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Capturing complexity in regional assessments with Gender-based Analysis Plus: Lessons learned from regional assessments for offshore wind in Atlantic Canada

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Thanks also to the team that led the research from which this case study emerged, and to Impact Assessment Agency of Canada (IAAC) for their helpful comments

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Territory Acknowledgements

GiiiA network respectfully acknowledges our presence and work on Indigenous territories. We stand together with Indigenous Peoples in working to dismantle colonialism and its intersections with racism and sexism. We recognize that reconciliation is an ongoing process of building meaningful partnerships, collaborating, and undertaking participatory research and action that advance Indigenous rights. Our work through the GiiiA Network is informed and shaped by the experiences of diverse Indigenous Peoples with resource extraction and development.

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Summary of recommendations for practitioners on using Gender-based Analysis Plus in regional assessments

- Use Gender-based Analysis Plus (GBA Plus) to engage with communities to understand what is important to them
- Identify valued components and indicators based on priorities that emerge through community engagement
- Identify data needed for applying GBA Plus
- Establish a GBA Plus-informed strategy to address data gaps and support future assessment and follow-up programs

Summary and purpose

Under subsection 22(1)(s) of the federal Impact Assessment Act (IAA), an impact assessment of a designated project must take into account "the intersection of sex and gender with other identity factors." To understand how a project's effects may be experienced differently by diverse groups, an impact assessment should apply Gender-based Analysis Plus (GBA Plus). GBA Plus supports consideration of how intersecting factors, such as race, age, ability, Indigenous identity, and economic status, can shape differential effects of a designated project. This helps ensure that benefits are inclusive and that potential disproportionate adverse effects are identified and addressed for diverse populations. This requirement in the IAA—along with similar provisions in some provincial and territorial impact assessment regimes—has contributed to the increased application of GBA Plus in assessing the effects of designated projects, including cumulative effects on health, social, and economic conditions.

To support the application of GBA Plus, guidance on GBA Plus and culturally relevant GBA Plus has been developed by Indigenous organizations, community organizations, researchers, and others, including the Gender-based Indigenous Intersectional Impact Assessment Network (GiiiA Network). Applying culturally relevant GBA Plus to assess the effects of development supports practitioners in integrating context, cultures, and diverse knowledge systems, particularly those of Indigenous Peoples, into assessment methods and practices.

Applying GBA Plus in impact assessment is still relatively new and has focused largely on project-specific assessments rather than planning assessments (e.g., regional and strategic assessments). Thus, further work is needed not only to identify best practices and areas for improvement in the application of GBA Plus, but also to examine how its application, use, and outcomes may differ in planning assessments. This includes how GBA Plus in planning assessments can strengthen the assessment and

mitigation of cumulative effects on diverse populations and inform stronger application of GBA Plus in project-based assessments.

This case study offers lessons learned from research[1] conducted by the Canadian Research Institute for the Advancement of Women-Institut canadien de recherches sur les femmes (CRIAW-ICREF) related to GBA Plus for offshore wind development in Newfoundland and Labrador (NL) and Nova Scotia (NS) in the summer and fall of 2024. It focuses on the potential effects of offshore wind development on housing that were revealed through our research. Focusing on housing helps to illustrate the complexity of how projects affect people and communities and the challenges of capturing this complexity in impact assessment processes. The lessons learned are intended to contribute to practitioners'—those within IAAC and others, including within other levels and types of governments, industry, and communities—understanding of GBA Plus and how to apply it in impact assessment processes, particularly regional assessments (RAs).

We recognize the jurisdictional complexities associated with assessing project effects and that consideration of sex and gender under the IAA applies to impact assessments of designated projects and to the assessment of effects within federal jurisdiction. However, and as noted earlier, similar requirements are outlined in some provincial and territorial assessment legislation. GBA Plus can be applied in other assessment contexts, including those led by provincial or Indigenous governments, consistent with their respective legislative and policy frameworks.

This case study draws out lessons learned through our research to support the use of GBA Plus in planning assessments in a variety of contexts. It illustrates the importance of using culturally relevant GBA Plus to identify and respond to effects, especially those that cross jurisdictional boundaries and can thus fall through the cracks.

Regional assessments and GBA Plus

RAs are a broad type of IA used for planning. In Canada, they are established under section 92 of the IAA. Unlike project-specific IAs, which examine the positive and adverse effects within federal jurisdiction related to a designated project, RAs take place before specific projects have been proposed.

They focus on the regional context and may consider some or all of the following:

- the biological and physical environment

[1] The research underpinning this case study was supported by IAAC to enhance GBA Plus considerations in the RA processes for offshore wind in Nova Scotia (NS) and Newfoundland & Labrador (NL).

- the types of development that may occur (or not) in a particular region
- sensitive locations
- socio-economic and cultural factors
- social and cultural changes
- cumulative effects

RAs under the IAA examine the positive and adverse effects of past, current, and future physical activities within a defined geographic area to better understand regional context and cumulative effects. RAs do not authorize or approve projects. Rather, they provide information, analysis and recommendations to inform future planning, regulatory processes, and impact assessments. The intent of RAs is to inform and improve future IA processes and decision-making, making them more effective and efficient. They are flexible and can be used to examine one industry or several in a region. They can also be used in collaboration with other jurisdictions for better regional management.

GBA Plus can be applied in RA processes to provide important intersectional baseline conditions, contextual and cultural considerations, potential regional and community-based concerns and priorities, and data gaps that may need to be filled before projects are developed. This will provide important context and a starting point for subsequent project-based assessments. Furthermore, GBA Plus in RAs can support the identification and assessment of cumulative health, social, and economic effects on diverse populations by examining how multiple activities and stressors interact over time and space. Applying GBA Plus will help identify how existing health, social, and economic conditions (such as caregiving responsibilities, access to services, employment patterns, and safety) can compound or intensify cumulative effects for certain populations, including women and Indigenous Peoples.

Offshore wind regional assessments in Atlantic Canada

In March 2023, the federal Minister of Environment and Climate Change Canada announced RAs to inform potential future offshore wind development, one in NS and the other in NL. These RAs were intended "to provide information, knowledge and analysis regarding future offshore wind development activities in the study areas and their potential effects, to inform and improve future planning, licensing and impact assessment processes for these activities in a way that helps protect the environment and health, social and economic conditions while also creating opportunities for sustainable economic development."[2]

[2] For more information, see: https://natural-resources.canada.ca/energy-sources/renewable-energy/regional-assessments-offshore-wind-development-nova-scotia-newfoundland-labrador.

In each case, committees of five people with a variety of backgrounds and expertise were formed to lead the RA, which included conducting community engagement, facilitating relevant research, and providing a final report. The final reports include information, analyses, and findings about the potential effects that offshore wind could have on the environment, health, and social and economic conditions, as well as recommendations about mitigation measures, follow-up programs, and how the reports could be used for future planning of offshore wind development.

As part of each RA process, CRIAW-ICREF was contracted by IAAC to conduct research related to GBA Plus. We were not asked to conduct a GBA Plus for each RA. Instead, the research offered a starting point for guiding the application of GBA Plus in future project-specific impact assessments. It included conducting research to understand the potential effects that offshore wind development could have on diverse populations; considering potential qualitative and quantitative indicators that could be used to assess these effects; evaluating existing data regarding its potential for informing GBA Plus in future projects, including related to effects monitoring; and identifying data gaps and outlining data collection strategies for filling these.

To undertake this work, CRIAW-ICREF hired a team[3] that

- conducted a literature review of academic work as well as government and company documents related to offshore wind development and particularly related to equity and diverse populations.
- held interviews with individuals representing diverse populations or relevant issues to identify areas of concern, potential indicators, and data needs and data gaps.
- reviewed data to assess what data exist and would be needed to apply GBA Plus in the future.

Capturing complexity in planning with GBA Plus: The potential effects of offshore wind on housing

Our interviews were with community and provincial organizations engaged with diverse populations and groups, such as women, Indigenous Peoples, people with disabilities, folks from the 2SLGBTQQIA+[4] community, and with issues relevant to these groups, including food, housing, families, employment, and gender-based violence. Interview participants in both NL and NS emphasized the potential far-reaching effects (both positive and adverse) that offshore wind could have

[3] Leah Fusco, Jane Stinson, Leah Levac, and Deborah Stienstra

[4] 2SLGBTQQIA+ refers to people who identify as Two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, plus all other sexual orientations and genders.

economically, socially, and culturally. However, many of the concerns we heard were not issue specific; rather, they were complex and inter-related.

This challenge was especially apparent in interviews when people talked about housing (see Figure 1). Ensuring affordable, available, and suitable housing in locations that meet individual or family needs was a central concern because of the far-reaching effects of inadequate housing. That is, housing concerns were not presented as confined to infrastructure (i.e., the number of houses there are). Rather, they were presented as intricately intertwined with many aspects of people's lives, including economic security, physical and mental health, and safety. Moreover, interviews highlighted the rippling effects that changes in housing could have for individuals, families, and communities. Having to pay more for housing, for instance, would leave less money for food, health, and recreation, which can affect mental and physical health, work, and school. It was clear that understanding the central importance of housing would be needed to accurately predict the effects of offshore wind on diverse populations and communities, plan appropriate mitigation strategies, and establish monitoring processes.

Housing as a valued component

One way the centrality of housing can be captured in an impact assessment is if it is included as a valued component.[5] Valued components are aspects of the environmental, social, health, or economic conditions of an area that are considered important by government, Indigenous communities, the public, or proponents.

The identification of VCs is important because VCs guide all other aspects of an impact assessment. They shape how issues and effects are understood, what mitigation measures are identified, and what data will be needed to monitor whether mitigation measures are effective. Applying GBA Plus (and culturally relevant GBA Plus) to inform the selection of VCs is critical for ensuring that assessments and monitoring will reflect community needs and adequately capture culturally relevant effects across diverse populations.

The committees conducting the RAs in NS and NL were provided with a list of components to consider (here they were referred to as environmental, health, social, and economic components not VCs) in the terms of reference that laid out their work. These components included the following: Air Quality and Greenhouse Gases (GHGs); Marine Fish and Fish Habitat (including species at risk); Avifauna

[5] These may have a different name depending on the assessment or jurisdiction, i.e. valued ecosystem component, valued environmental component, components, etc.

(including birds, bats, and associated species at risk); Marine Mammals and Sea Turtles (including species at risk); Protected and Special Areas (established and proposed); Indigenous Communities, Activities, Interests, and Rights; Fisheries and Other Ocean Uses; Visual Aesthetics / Viewscapes and Acoustic Environments; Physical and Cultural Heritage (including structures, sites or things of historical, archaeological, paleontological, or architectural significance); Health; Communities; and Economy. There was no indication that the choice of these components was informed by culturally relevant GBA Plus.

Housing was not listed as a specific component for either RA. Housing-related issues could be discussed as part of several of the identified components, including Indigenous Communities, Activities, Interests, and Rights; Visual Aesthetics / Viewscapes and Acoustic Environments; Physical and Cultural Heritage (including structures, sites or things of historical, archaeological, paleontological, or architectural significance); Health; Communities; and Economy. However, hoping for housing to be captured indirectly across other components creates the risk that the interconnections or rippling effects of changes to housing will not be captured. That is, each component would only include discussion of particular aspects of housing rather than taking a holistic approach that links them all. Effects could be diluted or pathways of effects not fully explored, which would have implications for what mitigation and monitoring are suggested, or even how serious the potential effects are deemed to be. For instance, how changes in housing cost or availability could impact food security or gender-based violence would need to be considered to accurately portray effects and plan mitigation strategies, and these connections could easily be missed without focusing specifically on housing as a valued component. This could result in the impact assessment not fully characterizing the extent of a project's effects, particularly on marginalized populations.

Our research showed important perspectives on housing that were not captured in the RA and suggests that housing will be an important issue that needs to be addressed in planning future projects. It is also something for which cumulative effects assessment will be critical since multiple developments in a region will only increase pressure on housing and rippling effects.

Planning for GBA Plus-informed monitoring

Although project-specific VCs should be determined through GBA Plus-informed engagement at the project phase, the centrality of housing in our interviews--not to mention the centrality of housing concerns that emerge in relation to all resource-related projects--suggests that housing will likely be a central community concern when wind projects are proposed. Knowing this early (before specific projects are proposed) can help practitioners and governments prepare for future project development and monitoring that will address the needs and concerns of diverse populations and communities. Importantly, having a list of potential community concerns that were identified through an RA process

-- understanding issues important to communities and how they are interconnected -- will help identify potential indicators that might be used in the future.

Typical housing indicators include available housing units, rental costs, and other standard measures of housing availability. In our interviews, however, we heard about complex ways that changes in housing can negatively affect people, particularly already marginalized populations. For instance, we heard that when housing costs go up, people often prioritize housing in their budgets and may re-direct money away from other important areas such as food. This overall pressure on finances may mean that even housing considered "affordable" is, in reality, unaffordable. Thus, while people throughout the community may be affected by changes in housing costs and availability, looking only at typical indicators may not be adequate to monitor how these changes will affect diverse groups of people.

Interview participants suggested the importance of also monitoring indicators of general financial strain. This would help capture some of the rippling effects, specifically on those who are already struggling. For instance, indicators of food security (food costs, food bank use) are important since we know that people often redirect budgets to prioritize covering housing costs. One person suggested that grocery stores in rural areas may provide data on the number of gift cards used, which could indicate food insecurity as gift cards are sometimes given by community organizations and other service providers to support food insecure people in moments of acute stress. Other indicators of financial strain could include declines in extra-curricular activities for children and adults, gym memberships, or the purchase of luxury items. Monitoring the cost of energy could also suggest disproportionate increases in financial strain related to housing as new and renovated homes may have more insulation and be cheaper to heat. Indicators that suggest lack of available and appropriate housing could include number of occupants, shelter use, incidents of gender-based or family violence, and use of support services such as transition houses and shelters.

Filling data gaps

We know that particular populations who disproportionately live with low-income may be more affected by changes in housing, including women, Indigenous Peoples, seniors, and people with disabilities. Thus, being able to monitor indicators from an intersectional perspective is critical. However, as we found in our research, there are significant data gaps that need to be filled in order to appropriately monitor effects of offshore wind (and other forms of) development on housing in the future. In particular, there were significant gaps in the availability of disaggregated data, that is, data that have been broken into subcategories like gender or age. Disaggregated data are critical for capturing the unique experiences of diverse populations to ensure that their realities are not overlooked.

Lack of disaggregated data was flagged as a significant barrier by many people we interviewed. It limited their ability to substantiate their experience and the lived experiences of the people with whom they work. Participants also identified significant gaps in community-level disaggregated data that would help with monitoring changes in the community over time. This included information on substance use and gender-based violence. Filling these data gaps will be needed to accurately assess and monitor project effects if offshore wind projects move forward. If data gaps aren't addressed early, there is a risk that future impact assessments may not fully characterize potential adverse effects, including disproportionate adverse effects on diverse populations. In the federal context, this could limit the information available to support public interest determinations under section 63 of the IAA.

Identifying data gaps during a RA means that a plan can be put in place to gather data so that intersectional assessment and analysis can be done in the future. In some cases, the collection of the data needed would require long term planning and implementation of new ways of gathering data. For instance, in order to address housing and transportation-related effects from project development, it may be necessary to conduct research to get intersectional data about how the existing communities move around the region, including for work, school, recreational activities, shopping, childcare, etc. Filling data gaps will also require changes to how governments collect and compile data. Furthermore, data anchored in Indigenous knowledge systems will require building trust with Indigenous communities so that data can be gathered and used in culturally relevant ways. All of this will require long-term planning and integrating culturally relevant GBA Plus from the earliest moment possible.

Conclusion

Our experience with the RAs in Atlantic Canada underlines the important role that GBA Plus can play in RAs and the impact assessment process more broadly. In particular, it highlights the importance of early and robust engagement for understanding community concerns and important issues. This will lead to better consideration of pathways of effects, potential VCs, and indicators as well as data requirements for future monitoring.

[See Figure 1]

COMPLEX EFFECTS OF RESOURCE DEVELOPMENT ON HOUSING

Affordability, availability, suitability, and location are central factors in meeting housing needs and interests of people in communities. Resource development can alter these factors, which can have interconnected and rippling effects throughout the community and people's lives.

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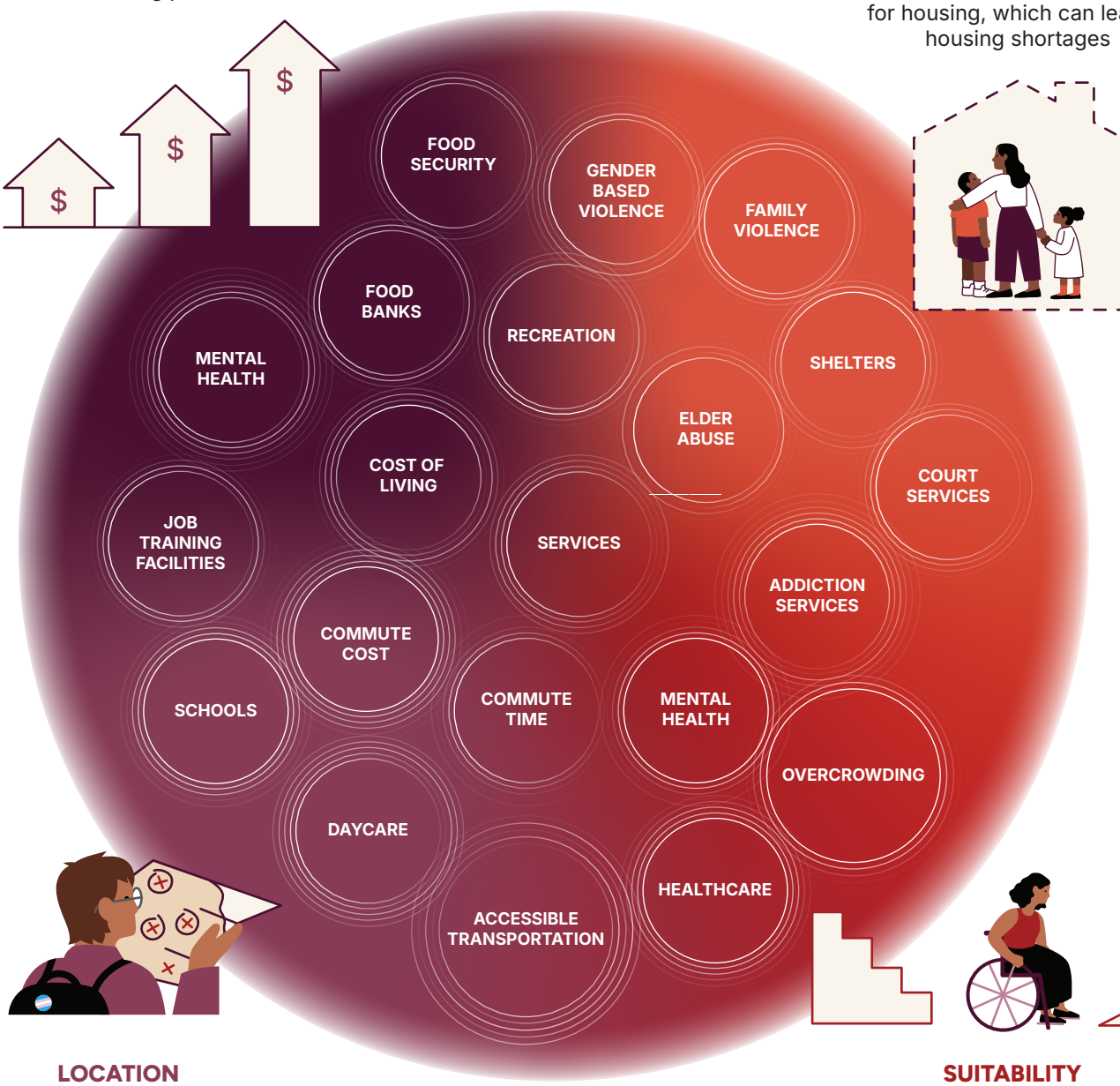
AFFORDABILITY

Increasing demand for housing can increase housing prices

AVAILABILITY

Increasing population in a region can lead to a rise in demand for housing, which can lead to housing shortages



LOCATION

Increasing costs/housing shortages can make it harder to find housing in a desired location that meets a person's or family's needs

SUITABILITY

Housing shortages can make it difficult for people to find housing that meets their cultural, personal, and family needs (size, accessibility, etc.)

Housing interconnections

Figure 1 helps to highlight some of what we learned about the potential effects of resource projects on housing. It shows that resource projects can affect housing affordability, availability, and suitability, and that changes in these and other dimensions of housing have rippling and interacting effects. For example, an influx of workers may change the demographics of a region and shift the housing needs.

Many interviewees drew on their experiences with other resource and infrastructure development projects in the region, including oil and hydro, and so had a good understanding of how offshore wind could affect housing for the populations they worked with. For instance, people pointed to changes in housing in Labrador as a result of the Lower Churchill Hydroelectric development and in Corner Brook from the construction of the new hospital.

As housing in a region shifts to cater to workers, it may be more difficult to find other types of housing, including affordable and accessible housing or housing near workplaces, childcare, or health facilities. This can be especially problematic for seniors and lone mothers as well as women with disabilities and/or who have children with disabilities who may need home support or regular access to health services. We heard concern about "renovictions", the practice of evicting people to perform superficial renovations in order to be able to break an old lease and charge higher rents to new tenants. While this leads to higher income for landlords, it can also push people who cannot afford the higher rent out of the region or out of housing altogether.

While industry workers may be able to afford higher housing costs, some people, especially those not benefitting from high wage industry jobs, may be forced to move further away from their place of work, schools, family, childcare, and other services. This could pose problems in terms of transportation, especially in rural areas where there is no public transportation or it is limited and/or not accessible, which could be challenging for seniors or people with disabilities who may rely on public transportation to get to work or to health care facilities. It could increase living expenses as people might have to drive further and/or purchase a car and rearrange important activities, including childcare. It could also lead to people taking lower paying jobs closer to where they find housing. Overcrowding due to affordable housing shortages could also result, which can have mental and physical health effects. Inability to afford or find appropriate housing could lead to a rise in the need for and use of shelters.

While industry can lead to more well-paying jobs, it also often leads to more low-paying jobs as general economic activity and demand in the region increases. For instance, jobs in retail, accommodations, and food service are often low paying, precarious, and lacking in benefits. They are also more often held by women, particularly racialized women. An increase in the cost of living, including for housing-

related costs, is disproportionately felt by these individuals as well as others who already experience marginalization and systemic oppression, including seniors, people with disabilities, members of the 2SLGBTQQIA+ community, Indigenous people, and women.

As housing becomes more expensive, people with lower incomes may need to prioritize housing over other expenses. This can have significant effects on other parts of their lives, including recreational activities (like involvement in sports or gym memberships), which in turn has economic effects throughout the community. We heard frequently about the link between housing and food security. People often prioritize housing over food and food for children over food for themselves, which can have wide-reaching implications on physical and mental health, child development, and the ability of children to focus and engage in school. Food insecurity may also disproportionately affect some groups of people, including Indigenous people, lone mothers, and people with disabilities. As people often approach their informal safety nets/friends and family first when they are food insecure, those without safety nets, which may include new Canadians, may be more at risk. Thus, when housing prices increase, people interviewed expected simultaneous increases in demand for shelters but also food banks, healthcare, and mental health services.

We also heard concerns about how resource development could lead to more gender-based and family violence, something that has been documented in other communities affected by resource development. Gender-based violence can be associated with increases in drug and alcohol use that can accompany resource development. This could lead to more women and children seeking housing in shelters or transition houses. We heard from the experiences of people working in these areas about the constant strain on these services and how this has increased in relation to other projects. An increase in demand for these services, on top of the existing situation where there are very few spots in shelters, could lead to women and children remaining in dangerous situations. Furthermore, the increase in demand for housing and decrease in affordable housing would make it harder for women and children to move out of shelters and transition houses into permanent homes, which may lead them to return to unsafe conditions.

While in some instances, an increase in population of an area will put pressure on existing housing, in other cases, projects may create housing for workers – often called 'worker camps' or 'man camps'. We heard concerns about these types of camps accompanying offshore wind development because they have been associated with gendered and sexualized violence in other communities where they have been used. We also heard concern about the mental and physical safety of workers living in those work camps. There was a broad understanding that these sites house mainly men and have a distinctly masculine culture, which may be and/or feel unsafe for some. Man camps raise significant concerns related to the physical safety of women, Indigenous women, and members of the 2SLGBTQQIA+ community as well as the mental health effects of feeling unsafe and removed from communities of

support. We also heard about the importance of accessibility features that would make it possible for people with disabilities to work on projects.