

Supporting Equitable Energy Transitions in Inequitable Communities: Offshore wind in Nova Scotia

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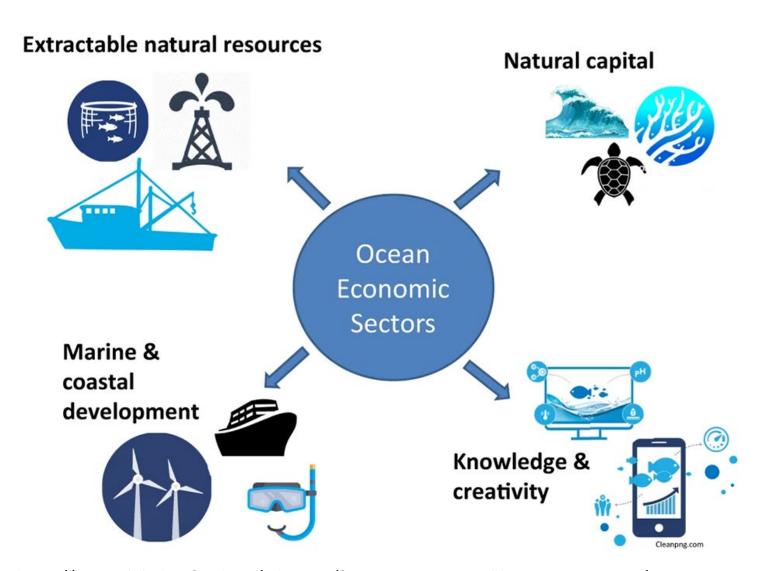
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Prepared for Nova Scotia Offshore Wind R&D Forum 2025

OCEAN ECONOMY





Offshore Wind Energy

Global

Global OSW capacity is projected to rise from 68 GW in 2023 to nearly 2000 GW by 2050.

Canada

Offer leases for 5 gigawatts of offshore wind energy by 2030.

Nova Scotia

Four designated
OSW areas in NS,
including French
Bank, Middle Bank,
Sable Island Bank,
and Sydney Bight.

PUBLIC ACCEPTANCE & CONFLICT

Global OSW Experiences



Stalled

New Jersey's Offshore Wind Program



Canceled

Navitus Bay offshore wind farm, United Kingdom



Initial stage

Port Stephens / Hunter Offshore Wind in Australia



Operational

Hywind Scotla nd Pilot Park

OSW in Nova Scotia

What We Heard in Nova Scotia

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human wellbeing policy and strategies

end use communication importance
fisheries coexistence
spatial planning local knowledge
fisheries coexistence
skills development and jobsclimate change
information gap marine species effects
governance energy security safety
electrical grid siting
project comparisons gelectricity costs

technologytrust and transparency
supply chain regulatory process
regional assessment
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Jurisdiction and sovereignty

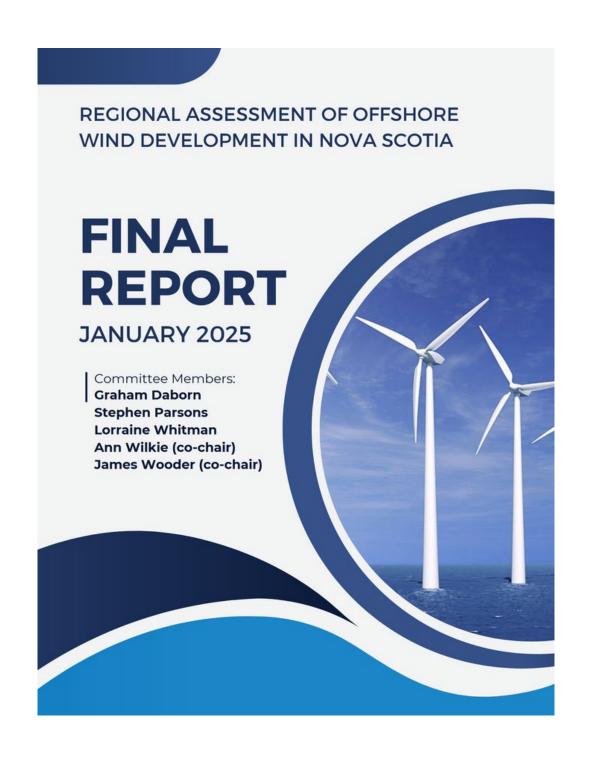
Marine environments and wildlife

livelihood

Climate change

Source: (NZA, 2025)

SOCIAL INFRASTRUCTURE



Final Report

Regional Assessment of Offshore Wind Development in Nova Scotia

January 23, 2025

Social Infrastructure

There is regular commentary that NS in 2024 is confronting a crisis in the capacity of its social infrastructure, i.e., its housing pool, its medical resources and its educational facilities. There is an acute shortage of affordable housing not just in HRM, but across the province (Turner Drake et al., 2022). As of June 2024, more than 16% of Nova Scotians did not have a family doctor and emergency facilities were reducing hours because of staff shortages. Schools are overcrowded in part due to recent population growth. It is not the intent of the RA to undertake a close examination of these topics, but if a new industry is to be accommodated, it is imperative that due consideration be given by the responsible authorities, federal, provincial and municipal, to address the pressures that would be placed on the already compromised social infrastructure and to plan and invest accordingly. If the labour needs of a new OSW industry are to be met by attracting further immigration, either from other provinces or internationally, investment in housing, the health system and education is of equal importance to investment in ports or the grid.

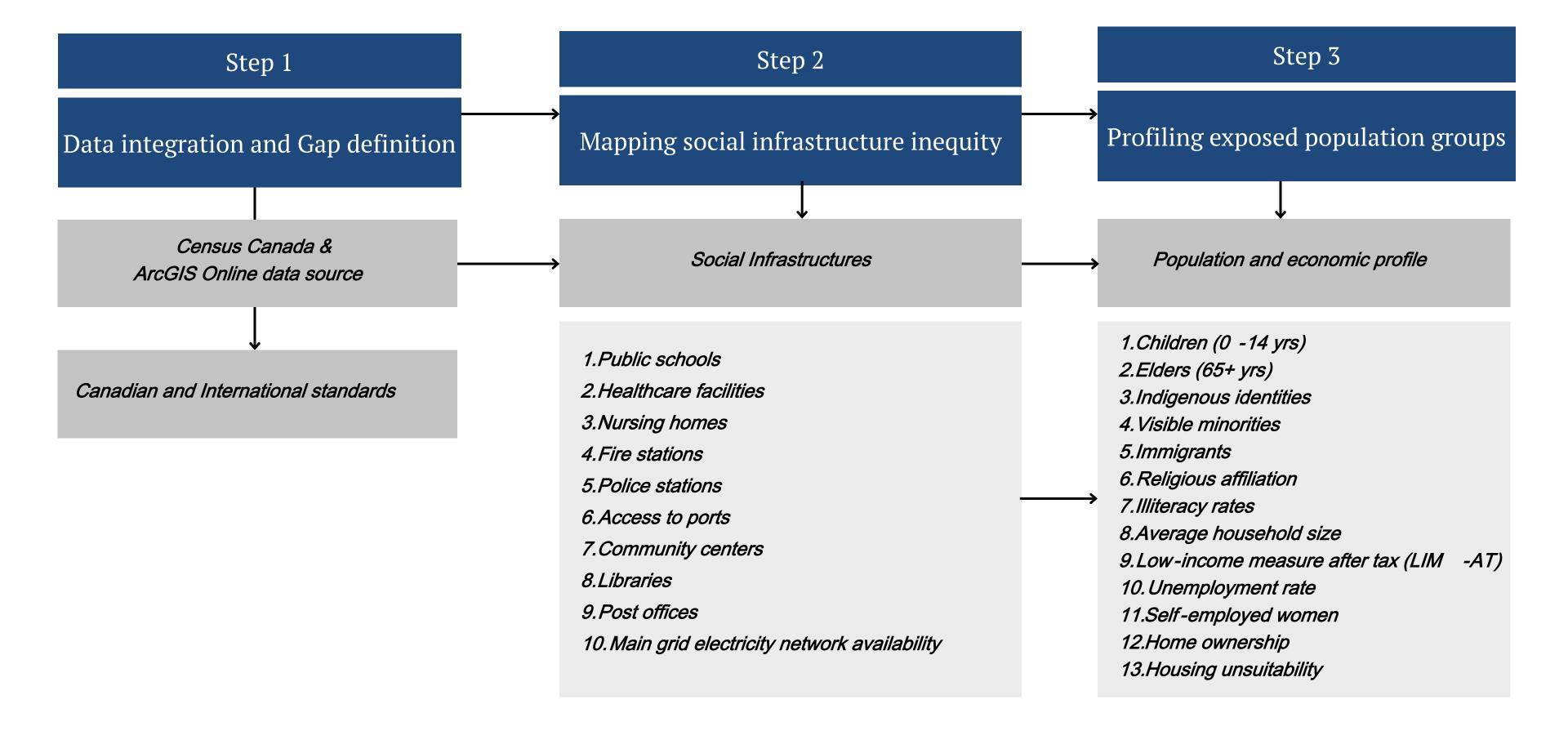
RESEARCH QUESTIONS

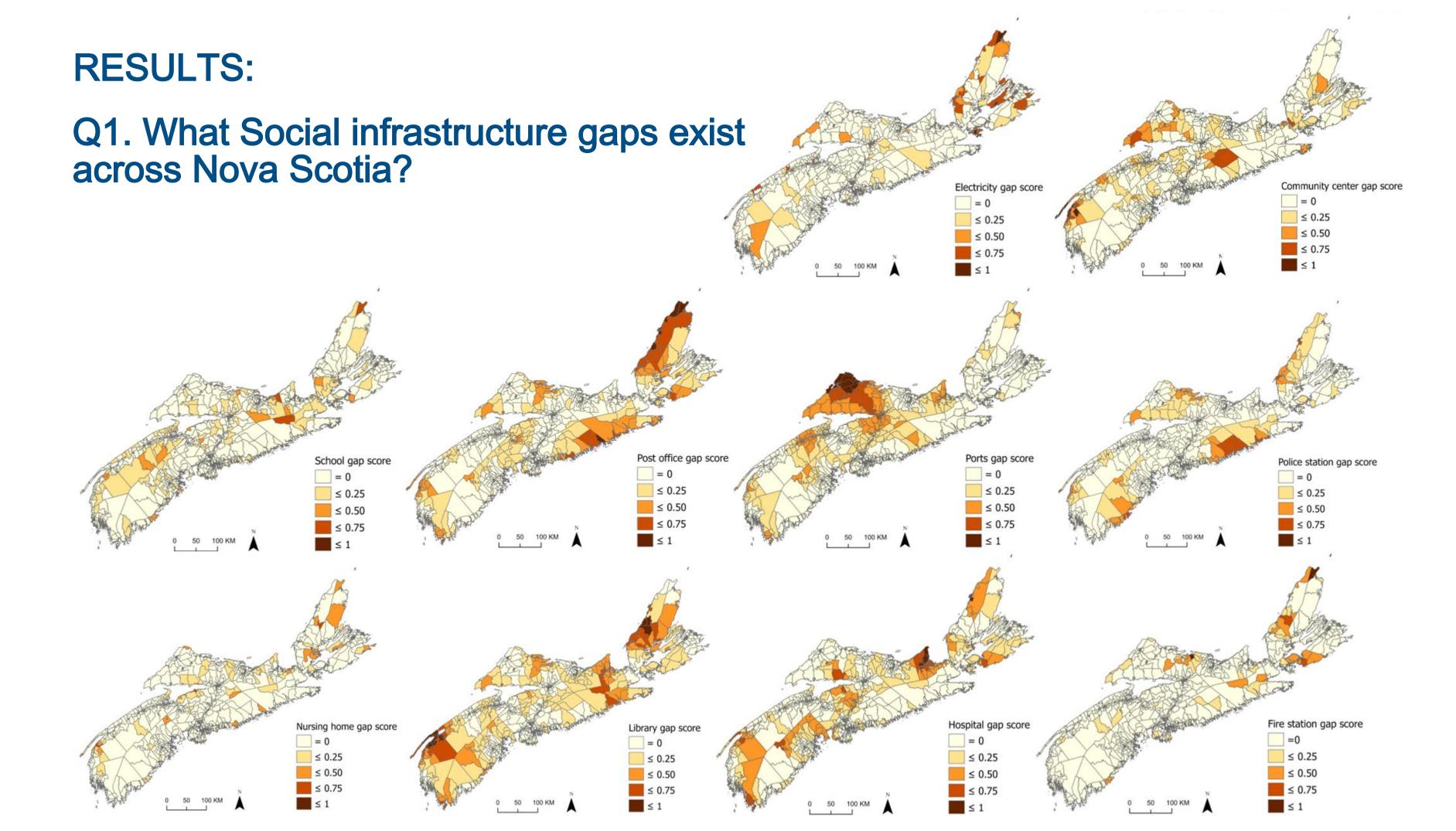
Q1: What Social infrastructure gaps exist across Nova Scotia?

Q2: Where are the areas of greatest need?

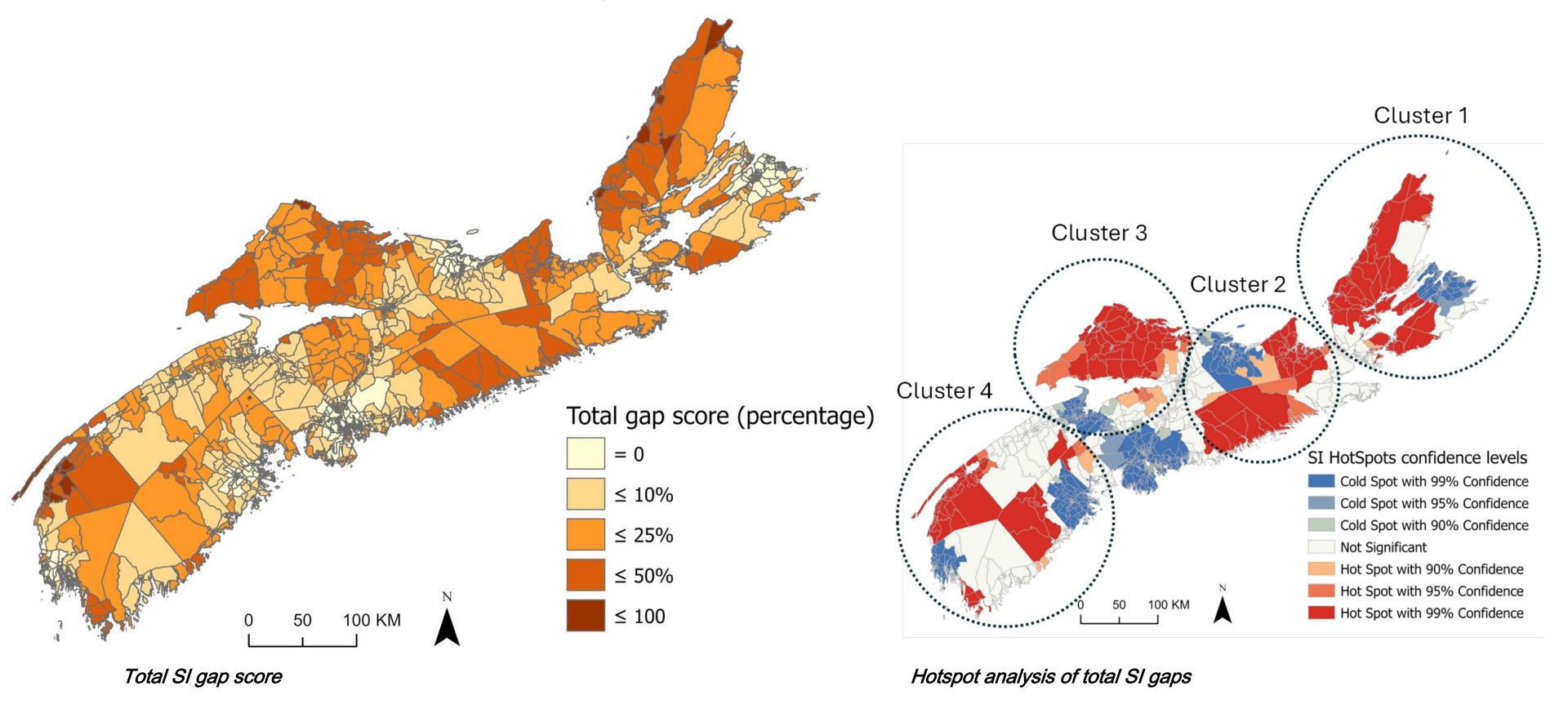
Q3: Which demographic and economic groups are experiencing these gaps?

RESEARCH METHODS

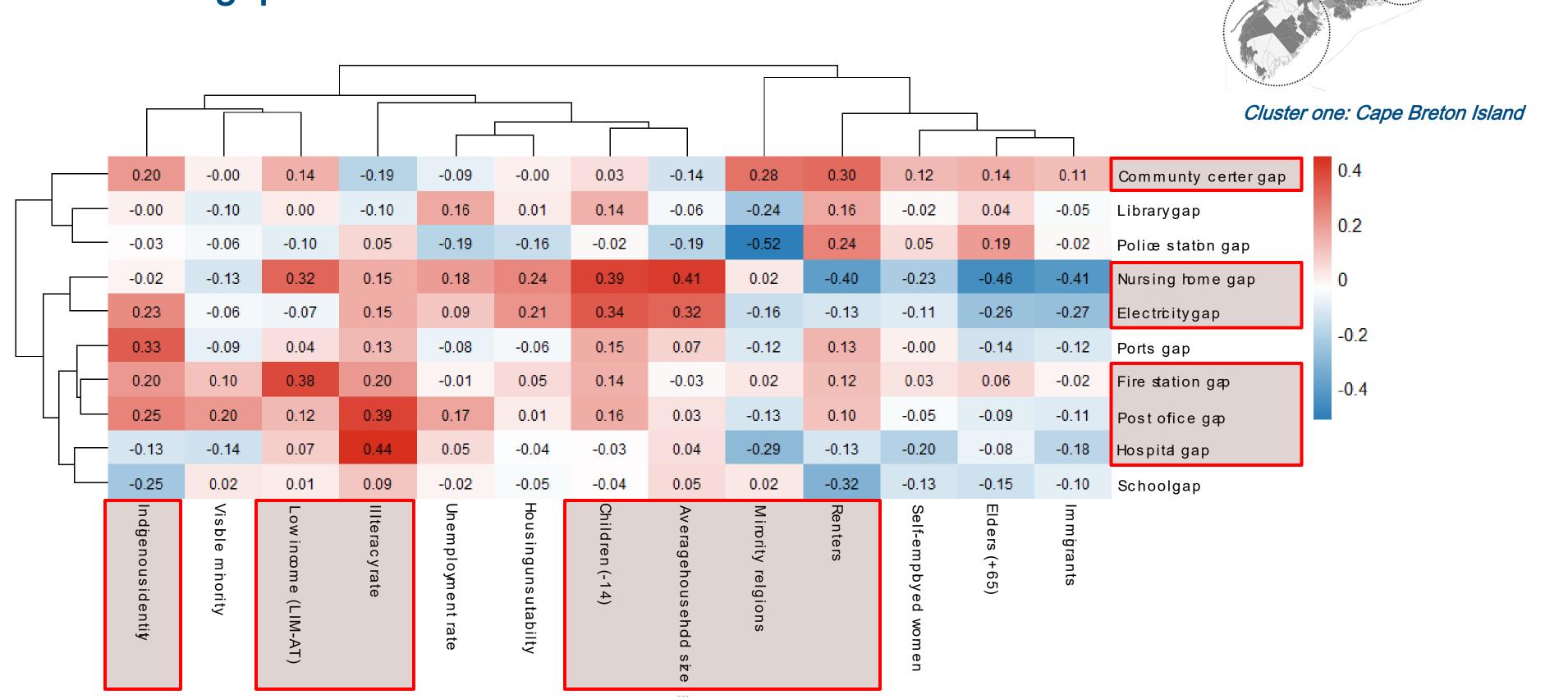




Q2. Where are the areas of greatest need?



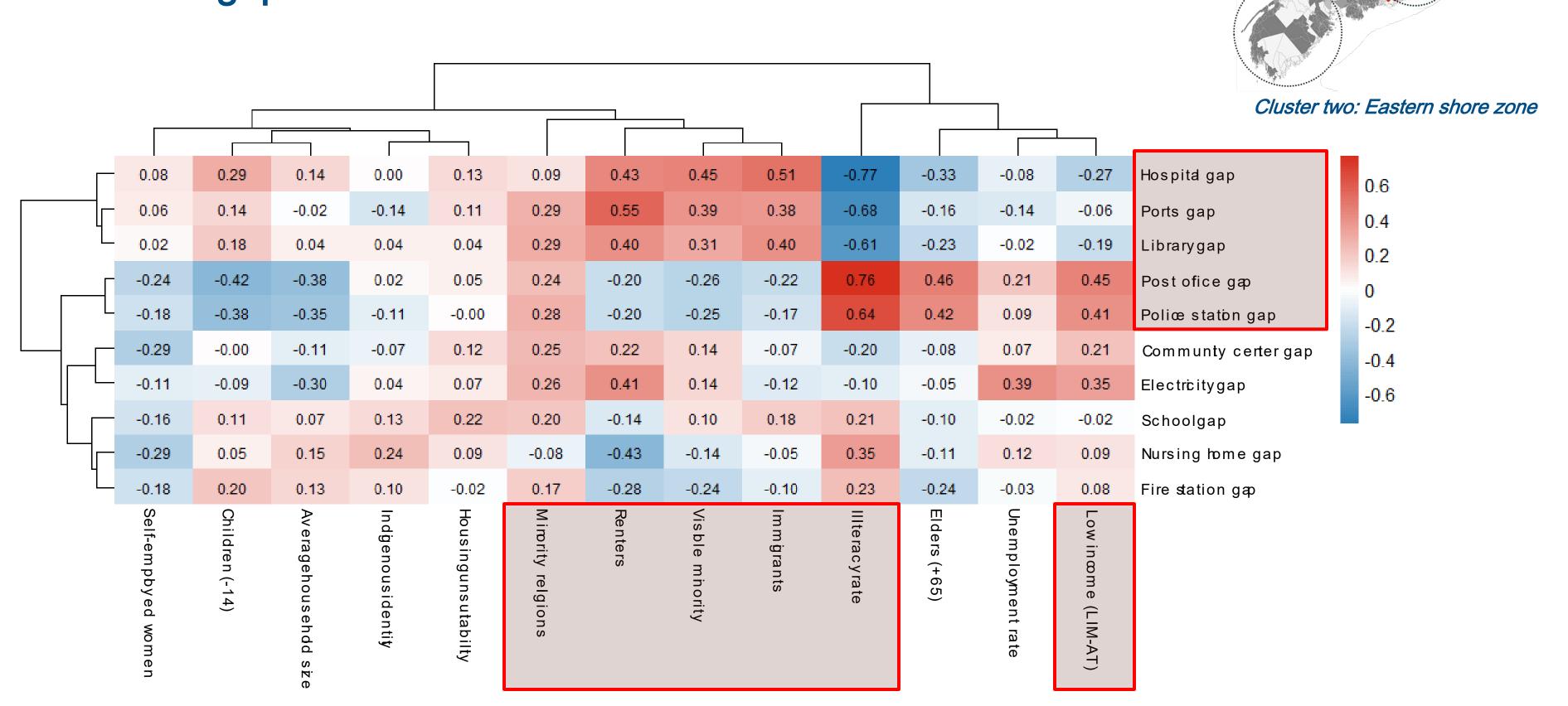
Q3. Which demographic and economic groups are experiencing these gaps?



Cluster 1

Cluster 3

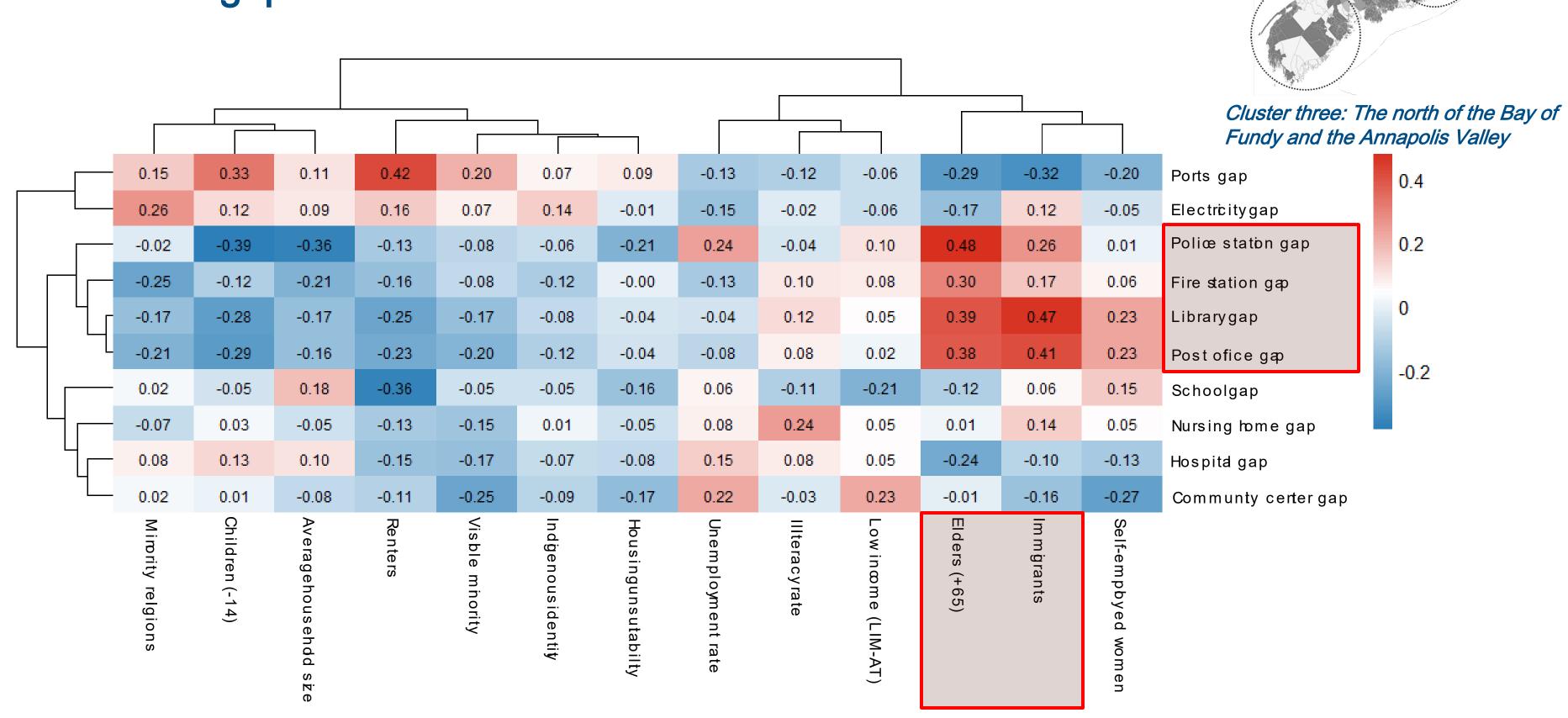
Q3. Which demographic and economic groups are experiencing these gaps?



Cluster 1

Cluster 3

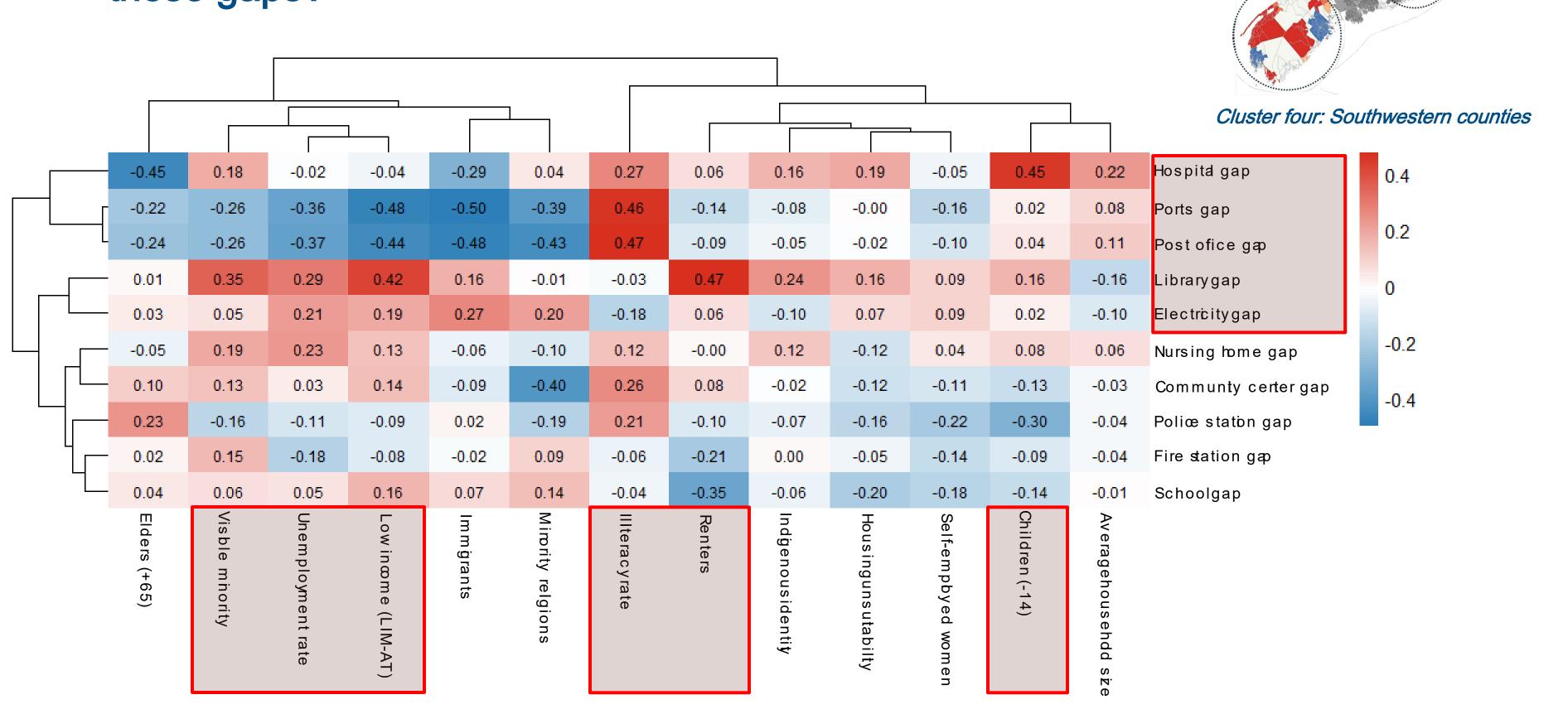
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Cluster 1

Cluster 3

Q3. Which demographic and economic groups are experiencing these gaps?



Cluster 1

Cluster 3

DISCUSSION

- 1. SI gaps mostly cluster in rural communities, with fewer concentrations in urban areas.
- High-gap communities show three social themes: economic and educational disadvantages, cultural and identity marginalization, and demographic and household pressures.
- 3. Equity and social impact assessments are necessary for a successful energy transition.
- 4. Further studies should center **local and Indigenous perspectives on SI gaps**, rather than relying solely on quantitative data.



THANK YOU!

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