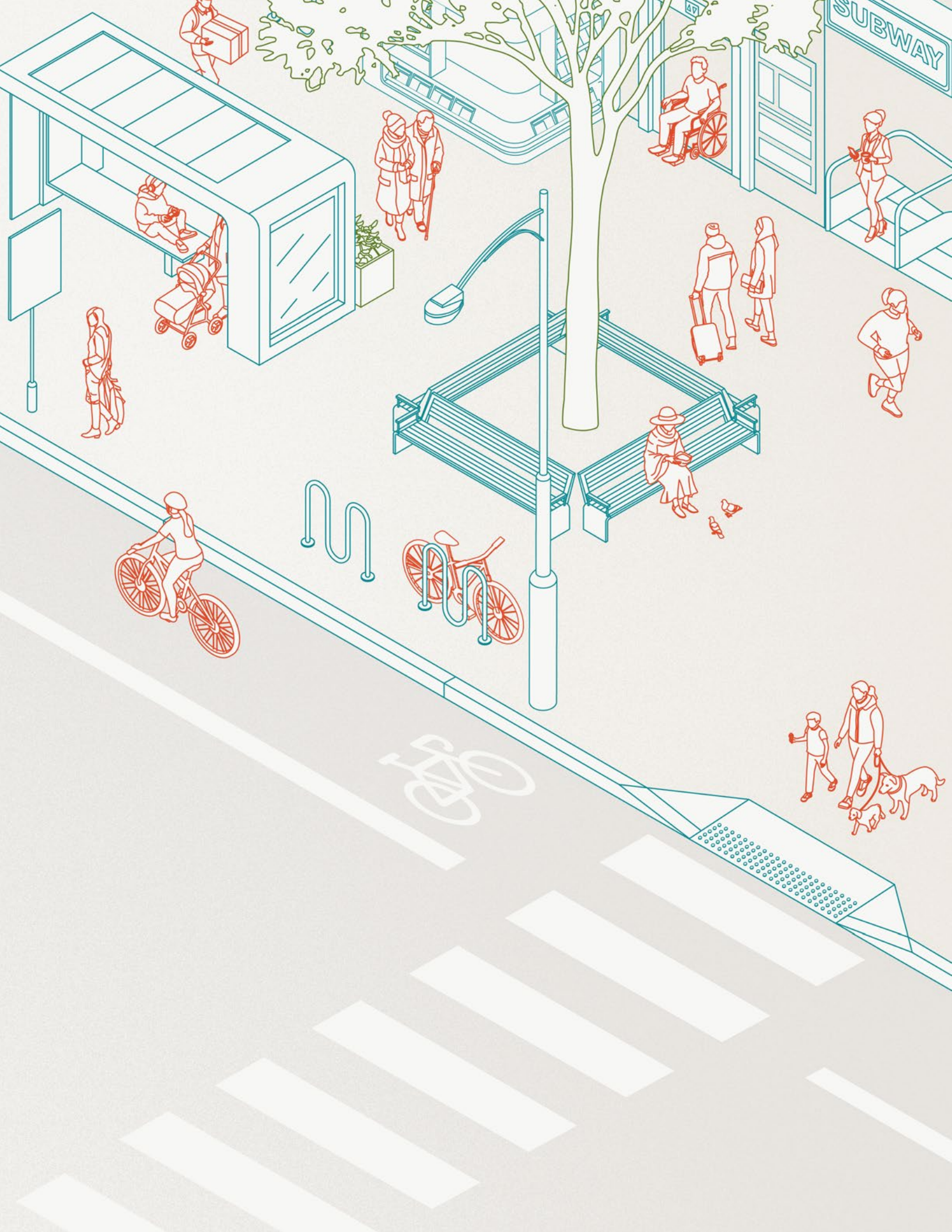
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