

Gender Geographies: Mapping Disaggregated Data for Change



 Brussels, Belgium  Espoo, Finland  Ankara, Türkiye

Data

Mapping

Introduction

Data isn't just about raw numbers and statistics: it's information we use to understand our world and make better decisions. When it comes to cities, data-driven decision-making helps accurately identify problems, allocate resources, and design effective policies. Mapping adds another layer to this insight by making data spatial. It helps planners and professionals visualise when, where, and why problems occur, and for whom. However, not all data is created equal. Gender-disaggregated data, which is collected and presented separately for women, men, and gender-diverse people, makes visible the inequalities that shape access to services, safety, mobility, and well-being. Without gender disaggregation, we risk designing policies and infrastructure that ignore how different groups experience the city.

Globally, the gender data gap reflects decades of under-collection and underreporting of information about women and other marginalised genders. As a result, urban decisions often rest on a partial picture. For example, gender disaggregated transportation data has shown women often make more multi-stop trips relating to their social and familial obligations, and even that they take different routes than men when biking in the same city. The absence of gendered data perpetuates blind spots in service design and infrastructure investment. Open data and open source tools can play a powerful role in this effort. Open data in the form of freely available, reusable datasets can increase transparency and civic engagement. Open source tools, which allow for collaborative and customisable digital platforms, also enable cities and civil society actors to co-create data and solutions suited to local needs.

This report presents three case studies that show how cities have used mapping and gender-disaggregated data to inform interventions to improve urban life. Whether starting with simple open data inventories or developing advanced digital tools, the lesson is clear: gender-responsive governance starts with gender-aware data.

The Toilet Action Plan: Brussels, Belgium

The initiative to map publicly available toilets in Brussels emerged around 2020-2021 as a response to public concern over the lack of inclusive public sanitation in Brussels. Politicians and civil servants alike raised the scarcity of public restrooms as a major concern for sanitation, but also for equality, with a disproportionate number of male-serving public urinals to full restrooms. In 2021, as a part of its 'Toilet Action Plan', the city government published a map of public toilets and urinals in the city center, along with a network of partnered 'welcoming toilets' made free of use by private businesses.

[Actions]

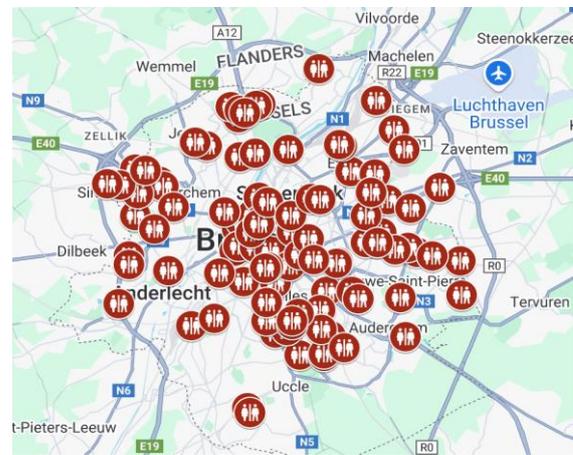
The map provides an initial evidence base, first inventorying the locations and types of facilities using city data and field surveys, distinguishing the free and public with paid ones, and then sorted by toilets

or urinals. By processing the data with a gender lens, the analysis quantified the inequity: in 2023, there were 41 free, public facilities in central Brussels, but only 12 were universal (versus 29 urinals for men). That equates to roughly one toilet per 11,000 residents. Such clear, disaggregated mapping of service access made the problem visible to both policymakers and the public.

[Lessons Learned]

Confronted with the evidence of “severe disparity” in facilities, city leaders acknowledged the gender bias in the urban landscape. The project’s findings spurred the City of Brussels to act: officials announced plans to replace all male-only urinals with unisex toilets accessible to women and people with disabilities. The city installed four new self-cleaning public toilets in 2023, with more planned, and increased maintenance budgets. They also partnered with local businesses to expand access (a “Guest Toilets” program where cafés open their restrooms to all). Further research funded by urban.brussels (Brussels Regional Public Service for Urbanism and Heritage) and carried out by women’s activist collective Garance expanded upon earlier data sets and discovered that 75% of toilets were too small to enter with a stroller, for example, and that only 10% were equipped with a baby changing table. The project, ‘For inclusive public toilets’, has since made additional recommendations to the greater capital region on how to improve accessible sanitation for all citizens, and uploaded their updated dataset on the public Brussels region ‘datastore’ open data platform.

Early outcomes include a modest increase in women-friendly facilities and greater public awareness of inclusive design. For urban professionals, a key lesson is that even a relatively narrow data project like mapping toilets can illuminate broader equity issues. By gathering gender-disaggregated data on service provision, cities can uncover hidden biases and address quality-of-life issues that disproportionately affect women.



Left: Public Toilet Map of Brussels, <https://www.brussels.be/public-toilets-and-urinals>

Right: Garance Toilet Map of Greater Brussels: <https://www.garance.be/projet-pour-des-toilettes-publiques-inclusives/>

My Espoo on the Map: Espoo, Finland 

My Espoo on the Map is a participatory mapping project launched by the City of Espoo in 2020 to gather gender- and age-disaggregated insights into residents’ lives through location mapping. The project is a collaborative effort between Espoo’s urban planning department and Aalto University to develop a more “child-friendly city” profile by asking children and teens about the places they use and value. In autumn 2020, the city rolled out a map-based survey targeted at youth. The problem statement was twofold: to understand how the mobility patterns and activity spaces of young residents

vary by gender, and to use that data to inform city planning (from park design to transit and safety). Over 6,600 residents responded to the call, marking nearly 70,000 locations on the digital map. Notably, about 1,600 respondents were teenagers, providing a rich dataset on adolescent girls' and boys' daily movements.

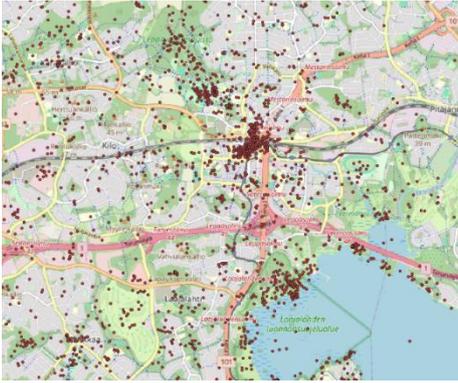
[Actions]

The My Espoo on the Map project collected two main types of data: geospatial data about places marked by young residents, and demographic data (age and gender) for each respondent. The project deployed separate surveys along with an online tool built on a public GIS (Geographic Information System) platform that prompted participants to drop pins on a map of Espoo indicating locations they frequent, enjoy, feel unsafe in, or want to see improved. Participants could also add comments or development ideas for those spots. This approach enabled gathering experience-based information at scale, from favorite hangouts spots to routes taken to school. Crucially, the data was tagged by gender (among other factors), allowing analysts to compare patterns between girls and boys. Aalto researchers processed the data using a “life circles” concept: essentially mapping the radius and clusters of each young person’s regular activities. They then analysed these life-circle maps across genders. The gender lens analysis revealed clear differences: girls tended to have wider, multi-centered activity spaces than boys of the same age (their daily movements covered more distinct clusters), whereas boys’ activity spaces were more often single-centered around home or one focal point. This held true in both younger (12–15) and older youth cohorts. The project reached a broad demographic spectrum and ensured data quality by running the survey through schools and youth channels with support from teachers.

[Lessons Learned]

Espoo’s initiative demonstrates how crowd-sourced gender-disaggregated data can directly influence urban policy. The immediate outcomes were robust: city officials gained a nuanced “map” of young residents’ lives, highlighting, for example, where girls feel comfortable vs. where improvements (lighting, facilities, programming) might be needed to support them. These insights have already been put to use: the survey results were integrated into Espoo’s new city master plan process as key evidence of how different groups experience spaces in the city.

An important lesson for other urban professionals is the value of participatory mapping as a diagnostic tool. By gathering gender-disaggregated data from the community itself, cities can uncover subtle inequities that might be invisible in aggregate statistics. Espoo’s case also shows the feasibility of engaging youth in planning, as thousands of young people contributed when given an interactive, map-based platform. The project’s success has led Espoo to repeat and expand similar surveys, with plans to conduct the survey every four years, institutionalising this approach. For cities not yet disaggregating data by gender, My Espoo on the Map is an inspiring example: start with a clear question (how do different inhabitants experience the city?), collect location-specific data from residents, and use the findings to shape inclusive urban design. As Espoo’s planners put it, the exercise built “in-depth knowledge” of how different demographics use the city, making future developments more responsive and equitable.



Example of My Espoo on the Map's open location data visualised in QGIS

The Purple Map Project: Ankara, Türkiye

The Purple Map (Mor Haritam) project is a nationwide initiative in Türkiye that leverages gender-disaggregated mapping to guide local service delivery for women. Launched in 2021 by UN Women Türkiye in partnership with the Turkish Economic and Social Studies Foundation (TESEV) and funded by the Swedish International Development Cooperation Agency under the “Advancing Women's Leadership and Gender Equality in Politics and Business Life” campaign, this project spans multiple cities and focuses on a broad array of services and safety issues pertaining to women and the urban environment.

The pilot was rolled out in Ankara in late 2020, in response to a clear problem: municipalities lacked data and tools to identify where women's needs were not being met. Issues like gender-based disparities in access to social services, lack of safe public spaces, and underrepresentation of women in local decision-making were not systematically mapped. The Purple Map project's goal was therefore to strengthen gender-sensitive governance at a local level by creating an interactive map-based data hub showcasing demographic and location data in the city that reflected the experience of its female inhabitants. In Ankara, the effort culminated in a publicly accessible digital map that highlighted demographic data by neighborhood, resources such as women's centers, daycare facilities, shelters, and user-sourced 'unsafe areas.' The success of this pilot prompted UN Women to expand the Purple Map to other cities: by 2022 it was launched in Eskişehir and plans were in place to roll out to 6 metropolitan municipalities by 2023.

[Actions]

The Purple Map project involves a combination of data compilation, citizen reporting, and policy alignment. First, participating city governments gather all relevant gender-disaggregated data on services: this includes the locations of facilities primarily serving women (women's community centers, childcare centers, social aid offices, etc.), and data on women's representation (like female elected officials or female neighborhood leaders). This information is uploaded to the Purple Map platform, essentially creating a city map layer of “gender-sensitive municipal services”. Through a feature called “Notify Risky Area,” women can report places in the city where they feel unsafe or that lack adequate infrastructure. Examples might be an unlit park, a street with frequent harassment incidents, or a district with no childcare facilities. These reports appear as alerts on the map for city officials to see. The data collection methods are thus both top-down and bottom-up.

Importantly, the project actively reached out to diverse demographics – working with local women's NGOs, community centers, and mukhtars (neighborhood heads) to ensure women from various backgrounds knew about the map and could contribute. In Ankara's pilot, hundreds of women submitted safety concerns or service gaps via the platform. City data teams then analysed the

combined dataset with a gender lens: for example, overlaying reported “unsafe spots” with socio-economic data to prioritise interventions in low-income areas, or identifying which districts had the greatest mismatch between women population and available services. The Purple Map’s interactive dashboard enables officials to filter information (e.g., view all daycare centers vs. all reports of street lighting problems) to support planning. The project also included training local government staff on how to interpret and act on the gender data, ensuring that the maps lead to concrete actions.

[Lessons Learned]

The Purple Map project has had a tangible impact on local decision-making and offers several lessons for other cities. In Ankara, the pilot provided city authorities with an unprecedented evidence base: they could see, at a glance, which neighborhoods lacked women’s clinics or where women felt most unsafe at night. This directly informed urban interventions – for instance, the Ankara Metropolitan Municipality identified specific “risk zones” from the map and promptly increased street lighting and police patrols in those areas. After the project was launched, the municipality also established a Women’s Services department. In Eskişehir, which launched its Purple Map in 2022, officials announced plans to develop new women’s services in response to needs pinpointed by the map data. Beyond such service improvements, a broader lesson is the power of digital participation: by inviting women to directly flag issues, municipalities built trust and opened new channels of dialogue with half their population.

For urban professionals, the Purple Map underscores that tackling gender equality in cities need not be abstract: it can be very practical and map-driven. Key lessons include the importance of cross-sector partnership (international agencies, NGOs, and city governments each played a role), the value of combining official statistics with personal testimonials to get a full picture, and the need for political will at the local level. The participating cities in Türkiye showed that when leaders are committed to listening to women’s voices through data, they can target resources more effectively and make urban services fairer.

[Practical Steps Towards Gender-Disaggregated Data in Cities]

Below is a set of practical recommendations for local governments, drawn from global best practices and gender statistics training toolkits:

- ❖ **Establish systematic collection of sex-disaggregated data:** Begin by auditing what data your city already collects (e.g. service usage, satisfaction surveys, budget allocations) and ensure it is broken down by gender. If certain departments lack gender-disaggregated records, mandate a change in procedure so that all new data (from transit ridership to library memberships) is categorised by sex or gender. Consider setting up a simple internal dashboard where each department reports key indicators for women and men. Over time, this routine collection will create a baseline to measure progress in closing gaps.
- ❖ **Use standard indicators and align with international frameworks:** Leverage existing guidance on gender metrics so you aren't starting from zero. Organisations like UN Women, UN-Habitat, and the OECD (Organisation for Economic Co-operation and Development) provide indicator frameworks (for example, women's safety audits, gender-sensitive Sustainable Development Goals indicators for cities, etc.). Identify a handful of relevant indicators for your city's context, such as the percentage of public facilities that are accessible to women, gender gaps in public transit usage, number of women benefiting from entrepreneurial programs, and incorporate these into your monitoring systems. UN Women's Gender Statistics Training Curriculum helps policy-makers learn to use gender data for evidence-based decision-making.
- ❖ **Engage the community to gather new data (especially where gaps exist):** If certain gender-relevant data is not readily available, create opportunities to collect it through public engagement. As seen in Espoo and Ankara, participatory methods like map-based surveys, "safety walks," and citizen reporting apps are effective for capturing people's lived experiences. Launch a simple survey asking women and men about their satisfaction with local services, or set up a map where anyone can drop a pin to highlight a problem (broken streetlights, unsafe shortcuts, etc.) Choose methods that fit the context: in a city with low literacy, in-person community meetings might work better than online surveys; in a tech-savvy city, a smartphone app could yield thousands of data points. The key is to ask questions in a way that highlights differences in needs or usage by gender.
- ❖ **Collaborate with gender experts and civil society:** Don't do it alone. Local universities, NGOs, and advocacy groups can be invaluable partners in collecting and analysing gender-disaggregated data. Academics can help design surveys or interpret results, lending rigor. Community organisations often have grassroots knowledge and can help reach women who might not respond to official channels. For example, if you plan to map safety concerns, a local women's shelter or feminist NGO might already have data or stories that point to hotspots; partnering with them can improve the quality of your data and the credibility of the process. Form a working group or task force that includes such stakeholders to guide the gender data initiative.
- ❖ **Ensure transparency and regular monitoring:** Make gender-disaggregated data visible and track progress publicly. Publishing the data you collect in an open format can enhance transparency and invite useful analysis from outside experts. Consider creating a public-facing "Gender Data Dashboard" on the city's website, showing key stats and indicators (e.g. a map of facilities colored by levels of usage by women versus men, or charts of employment by gender in city programs). By openly sharing disaggregated data (with appropriate privacy safeguards), cities not only foster trust but also encourage tech communities and researchers to develop new insights. Set up annual or bi-annual monitoring reports on gender equality in the city – these could mirror national reports on SDG 5 (Gender Equality) but at the city scale, focusing on local issues like safety, economic inclusion, health services, etc.

[+] Learn more about this Project

Brussels:

- + [City of Brussels - Toilet Plan \(2021\)](#)
- + [City of Brussels - Public Urinals and Toilets \(with maps\)](#)
- + [Note - Plan Toilettes à la Ville de Bruxelles \(French\)](#)

Espoo:

- + [City of Espoo - My Espoo on the Map Homepage](#)
- + [My Espoo on the Map – The sizes of young people's home ranges vary between the sexes](#)
- + [Mun Espoo Kartalla - Survey Results \(in Finnish\)](#)
- + [My Espoo on the Map - Public Datasets](#)

Ankara:

- + [UN Women ' "The online Purple Map helps more municipalities build gender-responsive services in Türkiye"](#)
- + [TESEV - "The Impact of Digital Policy Tools on Local Democracy": Purple Map in Eskişehir](#)
- + ["My Purple Map: Most Applications from the Poorest Districts" \(in Turkish\)](#)
- + [Purple Map - Ankara Municipality](#)