

GENDER AND CAPITAL BUDGETING



**PUBLIC GOVERNANCE DIRECTORATE
COMMITTEE OF SENIOR BUDGET OFFICIALS**

Cancels & replaces the same document of 16 June 2021

Gender and Capital Budgeting

This paper looks at how the impact of capital investment on gender equality can be taken into account during the budget process. Capital investment is a policy area that is often overlooked as gender-relevant. However, capital investment has a powerful impact on the way in which society operates. Ensuring that the design of capital projects considers gender impacts plays an important role in advancing gender equality.

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JT03479283

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Acknowledgements

The paper was prepared by Benedikt Gamillscheg, Senior Adviser, Budget Directorate, Ministry of Finance, Austria, with contributions from the OECD Secretariat. It expresses the views of the author. The paper was presented at the May 2021 Meeting of the Senior Budget Officials (SBO) Network on Gender Budgeting. The author expresses his appreciation for the valuable comments received from Delegates.

The author would also like to thank Pinar Guven, Sigita Strumskyte, Timothy Bishop, Jon Blondal, Andrew Blazey, and Edwin Lau, all from the OECD, for valuable insights. The author would like to express special gratitude to Alfrun Tryggvadottir, Scherie Nicol and Indre Bambalaite, all from the OECD, for their contributions.

Executive summary

Capital investments help to drive economic growth and productivity and ensure that essential services are available to people. Poorly planned and delivered capital investment can have harmful effects on societies.

Public investment should broadly benefit the population at large, regardless of gender. To ensure this is achieved, particular attention should be paid to the gender aspects of capital investment, as women, men and gender-diverse people often use assets differently due to their different social roles, work patterns or preferences. For example, women often spend more time travelling and accompanying family members to schools, childcare centres, hospitals and other social services, as well as more frequently using public transport. As such, women benefit more from light and safe train stations, while men benefit more from advanced constructions of motorways.

In response to the COVID-19 pandemic, governments' economic recovery packages involve significant capital investments as a means of stimulating the economy.

Future investments to support economic recovery represent an unprecedented opportunity to reduce inequalities while simultaneously aiming at closing the global infrastructure gap, stimulating the economy and strengthening governmental balance sheets. In order to promote fairer recoveries, and safeguard our societies and economies against future crises, it is imperative that capital investment proposals consider the benefits to both men and women equally. Norms and operational guidelines must shift towards improved capital investment decisions that make use of the best available evidence and technologies that can deliver services effectively, efficiently, and inclusively, particularly concerning the different use and impacts on gender.

Making well-informed decisions is critical as capital investments typically last for decades, defining our collective future by locking in the consequences of decisions that are being made now.

In particular, it is important that budgetary decisions take into account the impact of capital investments on gender equality. Key tools discussed in in this paper include:

1. Applying a gender perspective to performance indicators for capital programmes.
2. Requiring gender impact assessments for capital budget proposals.
3. Undertaking a gender impact assessment of the overall capital investment programme included in the budget.
4. Requiring cost-benefit analysis that take into account gender considerations to accompany capital budget proposals .
5. Requiring gender impact assessments in budget execution for specific investment projects.

1 Introduction

Gender equality is a keystone of a modern economy, and closing gender gaps has the potential to increase sustainable growth of the economy. In 2019, the global cost of ignoring gender discrimination across societies was estimated around USD 6 trillion, accounting for a loss of 7.5% of the global GDP (OECD, 2019^[1]).

In this context, capital investment plays a crucial role. It is often assumed that women and men benefit equally from new capital investments, but an adequate investigation into whether there are different impacts based on different needs and social roles is often lacking. This arises from factors such as differing employment patterns, care responsibilities and safety requirements.

Governments can use gender budgeting to focus government-wide policy-making towards national gender goals. This paper looks at how gender budgeting can be leveraged as a tool within a broader infrastructure governance framework to help make more informed capital decisions that progress gender equality. It builds on the OECD's Framework for Gender Budgeting (OECD, 2019^[2]), the Recommendation of the Council on Budgetary Governance (OECD, 2015^[3]) and the Recommendation of the Council on the Governance of Infrastructure (OECD, 2020^[4]). It draws on experiences in OECD countries, including Austria, Canada, Iceland and Sweden, identifying lessons learnt from considering gender equality as part of capital investment decision-making. The paper includes material on non-OECD countries, in particular G20 economies such as India and South Africa.

The first part of this paper looks at how the COVID-19 crisis has aggravated gender inequalities, and addresses the role of well-designed recovery investments. The second part of the paper explains why gender equality is an important consideration in the context of capital investment. It also provides examples of how an investment project can have different gender impacts, especially for end-users. The third part of the paper presents a framework to help ensure that gender equality considerations are taken into account in budget decision-making, where investments that can help in achieving gender equality goals are prioritised. In this paper, references to women and men include gender-diverse people.

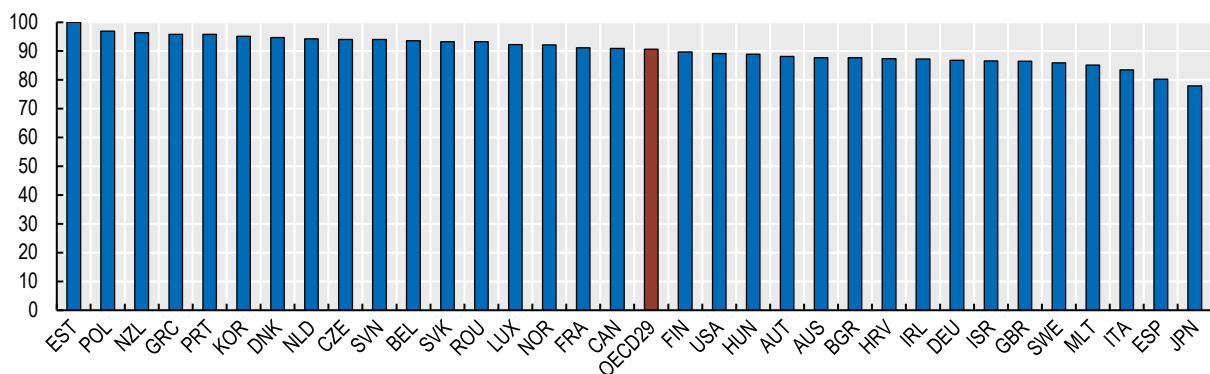
2 The COVID-19 pandemic and gender equality

The COVID-19 pandemic has had wide-ranging social and economic impacts globally, with different implications for men and women (OECD, 2020^[5]). The pandemic has aggravated existing gender inequalities for three main reasons:

- Women are the dominant share of employees in the long-term care sector, and provide most unpaid work at home.
- Women are more likely than men to work in social sectors — such as services industries, retail, tourism, and hospitality — that require face-to-face interactions and which have been most impacted by containment measures, as well as the sectors with higher non-regular job contracts and informality.
- Women have experienced increased violence, sexual exploitation, or abuse in the current crisis.

Figure 1. Share of women in the long-term care workforce

2016 or latest year



Source: OECD (2019^[6]). Women represent the overwhelming majority of LTC workers in all countries.

Firstly, women have been particularly affected by the crisis since they represent the largest share of employment in the long-term care sector. The high share of employment in long-term care (Figure 1) has generally meant that women are at the front of the battle against the pandemic. As front-line responders, health professionals, and community volunteers, women are exposed to a greater risk of infection (OECD, 2020^[5]).

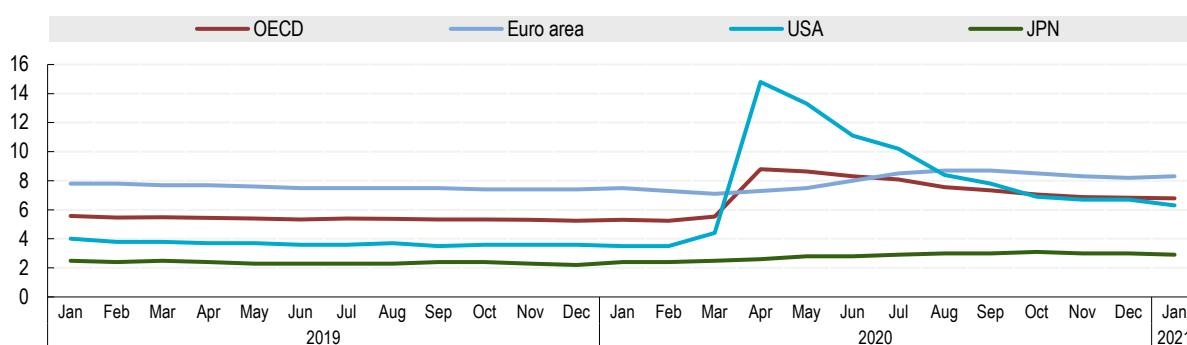
In addition to the high share of unpaid work women already did at home prior to the pandemic, women are more likely to have taken on increased care responsibilities as the crisis emerged. Responsibilities resulting from shutdown measures such as school closures and precautions for vulnerable elderly parents

have more frequently fallen under the responsibility of women, even when both women and men are expected to work from home.

Secondly, the crisis has affected women differently because of the nature of their jobs. The scale of the economic impact of the crisis is still emerging and, it is difficult to predict exactly how it may affect women’s jobs, business and incomes. For example, women are more likely to work in social sectors, such as services, industries, retail, tourism, and hospitality, requiring face-to-face interactions.

Figure 2. Unemployment rate in times of COVID-19

Total unemployment, percentage of total labour force, February 2020 – February 2021

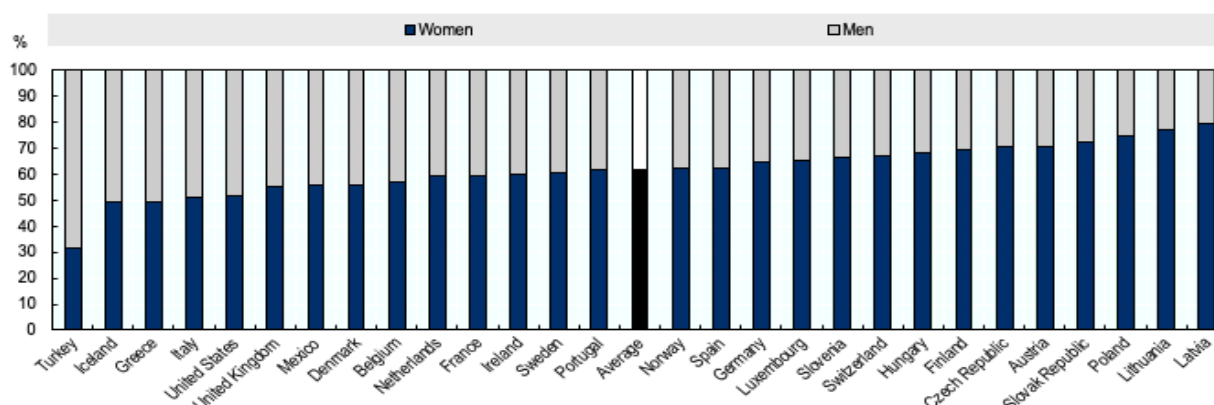


Source: OECD (2021^[7]), Unemployment rate, <https://data.oecd.org/unemp/unemployment-rate.htm>.

Women’s labour protection tends to be weaker, especially around parenthood. However, the longer-term impact on employment and the distribution of job loss is, at this stage, much harder to predict, as it depends on the severity and duration of containment measures and the depth and breadth of the economic contraction. Overall, unemployment across the OECD has increased from 5.4% in 2019 to 8.4% in April 2020 and slowly improved again to 6.9% in December 2020 as shown in Figure 2.

Figure 3. Distribution of employment in retail activities by sex

Data from 2018



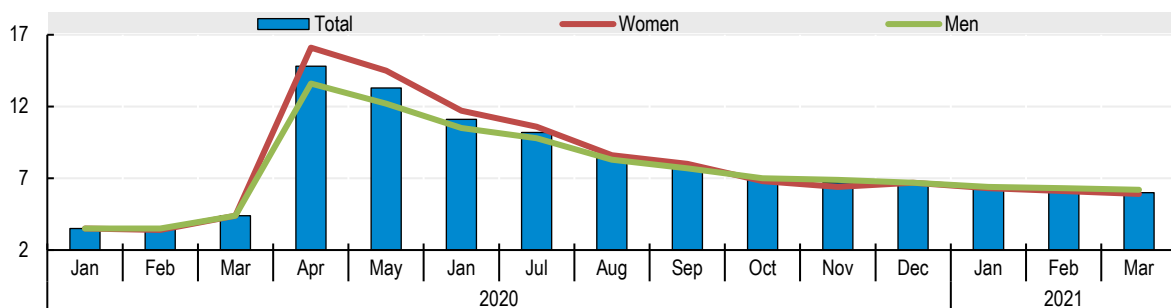
Note: Data refer to women’s share of employment in ISIC Rev 4. category 47 (Retail trade, except of motor vehicles and motorcycles). Source: Queisser, Adema and Clarke (2020^[8]), COVID-19, employment and women in OECD countries, OECD calculations based on data from ILO ILOSTAT, <https://ilostat.ilo.org/data/>.

As shown in Figure 3, women hold the vast majority of jobs in retail activities. During COVID-19, some retail sectors – such as supermarkets, grocery stores and pharmacies - remained open, while most other retail activities were hit very hard by lockdowns. Those who work in the sectors that have remained open have been put in increased danger of being infected due to contacts with customers, while not always being compensated: in Austria, some big supermarket chains gained their biggest sales in 2020, but their employees only got a small compensation or none at all.

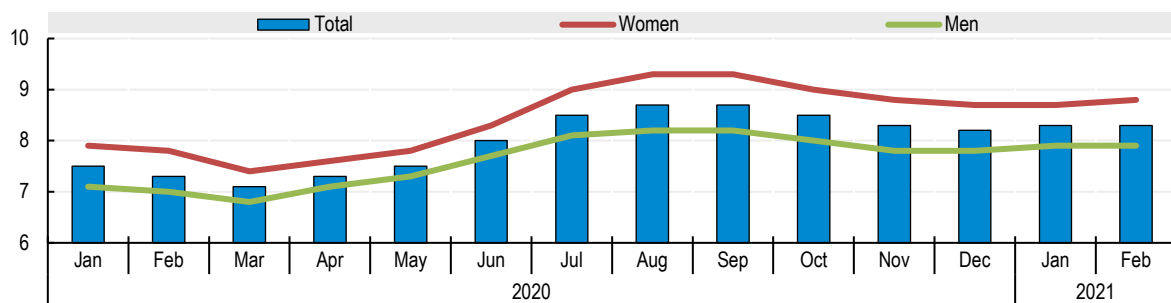
OECD data in Figure 4 shows that women have been hit hard in the United States where the female unemployment rate increased from 4.4% in March to 16.1% in April 2020. By December 2020, it had fallen to 6.7%, which was still three percent higher than the previous December. In comparison, the male unemployment rate also increased, but not as much. However, the US has been successful in rolling out vaccinations and this could lead to increased participation of women in the labor market.

Figure 4. Unemployment rate in times of COVID-19 – gender disaggregated data

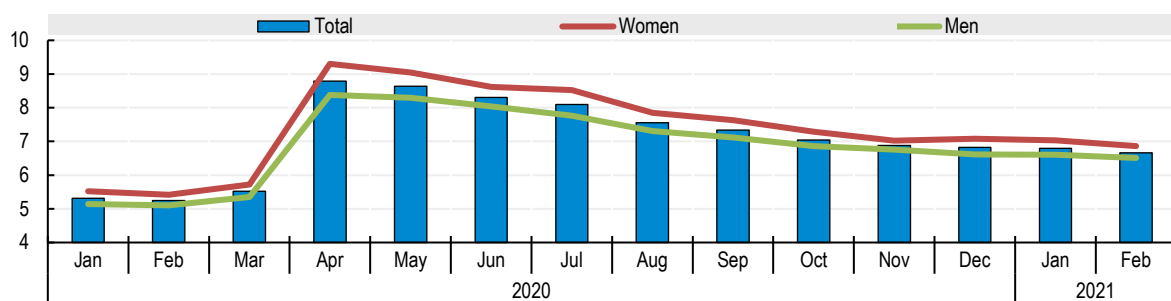
Panel A: USA: Unemployment rate, percentage of total workforce



Panel B: Euro-area (19 countries): Unemployment rate, percentage of total workforce



Panel C: OECD (total): Unemployment rate, percentage of total workforce



Source: OECD (2021^[7]), Unemployment rate, <https://data.oecd.org/unemp/unemployment-rate.htm>.

Due to short-term work schemes and other supporting measures in the Euro-area, the increase in unemployment for both women and men has not been as high in the Euro-area as in the United States, although unemployment remains higher in Europe. As shown in Figure 4, women had been more affected during the course of the COVID-19 pandemic. OECD countries show an increase in unemployment, but also a fast recovery although unemployment remains higher after the pandemic than before. The impact of unemployment has been greater for women than for men, and reaching the pre-pandemic unemployment rates, especially for women, remains one of the main challenges in recovering from the COVID-19 pandemic.

Thirdly, women have experienced increased violence, sexual exploitation, and abuse in the current crisis. Evidence from past crises and natural disasters suggests that confinement measures often lead to increased or first-time violence against women and children. The social consequences of COVID-19 - such as the inability to go outside of the household, loss of social interactions, children staying at home due to school closures, and tensions because of forced cohabitation – are some of the factors that have led to increased violence.

The role of well-designed economic recovery investments

In response to the COVID-19 pandemic, governments' economic recovery packages involve significant capital investments as a means of stimulating the economy and improving productivity over the medium-term. Making well-informed decisions is critical as capital investments typically last for decades and have implications for future outcomes as the investment can lock-in the consequences of decisions that are made now. Future capital investments to support economic recovery present an unprecedented opportunity to reduce inequalities while simultaneously closing the global infrastructure gap, stimulating the economy and strengthening governmental balance sheets. In order to promote fairer recoveries, and safeguard our societies and economies against future crises, it is imperative that capital investments consider gender equality implications.

The unequal economic and social impacts of the COVID crisis means that wherever possible, responses to the crisis should aim to promote a fair recovery. All policy responses should aim at gender equality in both the short and the long run.

During the containment phase of the crisis, decision-making moved quickly and it was difficult to grasp the immediate impact of containment measures on men and women. Today, governments take more time to design recovery packages carefully, providing an opportunity to put in place well-designed capital investments that address gender inequalities, as well as other strategic approaches related to climate change or digitalisation, which are the two main pillars of the European Green Deal (European Commission, 2019^[9]).

When designing recovery packages, it is important to consider lessons learnt during the 2008 global financial crisis, which also had disproportionate impacts on men and women. At that time, responses included capital investment to create jobs and stimulate the economy, although little consideration was given to whether women were proportionately represented in those new jobs. In reality, much of the employment was created in male-dominated sectors (e.g. construction and transport). This is one of the reasons why men's employment improved more quickly than women's employment during the recovery phase (Pérvier, 2014^[10]).

The results from a panel of 68 countries in the period from 1980 to 2010 indicates that financial crises undermine women's participation in the formal workforce, their presence in politics, their educational attainment, and their health outcomes. Furthermore, the negative gender effects have been detected to last up to seven years after the end of a crisis, showing their lingering effects in the post-crisis era.

Forthcoming gender-sensitive capital investments can help alleviate inequalities. Where gender considerations guide capital investment, there is the opportunity for these investments to foster inclusive growth and maximise positive impacts, such as improved well-being, sustainable development and the empowerment of women and girls. In the context of the ongoing COVID-19 crisis, there is an opportunity to learn from past mistakes and avoid repeating them.

3 Gender equality and capital investments

Capital investments should ideally provide men and women with equal access to jobs and services, as well as an equal voice in setting priorities for capital investment. Many believe that women will automatically benefit from infrastructure projects in the same way as men, without acknowledging possible distinct impacts on women and men. Women and men often use infrastructure services differently, due to their different social roles, work patterns or preferences. For example, women generally use public transport more than men do, due to their economic status and their preferences (Ng and Acker, 2018^[11]). Evidence shows that women also travel more frequently and for shorter distances at different times than men, as their responsibilities can differ (regarding shopping, childcare and care in general). The same effects have to be taken into account in designing parks and other recreational spaces (OECD, 2019^[12]). Additionally, women are more likely to leave their jobs if the time it takes to commute to and from work increases (Black, Kolesnikova and Taylor, 2014^[13]).

Gender impacts also need to be considered when adapting investments to climate-related changes and risks. After Hurricane Katrina in 2005, 83% of low-income single mothers displaced could not get back to their homes (Williams et al., 2005^[14]); and in the 2003 heatwave in France, 70% of 15,000 deaths were among women (Fouillet et al., 2006^[15]). Factors such as resilient and sustainable capital investment that integrates social, governance and environmental aspects in all phases of the asset, can assist in focusing on gender impacts. This shows that by integrating gender perspectives when addressing these challenges, better results can be achieved.

Different social roles

Women tend to spend more time travelling and accompanying family members to schools, childcare centres, hospitals and other social services, as well as using public spaces such as parks and recreation centres more intensively. Since women are important contributors to these amenities. The location of services, the design of public transport grids and the frequency of transport, must be considered from a gender equality perspective. As shown in Box 1, gender-analyses for capital investment projects can lead to gender considerations in relation to follow-up-effects.

Box 1. Examples of different infrastructure needs based on social roles

Iceland – Road Tunnel: As part of the introduction of gender budgeting in 2009, each ministry was required to undertake a pilot project looking at the impact of spending on gender in one particular expenditure area. The objective of this exercise was to make the gender impact of spending across different areas more visible, and to make it possible to re-allocate expenditures and re-design policies in line with gender objectives.

The Ministry of Interior looked at the gender impact of proposed spending on a new tunnel between two small towns in the north of Iceland. The government undertook a research project considering the different elements (transportation, community development, economic conditions, public service and social wealth) from a gender perspective. As part of this research, the Ministry of Interior discovered that the new tunnel would suit men better than women, as men would benefit more from increased job opportunities and less travel to work time. On the other hand, women were concerned about the possible loss of local services with the two towns being joined. This is in part due to different social roles of women as more frequently, women needed to work closer to their homes to be able to send their children off to school and be there for them after school.

The Ministry went ahead with the construction of the tunnel, but with a greater awareness of how negative impacts on women, who are already in a weaker position in rural areas, could be mitigated.

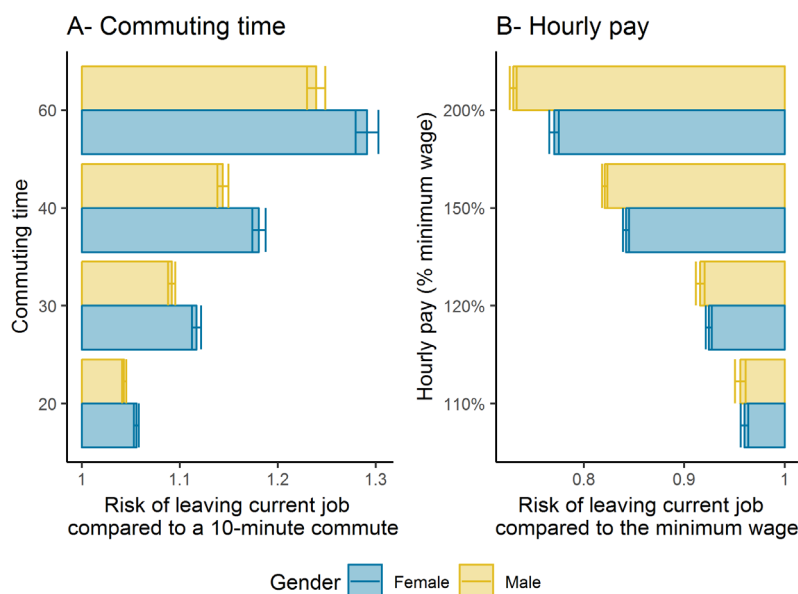
Sweden - Snow Clearing: Historically, major roads for cars and larger vehicles have been cleared of snow before sidewalks for pedestrians and bicycle paths in Karlskoga in Sweden. Analysis found that this approach to snow clearing was favouring men, who typically used major roads to travel to their workplace, while women were more likely to use pedestrian walkways and bikes to bring children to school or travel to work. This approach to snow clearing was therefore adjusted so that it was more gender equal, where pedestrian walkways and bicycle paths to schools are now cleared before families leave their homes. Changing the approach to snow clearing was not associated with additional costs, but did bring additional economic benefits since there was a reduction in pedestrian injuries due to the slippery conditions.

In order to mitigate any potential negative side effects related to gender, it is essential to get perspectives from important stakeholders early on in the infrastructure decision-making process, as highlighted by the OECD Recommendation on the Governance of Infrastructure (OECD, 2020^[16]). End-users constitute one important stakeholder group whom should be involved as early in the preparatory phase as possible to understand intended user outcomes and prioritise user needs (user-centred approach). Ideally, civil society should be included from the beginning. This complex multi-stakeholder process, which can be limited due to time pressure, is a key for improving gender impacts, as well as considering other important aspects.

Different working patterns

Due to the negative correlation between commuting time and women's participation in the labour force, capital investments that facilitate women's economic participation can generate significant benefits. Investments may even pay for themselves via increased labour force participation by women, and hence higher tax revenues. Public investment in physical infrastructure can create fiscal space in the long run by stimulating income growth and expanding the taxable income base (Seguino, 2017^[17]). Based on this, investments targeting the female participation in labour market can expand the taxable base. Likewise, neglecting women's preferences of transport and mobility may limit their economic participation and may decrease tax income.

Figure 5. Women place more emphasis on their commute time when deciding whether to leave their jobs, while men prioritise pay



Source: Nafilyan (2019_[18]), Gender differences in commute time and pay: A study into the gender gap for pay and commuting time, using data from the Annual Survey of Hours and Earnings.

Figure 5 shows how the risk of leaving current jobs varies by commuting time. Longer commutes increase the probability of leaving a job for both men and women, while the effects are greater for women. As an example, for women, having a 10-minute commute compared to half an hour commute to work, increases the probability of leaving their current job by 11.6%, compared to 9.1% for men, everything else being equal. Similarly, women who have an hour-long commute are 29.1% more likely to leave their current job than if they would have a 10-minute commute, compared with 23.9% for men.

The fact that longer commute time to and from work is more likely to affect women than men, indicates that women are more likely to take into account other duties related to being primary caregivers when considering the commuting time. Other considerations include differences in where women tend to work relative to men. For example, women consist of a larger share of employees in the social infrastructure sector, and thus, the location of these services should be designed with a gender lens in mind. Likewise, women are less likely to be employed in construction sectors, and benefit less from the immediate economic impact of capital investments. However, because of COVID-19, the work patterns of men and women are changing and should continue to be studied carefully.

Capital investments should take into account that women's commuting to and from work may involve additional duties related to their expected social roles. Accordingly, women tend to prefer more flexible transport options, which should be taken into account in designing public transport projects.

Box 2. Example of general impacts of different work patterns

India – Access to Services: India has incorporated a column on gender outcomes in the government's budget, where ministries are mandated to identify gender-mainstreaming programmes and identify ways to improve women's access to services. The Planning Commission has ensured that national and state plans are gender sensitive, the Department of Commerce identified gender implications of special

economic zones, and the Ministry of Urban Development introduced measures for clean and safe public toilets and adequate street lighting.

Although these measures are not directly targeting capital investment, they all include different aspects of work patterns. Better access to services should improve the possibilities for women in working life and offer more possibilities to increase working hours. Certain economic zones often offer improved working conditions and higher salaries, and if these zones are designed with equal needs of women and men in mind, it could lead to changes in female work patterns. Finally, construction projects that improve safety such as public toilets and better street lighting, contribute to increased likelihood of women commuting in urban areas.

In many cases, capital investment measures do not contain straightforward gender-sensitive assumptions, and the bigger picture has to be analysed from a bird's eye view. Different work patterns of men and women are a complicated consideration due to their broad impacts, including capital investment, labour market issues, and tax-dimensions. These subjects are all linked and should be analysed under a broader infrastructure governance framework, by involving many stakeholders from the beginning.

Different preferences

Good transportation facilitates access to the labour market, healthcare and education, as well as to other services necessary for improving the welfare of individuals and households (EIGE, 2017^[19]). Evidence shows that gender specific preferences play an important role when it comes to transportation and due to its impact on capital investment, it is crucial to analyse the design of such projects from a gender perspective.

A study of eight European and Asian cities by Ng and Acker (2018^[11]) shows that women more frequently travel shorter trips, use public transport and travel more during off-peak hours. Generally, women are also more willing to reduce the use of private cars.

Even though much has been done to integrate gender perspectives in transport planning, it remains an area where much is lacking when it comes to gender considerations. This includes gaps in access to transport infrastructure and services, segregation within the transport labour market itself, weak representation of women in the decision-making process in the transport sector and gender-based violence in transport, which mostly affects women (EIGE, 2017^[19]).

The evidence on women's specific travel preferences suggests that transport design programmes should take women's needs and preferences into account, in line with the best practices brought by the Recommendation on the Governance of Infrastructure (2020). Examples of where this has been done, and what had been specifically analysed, are highlighted in Box 3.

Box 3. Examples of how women's preferences have been considered in transport projects

Austria (City of Vienna): Vienna is a city that has considered women's specific transport preferences. Initially prompted by a survey in the late 1990s on the use of public transport by men and women, data is now collected to determine how different groups of people use public transport and spaces before an capital project gets underway (Foran, 2013^[20]). In the context of the Gender Mainstreaming Model Districts project, Geo Information Service-based analytic maps were developed for all municipal districts of Vienna, comprising both qualities and deficiencies of the respective footway networks. For example, the 'network qualities' parts of the maps show sufficiently wide (projecting) pavements, while the 'network deficiencies' parts feature narrow pavements or dangerous spots for pedestrians (EIGE,

2017^[19]). Important destinations within districts (e.g. public transport stops, and social and healthcare facilities) provide information about expected pedestrian volumes and any special requirements. These maps are regularly updated.

Belgium (City of Brussels): The “women in the park” project aims to reflect fully the way in which Brussels develops and maintains the green spaces it is responsible for, in order to guarantee equal use by women and men.

Iceland: According to the Icelandic Government's Gender Baseline Report (2019^[21]), issued jointly by the Prime Minister's Office and the Ministry of Finance, women generally own smaller and more fuel-efficient cars than men, and even though women own only a third of all cars in Iceland, they own 43% of eco-friendly cars. This can be linked to women consciously choosing more environmentally friendly cars or related to the gender pay gap as bigger and more energy-intensive cars are more expensive.

The report shows measurable difference between men and women when it comes to choosing travel options, purpose and frequency of trips, and distance travelled. Possible reasons include different social and economic roles related to responsibilities for housework and child caring, as well as residence, class status and wage gap. Furthermore, according to a separate travel survey, women use cars proportionally more than men do, but are less likely to be registered owners. They also walk more, cycle less and take the bus less often, and live closer to their workplace than men. As presented in the report, both domestic and foreign research indicates that transport improvements over the years have had a more positive effect on men's daily transport and that transportation improvements had more often concerned men's employment areas than women's. This is because women are more likely to drive children to and from kindergarten or school and they usually spend less time traveling between home and the workplace.

Safety and security

Safety and security are also key factors in determining women's mobility preferences and choices, as is further elaborated in the last chapter. This is also an important topic for women living in urban areas where they are the main users of public transport and depend heavily on those systems for their mobility needs.

In a Gender and Mobility Report (Ramboll, 2021^[22]), safety and security are identified as important factors in whether women use public transport or not. This report analysed gender and mobility in Berlin, Copenhagen, Delhi, Helsinki, Oslo, Singapore and Stockholm. Globally, women rather than men identify personal safety and fear of harassment as a concern in relation to public transport. In the focus group interviews, women expressed concerns and fears around waiting at bus stops and train stations. Fear of harassment and assault also influence their travel behaviour, both in relation to the choice of transport and the time of the day travelled. Concerns were raised about both too few and too many people in these places, and the design of public space - stops, stations and whether there staff is available - influenced how secure they felt. Considerations around women's fear of harassment and assault and the need to create public spaces and facilities where women feel secure when traveling alone have to be prioritised. These considerations should be factored in and analysed more when developing new public transport facilities and improving existing ones. When testing and developing autonomous public transport, it is important to factor in how public transport personnel could give women a sense of security.

More specifically, the report shows that in Copenhagen, 57% of bus passengers are female and that 64% of persons accompanying children are women. Improved urban infrastructure with a gender perspective demands proper lighting, safe public spaces and safe public transport to help mitigate safety-related risks that women face in their everyday life. These improvements are importance as the majority of passengers in public transports in many countries are women.

Implications

The different needs and preferences of men and women show that gender equality is an important consideration when it comes to capital investments. Several OECD countries already consider gender dimensions in a comprehensive manner, including Belgium, Canada, Czech Republic, Iceland, Latvia, Lithuania, Luxembourg, Spain and Sweden (OECD, 2020^[23]). Examples of how this is done are shown in Box 4.

Box 4. Examples of how gender is taken into account in capital investment

Austria: According to the general legal framework (laid down in constitution and regulated in detail in the organic budget law), gender impact assessments must be done on all projects/legal drafts up to specific thresholds, and one out of five performance objectives for every budget chapter has to be gender-related. These gender-related objectives also cover capital investment. These assessments are transparently published through tables in the annual budget bill, visuals in the annual report of evaluations of impact assessments, and interactive webpages. Annual assessments of performance outcomes of the past year have to be done and be published, at latest five years after implementation of projects.

Canada: As part of the Investing in Canada Plan, recipients of federal funding for new major public infrastructure projects, with certain exceptions, are required to participate in the Community Employment Benefits initiative, which aims to support the diversification of recruitment, training and procurement practices for infrastructure projects. This initiative is also a requirement for all projects under the Disaster Mitigation and Adaptation Fund and for final proposals submitted for consideration to the Smart Cities Challenge. Implicated projects are required to set targets to provide employment and/or procurement opportunities for at least three of the groups targeted by the initiative, including women, and report on progress against these targets on an annual basis of the course of the project.

Iceland: In recent years the Ministry of Transport and Local government has conducted several surveys and statistical researches on gender-based travel methods and ownership of cars, while simultaneously carrying out research related to commuting patterns and distances around main rural service centres, as well as in the metropolitan area.

Spain: According to Constitutional Act 3/2007 for effective equality between women and men, the principle of equal treatment and opportunities between women and men will inform, on a horizontal basis, all public actions. As for capital investment, article 31 states that public administrations shall take gender perspectives into account in the design of cities, in urban policies, and in the definition and execution of urban planning (OECD, 2020^[23]).

Gender-responsive investments have the power to address gender inequalities and empower women by responding to diverse needs in society, although it is still not broadly implemented. This can maximise the benefits of investments for all citizens and accelerate the socio-economic mobility of women, girls and other groups. This can also improve the lives of women and girls by taking into account gender considerations as well as bringing other social and economic benefits.

Improving public transport options according to women's preferences can increase working hours of women. This can lead to increased output for societies and increase tax income, which can have positive impact on welfare and equality.

Given that the budget is the central policy document of every government, and the central role it plays in determining how resources are allocated to deliver outcomes, it is appropriate that crosscutting priorities such as gender are considered as part of the budget process. The following chapter looks at how gender

considerations can be taken into account in relation to capital projects during the budget process and during the budget execution phase with impact assessments.

It is important to keep in mind that this is an area of work in process, where important steps have been reached, but improvements can be made. As discussed in Chapter 5, climate-related investments can trigger increased gender equality as part of climate resilient assessments, while also making the process more complex by including more crosscutting priorities.

4 A framework for gender capital budgeting

According to OECD's Gender Budgeting Framework, Gender Budgeting involves using the analytical tools of the budget process in a systematic way to promote equality. Gender gaps persist in all areas of social and economic life in OECD countries, and including gender perspectives in the budget process can have considerable impact on government-wide policy-making.

Gender capital budgeting is the application of gender budgeting tools to capital investment decisions. This ensures that gender equality considerations are given due attention in decision-making and assist in making informed decisions that progress gender equality goals.

The framework for gender capital budgeting in this chapter identifies tools that can be used as part of the budget process to bring a gender lens to capital investment decision-making, including:

- Applying a gender perspective when identifying performance measures for capital programmes
- Requiring gender impact assessments for capital budget proposals
- Undertaking gender impact assessment of the overall capital investment programme included in the budget
- Requiring cost-benefit analysis that take into account gender considerations to accompany capital budget proposals
- Requiring gender impact assessments in budget execution for specific investment projects, which are generally included in the budget proposal, but are only concrete enough to be assessed after the concerning budget had been concluded

To be effective, gender capital budgeting must take into account and be responsive to the realities of the budget process in an implementing country. The possibility of making relevant changes varies depending on the phases of the budget cycle, that is, planning, formulation, approval, execution, evaluation and oversight.

The decisions taken in each phase of budgeting is critical for an effective approach to gender capital budgeting. Gender capital budgeting works best where parliament and the executive both play an active role in the budget process, and ideally, where civil society has an active voice. The best opportunity to influence the decision-making process is during the early phases, although input during the evaluation phase can also be useful in terms of helping to formulate the budget for the following year. Performance-oriented budgeting systems are more likely to include gender capital budgeting than input-based systems.

In advanced systems, gender considerations are included when preparing guidelines and setting expenditure ceilings, preparing ministry spending proposals, securing legislative approval, monitoring, evaluating and ensuring accountability. In Iceland, capital investment has been assessed in the framework of a generally comprehensive system of gender assessments. Some other countries, such as Austria and Canada, include most of these steps in their legal frameworks and guidelines, but in many countries, capital investment is often a part of a budget where gender related assessments are lacking.

Tools for gender capital budgeting

1. Applying a gender perspective to performance setting for capital programmes

Key performance indicators are an essential tool for monitoring the gender impacts of budgeting decisions, including capital budgeting decisions. Monitoring the performance and impacts of capital investment enables the use of adaptive management approaches that can respond to changing conditions over the lifespan of the investment. This allows continuous improvement in the sustainability and service delivery of infrastructure across the different phases of the lifecycle.

Box 5 presents examples of countries that apply a gender perspective when setting performance measures, including within capital programmes.

Box 5. Examples of countries that apply a gender perspective to performance setting

Austria: In Austria, as part of its new system of performance budgeting implemented in 2013, each federal ministry must set five outcome objectives, one of which is to relate to gender equality. For example, the Ministry of Climate Action's budget includes an objective that states:

“Ensuring gender equality in mobility...raising awareness with regard to gender-relevant aspects in the transportation system. As such, specific training courses are offered in the ministry to sharpen gender competence in everyday mobility. In addition, awareness raising among planners of the transport companies (...) is in particular important.”

The objective is tracked by counting the number of people in traffic planning and control with gender competencies”. The number of people trained is to increase by 100% in 2021.

India: India is taking a holistic approach to women's empowerment by focusing on social, economic and political factors, and gender equality should be reached by ensuring that it is addressed by each ministry. Social ministries focus on issues like education, health, and the status of women within their families, while economic ministries focus on asset ownership, income generation, skills development, and appropriate technology. Emphasis has been put on the participation of women in decision-making and this should cover capital budgeting. India has included a column on gender outcomes in the budget to ensure that gender concerns are addressed and mandated ministries to identify three to six gender-mainstreaming programmes, and to undertake initiatives and special measures to improve women's access to services – as already pointed out in Box 2.

Despite considerable scope for performance information to provide information on how capital investment is serving different parts of society, gender performance indicators in the area of capital investments tend to be scarce. For example, the budget for the Austrian ministry responsible for all public investments in railways and motorways did not include a gender outcome objective related to capital investment. A key challenge with implementing a gender perspective to performance setting, and specifically for gender capital budgeting, is that effective monitoring requires gender-disaggregated data, which is not available in all sectors in OECD countries.

2. Gender impact assessments for capital budget proposals

Ex-ante gender impact assessments can help ensure information on the gender impacts of capital investment proposals are part of the infrastructure decision-making process. The assessments aim to highlight the potential impacts in terms of relative distribution of resources, opportunities, constraints and power in a given context or project, fixed in the corresponding budget proposal (Box 6).

Box 6. Examples of countries that require gender impact assessments for capital budget proposals

Austria: Where projects exceed a certain value, gender impact assessments must be undertaken. This is important in the context of capital investment, which is often costly, for example railways, motorways, and defence equipment.

Norway: When developing large-scale projects, two assessments are required. Firstly, during the preparation phase, a life cycle (gender) impacts assessment is to be undertaken. Secondly, when all work has finished, an assessment is required to evaluate whether the assumptions from the preparation phase were really implemented. To improve transparency, these assessments can be done by independent institutions and should be published. These assessments can be used to prioritise investments that progress gender equality goals.

South Africa: In South Africa, a gender impact-assessment system, covering parts of the budget, has been implemented. The Women's Budget Initiative analysed six national ministries, as well as public sector employment and taxation, where gender issues in both social and economic sectors were highlight. Subsequently, the process was expanded to all ministries as well as how national, provincial, and local governments interacted in developing health policies and budgets.

Source: Concept (2021^[24]), The Concept Symposium on Project Governance; Stotsky, Kolovich and Kebhaj (2016^[25]), Sub-Saharan Africa: A Survey of Gender Budgeting Efforts, IMF Working Paper WP/16/152; Elson and Sharp (2010^[26]), The International Handbook of Gender and Poverty: Concepts, Research and Policy.

Impact assessments should be applied systematically as early as possible in the infrastructure investment process when alternatives and opportunities for risk avoidance and synergies are still politically, economically and technically feasible. In the project design phase, measures to prevent and minimise negative impacts should be identified. Likewise, compensation measures for any estimated residual impact should be identified as early as possible, and be planned and budgeted for.

In line with best practices from the OECD Recommendation on the Governance of Infrastructure, capital investment assessments should consider the potential impacts on gender over the whole life of a capital asset, including its disposal. For this reason, gender impact assessments should look at impacts not just in the construction phase, but also over the course of the asset's use. Table 1 illustrates what to consider when conducting budget impact analysis.

Table 1. Gender Budgeting: Budget Impact Analysis

Impacts	Phase	Considerations
Short-term	Construction phase	Share of women involved in construction activity
Medium-term	Implementation phase	Share of women as end-users of completed projects
Long-term	Outcomes phase	Economic: Impact of completed projects on labour force participation by women

Capital investments should produce no negative impact on gender inequality, and preferably produce a net gain to gender equality; in any case, as it in the Canadian experience, impacts should be well considered and understood, even if they are always balanced. Where construction and operation of infrastructure is necessary, innovative measures (academic support in measuring impacts; management systems to implement changes when weaknesses are detected) to manage any gender inequalities that are created throughout the construction and use of the asset should be factored into the analyses of the various options being considered.

The constraints and opportunities identified through gender impact assessments can be addressed by specific actions detailed in a gender action plan. For example, this might include incorporating breastfeeding rooms in public or office buildings or making sure that streets, walkways and public spaces are well lit to facilitate women's use. Examples of adjustments made to capital budget programmes to mitigate gender equality impacts identified in gender impact assessments are provided in Box 7.

Box 7. Examples of adjustments to capital programmes from gender impact assessments

Canada

Capital investment funding in local communities through a municipal Top-Up: The federal Gas Tax Fund supports thousands of infrastructure projects each year in communities across Canada. It supports a broad range of assets, such as local roads and bridges, public transit and water systems, which are expected to benefit all Canadians. These investments should support productivity and economic growth and strengthen cities and communities. In the short term, the construction of the projects had been expected to carry more benefits that are indirect for men, who represent over 80 per cent of the total construction workforce.

The government has taken steps to increase women's representation, including funding for an apprenticeship incentive grant for women to encourage careers in areas with low representation of women, and a new pre-apprenticeship programme that will also benefit Indigenous peoples, newcomers and persons with disabilities.

Making zero-emission vehicles more affordable: Available research indicates that the current demographics of early adopters who purchase or lease zero-emission vehicles are more likely to be well-educated, high-income earners. In order to make such vehicles more accessible and affordable, the Canadian Government has provided funding to expand the network of refuelling and charging stations, as well as purchase incentives for new zero-emission vehicles. Over time, as ZEVs become more affordable and readily available, ZEV vehicle purchasers are expected to reflect the general vehicle-owning population, namely individuals of diverse language, education levels, marital status and culture.

Source: Government of Canada (2019^[27]). Gender Report: Budget 2019.

Funding for capital investment projects could be made conditional with the implementation of actions set out in the EU Gender Action Plan 2021–2025 (GAP III), which methodologically brings the gender lens to new policy areas in the European Green Deal, regarding criteria for green – and digitalised projects in the sense of recovering from COVID-19 (European Commission, 2020^[28]).

One of the challenges with requiring gender impact assessments for capital budget proposals is that these projects are often outsourced to private companies, for example through public private partnership agreements. In these instances, normal requirements for gender impact assessments may not apply. For example, in Austria, capital projects are usually included in framework agreements between the federal state and the private company. A gender impact assessment still has to be done but according to the framework agreement, it only includes macro-perspectives, not assessments for individual capital projects.

3. Undertaking gender impact assessment of capital investment programmes in the budget

Countries can use gender impact assessments to review their decision-making processes, and to increase the focus on ex-ante gender assessment of budget proposals. Gender impact assessments of capital

investments can be adopted as a pilot project, where governments may decide whether to institutionalise it into the regular budget process. After the pilot phase, countries can expand this approach to include gender impact assessment as a routine part of all relevant decision-making, including budgetary decisions.

Box 8. Iceland's gender impact assessment of its capital investment programme 2020 and 2021

This capital investment programme, designed for addressing implications of COVID-19, contained projects in transport infrastructure, building construction and maintenance, research and innovation, energy exchange and green solutions and digitalisation.

All proposals from line ministries had to estimate the number of jobs created and their gender ratio, although this could not be achieved for all projects, due to lack of information. In total the Ministry of Finance estimated that around 85% of jobs created would be performed by men.

In the second phase of this programme – for the budget 2021 – the gender ratio of jobs created after construction was to be completed and general gender impacts on users analysed. In this second phase, improvements regarding the gender ratio were expected, as well as environmental impacts due to adjustments of project composition after impacts assessments.

Iceland is at the forefront globally when it comes to gender budgeting and has in place a sophisticated system of gender budgeting that was implemented after the 2008 global financial crisis. Today, the investment-focus has been added and Iceland is expanding their assessments with the lessons learned from the current crises.

4. Cost-benefit analysis of capital budget proposals to include gender considerations

The analysis of capital budget proposals should include externalities, including gender equality impacts. Such gender impacts, whether positive or negative, should be quantified so that trade-offs can be assessed objectively based on a common framework of reference. Where this is not possible or appropriate, full account should be taken in qualitative terms. As with gender impact assessments, costs and benefits should be considered across the entire life of the asset. Gender equality impacts should include deconstruction and renovating the asset after its useful life ends.

Understanding the cumulative impacts — both positive and negative, the synergies and trade-offs – can help determine whether the overall mix of capital assets is optimal.

Having information from cost-benefit analysis with budget proposals can help more informed decision-making. It may be that cost-benefit analysis shows that capital projects that have significant gender equality benefits may not be considered as viable when considered in isolation.

5. Gender impact assessments in budget execution of capital investments

Another possible way to analyse gender impacts is to assess gender impact in budget execution for specific investment projects. This approach can complement the other gender assessment tools discussed above. Specifically, public procurement is a key tool to advance gender considerations in budget execution. The OECD paper on gender and public procurement provides different tools on how to embed gender considerations in the procurement processes ranging from users involvement and needs analysis to contract execution (OECD, forthcoming^[29]).

Challenges and potential solutions

In applying these gender capital budgeting tools, countries face a number of key challenges. Two are worth highlighting in greater depth. First, gender aspects need to be taken into account early in the capital budgeting process, and second, there can be limited availability of evidence on gender impacts. Other challenges include the availability of gender disaggregated data and lack of political will.

Gender aspects need to be taken into account early in the capital budgeting process

Understanding the gender impact of projects is crucial in the early stages of developing capital budget proposals. OECD countries that consider gender dimensions at the planning stage of the infrastructure lifecycle include Belgium, Czech Republic, Iceland, Lithuania, Luxembourg, Spain and Sweden (OECD, 2020^[23]). Ignoring gender impacts during this stage risks the success of the project and hinders the correction of deficiencies in later stages.

In Canada, Gender Based Analysis Plus (“GBA+”) are required to accompany budget proposals. As part of a detailed assessment, which includes expected benefits and mitigation strategies (should negative differential impacts be found), ministries must identify the timing of the analysis performed according to one of the following four options:

- GBA+ was performed on the existing programme (in cases where a programme is seeking a renewal of funding);
- Early in the development phase (when options/proposals are being considered);
- Mid-point (when options and proposals are being finalised); and/or
- Later stage (after proposals are finalised, prior to submission of proposal).

The Gender Impacts Report accompanies the budget, highlighting the GBA+ for each budget proposal and shows clearly the expected gender and diversity impacts of budget measures. There is a risk that the tools shown above are applied too late in the planning process to influence key decisions about what project to build and where to build it, resulting in missed opportunities to minimise negative impacts and maximise positive ones. However, requiring these to be undertaken as part of the budget process can help encourage gender considerations to be built in upstreaming the project.

Limited availability of evidence on gender impacts

In order to implement the tools of gender capital budgeting, governments need to have evidence on gender aspects. Often this might require increased efforts to collect gender-disaggregated data. Sweden, which has a long history of gender mainstreaming, devotes substantial effort into collecting *new* gender-disaggregated data.

Governments may need to engage in partnerships with the private sector, academia and civil society to ensure that relevant data are defined, measured, collected, analysed and synthesised in ways that they are useful for decision makers and the public. As broad expertise in collecting, connecting and interpreting quality data might not exist across all sectors (especially for capital investment), capacity building is a key enabler of data-driven approaches to the sustainable operation and planning of infrastructure projects.

Inclusive and meaningful stakeholder consultation with women is another way through which governments could increase the availability of evidence on gender aspects. Consultation facilitates a good understanding of service needs and preferences and helps to ensure that infrastructure development is culturally appropriate and well aligned with demand. To be effective, stakeholder consultation should be integrated throughout the life of the asset and be strengthened by comprehensive stakeholder analysis to identify all potential female users, as well as non-user groups, which could be affected directly or indirectly.

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