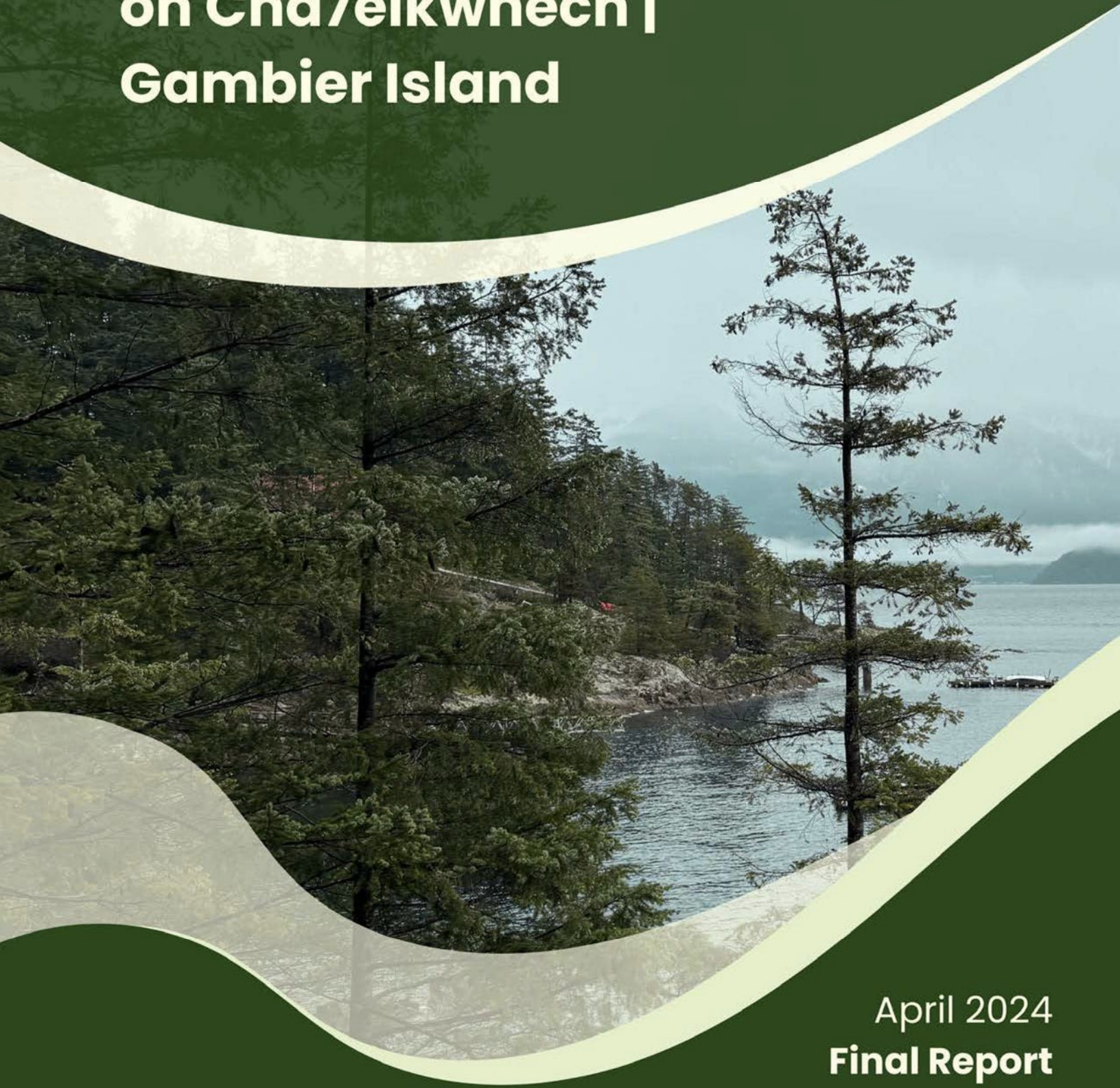


Promoting Livability on Chá7elkwnech | Gambier Island



April 2024
Final Report



Gambier Island
Community Association

This report is submitted to the Gambier Island Community Association through the
REDIP Oversight Committee



**Gambier Island
Community Association**

In Partnership with the University of British Columbia's
School of Community and Regional Planning



The Province of British Columbia provided the funding that made this plan possible under
the Rural Economic Diversification and Infrastructure Program REDIP



SoundPlanning is a student planning team from SCARP at UBC. We are working
with the Gambier Island Community Association to develop recommendations for
improving livability for Gambier Island residents

Acknowledgements

Land acknowledgement

We would like to respectfully acknowledge that our project for Cházelkwnech | Gambier Island occurred on the traditional, ancestral, and unceded territory of the Skwxwú7mesh Úxwumixw (Squamish Nation). It is with profound respect and gratitude that we acknowledge the Squamish People's unwavering guardianship and stewardship of these lands and waters. Understanding the paramount importance of this territory to the culture, identity, and daily life of the Squamish Nation, we pledge to honour their rich historical legacy and continuous connection with their land.

Team's Positionality

We acknowledge our invitation to Gambier Island by the Gambier Island Community Association (GICA) as student practitioners and recognize the weight of this learning opportunity and responsibility. As aspiring diverse planners in Canada, we bring with us a distinct set of values and ways of knowing that may sometimes differ from those of the communities we work with. However, throughout this project, we have been committed to accurately capturing and conveying the unique story and relationships of Gambier Island while exploring pathways to a more livable future. This journey has been one of reflection for our team as we strive to grow as lifelong learners and cultivate respectful relationships with the land and the communities we serve.

Special mentions

We express our deepest appreciation to the Gambier Island Community Association (GICA) and the REDIP Oversight Committee for entrusting us with this significant project and for their confidence in our capabilities as student planners. Their insightful feedback and steadfast support have been cornerstones of our project's development, guiding our objectives and methodology. We are especially thankful to Scott Finestone and Sophia Khan for their enthusiastic engagement and crucial insights, which have greatly enriched our project.

Our heartfelt thanks are also extended to our professors—Maged Senbel, Clare Mochrie, Eric Villagomez, and James Connolly. Their expert guidance and relentless support have been pivotal in navigating the complexities of our project, steering us towards a successful completion.

Lastly, we would like to express our gratitude to Samantha Wing for her pivotal contributions to our community engagement efforts and for offering us warm hospitality on Gambier Island. Her active involvement and insight have added a valuable dimension to our project.

To everyone who contributed to this journey, your belief in our vision and your collaborative spirit have been instrumental in bringing our project to fruition. Thank you for your guidance and encouragement and for the invaluable lessons we've learned along the way.

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Executive Summary

The aspiration for a truly livable community is universal, yet the definition of livability demands thorough exploration to grasp its full implications for Gambier Island residents. Guided by the Gambier Island Community Association (GICA), this project embarks on a critical analysis of livability within the island's context, with the aim of optimizing its benefits for the community.

This endeavour goes beyond merely examining the dimensions of livability identified through the Communities Survey. It entails validating survey findings and navigating any underlying tensions and knowledge gaps through community consultations. The objective of this project is to formulate a strategic path forward that includes actionable pathways for change to empower GICA in managing assets and addressing the top concerns identified by Gambier Island Communities.

Through comprehensive research and engagement with stakeholders, the project sought to identify areas for improvement and develop targeted interventions that enhance the quality of life on Gambier Island while preserving its unique character and environment. As a result, the Action Mapping Deck brings together a set of next steps and resources, giving Gambier communities the agency to start the change necessary to foster a resilient community that thrives in harmony with its surroundings.

The success of these initiatives hinges on collaborative efforts and a shared commitment to realizing the vision of a truly livable Gambier Island. By harnessing the collective wisdom and resources of the community, GICA can help lead the way in implementing meaningful change and securing a prosperous future for generations to come.



01

Introduction

Introduction

Project Overview

The beauty and tranquility of Gambier Island have drawn many visitors to its shorelines, which many now call home. Life on Gambier embodies a reconnection with nature, the cultivation of strong family and social ties, and the nurturing of a vibrant community spirit. It serves as a haven where residents seek refuge from the hustle and bustle of urban life, allowing time to unfold at a leisurely pace. Gambier Island holds dear the memories, narratives, and aspirations that contribute to a fulfilling and enduring way of life for generations to come.

Nonetheless, despite its proximity to Vancouver, Gambier remains a remote island with limited public access points, sparse communities, and a lack of essential infrastructure. Residents face the responsibility of meeting their own basic needs, and they must confront emerging challenges stemming from aging demographics, reduced capacity, and resource limitations, compounded by the risks associated with climate change.

In response to these pressing issues, the Gambier Island Community Association (GICA) secured funding from the Province of British Columbia's Rural Economic Diversification and Infrastructure Program (REDIP) in 2023 to develop a plan that helps communities build their internal capacity and improve their quality of life. As a non-profit organization dedicated to enhancing community well-being, GICA partnered with SoundPlanning, the SCARP Student team, to develop pathway recommendations for the REDIP project through the REDIP Oversight Committee and Project Coordinator.

To initiate the project, an island-wide Communities Survey was conducted in the summer of 2023, gathering input from 424 residents on their priorities for the island's future. Building upon this valuable feedback, further community engagement and research were conducted, culminating in the development of recommendations for GICA to address the identified livability values and concerns of Gambier Island residents.

Project Objectives

1. **Identify the major needs, aspirations, and priorities** related to livability in Gambier Island and recommend areas of attention.
2. **Provide a strategic path forward** that guides decision-making around improving quality of life for Gambier Island residents.

Our Approach

To prepare for a better future, the project sought to identify opportunities to preserve and enhance Gambier Island’s existing qualities and assets while identifying potential gaps, guiding the understanding of livability in Gambier. However, the concept of livability is still broad and unresolved, requiring further clarification when applied to planning initiatives. 2022

The team referred to the words of Tolfo and Doucet (2022), who underscore the need for planning practitioners to ask the question of: “livability, for whom?”. Therefore, our endeavor centered on a community-based approach of framing livability, gathering local knowledge, and collaborating with the community through meaningful and authentic engagement, recognizing how the residents perceived and envisioned quality of life and the actions that best fit their priorities.

Phase 1

Oct-Dec 2023

Survey Analysis & Context Research

The team first analyzed the Communities Survey, which provided insights into community characteristics, values, and priority issues. Concurrently, the team compiled relevant background material associated with the island’s governance and policy context, as well as multiple features from the Island living conditions.

Phase 2

Jan-Feb 2024

Community & Stakeholders Engagement

The initial findings from Phase 1 pinpointed knowledge gaps requiring further inquiry, shaping engagement strategies to obtain pertinent information from community members and stakeholders. The objective of engagement was to collect residents’ insights regarding actionable steps to address priority issues.

Phase 3

Mar-Apr 2024

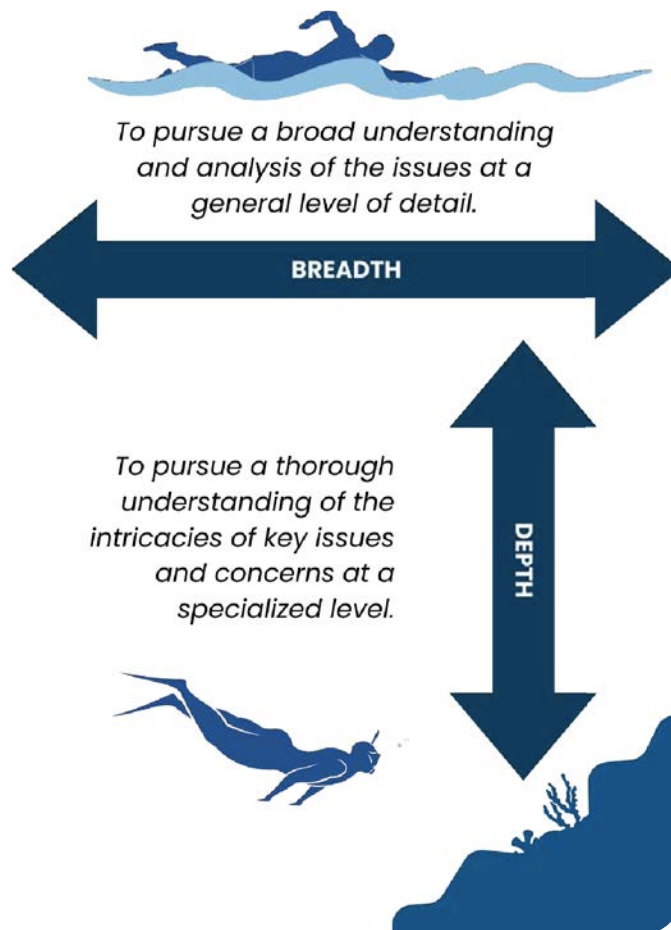
Recommendations & Implementation Pathways

The final phase focused on synthesizing the outputs from the previous phases and providing recommendations and implementation strategies as guidance for upcoming phases in GICA’s REDIP project.

Breadth vs Depth

The team considered two approaches for navigating the project: Breadth or Depth

While a broad approach may offer a comprehensive understanding of the problem from various perspectives, the generalist nature imposes limitations on practicality. As a result, the final outcome would likely feature high-level recommendations. Given the urgency of certain issues and the constraints of time and resources, the imperative to prioritize led the team to favour a depth-oriented approach for this project.





02

Project Context

Project Context

Cházelkwnech | Gambier Island is located on the traditional, ancestral, and unceded lands of the Skwxwú7mesh Úxwumixw | Squamish Nation. Along with all the life it sustains, the island played a significant role in Squamish culture, tradition, and daily life, serving as a celebrated deer hunting area and a crucial resource-gathering location (Gambier Island Conservancy, 2023). Gambier, the largest island in Howe Sound, sprawls across 6,899 hectares and lies just 10 kilometres northwest of the Horseshoe Bay ferry terminal (see Figure 1). With over 150 year-round residents primarily clustered on the southwest peninsula, smaller communities dot the southern bays, east coast, and some areas in the north. Settlements hug the flatter shores due to the island's steep terrain. In summer, the population swells to over 600 residents.

The southwest peninsula is reachable by passenger ferry, operated by BC Ferries from Langdale to the New Brighton dock. Private-access communities are accessible only by private boat, with private water taxi charter companies like Cormorant and Mercury serving many parts of the island, including some remote areas. Gambier is under a distinctive local government system, being part of the Islands Trust, a local governance model unique to BC that supports planning, zoning and preservation matters, while the Sunshine Coast Regional District (SCRD) delivers rural services like solid waste, emergency planning and some public docks and parks.



Figure 1: Location of Gambier Island

Gambier Island Community Association (GICA)

Founded in 1944, the Gambier Island Community Association (GICA) is a non-profit society and a registered Canadian Charity that advocates for Gambier Island communities well-being through various initiatives, including support for the SCRD's annual clean-up, first aid training, fire safety promotion, and infrastructure projects like parking expansion in New Brighton. GICA liaises with local government bodies for services and zoning matters.

Islands Trust Policy Statement

Under the Islands Trust Act, the Trust Council must create a Policy Statement for the Trust Area's preservation. This Statement guides operations and influences land-use bylaws, the Strategic Plan, and advocacy efforts (Islands Trust, n.d.-b).

In 2019, the Islands 2050 Project was launched to update the Policy Statement and gather public input (Islands Trust, 2021). This update reflects current challenges and prospects, including reconciliation, climate change, and affordable housing. (Islands Trust, n.d.-c).

OCP & Land Use

The official community plan (OCP) is a blueprint for guiding community growth. It details principles and policies for land use and decision-making. It is created with input from community members, First Nations, and provincial agencies. It is aligned with the Islands Trust's preserve and protect mandate and the Policy Statement (Islands Trust, n.d.-d).

The OCP encompasses residential development plans, permitted and restricted land uses, environmental protection restrictions, protected water bodies, among others.

Policy & Governance

1. The Islands Trust

The Islands Trust is a special purpose government with a mandate from the Province to preserve and protect the environment and rural communities of Salish Sea Islands through land use regulation and conservation (Islands Trust, n.d.-a). Local Trust Areas derive from the Islands Trust and are managed by Local Trustees. Gambier Island Local Trust Committee (LTC) is one of 13 local trust committees that make up the Islands Trust federation. The Gambier LTC is responsible for local planning for all the islands in Howe Sound apart from Bowen Island as well as the islands up the Sunshine Coast.

Gambier LTC is currently reviewing its Official Community Plan (OCP), including projects such as forest ecosystem protection, shoreline protection, archaeological preservation, riparian area preservation and access to public docks. The committee is focusing on preserving the forest ecosystem, protecting shorelines, safeguarding archaeological sites, and improving access to public docks (Islands Trust, 2022).

As a critical part of any OCP work, the LTC has begun early engagement with First Nations who have treaty and territorial interests with the island (Islands Trust, 2022).

2. Sunshine Coast Regional District (SCRD)

Established in 1967, the Sunshine Coast Regional District (SCRD) is a local government body facilitating cooperation across its jurisdiction. Governed by a Board of Directors and operating under provincial laws, the SCRD aims to progress the region, provide governance to rural areas, and deliver services tailored to regional, sub-regional, or local needs (SCRD, n.d.-a).

The SCRD is made up of three municipalities and five electoral areas. Gambier Island is located within Electoral Area F: West Howe Sound (SCRD, n.d.-b). The SCRD offers various services throughout electoral areas or municipal partnerships within the region, with costs borne by participants (SCRD, n.d.-c).

Islanders support specific services or "functions" through property taxation. These services include several local parks and trails, the Halkett Bay, Long Bay, West Bay and Gambier Harbour public docks, emergency planning and a unique annual garbage barge service.

Both the Islands Trust and the Sunshine Coast Regional District advocate to other levels of governments and agencies for issues important to islanders (ie Ministry of Infrastructure and Transportation for roads, RCMP for safety)

3. Skwxwú7mesh Úxwumixw (Squamish Nation)

For generations, the Skwxwú7mesh Úxwumixw (Squamish Nation) and other Coast Salish peoples have inhabited and thrived in the area known as Átl'ka7tsem/Howe Sound. As caretakers and keepers of land and knowledge, they play a significant role in developing a regional shared vision. wTheir expertise and stewardship are vital in ensuring that the natural resources of Howe Sound are preserved and utilized sustainably for generations to come (Howe Sound Biosphere Region Initiative Society, n.d.).

Atl'katsem/Howe Sound, including Quawlka (New Brighton) on Cházelknech (Gambier Island), is abundant in Squamish mythology, with numerous place names, village sites, burial grounds, spiritual areas, and resource gathering locations (Squamish Nation, 2014).

Ownership of a Key Facility: New Brighton Dock

.....

In November 2013, the Squamish Nation signed the transfer agreement with the federal government to acquire the New Brighton Port on Gambier Island, one of 15 docks that the federal government divested as part of a more extensive federal government marine structure divestiture policy. The dock is now owned by N'Ch Kay Development Corporation, the economic development arm of the Squamish Nation (Gambier Island Community Association, 2023).

4. Howe Sound Biosphere (HSB)

Importantly, Gambier Island is located within the Átl'ka7tsem/Howe Sound Region, which is divided into three UNESCO Biosphere Reserve zones: Core protected areas, Buffer zones, and Transition Areas. Core areas encompass five high-elevation parks and marine refuges. The biosphere spans 218,723 hectares, predominantly terrestrial, with 89% managed by the Province of BC and First Nations. Approximately 42% of the terrestrial area is conserved, recognizing the unceded territory of the Squamish Nation and claims by other First Nations. The region is a collaborative hub for conservation strategies, linking government, First Nations, corporations, and communities. Gambier Island's location in terrestrial buffer and transition zones and marine transition zones underscores its importance for conservation efforts, including those highlighted for review in its OCP (Átl'ka7tsem Howe Sound Biosphere Region, n.d).

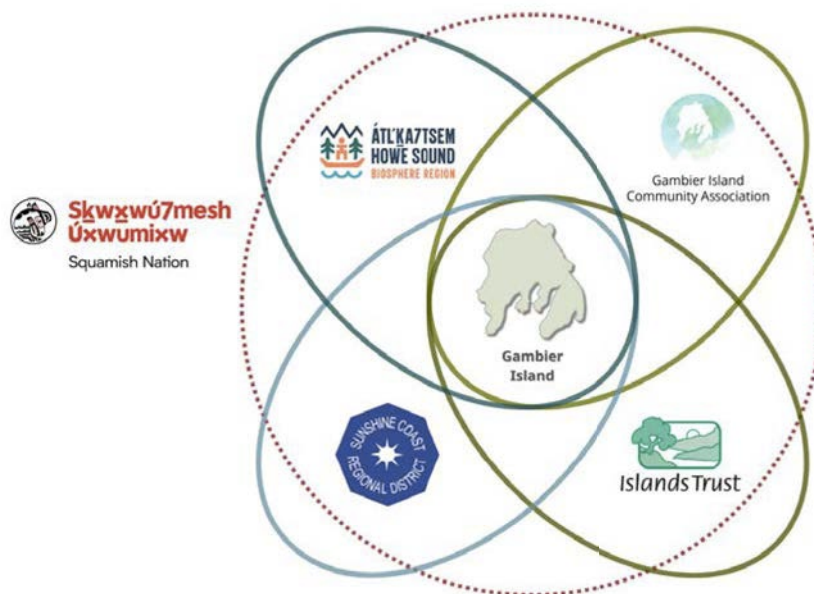


Figure 2: Governance and leadership context encompassing Gambier Island

Communities Survey

With support from SCARP, GICA initiated and executed an island-wide survey of residents and property owners to identify community priorities for Gambier Island. The aim was to gauge the sentiments of Gambier Islanders regarding measures that could enhance livability and foster community resilience.

The survey was conducted online, with the option for respondents to request a printed copy if preferred. It ran from August 4th to September 5th, 2023, resulting in 424 responses, including 421 online submissions and three physical responses.

To facilitate analysis, the island was divided into four regions, two of which contained three subregions each: Southwest (1, 2, and 3), Bays (1, 2, and 3), East, and North (see Figure 3). Within these regions, the survey identified 30 communities. (See **Appendix A**).

The survey comprised two types of questions: factual and attitudinal. Factual questions aimed to collect demographic, economic, and transportation data, while attitudinal questions delved into lifestyle, experiences, values, aspirations, concerns, and priorities. The survey was designed as follows (in parentheses: # of questions):

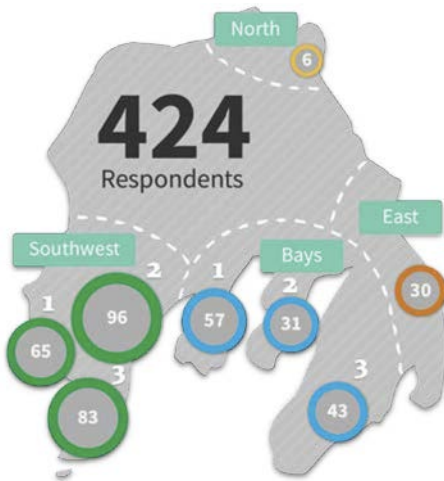


Figure 3: The four Island regions with survey responses (See the next pages for the distribution of responses per region).

Factual questions (21):

- Demography (9)
- Economic activity (6)
- Transportation (6)

Attitudinal questions (8):

- Values & Aspirations (5)
- Priorities (3)

This section will summarize the factual results (demographic, economic activity and mobility/transportation). The attitudinal results will be presented in the following sections (See section 03 Framing Livability)

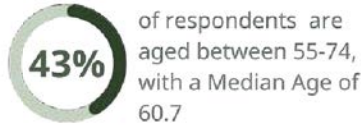
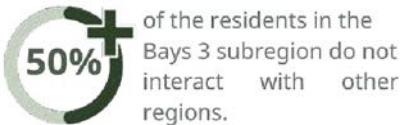
The Communities Survey gathered valuable insights into Gambier Islanders’ diverse perspectives, lived experiences, and concerns, which are mainly shaped by their region and residency type (full-time/part-time). Key findings from the survey are shown in the next pages, while detailed survey results can be found in **Appendix A**.

Distribution of Survey Responses Per Region

Island-Wide



The **further** communities are from the southwest, the **lower** their chances of settling on the island full-time, as it is more challenging to access basic services.

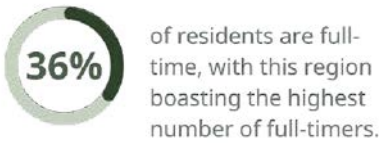


Communities in the Southwest region interact the most with each other.



There is low interaction between the Southwest region and the other regions.

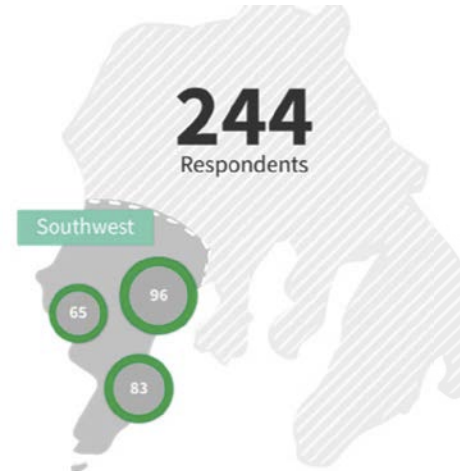
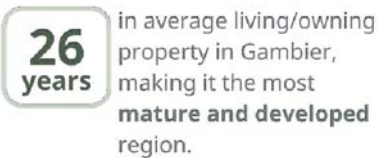
Southwest



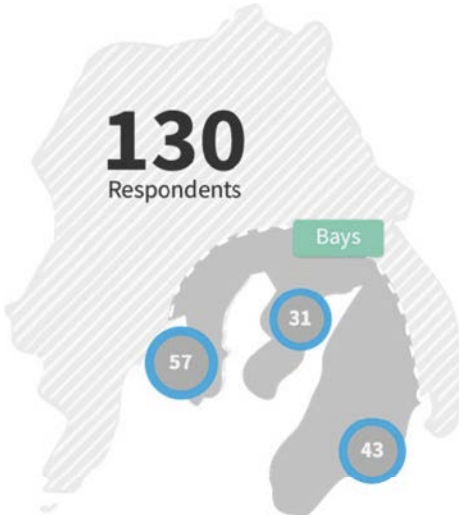
Likely due to relatively superior access to services and social networks.



Only region with residents who **commute off the island**, pointing to the need for reliable transportation services.



Bays



15% of residents are **full-time**, which speaks to the lower access to essential services.

8% of respondents do some type of work locally, showing some potential for **local economies**.

62 years **median age**, raising more discussions around aging in place.

60% use the **water taxi**, however there is still a reliance on personal boats.

Personal boats are used more than land-based vehicles to move around communities as bodies of water (i.e. bays) separate most of them.

East

Considerably a more **self-reliant community** compared to the other regions

10% are **full-time residents**.

16 years in average living/owning property.

Considered the **youngest community** to be formed.



40% **work remotely**; this speaks to the importance of having a better internet and cell connection.

More reliant on off-island food sources.



80% use **private boats** to move on and off island.



North

Most isolated community. Smaller sample of respondents.

80% are **part-timers**; there may be **more barriers** to living full-time.

Highest median age, raising questions about aging in place in a remote location and becoming more vulnerable during emergencies.

100% buy groceries off island relying only on very distant food sources.

These communities are reliant on **private transportation** as there are no services provided.



Problem Statement

Despite Gambier’s cherished island lifestyle, its communities confront notable challenges which, together, weave a complex tapestry of barriers that impact the well-being and resilience of Gambier communities (see Figure 4).

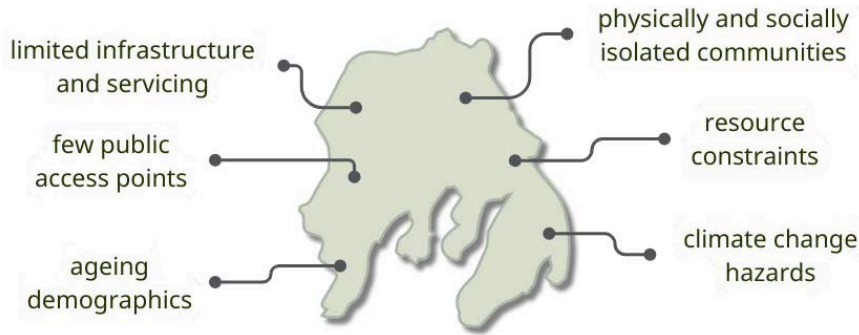


Figure 4: Barriers Impacting Community Well-Being

Remote Geography and Isolation

The communities’ geographical characteristics hinder access to essential services, resources, and certain opportunities (e.g. healthcare accessibility and social connectivity), exacerbated by limited transportation options. Insufficient investment in infrastructure, emergency response capabilities, and public amenities leaves communities burdened with the task of providing for themselves.

Aging Demographics

Many communities grapple with aging populations, heightening risks related to health, social isolation, and accessibility. The scarcity of adequate support and specialized care further magnifies the vulnerabilities of these age groups.

Low Capacity and Resilience

With limited human and financial resources, the residents face challenges in developing and implementing sustainable solutions to the Island’s most pressing challenges. The inability of many communities to organize or effect change hampers endeavours to adjust to evolving environmental conditions, minimize risks, and cultivate lasting resilience.

Risk of Wildfires and Climate Change Hazards

Climate change poses a growing threat to island communities, increasing the frequency and intensity of wildfires and other environmental hazards. These events endanger lives and property and disrupt vital infrastructure.

By prioritizing the enhancement of livability amidst the Island’s unique characteristics and circumstances, the island’s residents can strive towards a more resilient, safe, and healthy future.



03

Framing Livability

Framing Livability

Our community-based approach to framing livability was first informed by the Communities Survey, which used 'attitudinal' questions to describe communities' lived experiences, values, aspirations, concerns, and priorities. This section summarizes the results.

Community Values & Aspirations

When residents were asked what Gambier means to them, the word 'Community' was highlighted as the most important attribute. This was followed by the words 'Nature' and 'Quiet/Peaceful'. When asked to describe Gambier's future, many residents expressed 'Community' as what they will continue to value and what they hope to preserve the most. This was followed by the attribute of 'nature.'



Figure 5: Current Values for Gambier Island residents



Notably, the words 'Family,' 'home,' and 'retirement' were also identified as key aspirations for the future, expressing hopes of a long-term stay with family on the island. These results demonstrate Gambier residents' affinity for building community, bonding with family, and reconnecting with nature and their well-being.

The highlighted attributes were placed in two word clouds to visually represent residents' current and future values (see Figures 5 & 6).

Figure 6: Values for the Future of Gambier Island residents



Residents also voiced their primary challenges and concerns, which revealed additional underlying values that community members wish to protect. The Student Team synthesized these findings into four emerging themes for livability (see Figure 7). They include Community, Safety, Accessibility, and Resilience. These themes informed the next phases of the project.

Figure 7: Emerging Themes for Livability

Issues & Priorities

To gauge what major livability issues arise for island residents, the Communities Survey required respondents to choose seven (7) priority areas of potential improvement from a list of 46. The respondents were then prompted to rank the selected seven issues starting with 1 as their top priority over all, followed by the ones with lower levels of priority, which helped determine the overall community ranking of main priority issues.

The rankings provided by respondents were analyzed by region to identify both island-wide and region-specific priorities (see Figure 8). This process gleaned the following results:

- Multiple communities around the Island have unique sets of priorities that warrant targeted and context-specific actions. However, some issues overlap among regions.
- Fire is ranked as the number one concern by ALL communities, for both the present and future.
- Fire, Ferry/Water Taxi, and General Emergency Services are ranked as the top 3 concerns island-wide, reflecting the aggregate results of rankings across all communities. However, the Bays and East regions rank Trash & Recycle and Evacuation Planning among their top 3 concerns, reflecting region-specific priorities.

The ranking results for all 46 areas of improvement per region can be found in **Appendix A**.

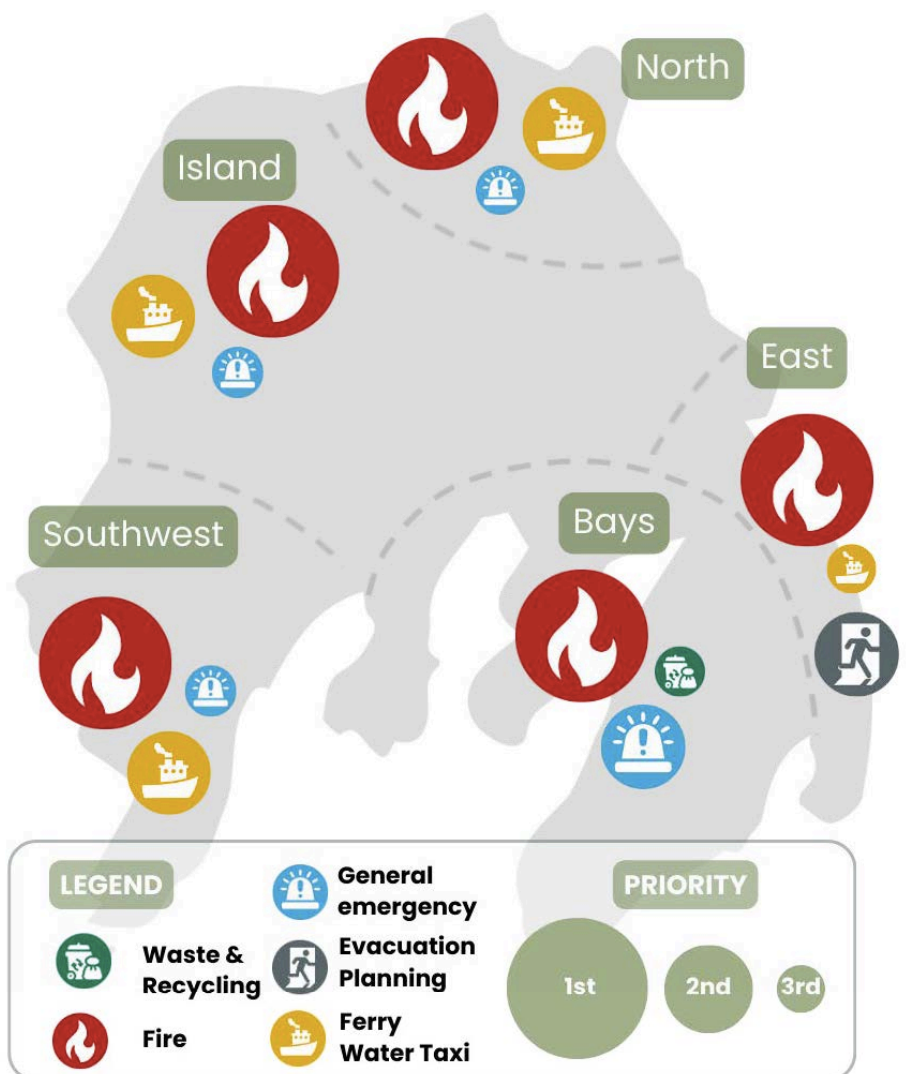


Figure 8: Residents' priority issues by region found through the Communities Survey

Given the team's 'depth-oriented' approach, the top 3 concerns for every region (Island, North, East, Bays & Southwest) were the prime focus of the project. We consolidated them into 5 priority areas/issues: Fire, Ferry/Water Taxi, General Emergency, Waste & Recycle, and Evacuation Planning. Although this project did not seek to address every issue raised by the communities, it concentrated on priority areas selected by residents that are interlinked with additional concerns. Addressing these five principal issues is expected to yield a cascading positive effect, influencing related issues either directly or indirectly. Therefore, it is advised that future initiatives aim to enhance comprehension of unresolved issues by engaging stakeholders and the community, employing a methodology akin to that used in this project.

The following analysis synthesizes what we heard from the communities through the Communities Survey on the top 5 priority issues they face. These priorities were the foundation for Community Engagement and Action Mapping processes.



"Whether we like it or not, we are first responders in our communities."

Fire

Communities across Gambier Island have agreed that fire is a significant issue. In the absence of municipal fire response, fire prevention is an essential shared responsibility that community members have started to organize around. Namely, the Gambier Fire Equipment Group (GFEG) is an established community network that provides frequent summertime demonstrations and practice sessions. Its current capacity is primarily organized in the Southwest Peninsula, though it actively supports other communities as well.

It is also apparent that different communities around the island are at various stages of fire preparedness and have different capacities to respond. In the Bays region, residents noted the need for better awareness and enforcement of bans, regulations, and penalties, considering the lack of existing resources and community ability to respond to fire emergencies. In the East and North regions, residents expressed need for a comprehensive and coordinated firefighting response.

Ferry/Water Taxi Services

Passenger ferry and water taxi services are vital for transporting residents and goods, connecting them to essential services, employment opportunities, and recreational activities on Gambier Island. Particularly in the Southwest Peninsula, residents have expressed a need for increased capacity and frequency of the Stormaway ferry route to Langdale, especially during peak tourist seasons.

For communities not directly connected to the New Brighton dock, the need for greater mobility manifests in a few different ways. The closure of road access to the New Brighton dock significantly impacts mobility for residents in the Bays region, removing a key transportation route from their use. Communities outside of the Southwest Peninsula face practical challenges accessing the public ferry service, leading residents in the Bay and East regions to advocate for reliable and subsidized water taxi services. Additionally, residents in the North region advocate for improved connectivity to both Horseshoe Bay and the Sunshine Coast.

"Our Connection to the World"





"All is well until it isn't!!"

General Emergency Services

Adjacent to the connectivity issue is the question of how Gambier residents can access reliable and timely emergency services. Residents across the Island highlighted various examples of time-sensitive emergencies (e.g., health emergencies, fire suppression efforts) that require coordinated responses to ensure the safety of islanders. Many residents in the Bays region also mentioned the lack of reliable and consistent telecommunication services that would be critical for receiving important information like power outages and wildfire alerts. A few residents also noted Search and Rescue as an area that could benefit from capacity-building efforts around the Island.



Evacuation Planning

To respond to emergencies and disasters including fires, Gambier residents have surfaced the need for a coordinated evacuation plan involving communities living close together. Hence, the demand for evacuation planning is intertwined with the Island-wide top 3 concerns mentioned earlier, especially when community-coordinated responses fall short in addressing specific situations. Residents also stressed the importance of evacuation planning to accommodate the influx of part-time residents, visitors, and Camp visitors during the summer season.

"How to quickly get off the island?"



"Improve access to waste collection & diversion"

Waste & Recycling

Sunshine Coast Regional District runs the Islands Clean Up program - an annual residential garbage and recycling collection service for residents on Gambier during the summer months of each calendar year. Gambier residents across the Island note how this service is limited in frequency and the selective range of accepted waste materials.

Asset Mapping

Through engagement with various communities on Gambier Island, residents provided vital insights on the existing resources and assets that can be leveraged to address livability issues such as fire risk, evacuation and emergency planning, waste management, and ferry/transportation. These assets and resources are reflected in the graphic below (see Figure 9). They have been categorized based on issue and are community specific as opposed to Island-wide. Assets that are designated as island-wide can be leveraged by all communities on Gambier Island, whereas community-specific assets may only be used by the community they belong to.

It should be noted that this compilation of assets and resources is continually evolving. Further engagement with communities on Gambier Island, which the Sound Planning team did not directly engage with, will be necessary to enhance this dataset and develop strategies tailored to address these issues on a community-specific basis. Additionally, this asset mapping exercise can be done again in the future for other important livability issues that were not a focus of this project but were identified as important to the residents of Gambier Island.

Refer to **Appendix B** for additional information on the assets and resources highlighted in **Figure 9**.

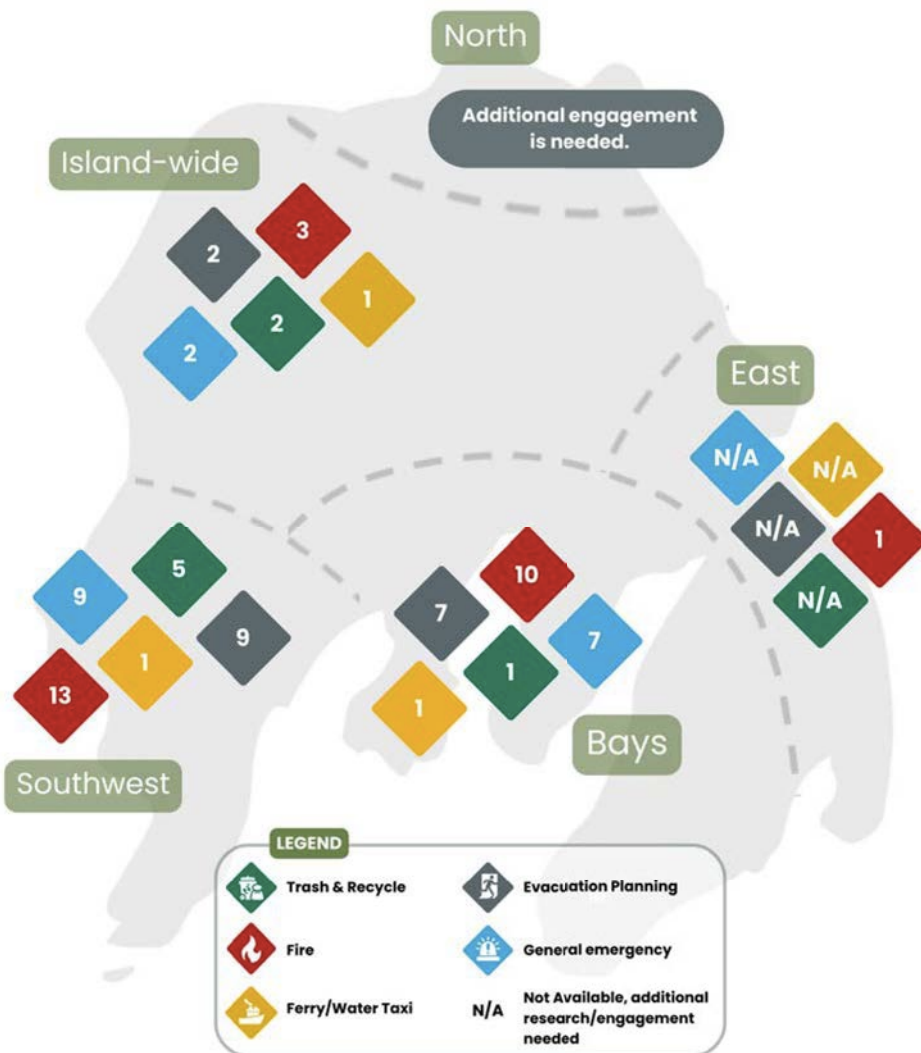


Figure 9: Issue-specific Resources & Assets per Region





04

Community Engagement

Community Engagement

Phase 1 was meant to provide an understanding of visible and distinct living dynamics on Gambier. It was also meant to identify knowledge gaps and any missing pieces for fulfillment during subsequent project phases. Some of the most relevant questions raised from Phase 1 are:

- *How differently does each community experience the same issues?*
- *What are the specific capacity gaps in each community?*
- *What actions could be taken locally to address the issues?*

Phase 2 aimed to clarify some of these missing pieces.

The team advocates for community engagement as the optimal method for addressing questions regarding the community's concerns, aspirations, capacities, and ideas. Meaningful engagement facilitates improved decision-making, aligns with community interests and values, and enhances communication, implementation, and ownership of any proposed path forward by residents.

To achieve the two guiding objectives for engagement and account for the varying contexts between communities on Gambier, the project adopted four strategies to connect with different networks of Gambier residents and stakeholders. The outreach of each engagement approach was championed by GICA members and the REDIP Oversight Committee - with representations from Southwest Peninsula, West Bay Landing, Gambier Estates, Brigade Bay and Islands Trust.

Engagement Objectives

1

Expand on **community resources** and identify **issue-specific gaps**

2

Explore **locally-specific strategies** and actions to advance livability

Our 4 Engagement Strategies

100+ touchpoints resulted from the four strategies.

1. *In-person community engagement at the Gambier Island Community Center (South west peninsula)*
2. *Virtual community engagement (1 for private-access communities, 1 for Southwest)*
3. *Online Action Mapping survey engagement open to all Gambier Residents*
4. *Interview with Kate-Louise Stamford (Gambier Islands Local Trustee & SCRD'S Rural Area Director)*

In-person engagement (1 session)

February 17, 2024



26

in-person participants

Virtual engagement (2 sessions)

February 12 & 20, 2024



24

online participants

Action Mapping survey

February 12-26, 2024



58

survey responses

Stakeholder interview

February 7, 2024



1

1-on-1 interview

During each engagement session, the team presented on the state of the project, including emerging themes and findings from Phase 1. Furthermore, we conducted action mapping workshops where community members were divided into issue-specific group discussions and were given the task of coming up with a set of local actions to address the top priority issues. The online action mapping survey asked similar prompt questions as the engagement workshops. The interview inquired about feasibility of certain service improvement and guidance towards relevant actions. For more details on the Engagement and Facilitation plans see **Appendix C**.

The findings from the engagement sessions and action mapping workshops are summarized by issue below, and Engagement notes and photos are included in **Appendix D and E**. Note that Evacuation Planning as an issue is encompassed by General Emergency Services. For this reason, both were unified into "Emergency Services & Evacuation".



Fire

Southwest Peninsula



The Gambier Fire Equipment Group (GFEG) has been the leader in cultivating shared responsibility over fire risks in the Southwest Peninsula. With its roots tracing back to 1980, GFEG has a demonstrated record in acquiring fire suppression equipment, organizing summertime practice sessions, and facilitating community mutual support. The group recently acquired and retrofitted a fire truck which is a celebrated milestone in the community. GFEG's ongoing commitment to this issue and the culture of volunteerism in the Southwest Peninsula were highlighted as important assets for actions moving forward.

Several gaps were flagged as the entry points to improve fire response in the Southwest. There is the concern over the sustainability of the funding mechanism to purchase more fire equipment in remote areas and for a more reliable, team response. The question of community capacity underpins many of the conversations during engagement given the aging demographics on Gambier. Fuel management was also identified to be an area of concern, particularly around the trimming of high-risk shrubs and branches around power lines and the uncertain road conditions for a timely response to remote fire when it does occur. GFEG is currently looking towards becoming a separate registered not-for-profit organization such that they

are able to collect and administer donations independent of GICA. Though some GFEG members noted the operation of fire equipment and community capacity will continue to be a practical concern.

The community in response to the current circumstances have proposed several ideas to address these issues. Suggestions include raising community awareness using FireSmart and well-received resources, conducting a feasibility study for establishing a volunteer firefighting department, recruiting more committed volunteers to be a part of the community response, exploring enforcement mechanisms for fire restrictions and ban, and organizing community campaign to remove fire fuel from the forest floor. Residents also mentioned the importance of taking on an intergenerational approach to address these challenges - intentional engagement with this demographic could be incorporated into future capacity building initiatives.

Private-Access Communities

Private-access communities around Gambier are proactively organizing fire mitigation and suppression in response to the lack of infrastructure servicing within their neighbourhoods. In the Fircom Plateau, Sunset Estates, and Gambier Estates area - property owners have taken initiatives to organize resources through registered community societies, governed under the BC Societies Act. Property owners in these communities can opt-in to pay an annual due, where in turn, the community society organizes essential servicing functions like group fire equipment purchase and road maintenance. Yet contrary to a strata governance model in BC, community members noted that the lack of enforcement mechanism means only 50% of property owners pay into this servicing arrangement - resulting in the 'freeloader' problem where community amenities are not equitably funded by all of its users.

During the engagement with Brigade Bay and Sea Ranch communities, participants highlighted the different ways in which the current approach to mitigate fire risks are confounded by several structural conditions. The issue of wildfire hazard is directly linked to how much property owners will be assessed for their home insurance. As some property owners are already seeing unaffordable insurance rates, the trade-off to opt-out of insurance altogether will only become more pronounced in the coming years. Moreover, community members through prior engagement with BC Wildfire Service (BCWS) learned BCWS's mandate is to manage fire on provincially-managed crown land, and not to structural fire on private properties.

In response to these concerns, engagement participants suggested seeking greater clarity with BCWS on the what, when, and where will trigger a BCWS response in order to identify gaps in servicing. There is also significant interest to explore the potential for professional, reliable firefighting services - either through expanding fire protection services from a nearby jurisdiction, or collaborating with other communities on Gambier to establish this protected service.

Expanding community capacity and awareness on fire preparedness was another common thread between online engagement and survey responses. Several actions were suggested under this theme: 1) Promote fire-sighting protocols with tug-boat, ferry operators who have regular views over the Island; 2) Public education on fire ban and restrictions for both visitors and residents alike; 3) forming a rapid response network across different Gambier communities; 4) remove fire fuel from high-risk areas; 5) expand FireSmart assessments across communities.



Waste and Recycling

Southwest Peninsula



The Southwest community of Gambier Island possesses various assets that make community organization around waste and recycling relatively feasible compared to other areas of the island. These assets include a Barge service, which is an essential tool in transporting large volumes of waste and large waste items from the island. The Southwest also contains roads connecting various sub-communities, and residents who own large trucks suitable for waste collection. This would allow the community to organize a waste collection service through a community agreement of their design, where waste could be collected at each property rather than at a pick-up point on the docks. This would ease existing challenges for waste collection within the community, as some residents stated during engagement that this poses barriers for vulnerable populations that do not have the physical capability of transporting their garbage to pick-up points.

Engagement on this issue with the Southwest community also supported the identification of various types of waste on Gambier Island and the barriers to disposing of certain items. The types of waste identified were: solid waste, recycling, biological waste, construction and renovation waste, toxic waste, ocean waste, and large junk items such as docks, boats, and cars. The issue of how to manage the accumulation of these waste types was raised, as certain waste types like large items are currently going unmanaged by the community, and others such as ocean waste are being collected on an ad-hoc basis by residents as it is observed. Residents also stated that there should be more effort from relevant governance bodies overseeing the Howe Sound region on regulating ocean waste, particularly Styrofoam.

Private-Access Communities



Community engagement with Brigade Bay and Sea Ranch uncovered various challenges and improvement suggestions regarding waste and recycling on Gambier Island. Full-time residents face difficulties in regularly transporting waste off the island, leading to storage issues. Some resort to burning waste, posing fire risks due to lax waste management regulations and a lack of promotion for zero-waste practices.

Transporting large waste off the island is problematic, as the Sunshine Coast only collects certain items, such as batteries, every four years. Residents emphasize the need for better guidelines and enforcement to foster personal responsibility. Promoting a zero-waste mindset requires community education and advocacy, especially concerning pesticide use and natural solutions. One of the largest issues right now is discouraging the use of pesticides and herbicides to remove rats and other invasive species on Gambier Island. While the use of natural solutions is preferred by many, there is a need for adequate community education and capacity building to support this.

Several suggestions were made to combat these issues, however, residents raised concerns surrounding constraints they would face with the current stock of resources and gaps in their communities. Suggestions included a community composting area, but maintenance challenges exist due to the ratio of full-time to part-time residents. Enforcing a damage deposit for timely waste removal of large items was also proposed, though enforcing regulations through the Sunshine Coast on Gambier Island has been challenging in the past.

Ferry/Water Taxi Services



Southwest Peninsula



The Stormaway generally maintains a punctual schedule, which is appreciated by Gambier residents. Additionally, the schedule is often more accommodating for Gambier residents compared to the service provided to Keats Island. The availability of grocery delivery services on the Stormaway further enhances convenience for residents.

Several key elements are lacking in the current service. These include the absence of nighttime Stormaway runs, which limits transportation options for residents after hours. Additionally, maintenance of the dock is an area of concern. The lack of 6 AM departures to catch the first big ferry poses challenges for commuters. Insufficient space on the Stormaway during busy periods, especially weekends in peak seasons, is another issue. Moreover, the absence of a second boat during peak seasons, particularly spring and summer, exacerbates transportation constraints. The unresolved issue of dock ownership for New Brighton further compounds these challenges.

Several action items could address these shortcomings. Implementing a Gambier-specific boat ride-sharing app, akin to 'Poparide' could optimize transportation resources. There is also a need to expand discussions regarding the Stormaway schedule to better meet community needs. Elevating the priority of dock maintenance to relevant authorities, such as the BC government, BC Ferries, and the local MLA, is essential. Educating Stormaway staff to approach the dock at a slower speed could improve safety and efficiency. Reinstating milk runs to reduce waiting times for passengers is another potential solution. Additionally, advocating for guaranteed boarding on BC Ferries' Langdale to Horseshoe Bay route could enhance accessibility.

Collaborative efforts within the community can address transportation challenges effectively. Coordinating Stormaway runs to align with school schedules, particularly the 2:25 PM runs for school kids, could improve accessibility. Developing an app for boat ride-sharing would facilitate community-driven solutions. Moreover, it's worth noting that according to the current service agreement between the Stormaway and BC Ferries, additional runs may be considered when annual ridership exceeds 55,000 people, suggesting the potential for future improvements.

Private-Access Communities

The Sea Ranch community is a strata and working farm. The community contributes to infrastructure maintenance through strata fees paid twice a year, which includes funding for a barge service that transports lumber and feed.

The Sea Ranch is part of the regular Mercury water taxi run that serves Keats, Gambier Harbour, West Bay, Fircom, and Centre Bay. In the summer months, the water taxi service runs 4 times a day, while in the winter it runs 3 days a week including weekends. Residents have expressed that they face some limitations in accessing water taxi services, due to high parking costs on mainland docks, particularly in Horseshoe Bay. While not unique to Gambier Residents, these costs can make it significantly more difficult to get to Gambier Island. Some residents also choose to use private transportation options that leave from other docks and marinas, including Sunset Marina in West Vancouver.

Despite some challenges associated with using water taxi services, including limitations on what can be brought from the mainland, residents generally feel that it is more economical to utilize them as opposed to owning their boat. This is largely due to expenses associated with boat ownership, including capital costs, insurance, maintenance, fuel, docking permits, the cost of construction and maintenance of private docks, or the fees for private moorage in marinas.

As a Homeowners Society, Brigade Bay is responsible for the maintenance of public roads (Mount Artaban road) and the private dock, with community members paying annual fees of about \$1,300 with a near 100% compliance rate. Brigade Bay residents do not pay for sewer, or animal control, nor do they have dedicated fire services. However, they do have extensive fire equipment infrastructure that has been built up over the last 16 years, largely thanks to volunteerism that continues to support the maintenance of infrastructure, reducing costs for the community.

In all, residents face certain challenges related to access to trades, particularly outside of the Southwest region. Lack of access to trades can pose significant barriers for residents who may not have the financial means or skills to address maintenance and repair needs. To mitigate these challenges, communities often share equipment and resources, emphasizing the importance of communal support and resource sharing among residents.



Emergency Services & Evacuation

Southwest Peninsula

Insights gathered from the Southwest indicate that the region benefits from an acceptable level of infrastructure and service accessibility. This includes amenities such as BC Hydro, reliable internet, roads, ferry connections, public docks, and a helicopter landing pad. Of greater significance is the presence of a sizable year-round resident population and strong community ties. These factors facilitate smoother planning processes and community coordination.

Moreover, the southwest peninsula is equipped to handle certain health and fire emergencies, with clear informative maps outlining the location of essential resources. Informal communication networks via platforms like Whatsapp and

Facebook groups further enhance emergency responsiveness at a local level. However, residents express concerns regarding the unpreparedness for larger-scale emergencies spanning neighborhoods, communities, regions, or the entire island.

In terms of preparedness, residents feel there is insufficient emergency response equipment, training, and capacity among community members. The absence of comprehensive emergency and evacuation plans, communication protocols, and a centralized response center to coordinate with other levels of support (e.g. Regional District, Province) exacerbates these concerns. Additionally, there is a glaring lack of risk assessment for identifying community-specific hazards, as well as inadequate maintenance of public infrastructure to mitigate vulnerabilities.

Despite these challenges, residents demonstrate a proactive attitude towards addressing gaps in community capacity. Suggestions include initiating discussions with neighbors to formulate household and neighborhood-led micro plans, integrating First Aid training, establishing larger-scale emergency plans, improving communication protocols, and conducting regular drills. Furthermore, special attention is warranted for vulnerable community members, particularly the elderly or those living alone, who may require tailored emergency plans and support measures.



Engagement was guided by the four principles of Emergency management promoted by the Province

Private-Access Communities

Each private-access community faces unique challenges, primarily stemming from geographic isolation, which poses barriers to service provision and community organization. Nevertheless, these communities exhibit resilience by adapting to their circumstances and exploring solutions to overcome challenges.

Preparedness efforts vary across communities, with some relying on shared fire suppression equipment procured through community associations (e.g. Sunset Estates, Gambier Estates and Fircom Plateau). However, less structured and consolidated communities may face challenges in implementing such measures due to reliance on household independence, resulting in high costs for each household. It was heard that communication strategies during emergencies often center around platforms like Whatsapp, although intermittent Internet and cell services necessitate exploring alternative communication systems.

Evacuation strategies revolve around private boats or water taxi services, with potential for leveraging on community-based ride-sharing platforms. Collaborative partnerships with organizations such as Camp Fircom offer opportunities for resource sharing and mutual support during emergencies. Mitigation efforts emphasize understanding neighbors' needs and existing resources to develop effective emergency plans. Addressing existing gaps and vulnerabilities can enhance community resilience and reduce negative impacts during emergencies.

Similar to the Southwest, private-access communities shared their struggles with limited individual and community capacity for recovery following a catastrophic event. Rising insurance costs due to heightened risks underscore the importance of implementing mitigation measures. Some residents express a need for accessible healthcare services and wellness facilities, particularly for regular medical check-ups for the elderly, although this didn't show in all communities.

In summary, while challenges persist, both the Southwest Peninsula and private-access communities demonstrate resilience and proactive approaches towards enhancing emergency preparedness and community resilience. Collaborative efforts and targeted interventions can further bolster their capacity to mitigate, respond to, and recover from emergencies effectively.

Stakeholder Engagement

As part of the Stakeholder and Community engagement phase of this project, the Sound Planning Student Team interviewed Kate-Louise Stamford, Gambier's Islands Trust Representative and SCR D Rural Area Director, in February 2024. The Director discussed several topics with the team, including the role of local government in working with the island communities to address the focus issues of this project as well as the limitations regarding policy and regulatory intervention.

In response to islanders' comments about taxation and relative service provision, Ms. Stamford recognized the limitations of available services to island communities. She noted that for the Regional District, Islanders only pay into functions that they use. This is complicated by the evolution of functions that causes under payment in some areas, such as docks, and overpayment in other areas such as public transit, which is hardly available to any islander.

Regional Districts cannot easily adjust between functions so the priority is to see the whole contribution and try to give fair service back. Because of the isolated community nodes across Gambier, this disparity of service availability is more pronounced as not all islanders have access to specific parks or docks. Director Stamford said she would provide ongoing communication about how taxation works at the Regional District level.

From the Islands Trust preview, Trustee Stamford outlined how the Official Community Plan (OCP) and Land Use Bylaw (LUB) influence the appearance and structure of communities on Gambier Island. For instance, a community policy to not have a car ferry and to limit interconnecting roads creates isolated neighborhoods. The Islands Trust population density management mechanism is parcel size, so properties are generally large and, therefore, expensive to purchase.

Regarding the significant risk of fires on Gambier Island, the Director highlighted the need for local government advocacy on programs supporting self-resilience and community response infrastructure. She noted challenges stemming from fire response standards, volunteer firefighting groups' eligibility for support, and residents' difficulties in obtaining fire insurance due to increased fire risks from climate change and limited reliance on BC Fire response units. The Director suggested exploring solutions like fire improvement districts as alternatives, although acknowledging the complexities

derived from having a small population, making the alternative less cost-effective. Recent changes in Provincial wildfire response will hopefully provide more avenues for financial support to prevent and fight fires in rural areas. Director Stamford underscored the importance of community and local government mobilization around emergency and evacuation planning which is a priority for the SCR D Board and she has received confirmation that water access communities are on the priority list for review at the SCR D.

Concerning ferry servicing of the New Brighton Dock, Director Stamford continues to reach out to all levels of government with the help of the GICA - New Brighton Dock Committee. There is some support from the Ministry of Water Land and Resource Stewardship to help coordinate a long-term solution that provides appropriate maintenance and capitalization while supporting continued public access to this vital facility. This is one of Director Stamford's top priorities.

Limitations for engagement

- While there were efforts for the engagement activities to be extensive, **it did not encompass all stages of the project nor reach the entirety of the island population.** We recognize that this was a result of limited time and capacity from community members and volunteers, as well as budgetary considerations.
- It is imperative to acknowledge that **communities hold a wealth of local knowledge** vital for fostering a more equitable and trusted decision-making process.
- Findings from engagement activities are influenced by the time of year they are conducted, as population numbers fluctuate throughout the year, especially in areas where seasonal residency composes the majority of population. This poses challenges in reaching certain segments of the community and **speaks to the reality and challenges of bringing residents together** towards collective action.
- Efforts were made to engage private-access communities through accessible formats such as virtual sessions and follow-up surveys; however, there remain pockets of communities, including Douglas Bay and Daisy Bay, where **establishing robust connections proved challenging due to limited existing community networks.**
- Regrettably, community involvement did not extend to the evaluation and prioritization of action items. It is **imperative to afford communities the opportunity to articulate their preferences regarding proposed actions,** integrating their input into the decision-making process of GICA.
- While the findings from engagement sessions are presumed to reflect the sentiments of the communities, it is crucial to acknowledge that **participation levels varied across different demographics, with some communities underrepresented.**
- Notably, the engagement sessions **failed to fully capture the perspectives of the island's youth, who represent the future generation.** Their limited participation can be attributed to their predominantly part-time residency and leisure-based ties to Gambier, presenting challenges in engaging them effectively. Efforts to better involve youth should be a priority moving forward.



05

Pathways to Livability

Pathways to Livability

The Sound Planning team has completed an action mapping exercise supported by community and stakeholder engagement, survey analysis, and issue-specific research, found in **Appendix F**, which has resulted in the compilation of 34 supporting actions for the four focus areas for this project: Waste & Recycling, Ferry/Water Taxi, Fire, and Emergency Services & Evacuation. This section offers a starting point to addressing these four priority issues, and is intended to better inform community conversations and decision-making on the strategic next steps.

Some actions in this section are formulated with an Island-wide lens to indicate opportunity for collaboration, while others are crafted through a community-specific lens to reflect the varying physical and social fabrics on Gambier.

Taking action on livability requires problem-solving that accounts for varying input, timeline, community capacity and strategic opportunities. **The supporting actions outlined in this section are categorized by action type based on 5 typologies.**

Action type based on typology



Actions that would require various types of analysis, identifying opportunities and barriers, and organized collaboration with stakeholders to formulate tangible solutions



Actions that facilitate learning, skill acquisition, and knowledge transfer, and can involve teaching, training, and experiential learning to support residents in being better prepared to address focus issues



Actions that support the community as a whole in strengthening skills, resources, and strategies to address focus issues



Actions that involved the development, acquisition, maintenance and provision of physical and non-physical structures, facilities, and utilities necessary to address focus issues



Actions that are focused on securing financial resources to support the implementation of strategies to address focus issues

Action type based on complexity



Actions that would require various types of analysis, identifying opportunities and barriers, and organized collaboration with stakeholders to formulate tangible solutions



Actions that facilitate learning, skill acquisition, and knowledge transfer, and can involve teaching, training, and experiential learning to support residents in being better prepared to address focus issues



Actions that support the community as a whole in strengthening skills, resources, and strategies to address focus issues

The supporting actions require a range of resources, capacity, organization, and mobilization to implement. **The complexity level of each action is defined on the left.**

Relevant information, additional stakeholders, and existing tools to use as a reference in future implementation efforts are included for various supporting action items as Resources. Some funding opportunities may require support and collaboration from the Islands Trust or SCRD representatives.

Action Mapping Deck

Fire

The primary fire risk for communities on Gambier Island arises from the close proximity of buildings and infrastructure to forests capable of sustaining high-intensity wildfires (SCRD, 2021). This risk is heightened in the "wildland-urban interface," a term used by FireSmart Canada to describe areas where human development and the natural environment meet or intermingle. To mitigate wildfire risk, proactive measures include operational treatments to manage interface fuels, strategic community planning, capacity building, and comprehensive public education.



Resources

- » BC Wildfire Service Mobile App
- » BC Wildfire Service Stakeholder Collaboration Example

Action #1: Expand Fire Sighting With External Stakeholders

Rationale: There is a need for everyone to report active fire. The dispersed geography of Gambier Island prevents effective reporting across communities. There are also concerns within private-access communities on if there may be enough full-time residents around to spot signs of fire. Tugboat ferry operators are suggested during engagement as a point of support given their frequent sightings on the Island.



Resources

- » Home Ignition Zone
- » SLRD – Rural Fire Suppression Resident Guide
- » Firesmart Starts at Home

Action #2: Improve Community Awareness on Firefighting

Community education and awareness is a central pillar to how Gambier has already responded to wildfire risks. There are multiple ideas to how this can be expanded: 1) include fire response information in the Welcome package for new homeowners 2) increase individual awareness on first response items 3) training for the use of existing equipment 4) disseminate well-received resources 5) move rain barrels closer to the house structure 6) co-ordinating equipment purchase and use across Island.



Resources

- » **Conservation Officers Hotline (24-Hour): 1-877-952-7277**

Action #3: Establish Fire Ban Enforcement Protocol

Fire ban in British Columbia is periodically enforced during times of heightened fire risk, typically during hot and dry conditions. One concern raised during engagement was the inability for fire bans to be enforced given the general absence of law enforcement on Gambier. The enforcement of fire ban penalties is typically the responsibility of several authorities:

1. BC Wildfire Service: During periods of heightened fire risk, the Coastal Fire Centre coordinates fire bans and restrictions. Enforcement primarily falls under regional districts' jurisdiction through bylaws.
2. Sunshine Coast Regional District (SCRD): Compliance with fire bans is often managed by volunteer fire departments through SCR D Fire Protection Bylaw #631.
3. Conservation Officers: These officers enforce environmental regulations, including fire bans. They address issues like illegal burning reported by the Cowichan Valley Regional District.
4. Law Enforcement: Police departments may assist in enforcing fire bans, especially in cases of deliberate violations or concerns for public safety.



Resources

- » **Call 1 800 BCHYDRO when tree/hedge is within 3m of Powerline**
- » **Maintaining trees and vegetation on Private Property**
- » **FireSmart Neighbourhood Recognition Program**
- » **Community Resiliency Investment Program**

ACTION#4: Organize Community Campaign to Remove Fire Fuel

Forest fuels are key predictors of fire behavior, with interventions aimed at reducing them to alter fire dynamics from fast-spreading crown fires to less intense surface fires (Forest Practices Board, 2015). Effective fuel management practices involve proactive forest thinning, preserving larger trees for shade, habitat, and biodiversity (UBC Forestry, 2024). Trimming trees near powerlines is also crucial due to their fire hazard potential.

In British Columbia, fuel management has largely relied on private landowners and local governments to protect properties and nearby municipal and Crown land (FPB, 2015). The Community Resiliency Investment program offers funding opportunities for treating hazardous fuels within the wildland-urban interface, presenting Gambier Island with avenues such as FireSmart Community Funding & Supports and Crown Land Wildfire Risk Reduction.

SCR D's 2021 Community Wildfire Protection Plan identifies Gambier's high wildfire risk due to dense values and intermix fuels, along with high-risk fuels near private lands. Given this risk, the plan recommends Gambier develop a comprehensive FireSmart plan, encompassing communication, education, coordination with BC Wildfire Service, and FireSmart assessments.



Resources

- » [Improvement District Services](#)
- » [Mayne Island's Taxing Authority](#)

Action #5: Research the feasibility of Fire Improvement District

[Improvement districts](#) are incorporated public bodies intended to provide municipal-like services such as fire protection to residents within a specified boundary. To become incorporated in the province, it must be established that a regional district is unable or unwilling to establish a service area. The majority of the landowners must then vote in favour to create one ([Improvement District Manual, 2006](#)).

Given the significant gap in fire service delivery, communities on Gambier can explore this strategy to formalize fire protection service and a sustainable funding structure necessary to a successful fire service.

Improvement districts are governed by elected trustees on a 3-year term, and the provincial government collects taxes to recover costs on their behalf. This legal entity can enable communities to have greater access to financing, where the board of trustees may adopt a [borrowing authorization bylaw](#) to finance capital asset construction or purchase that is unfeasible for a community to crowdsource in the short term.

Fire Improvement Districts provide an organizing body for a localized response to fire prevention: 1) issuance of burning permits 2) volunteer fire department 3) levy taxes to support the provision of fire protection. [Sunshine Coast Regional District](#) currently has a working relationship with four volunteer fire department, all of which has a service area defined through improvement district boundaries for taxation purposes.



Resources

- » [Establishing Rural Fire Protection Service](#)
- » [Best Practices in Volunteer Firefighter Recruitment & Retention](#)
- » [FUS Outreach Program](#)

Action #6: Research the feasibility of volunteer firefighting group

A volunteer fire department is where all members of the department, including the chief and officers, are volunteers. [In addition to fire suppression](#), they can also play an active role in rescue operations, bylaw enforcement, and public education. This is the most affordable option to property owners but presents recruiting and retaining challenges to small communities as it requires 15-20 volunteers minimum.

Communities across Gambier are increasingly concerned with the risk of losing home insurance coverage due to the lack of fire protection services. An essential precursor to establishing a voluntary firefighting department is to decide between the following goals:

1. Provide fire protection to decrease risk of losses due to fire
2. Provide fire protection to reduce risk AND lower residential property insurance costs

Insurance companies evaluate fire risks and calculate premiums according to the fire rating established by The Fire Underwriters Survey (FUS). FUS has three categories of fire ratings to classify the level of fire protection in a community. Where established fire departments exist and have received recognition from the FUS, property owners may be able to realize savings on their property insurance. Insurance savings also may not be realized immediately, and the department would have to continuously meet the FUS standards. (Cont'd on next page)

(Cont'd from previous page) Since volunteer fire departments are often an independent registered society, regional districts can collect property taxes on behalf of the department and provide financing for their operations and capital expenses. An example of this arrangement: [Bow-Horn Bay Volunteer Fire Department and the Regional District of Nanaimo](#).

A decision to pursue volunteer firefighting group thus needs to consider: 1) insurance coverage 2) costs, training, 3) funding structure, 4) volunteer recruitment. Given that SCR D's grant-in-aid now excludes fire suppression equipment purchases, a volunteer firefighting group provides the organizing structure to receive [additional grant and funding](#) that can benefit and enhance fire response at a community-wide scale.



Resources

N/A

Action #7: Seek External Funding For More Fire Suppression Equipment

In the absence of SCR D support, communities across Gambier highlighted the need to secure additional provincial funding for more equipment & training to form the basis of fire response. One barrier to implementing this action is that many funding opportunities exclude property owners and community organizations from partaking.



Resources

- » [Making fire safely while hiking](#)
- » [Responsible Recreation](#)

Action #8: Organize Responsible Recreation Campaigns Targeting Summer Visitors

Fire safety education programs, campaigns, and events were suggested to engage with summer visitors who frequent Gambier when fire danger is high. One approach is to have educational signages at various public dock access points and other frequented areas to inform the public on the current state of fire ban/restrictions and foster awareness for water conservation and fire prevention



Resources

N/A

Action #9: Establish Informal Fire Lighting Protocols at a Neighbourhood Scale

A part of what it means to be in community on Gambier is to have neighbourly conversations on personal fire use during times of heightened risk. Community members noted this allows for the appropriate fire response when encountering signs of smoke and ash.



Resources

N/A

Action #10: Participate in FireSmart Neighbourhood Recognition Program

Initiating systematic planning and implementation of fire protection would offer a valuable roadmap to reduce the risk of wildfire affecting people’s private properties. The physical isolation between communities on Gambier, between Gambier and outside communities, has largely meant each community organizes in relation to their particular circumstances like road maintenance, water provision, and mobility needs. Yet, wildfire behaviour is not affected by this physical disconnection between communities and requires collaboration to achieve collective benefits and survival.

While GFEG has been a leader in facilitating information sharing across various communities, [FireSmart Canada’s Neighbourhood Recognition Program](#) presents a framework for planning and mitigating fire risks, with an emphasis on increasing the wildfire resistance of private lands and structures. An essential benefit from initiating this approach is that the program requires local champions to advocate for wildfire safety in their respective neighbourhoods. This is an opportunity to bring together localized networks of community capacity and form a coordinated implementation response on Gambier.

Participation in this program is not contingent on identifying a local champion from every community on Gambier, as the program encourages neighbourhood, subdivision, and community of every scale to build community resilience and trust via fire planning - an essential ingredient to establishing buy-in at the level of individual property owners.



Resources

N/A

Action #11: Research the Feasibility of a Funded Firefighting Service in Private-access Communities

Many residents from private-access communities articulated the interest for professional firefighting service as a more reliable response. Private-access communities on Gambier have unique concerns on fire given: 1) the lack of community capacity as most are part-time residents, 2) BC Wildfire Service will only respond to fire on provincially managed land, not structural fire on private property.

The following ideas were suggested as a part of this action:

1. Exploring service agreements with neighbouring municipalities like West Vancouver
2. Creating an Island-specific professional firefighting service

A detailed feasibility analysis is needed to explore this action given the high cost and the complex administrative process to expand service area from neighbouring jurisdictions. Additional engagement is also needed to understand if this would be a yearlong or seasonal service that is in demand.



Resources

- » [Langford's Fire Hazard Planning Model](#)

Action #12: Establish Covenants on Gambier Island Properties

A restrictive covenant is a zoning tool that Island Trusts can implement to manage how land is subdivided and built upon. Local governments usually make covenants as a condition of a development permit, subdivision approval and/or building permit in matters of public interest.

Examples of covenants include specifying clearing of lands from around residential structures, the on-going maintenance of vegetation, types of building materials, construction design and criteria, and the installation of sprinklers.

However, lots and structures that currently exist are not subject to the covenants unless the owner approaches the local government for permission to make improvements that allow municipal government to request the covenants. The purpose of a restrictive covenant is therefore geared towards promoting responsible homeownership and fire awareness at the time of purchase, rather than a strategy to encourage community action to mitigate the risk from interface fires.

Waste & Recycling

Gambier Island’s existing waste and recycling services consist of an annual solid waste and recycling collection at various sites across the communities of the island, facilitated by the Sunshine Coast Regional District (SCRD). Due to the unique geography of the island as well as transportation constraints, managing trash and recycling has proven to be difficult at an individual-scale. One of the key challenges examined throughout this project was exploring the feasibility of different solutions to better managing waste and recycling on the island through the increase of public/governmental servicing, community-driven organization, and behaviour-focused solutions that promote waste diversion and better household management of waste. Through community and stakeholder engagement, the SoundPlanning team was able to more accurately determine how Gambier Island residents would like to see this issue addressed, as well as discuss the logistics and resources required for various action items.



Action #1: Expand Upon Existing Social and Digital Networks Focused on Buy-Nothing and Upcycling to Encourage Waste Diversion.

Resources

N/A

Identify community and island-wide communication forums such as Facebook groups, WhatsApp groups, email newsletters, etc., and establish guidelines and procedures for residents to procure and/or giveaway items, including eligibility for items.



Action #2: Organize Community-Led Ocean and Shoreline Cleanup of Marine Debris.

Resources

- » [Marine Debris Reporting Form:](#)
- » [Howe Sound Marine Debris Resource Guide:](#) Covers reporting, disposal, mapping, legal guidelines, marine debris, local plans, funding, organizations, and education on waste management (Howe Sound, n.d.)
- » [I Found a Wrecked, Abandoned or Hazardous Vessel: What to do Chart](#)
- » [Best Practices for Dock Management](#)
- » [Clean Coast, Clean Waters Initiative Fund](#)

One of the largest waste issues on Gambier Island is ocean waste and large marine debris that washes up to the shores. Residents often take to collecting plastics and Styrofoam as it is noticed, but there is no system in place for larger-scale clean-up or for reporting larger debris such as abandoned docks and vessels.



Resources

- » [Solid waste management for northern and remote communities](#)
- » [Howe Sound Marine Debris Resource Guide](#): Covers reporting, disposal, mapping, legal guidelines, marine debris, local plans, funding, organizations, and education on waste management (Howe Sound, n.d.)
- » [I Found a Wrecked, Abandoned or Hazardous Vessel: What to do Chart](#)

Action #3: Develop Island-Wide and Community Best Practices for Waste Disposal, Diversion and Management Procedures of Various Forms of Waste Such as Toxic Waste, Renovation and Construction Waste, Large Waste, Ocean Waste, and Biological/Organic Waste

There are many forms of waste that accumulate and pose issues with respect to disposal, diversion and management for residents of Gambier Island. These include solid waste, recyclables, composting and food waste, bio-waste and toxic waste, explosives and chemical waste, building/construction/renovation waste, ocean waste, and large waste such as boats, cars and docks. A Best Practices document for residents that provides guidance on how to divert, manage, and dispose of all these different types of waste would be a significant support to the community. It is recommended that this document be a stand-alone product but can also be incorporated into a revised "welcome package" for existing and future Gambier Island residents. It is also recommended that this product be prefaced by an overarching guideline that residents should "take what they bring," which establishes community and individual responsibility for waste accumulation year-round.



Resources

N/A

Action #4: Develop Clear Communication Channels for Community-Organized Support in Garbage Collection/Drop-Off For Vulnerable Residents

It was raised to the SoundPlanning team through community engagement that the most vulnerable residents on Gambier Island with respect to waste management, are seniors and those with disabilities. Since residents are required to bring their waste to collection sites, which are often the public docks, those who do not have the physical capabilities to transport their waste face increased challenges during the annual waste collection servicing. It was also raised to the SoundPlanning team that there are informal, existing networks within the community based in volunteerism where residents offer support to these vulnerable groups if needed. This is not widely known amongst the community, however, and it is recommended that this network be more formally integrated into the existing community communication channels.



Resources

- » [Sunshine Coast Landfill and Transfer Station Guide: Hours of operation, eligible waste and associated fees, maps and wayfinding, contact information](#)
- » [Gibsons Recycling Depot](#)
- » [Crosby Marine Services](#)

Action #5: Develop a Community-Organized System of Waste Collection

In speaking with key stakeholders from the Sunshine Coast Regional District during the Community Engagement phase of this project, it was raised to the Sound Planning team as well as to community members that the feasibility of arranging a second waste collection for Gambier Island per year is low. This is due to costs and the logistics involved in waste collection. The recommendation for organizing a community-led waste collection service calls for several considerations and logistics.

Firstly, a large vehicle will need to be procured that has the capacity to carry the volume of waste within the Southwest peninsula and Gambier Island as a whole. Through community engagement with the Southwest communities, residents raised the possibility of leasing an existing vehicle that may be owned by a current resident. Alternatively, the community could purchase a vehicle with funds raised through community buy-in or through potential grant opportunities. Alternatively, residents could be required to bring their waste to a collection site at the dock, and this step/expense would not be required. A barge service will need to be arranged to transport the waste from Gambier Island to Langdale/Gibsons for further transport to the Sunshine Coast Regional District Landfill. A large vehicle must also be procured to transport the waste to the landfill from Langdale/Gibsons. While this action item has been proposed for the Southwest peninsula due to the assets such as roads, barge service, and large vehicles, GICA should consider expanding this service to other communities as well. While individual communities could arrange the collection of waste, there is a possibility of identifying additional pickup locations at other public docks to the East of the Southwest peninsula.

Moreover, GICA should assess the eligibility criteria for waste collection services, considering types of waste and their associated fees. Specifically, it should deliberate whether waste with higher disposal costs should be included in the service, thereby distributing the expenses among the community to alleviate the challenge of attributing specific waste types to individual residents. See the linked resource below “Sunshine Coast Landfill and Transfer Station Guide” for a list of accepted waste materials and their associated fees for the Pender Harbour Transfer Station and the Sechelt Landfill.

Ferry & Water Taxi

Opportunities for improving water transportation services on Gambier Island are evident. While service accessibility varies across the island, there is significant potential to increase frequency and capacity of services. Through community engagement, residents identified key areas for improvement, including the enhancement of nighttime Stormaway services, the improvement of dock maintenance, and the creation of early morning Stormaway departures. Residents also emphasized their preferences for enhancements, encompassing the refinement of Stormaway schedules, the development of a ride-sharing app, advocacy for BC Ferry services to align with educational schedules, the establishment of guaranteed boarding arrangements with BC Ferries, and the formalization of water taxi agreements. While addressing some of these challenges may be feasible through the REDIP grant and community involvement, sustained communication and collaboration with stakeholders, particularly BC Ferries, is essential for effecting long-term change in other areas.



Resources

- » Ferry Report previously provided by SoundPlanning

Action #1: Develop a Stakeholder-Informed Report to Guide Enhancements in BC Ferry and Stormaway Services

Create a comprehensive report that documents the current utilization patterns of the BC Ferry and Stormaway services (as provided by SoundPlanning in the **Appendix G. Ferry Report**). The report should include qualitative insights and anecdotal evidence from recent stakeholder engagement sessions, which articulate the preferences and expectations of users regarding the enhancement of service offerings. The purpose of the report is to provide a robust evidentiary basis for presenting well-informed recommendations to policymakers and decision-makers regarding potential improvements or modifications to the BC Ferry and Stormaway services.



Resources

N/A

Action 2: Explore the potential for a ride-sharing platform in Gambier

Investigate the feasibility of creating a ride-sharing application or platform tailored for the residents of Gambier. This initiative aims to facilitate the sharing of departure and arrival schedules, enabling community members to offer or seek rides amongst themselves. Efforts should be made to identify and engage potential users to assess interest levels and to explore viable payment models or expectations for those providing rides.



Resources

N/A

Action 3: Create a Committee to Explore Opportunities for Enhancing Stormaway and BC Ferries Services & Keep Up-to-Date on Ferry's Contract Details for Reference

Create a comprehensive report that documents the current utilization patterns of the BC Ferry and Stormaway services (as provided by SoundPlanning in the Ferry Report). The report should include qualitative insights and anecdotal evidence from recent stakeholder engagement sessions, which articulate the preferences and expectations of users regarding the enhancement of service offerings. The purpose of the report is to provide a robust evidentiary basis for presenting well-informed recommendations to policymakers and decision-makers regarding potential improvements or modifications to the BC Ferry and Stormaway services.

Emergency Services & Evacuation

Emergency management endeavors to mitigate both natural and human-induced hazards and disasters. While the Province of BC and the SCRCD have established response structures, these can be further enhanced by fostering a robust local emergency response system. Active participation from the community plays a pivotal role in reducing risks and bolstering resilience within the emergency management process. Acknowledging the existing emergency preparedness gap on Gambier Island, the team proposes a series of actions aimed at fortifying local capacity and establishing comprehensive plans to be implemented in the event of an emergency.



Resources

- » [Gambier HRVA](#)
- » [Plan2Adapt](#)
- » Community Emergency Preparedness Fund through the stream [Disaster Risk Reduction – Climate Adaptation*](#)
- » Community Emergency Preparedness Fund through the stream [Emergency Support Services Equipment and Training*](#)
- » [Complete Communities Funding program](#)
- » [Disaster Financial Assistance for communities](#)

Action 1: Create a Neighbourhood/Community Emergency Plan

Develop a comprehensive plan outlining responses for various scenarios, emergency levels, and scales, encompassing island-wide, regional/community, neighborhood, and individual/household levels. Key components to include are:

- A communication protocol
- Activation protocol for the Incident Command Post or Emergency Operations Center
- An assembly/muster point
- A contact list
- An evacuation plan
- An inventory and maps of existing services and equipment
- Backup systems in case of outages or loss of services
- A life span/maintenance strategy for all equipment
- Recovery strategies



Resources

- » **Community Emergency Preparedness Fund through the stream [Emergency Operations Centres Equipment and Training*](#)**
- » **[BC Infrastructure planning grant program*](#)**
- » **Complete Communities Funding program**
- » **[Next Generation 911 Funding program](#)**
- » **[Community Gaming Grant](#)**

Action 2: Commission an Incident Command Post (ICP)

The Province and the Regional District have Emergency Response Plans and Operation centers to address emergency situations. However, they require on-site contact points and local response groups to coordinate with. An Incident Command Post is the primary location for on-scene incident command and management. It manages and coordinates all communication and first response to emergencies and is the contact point with higher levels of response (Regional District, Province).



Resources

- » **[SCRD Evacuation Brochure](#)**
- » **[SCRD Evacuation Plans](#)**
- » **Community Emergency Preparedness Fund through the stream [Public Notification and Evacuation Route Planning*](#)**

Action 3: Produce an Evacuation Plan for Multiple Scenarios and Scales

Ancillary to the Emergency Plan. How to evacuate residents with different abilities, in different scales and levels of emergency, and different scenarios, by using existing resources and infrastructure? Sets out the procedures to coordinate internal evacuation with third parties off island.



Resources

- » **[BC Infrastructure planning grant program*](#)**
- » **[SCRD Emergency Alert System](#)**
- » **Complete Communities Funding program**
- » **Next Generation 911 Funding program**
- » **Community Emergency Preparedness Fund through the stream [Public Notification and Evacuation Route Planning*](#)**

Action 4: Have Alternative Communication Systems During An Emergency

The use of social media (as WhatsApp and Facebook) has been the main channel of communication and dissemination of information around all communities. However, it may not be as reliable in case of an emergency due to intermittent cell and internet signal and lack of coverage in certain areas (such as the mountains), and in some cases, residents have no access to technological devices. Alternative communication systems are required for effective and direct notification and information in case of an emergency.



Resources

- » **Community Emergency Preparedness Fund through the stream Public Notification and Evacuation Route Planning***

Action 5: Communication Protocols for Households and for ICP for Different Emergency Levels (household, neighbourhood, community/ region, island-wide)

Residents usually are unaware of what protocols to follow in case of any type of emergency (health, injury, fire, etc.). As one of the first actions, communicating the situation to the appropriate bodies is of utmost importance to have a timely and adequate response. Knowing who to call first, what information to provide, and through which channels, can make all the difference.



Resources

- » [Asset Management Planning Funding Program*](#)
- » [BC Infrastructure planning grant program*](#)
- » Community Emergency Preparedness Fund through the stream Disaster Risk Reduction – Climate Adaptation*
- » [Clean Energy for Rural and Remote Communities Program](#)

Action 6: Asset Management Plan Per Community

A tactical plan for managing infrastructure and other assets to deliver a desired level of service. It outlines the condition and assessment of assets and based on their lifecycle, the maintenance frequency and the decommissioning plan. Having an Asset management plan ensures the sustainability and resilience of systems in a community.



Resources

- » Community Asset Map (keep feeding it)
- » [Red Cross Canada](#)
- » [BC Infrastructure planning grant program*](#)
- » Asset Management Planning Program Funding*
- » Complete Communities Funding program
- » [Risk Management Grants](#)

Action 7: Place Neighbourhood/Community Emergency Kits at Key Locations

Some communities have acquired and placed community emergency kits (large red storage units) around the area, containing first aid response tools, fire suppression equipment and more. Nonetheless, the coverage of these kits has been found to be insufficient, leaving gaps in locations with higher hazard of an emergency event or where more vulnerable populations live.



Action 8: Ensure Household Preparedness

In resource-constrained contexts, a level of self-sufficiency is required. Ensuring you and your household are ready for emergencies is key. Your household should have an emergency preparedness kit with enough supplies to meet the needs of your entire family for at least 3 days.

Resources

- » [BC's Household Emergency Plan](#)
- » [SCRD's Emergency Preparedness Guide](#)
- » [Red Cross Kit Guide](#)



Action 9: Organize a Neighbourhood Program Team Based on the Sunshine Coast Neighbourhood Emergency Preparedness Program NEPP

Neighbourhood programs are designed to help neighbourhoods/communities pre-identify their skills and resources and organize them in case of disaster.

Resources

- » [NEPP booklet](#)
- » [BC Neighbourhood Preparedness Guide](#)
- » [SUNSHINE COAST EMERGENCY PROGRAM](#)



Action 10: General Emergency and First Aid/CPR Training

Knowing how to respond to a medical emergency is part of living in community, being able to help each other when the situation calls for it. Communities need that all residents have the basic knowledge for first aid response, not necessarily being certified. Although, it is necessary for each community to have a group of Firsts Aid/CPR certified volunteers with the proper training to attend larger emergencies.

Resources

- » [Community Emergency Preparedness Fund through the stream Emergency Support Services Equipment and Training*](#)
- » [ESS courses](#)
- » [General Emergency Training \(free\)](#)
- » [Training \(paid\)](#)
- » [Emergency Management Webinars](#)



Action 11: Conduct Drills Based on the Emergency Response Plans/Evacuation Procedures Put in Place

Resources

- » [go2HR Drill Template](#)
- » [OHS Emergency response plan template](#)

As repetitive training activities, drills increase skill and coordination of response protocols, and can be used to build confidence around communities.



Action 12: Wellness and Rehab Room

Resources

- » [BC Infrastructure planning grant program*](#)
- » [Complete Communities Funding program](#)
- » [Community Gaming Grants](#)

Some community members have mentioned the importance of aging in place in Gambier. This requires a health-driven strategy that ensures a safe, accessible and supporting environment. A wellness and rehab room was suggested, as a designated space with medical equipment and tools, where medical check-ins can be conducted. Such a space would work as a First aid room as well.



Action 13: Rural Nurses/Doctors Visiting Regularly

Resources

- » [VCH Rural Practice Program](#)

An important dimension of aging in place is health. Gambier residents would benefit from on-island medical check services, in which a health professional visits the island on a regular basis.



Action 14: Better Response/More Presence From Police

Resources

- » [CCOPA website and resources](#)

Safety in some neighbourhoods has been a concern and some residents feel there has to be more policing. Community-organized policing groups are a common practice for neighbourhoods and communities.

Evaluation Matrix Tool and Selected Criteria

Recognizing the intricate nature of the decision-making process, our team has developed a valuable tool to streamline this process and inform decision-makers on the considerations of each action. This tool is presented as an Evaluation Matrix that assesses each potential action against specific criteria. It encompasses essential components such as the list of actions, their rationales/descriptions, a preliminary evaluation based on eight (8) carefully chosen criteria by the GICA Oversight committee members, a column of Next Steps and Implementation leads. The Evaluation Matrix can be found in **Appendix H**.

Below are the eight criteria and the rationale guiding the evaluation of each action against these criteria:

Cost:

This criterion evaluates the balance between reliance on funding and utilization of community resources. Low cost = Low dependency on external resources and funding, and potential of using only community resources.

Level of agreement:

It gauges the degree of agreement both within and between communities and the potential for contention. High level of agreement = Consensus spread across communities on the priority of the issue and the need of the action.

Relevance:

This assesses whether the action addresses a noticeable gap in the community, affects all members or only a subset, and aligns with broader goals (e.g., island-wide, regional, provincial). High relevance = The action fulfills a critical gap.

Community Capacity Demand:

This criterion measures the amount of time and financial resources required from community members to execute the action. Low capacity = Low levels of human capital and resources required from communities. Other institutions are responsible.

Impacts:

It evaluates how effectively the action addresses the underlying issues. High impact = The action significantly improves the conditions around the issue, mitigating its negative effects.

.....

This criterion combines the assessment of cost and impact to determine the ratio of benefit to investment. It categorizes actions as having equal cost and benefit (medium), greater cost than benefit (low), or greater benefit than cost (high).

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Cost/Benefits:

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This considers the size of the gap (vulnerability versus hazard), the immediacy and severity of the issue's impact on community well-being, and the urgency of short-term needs for change. High urgency = Issue requires an immediate response, otherwise the consequences can be severe.

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Urgency:

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It examines the potential consequences of inaction in the short, medium, and long terms, and explores alternative means of achieving objectives without collective action. High risk = The consequences of the issue will be seen in the short term, aggravating the conditions and making it more difficult to address. Addressing the issue depends on community initiative.

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Risk of not acting:

.....

The 8 criteria were selected from a list of 18 potential indicators (See **Appendix I**). The Evaluation Matrix tool is a living framework which can be adapted by including new sets of criteria, or expanding the list of actions.

By employing the Evaluation Matrix, our team aims to enhance the effectiveness and efficiency of decision-making processes, ensuring that actions undertaken are well-informed and aligned with the needs and capacities of the community. The REDIP Oversight Committee has also been advised to conduct an internal evaluation on these action items given their expertise and better awareness of the changing circumstances on Gambier. Further evaluation iterations from multiple stakeholders is recommended as the team's evaluation shows only one perspective originated from our experiences during the project, the engagement sessions and our research.



06

Overall Recommendations

Overall Recommendations

1. Welcome Package and Information for Prospective Buyers

The welcome package - currently distributed by Island Trusts, is an opportunity for prospective homeowners to understand the everyday reality of life on Gambier. A comprehensive welcome package should detail information regarding infrastructure servicing, accessibility, emergency response, zoning regulations, and community services. This information should be made available before a property purchase, such that prospective buyers can make an informed decision that aligns with their needs and expectations.

To enhance livability on Gambier Island, it is recommended to develop a comprehensive welcome package outlining essential information for individuals considering purchasing property on the island. This package should include detailed guidance on various aspects such as infrastructure, accessibility, zoning regulations, and community services. Furthermore, it can address specific issues relevant to potential buyers, providing insights into challenges and opportunities associated with island living. By equipping prospective buyers with comprehensive information, they can make informed decisions that align with their needs and expectations, ultimately contributing to a more sustainable and vibrant island community.

2. Zoning By-law Enhancement

Aligning zoning by-laws to better reflect the needs and aspirations of the community is a regulatory pathway to promote livability. This includes conducting a comprehensive review, adopting restrictive covenants earlier discussed, and updating existing zoning regulations to accommodate evolving demographics, economic activities, and environmental considerations. By ensuring that zoning by-laws align with community values and development objectives, we can foster sustainable growth and development while preserving the island's unique character and natural environment.

3. Engagement with Skwxwú7mesh Úxwumixw| Squamish Nation

As part of the REDIP project, the oversight committee is exploring the opportunity to engage and collaborate with Squamish Nation on key capacity funding items. In turn, Sound Planning team has been requested to conduct research on a) Squamish's relationship with Chá7elkwnech|Gambier b) Strategic Priorities of the Nation c) Relevant resources to facilitate this relationship building

a) Chá7elkwnech - A Place for Seasonal Hunting: The name Chá7elkwnech, is the Squamish reference for the deep protected bays that the Island offers ([BC Geographical Names](#)). Gambier was a celebrated deer hunting area by the Squamish People and was extensively used for resource gathering at places such as Yuuq-quawkl-ka (Avalon Bay), Ho-mahmk (Brigade Bay), Ch'á7elsm (Halkett Bay) and many other locations of importance.

b) Strategic Priorities of the Nation: There are two public-facing plans that communicate Squamish's vision for their community, land & water. The [Skwxwú7mesh Úxwumixw 2026 Strategic Plan](#) defines who Squamish is as a government and lists concrete actions to achieve their visions. The plan's sections for Our Land & Water & External Relations provide entry points into dialogue and partnership.

[Xay Temíxw Land Use Plan](#) describes how the Nation envisions their land and resources to be protected, managed and utilized for the benefit of present and future generations. Notably, the plan shows the intention to restore health to areas that have been degraded by industrial logging, pollution, erosion and other impacts of development.

[The Nchu'ú7mut/Unity Plan](#) - is a holistic land and marine use plan that is conceptualized for the management of the UNESCO Howe Sound Biosphere Region. Endorsed by the Squamish Nation, the proposed zoning framework outlined within the Unity Plan can serve to inform appropriate Zoning Bylaw amendment on Gambier. Advocating for the implementation of this zoning scheme with Islands Trust can be a next step to promote harmony between human development and nature on the Island.

c) Engagement Considerations: Considering the nature of the REDIP grant and GICA's role as a community association, the following resources offer general considerations when proceeding with the consultation request with Squamish Nation:

- [BC Tourism: 10 considerations when working with Indigenous Communities](#)
- [Respecting Rights and Doing Good Business](#)
- [3 Rs of an effective Indigenous pre-engagement strategy](#)

4. Island-Wide Engagement

An Island-wide response requires Island-wide collaboration. Key issues like: fire prevention, evacuation planning need to involve a greater degree of input from various regions of Gambier Island, ensuring unique place-based context is taken into account when brainstorming the appropriate response. Collaboration on key issues can focus on identifying common priorities, concerns, and aspirations - while acknowledging there may be other issues that require a community-specific solution. Identifying local champions within the various boat-access only communities is a tangible next step to fostering working relationships on Gambier.

5. Research Funding and grants opportunities

In order to finance various of the proposed actions, a Grant committee should be created to write a Grant applications plan based on application deadlines and priorities. A Grant deadline schedule would become useful for the committee to be strategic on which funding opportunities to tackle first. The chart on the right lists some relevant funding sources to explore and to continue regular checking for future opportunities. Some funding sources are limited to local governments, which means that a strong partnership between GICA and the Islands Trust and SCRD must be established, promoting effective cooperation and communication between the organizations to seek senior government funding.

This committee can also take the role of relationship and partnership builder with universities (e.g. UBC, UVIC, SFU, etc.) for further research projects at Gambier.

6. Education on Tax Breakdown by Sunshine Coast Regional District (SCRD)

Promoting transparency and understanding of local governance processes is essential for building trust and accountability within the community. Therefore, it is recommended to provide education on the tax breakdown by the Sunshine Coast Regional District (SCRD) to Gambier Island residents. This initiative should aim to inform residents about how tax revenues are allocated and utilized to fund various community services and infrastructure projects. By building resident’s knowledge of the tax system, the conversation can inform a wider range of alternative solutions

7. West Bay Landing Road Closure

Road closure on the private lot between West Bay Landing and Southwest have presented concerns around access to Stormaway as well as community disconnections. While emergency access is still permitted between the two communities, residents of West Bay Landing have largely been reliant on alternative transportation routes or modes.

From Sound Planning’s research, two planning intervention can be considered to enable access of this mobility artery:

- **Right-of-way Easement:** Easement refers to a legal right that allows someone to use another person's land for a specific purpose, even though they do not own that land. Easements are typically granted by property owners to provide access or utilities to neighboring properties or to ensure the proper functioning of infrastructure. This is a [legal endeavour](#) that requires the agreement of all property owners involved.
- **Right-of-way Expropriation:** Island Trust has the statutory authority to expropriate private land and establish a permanent right-of-way between the two communities. In contrast to an easement, the authority can expropriate the entire interest on a part of the parcel. This is a [legal endeavour](#) with several accountability mechanisms set out to ensure a due process for all parties involved.

Grant Resources

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- » [Community Climate Funding](#)
- » [Federal Funding](#)
- » [Union of BC Municipalities](#)
- » [CivicInfo BC](#)
- » [Green Municipal Fund](#)
- » [Vancouver Foundation](#)
- » [Island Coastal Economic Trust](#)
- » [Investing in Canada Infrastructure Program](#)
- » [Natural Assets Initiative](#)
- » [BC Funding Opportunities](#)
- » [BC Economic development funding & grants](#)



07

Considerations

Considerations

Engagement

Several considerations should be noted with respect to the recommendations raised in this report. Firstly, the SoundPlanning team sought to organize action items and community assets on a community-specific as well as island-wide scale. It should be noted that the SoundPlanning team was not able to connect and engage with all communities on Gambier Island; as a result, the context of key priority issues, community preferences on how to manage issues, and the existing asset and gaps remain unknown for several communities.

As mentioned in the Overall Recommendations section, GICA is advised to continue efforts to connect with communities in the northern region of the island, as well as private-access communities in the Eastern and Bays regions. Through this project's engagement phase, meaningful engagement was done with the Southwest, Sea Ranch, Gambier Harbour, and Brigade Bay communities. Community-specific actions have been highlighted throughout this report for the aforementioned communities, however, all other communities should be considered in island-wide actions until meaningful engagement is completed to develop community-specific responses to these issues.

It was observed during community engagement with regions outside of the SW peninsula, that residents are not aware of the existence of the Gambier Island Community Association, and therefore demonstrated some resistance to the notion that GICA was representative of their interests. As mentioned in the Overall Recommendations section, GICA is advised to develop stronger relationships with communities outside the SW peninsula as this will greatly support the planning efforts that address major livability issues on Gambier Island. This is especially relevant to issues such as fire, evacuation planning, and general emergency that may extend beyond the boundaries of each community and may require island-wide collaboration. GICA will also be able to better represent these communities

via resource allocation and planning interventions through established working relationships. Despite these recommendations however, it is noted that due to geographical constraints, it may be difficult to share resources and establish inter-community collaboration for various regions on Gambier Island.

Interpretation of Action items

Additionally, it should be noted that some action items in the Evaluation Matrix call for multi-scalar intervention from governments, quasi-private, private, and community stakeholders. As a result, they should be interpreted as a first step in GICA engaging with external partners to address these issues through policy, regulatory, and financial mechanisms. Many of these issues are technical and require the expertise of a subject-matter expert, which limits the level of detail of the actions; the actions were informed by community input and research.

Full-time vs. Part time community resources

This project highlights the significance of community capacity and volunteerism in maintaining essential infrastructure and services for residents, which is crucial for addressing life-threatening challenges like fire and emergency planning. On Gambier Island, some communities are off-grid and predominantly consist of seasonal second homes for part-time residents. These residents may not have a continuous population throughout the year, resulting in low human capital, therefore, lower response capacity.

Barriers to implementation

Identified Barriers

Geographical Isolation: The geographical isolation of some communities significantly hampers resource sharing and the establishment of connections with the Gambier Island Community Association (GICA). This isolation can limit access to essential services and support networks, making it challenging to implement community-wide initiatives.

Skepticism: Some community members express skepticism towards the value or

Impact of GICA's efforts and initiatives. These perspectives can stem from various sources and for various reasons, including past experiences, distrust in leadership, or a lack of perceived relevance of GICA's actions to individual needs, thereby hindering collaboration and engagement.

Connectivity with Other Communities: There is a sentiment that GICA should intensify its efforts to reach out and establish meaningful connections with other communities. Strengthening these connections could enhance resource sharing, knowledge exchange, and mutual support, which are vital for addressing everyday challenges.

Differences in Community Participation: The presence of part-time residents may contribute to a lack of communal support for local resources and infrastructure.

Difficulty in Obtaining Government Support: The challenge of enacting change on Gambier Island is significantly exacerbated by the difficulty in obtaining government support, a situation largely attributable to the island's physical isolation and its consequent absence from the attention of policymakers. This isolation not only renders policy interventions difficult to secure but also amplifies the cost of addressing the island's unique challenges, often pushing potential solutions beyond the realm of financial feasibility. The pathway to requesting necessary upgrades or services is beset by complex bureaucratic channels, making navigation through these processes a daunting task for residents and stakeholders.

Moreover, attempts to connect with the relevant governmental bodies assigned to manage distinct areas or subjects are further complicated by a lack of clear jurisdictional boundaries within the governmental structure. This ambiguity results in uncertainty regarding the appropriate points of contact for addressing specific concerns, thereby complicating effective engagement processes with government authorities. This amalgamation of factors creates an obstacle to progress, significantly impeding the implementation of change on the Island.

Community Support for Essential Services: Essential services, which require continuous management like fire and emergency response, depend heavily on the active support of the entire community to maintain safety and preparedness. When a significant number of residents are seasonal or part-timers, or in communities where some members are less engaged, it can challenge the effectiveness and reliability of these crucial services, potentially affecting the well-being of all residents.

Steps to Overcoming Identified Barriers

To overcome the identified barriers to implementing actions for mitigating community issues, several strategies can be adopted:

Enhanced Communication: It is crucial to develop clear and open communication channels that can build trust and understanding within and between communities. This approach will help in dispelling resistance or defensiveness against community initiatives and in promoting a more collaborative environment.

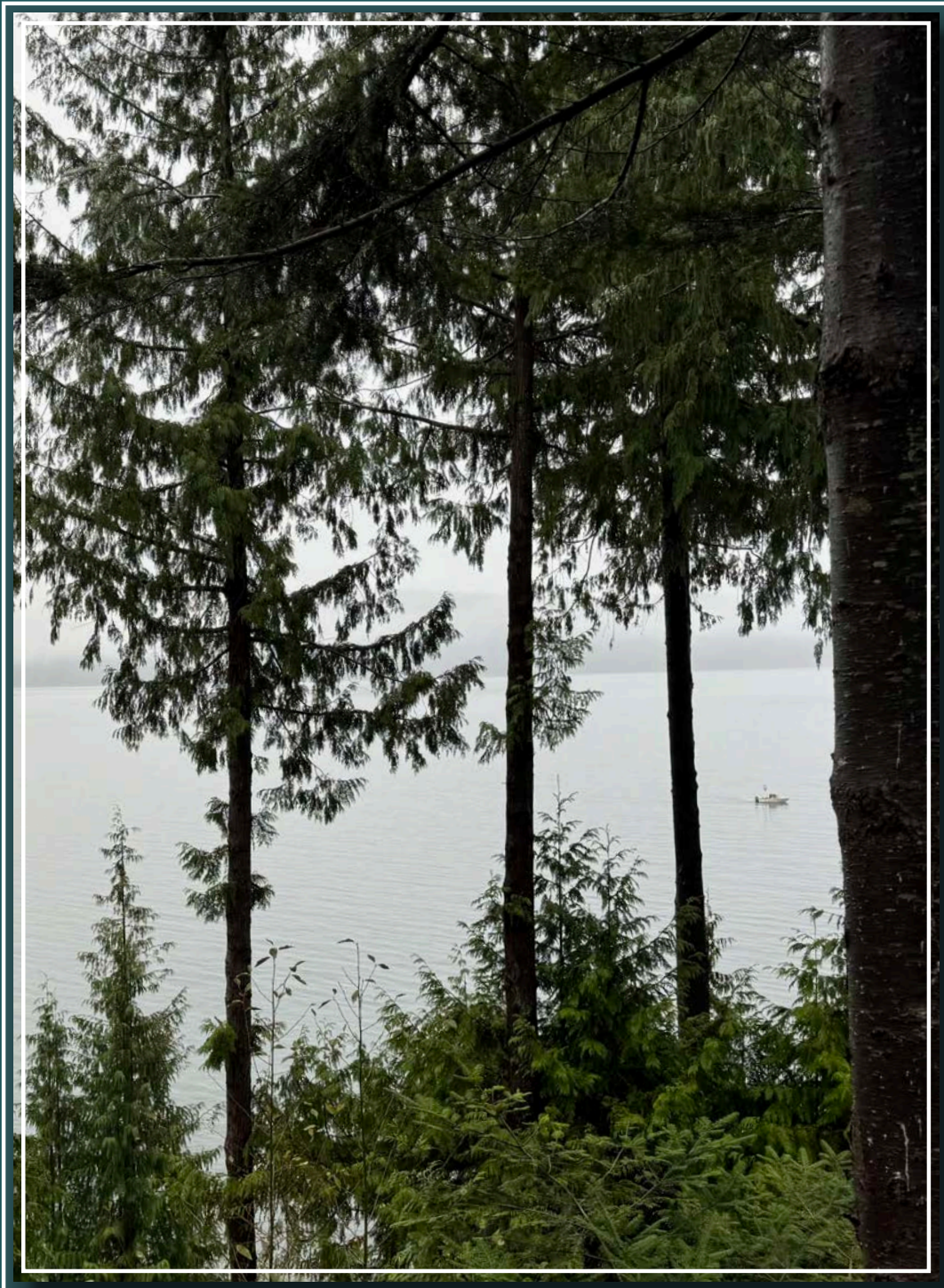
Community Engagement: By fostering a sense of ownership and involvement in community projects, GICA can better align its actions with the actual needs of the community. Encouraging active participation from all community members, including those who are often less engaged, can lead to more effective and supported community initiatives.

Resource Sharing Initiatives: The creation of mechanisms for sharing resources more effectively, even across geographical divides, is essential. This strategy aims to ensure that all community members, regardless of their geographical location, have access to essential services and support, thereby mitigating the challenges posed by isolation.

Inclusive Planning: Involving a diverse range of community members in the planning processes is critical to ensure that different perspectives and needs are considered. This inclusive approach can lead to more comprehensive and effective solutions to community issues, making sure that the plans are reflective of the entire community's needs.

Strategic Framework for Change: Addressing the difficulty in obtaining government support for Gambier Island requires a multi-faceted approach, focusing on enhancing visibility, streamlining communication, and clarifying jurisdictional responsibilities. A potential solution could involve the establishment of a dedicated liaison or advocacy group responsible for bridging the gap between the island's residents and governmental entities.

Sustainability and Training Programs: Implementing training programs for emergency services that are accessible to full-time residents is vital. These programs should focus on ensuring the sustainability and reliability of critical community services, addressing the need for full-time community support in emergencies. By preparing all residents, especially those who are permanently based in the community, to effectively respond to emergencies, the community can enhance its resilience and safety.



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09

Appendices

Appendix A.

Survey Report - Final

Promoting Livability in
Cha7élkwnech | Gambier Island

SURVEY RESULTS

Final



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Survey Context

Cha7élkwnech/Gambier Island is located on the traditional, ancestral and unceded territories of the Skwxwú7mesh Úxwumixw (Squamish Nation). Currently, the island is inhabited by approximately 150* residents living in multiple communities, being the southwest the most populated region, and reaching up to approximately 600* during the summer.

The Gambier Island Community Association with the help of UBC Planning Studio developed and conducted an island-wide survey of residents and property owners about community-identified priorities for the island with the purpose of getting a strong understanding of what Gambier Islanders feel would make the island a more livable place as well as a resilient community. The input received from the survey would inform the Rural Economic Diversification and Infrastructure (REDIP) project which seeks the development of plans that address the most pressing priorities and advance livability for the communities.

The Survey was launched and conducted on an online format, with the option of receiving a printed copy if requested. It was carried out from August 4th to September 5th, 2023. The survey recorded 421 valid online responses and 3 physical (paper) responses for a total of 424.

For the purpose of analysing the Community Survey, the island has been divided into 4 regions and two of them have 3 subregions: Southwest (1, 2 and 3), Bays (1, 2 and 3), East and North. Within these regions, 30 communities were recorded in the survey. The distribution of responses is shown in Figure 1. The survey was structured with two types of questions, factual or objective questions and attitude or subjective questions. The factual questions seek to gather profiling/demographic data, economic activities and mobility/transportation patterns. The attitude questions inquired about lifestyle, lived experiences, values, aspirations, concerns, and priorities. The survey was designed as follows (in parentheses: **# of questions**):

1. Factual questions **(21)**:
 - a. Demography **(9)**
 - b. Economic activity **(6)**
 - c. Transportation **(6)**
2. Attitude questions **(8)**:
 - a. Values & Aspirations **(5)**
 - b. Priorities **(3)**

*May vary from year to year

Communities per region

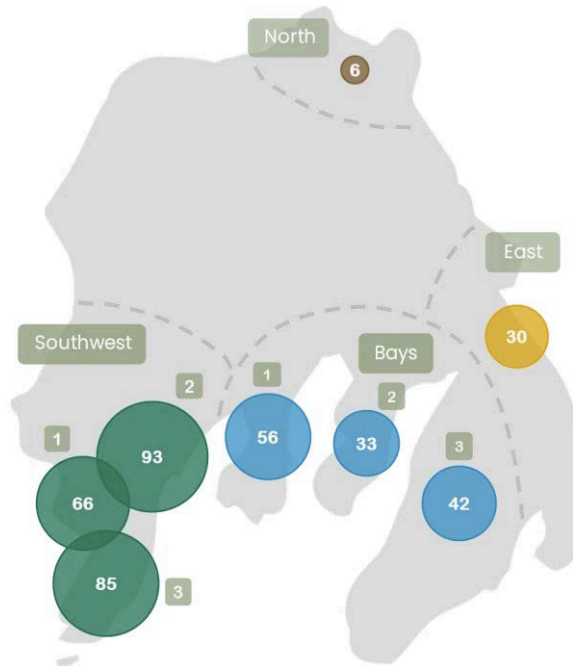


Figure 1. Geographic distribution of survey respondents

Southwest 1

- New Brighton
- Cotton Bay
- Austin Trails

Southwest 2

- West Bay

Southwest 3

- Gambier Harbour
- Burgess Cove
- Avalon Bay

Bays 1

- West Bay Landing
- Center Bay
- Carmelo Point

Bays 2

- Daisy Bay
- Mackenzie Cove
- Sea Ranch
- Long Bay
- Mitchell Cove
- Port Graves
- Poets Point
- East Bay

Bays 3

- Fircom Plateau
- Hope Point
- Halkett Bay
- Gambier Estates
- The Orchard
- Sunset Estates
- Richardson's Cove
- Camp Fircom

East

- Brigade Bay

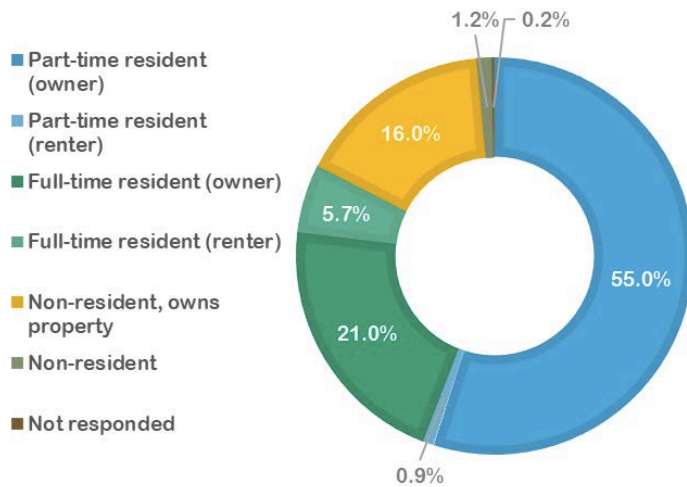
North

- Douglas Bay
- Ekins Point
- Camp Latona

Demography

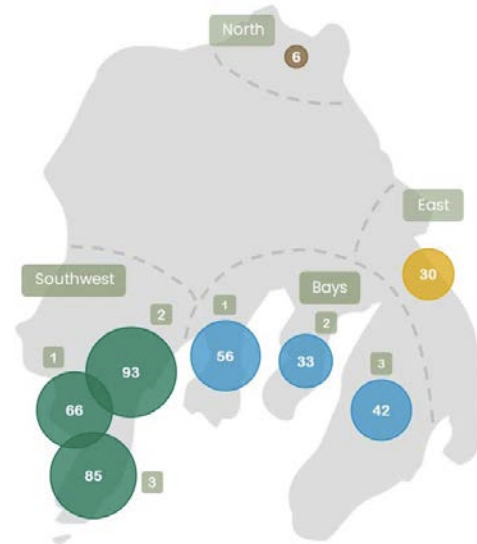
Residency & Home Ownership

Response rate: **99.76%**



Where do they live?

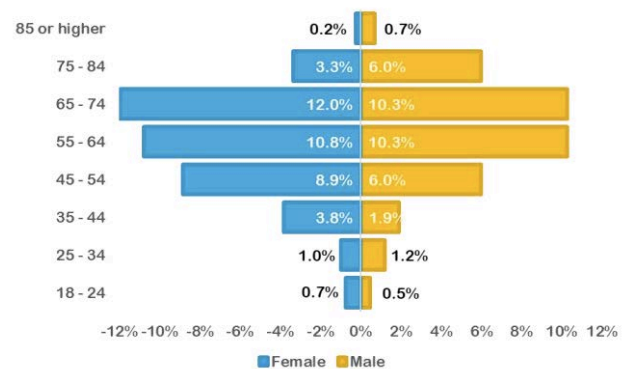
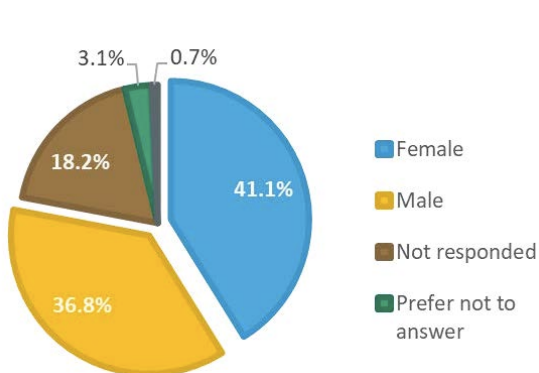
Response rate: **98.56%**



- ★ **Major concentration** of population is in the **southwestern** peninsula.
- ★ **More than half** of respondents are **floating population**.
- ★ **92%** of respondents **own property** on Gambier.

Gender and Age distribution

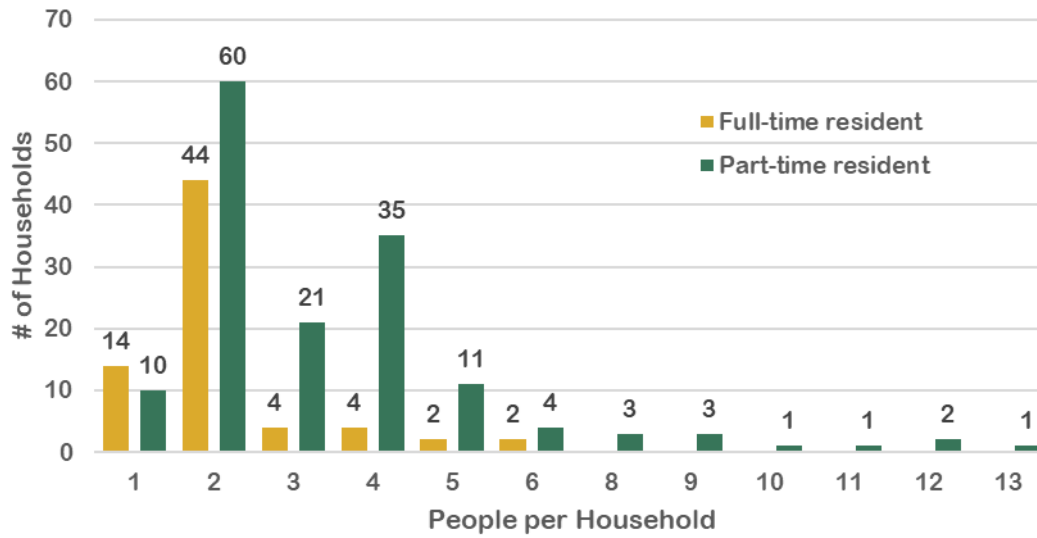
Response rate: **80.66%** and **81.13%** respectively



- ★ **58.1%** of respondents are aged between **45-74** with a **Median Age** of **60.7**

Household size

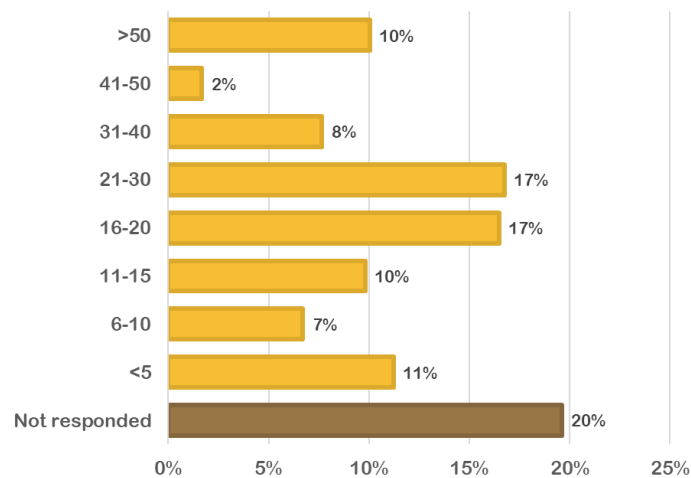
Response rate: **95.6%**



* **46.9%** of households are **2-person households**.

Years living or owning in Gambier Island

Response rate: **80.4%**

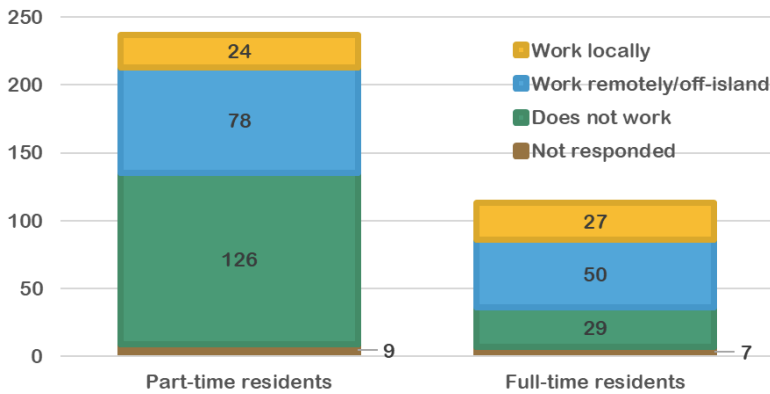


* Respondents have **lived/owned** for **24.4 years** in average.

Economic activities

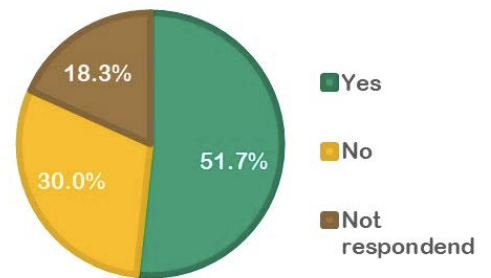
How do they work?

Response rate: **96.20%** for part-time + **93.81%** for full-time



Have Pets/Livestock

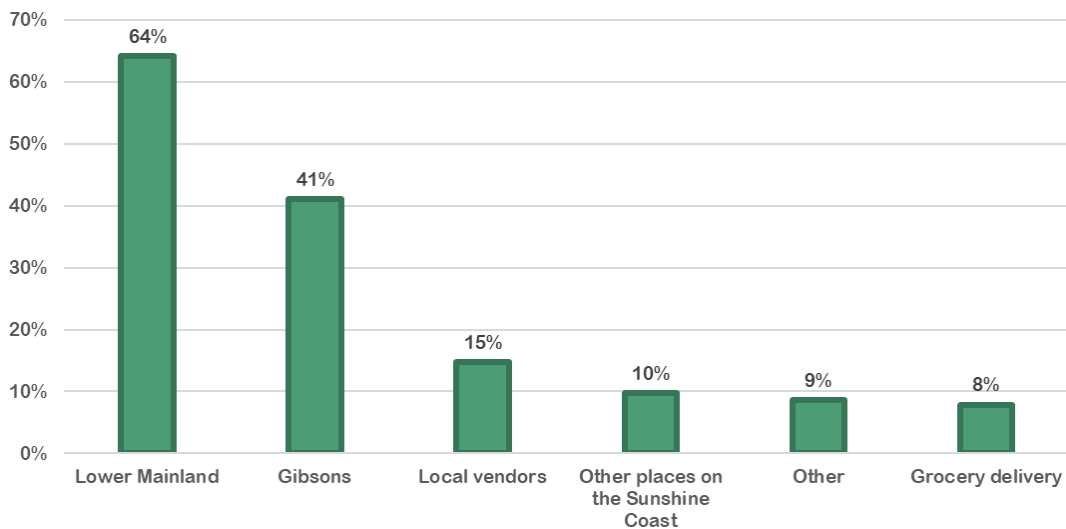
Response rate: **81.7%**



* Only **14.6%** of respondents **work locally**.

Locations for groceries

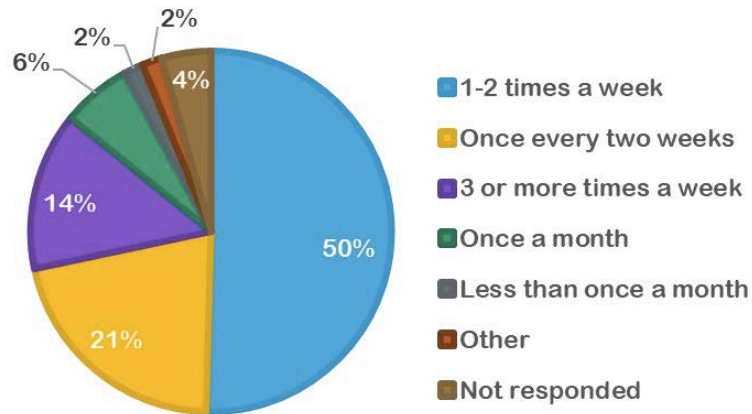
Response rate: **82.3%**



* Only **15%** of respondents **buy groceries locally**.

Times leaving the island (full-time)

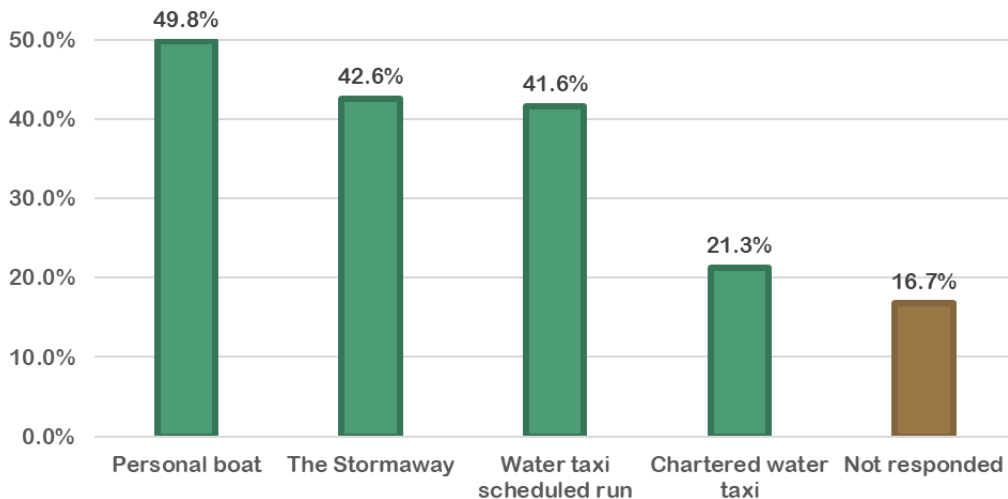
Response rate: **95.6%**



* **64%** of full-time residents **commute weekly** from the island.

Means of transportation from/to Gambier

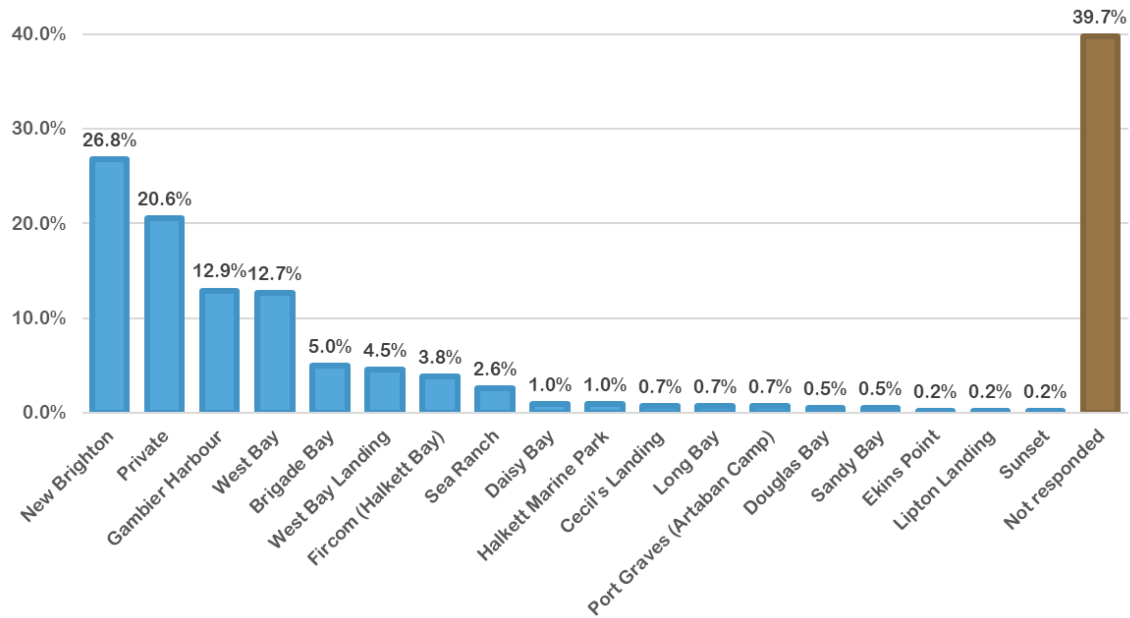
Response rate: **83.3%**



* **75.6%** of respondents use **public transportation** services (Stormaway/Water taxi scheduled).

Docks used by residents

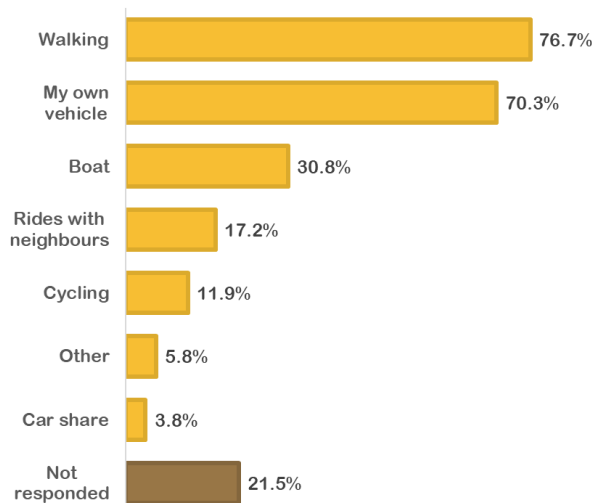
Response rate: **59.3%**



★ **Southwest docks** are the **most used** public docks.

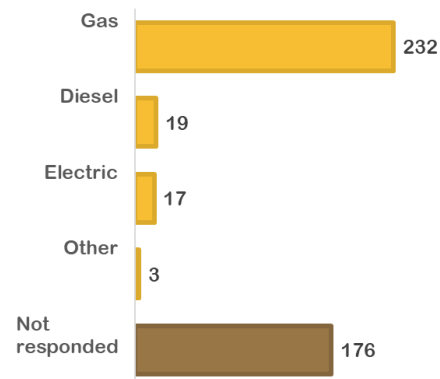
Means to get around the island

Response rate: **81.1%**



Types of vehicles

Response rate: **57.9%**

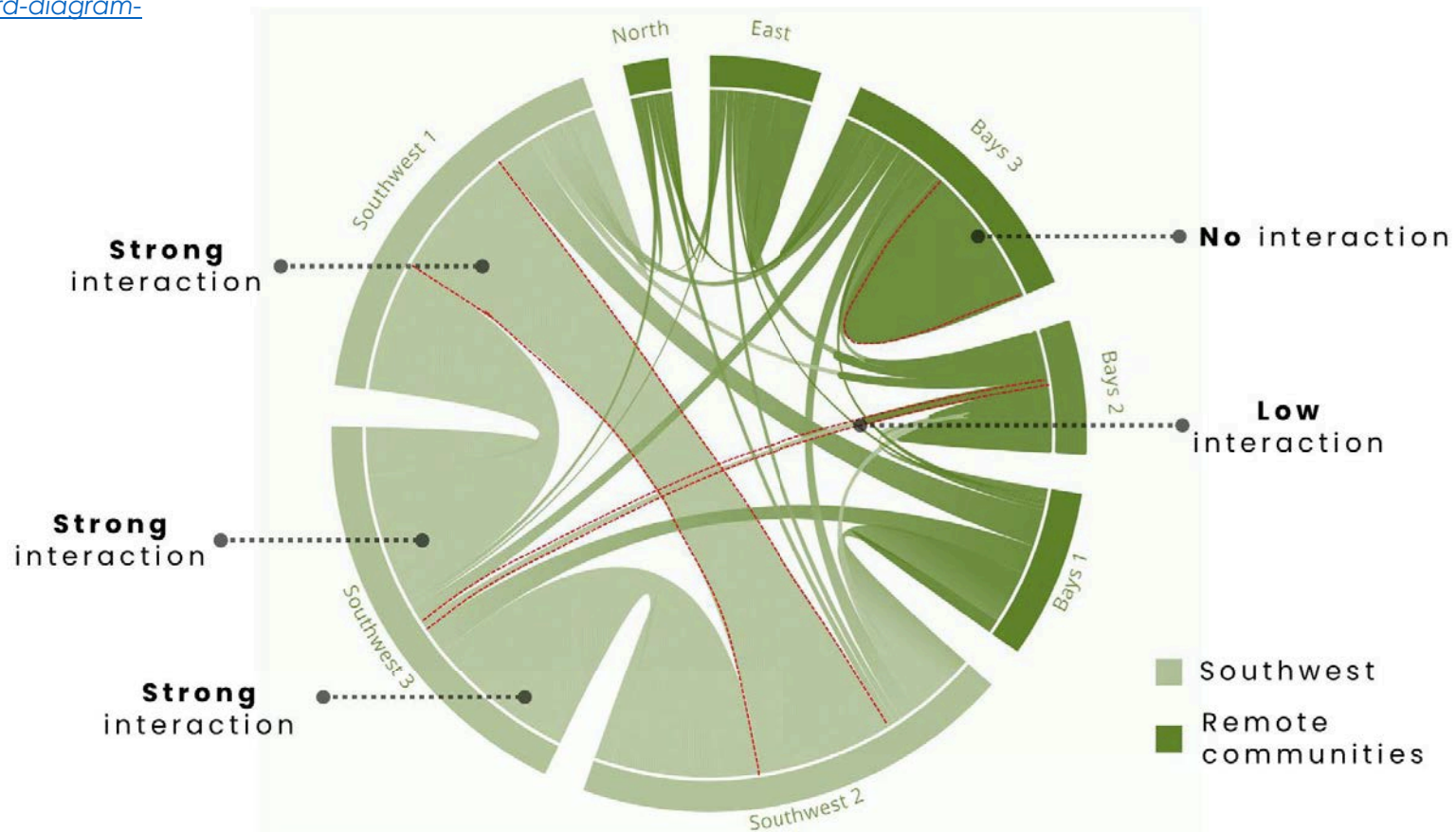


★ **Walking** is the preferred means to move around the island.

Generated with DataSmith
Chord Diagram Generator:
<http://www.datasmith.org/2018/06/02/a-bold-chord-diagram-generator/>

Interaction between communities/regions

Response rate: **69.1%**



- * **More than half** of the residents in **Bays 3** region **don't interact** with other regions.
- * Communities in **Southwest region interact the most** with each other.
- * There is **low interaction** between the **Southwest region** and the **other regions**.

Profiling Summary

Southwest

Region: SW

244 Respondents

Q. Residency Type

Part-Time	52.9%
Full-Time	35.7%

Q. What is your age?

MEDIAN AGE
59 years-old

Q. How long have you lived in Gambier?

YEARS LIVING/ OWNING
26 years average

Demography

Residency type: 35.7% of residents are full-time, with this region boasting the highest number of full-timers on the island. This underscores the relatively superior access to services, social networks and residents' commitment to sustaining and enhancing favorable conditions.

Work: 51.2% of respondents do some type of work. —16% work locally, sharing skills and trades. Leveraging the sharing of local skills and services between residents can create local economies.

Groceries: 77% of respondents get groceries off island; however, 23.4% buy groceries locally. This shows the feasibility of having alternative local economies, as the higher full-time population may sustain them.

Transport on and off the island: There is a very high use of scheduled transportation services (i.e. Stormaway and water taxi). This is the only region with residents who commute off the island, pointing to the need for reliable transportation services. 20.1% rely entirely on the Stormaway.

Moving around: There is a high use of personal vehicles to move around. This may speak to the vastness of the community, the existing infrastructure, and the connectivity to points of interest.

Lowest **median age**. This means that younger folks are moving to this region of the island.

With an average of 26 years **living/owning property in Gambier**, it is one of the most mature and developed regions.

Q. Do you work?

Q. Where do you do your Groceries?

BUYING GROCERIES

Off the island	77.5%
Locally	23.4%
Delivered	11.5%

Economic

Q. How do you get on/off the island?
TO/FROM GAMBIER

Public	73.8%
The Stormaway	
Mercury	
Private	34%
Personal boat	

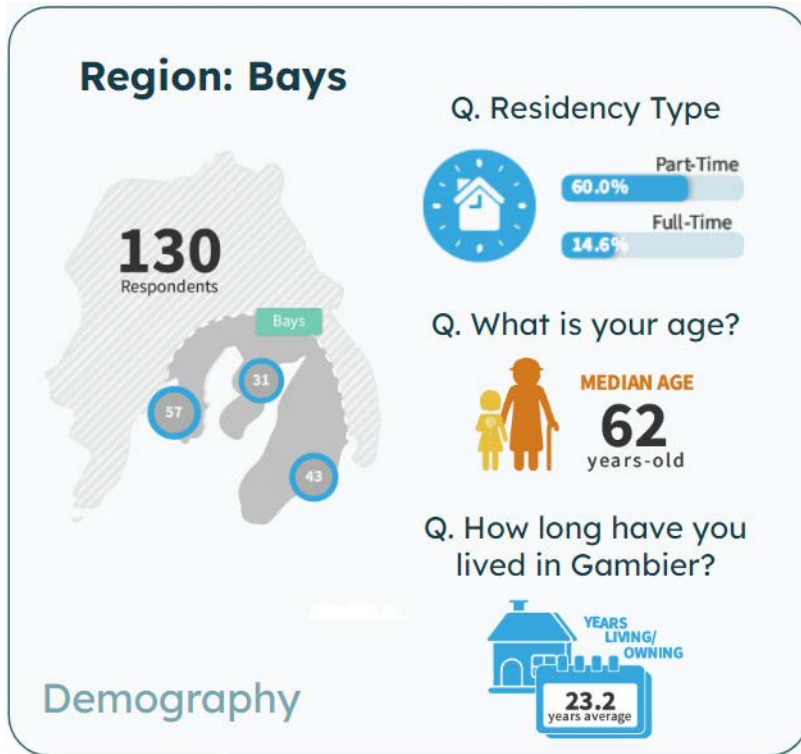
Q. How do you move around?

MOVING AROUND

Mobility

Profiling Summary

Bays



Residency type: 60% are part-time residents versus only 14.6% full-timers, which speaks to the lower access to essential services.

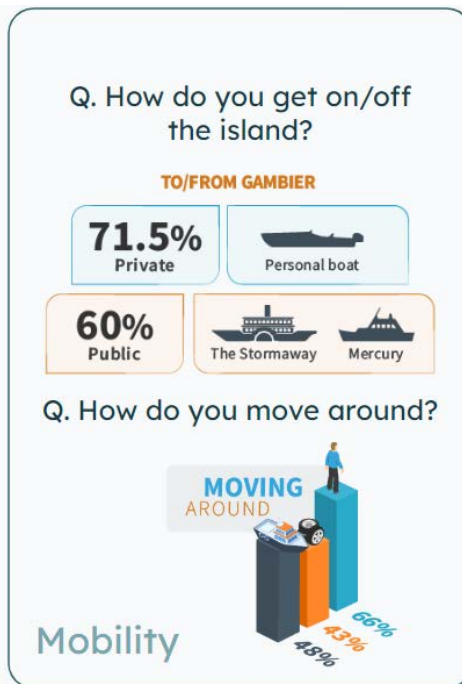
Work: 55% don't work when they are on the island. This could mean most residents spend time on the island to take a break from their daily routine. It can also expose the relative ineffectiveness of internet connection. 7.7% of respondents do some type of work locally. Thus, there is an opportunity for residents to share skills and services.

Groceries: 85% of the respondents get their groceries off island instead of growing, buying them on the island, or getting them delivered.

Transport on and off the island: There is still significant use of scheduled and public transportation services, especially the water taxi that has stops around the Bays. There is still a reliance on personal boats.

Moving around: Personal boats are used more than land-based vehicles to move around communities. This speaks to the relative lack of roads and unique geographic characteristics of the Bays (bodies of water separate most communities).

The Bays has the second highest **median age** (62 years), necessitating more discussions around aging in place.



Profiling Summary

East

Region: East

30 Respondents

Q. Residency Type

Part-Time	66.7%
Full-Time	10.0%

Q. What is your age?

MEDIAN AGE
60 years-old

Q. How long have you lived in Gambier?

YEARS LIVING/ OWNING
16 years average

Demography

Considerably a more **self-reliant** community

Residency Type: High number of part-time residents

Years living or owning on Gambier: 16 years of average living or property ownership - these are considered the youngest community to be formed.

Work: The majority do not work on the island, but 40% work remotely; this speaks to the importance of having a better internet and cell connection.

Groceries: More reliant on off-island food sources

Transport on and off the island: More reliant on private boats. There are few who use the water taxi.

Moving around: There is a higher use of personal vehicles to move around. Speaks to the spread of the community, the existing infrastructure, and connectivity to points of interest.

Q. Do you work?

Does not work	53.4%
Work remotely/off-island	40.0%
Work locally	5%

Q. Where do you do your Groceries?

BUYING GROCERIES
90% off the island

Economic

Q. How do you get on/off the island?

TO/FROM GAMBIER

80% Private	Personal boat
13.3% Public	Mercury

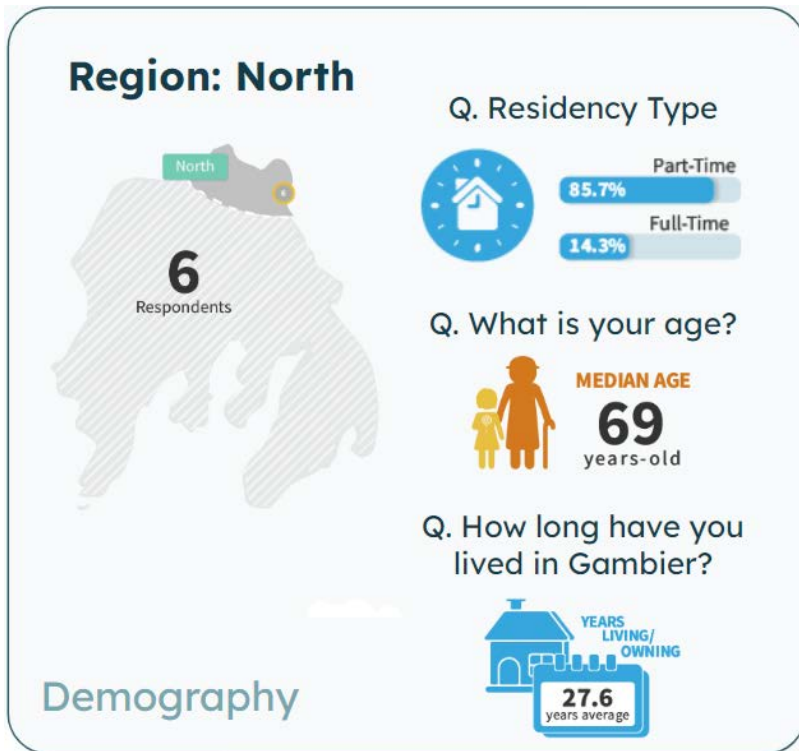
Q. How do you move around?

MOVING AROUND

Mobility

Profiling Summary

North



Most **isolated** community

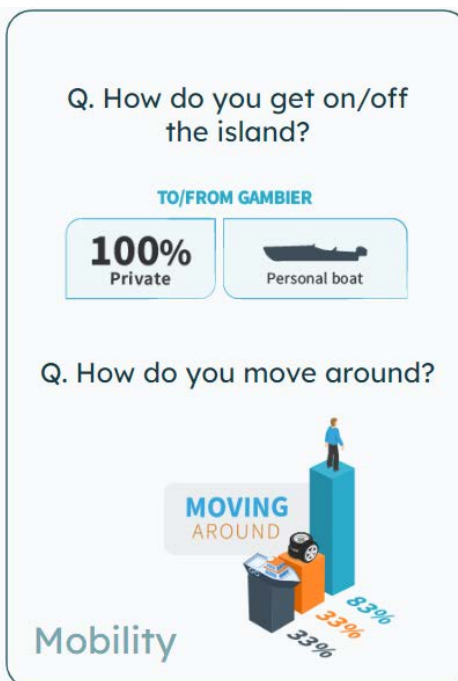
Smaller sample of respondents

Residency type: Highest number of part-time residents. Due to a lack of services, there may be more barriers to living full-time.

Years living or owning in Gambier: This is an older community in terms of median age and years living/owning on Gambier. It raises discussions about aging in place in a remote location and becoming more vulnerable in emergencies.

Groceries: The North region has fewer options than buying groceries off island. This reflects the importance of having alternatives and not relying only on one source.

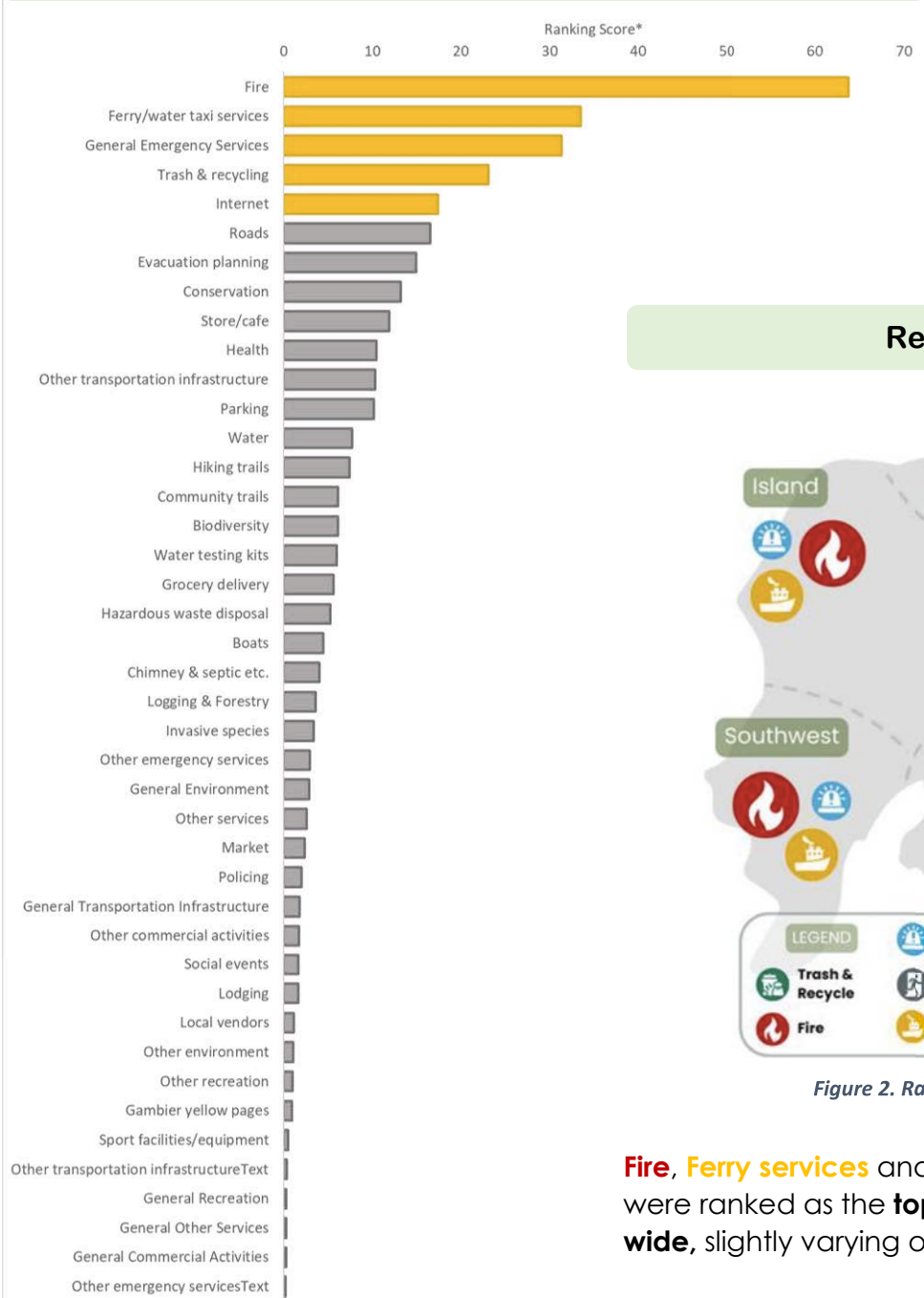
Transport on and off the island: These communities are completely reliant on private transportation as there are no services provided.



Issues ranked by the communities

Response rate: **88.7%**

Island-wide



Region-specific

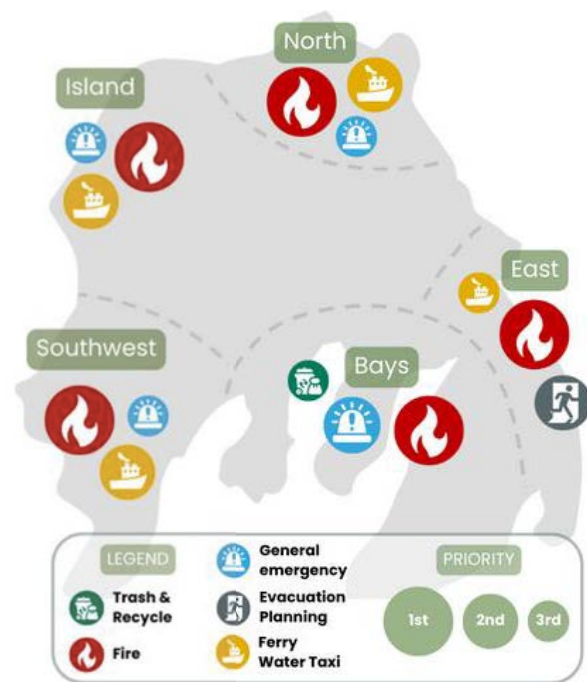
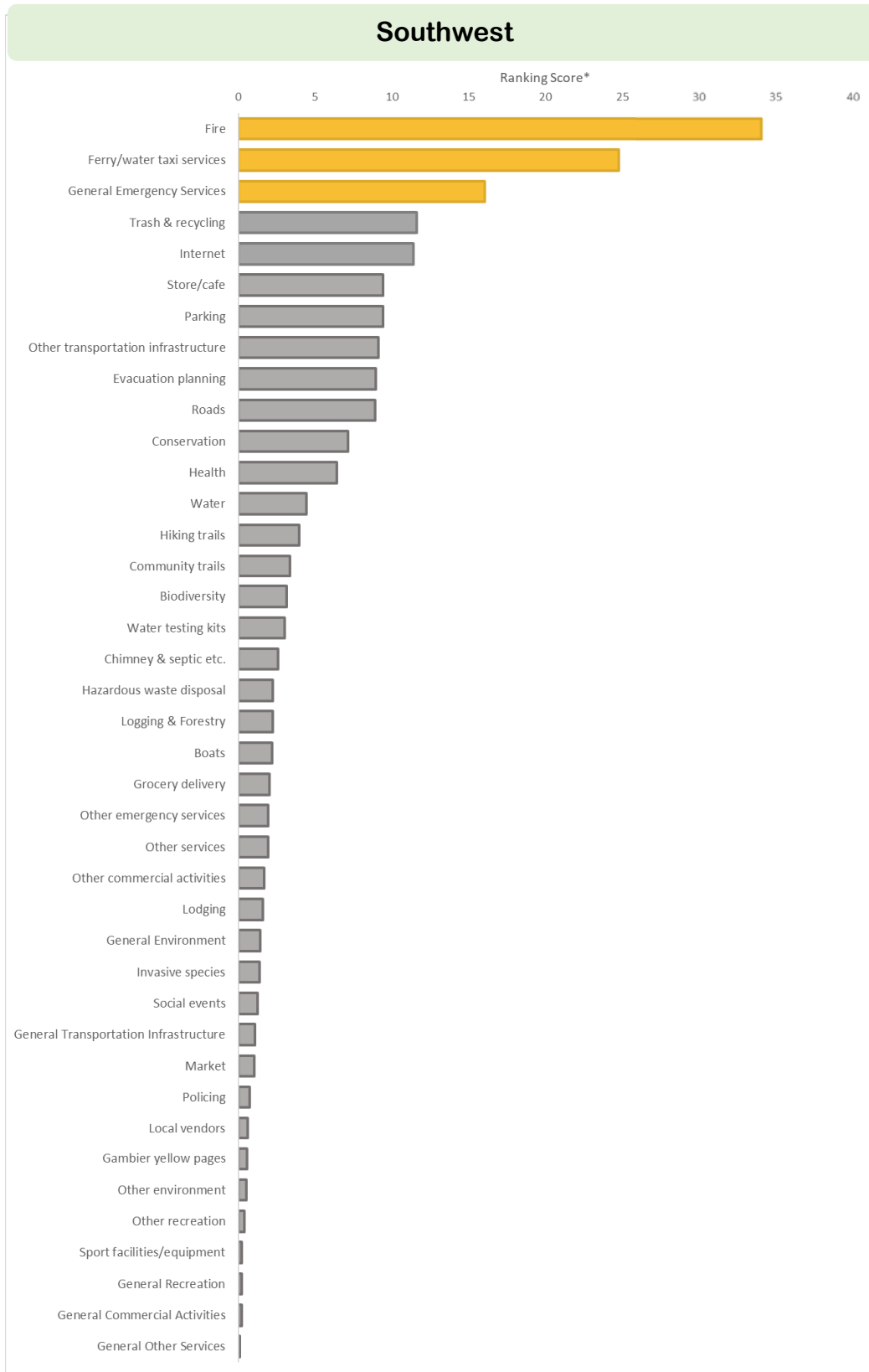
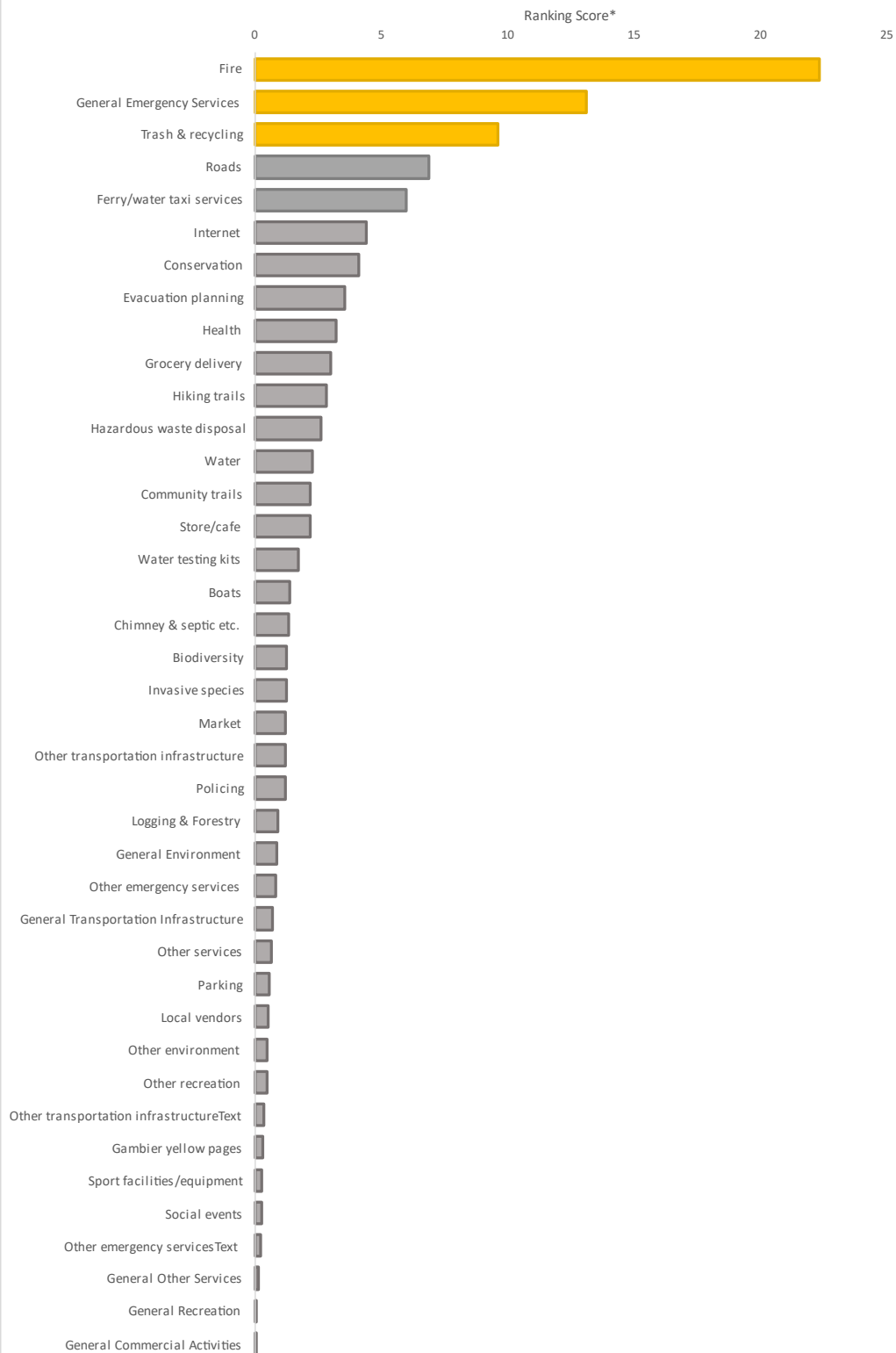


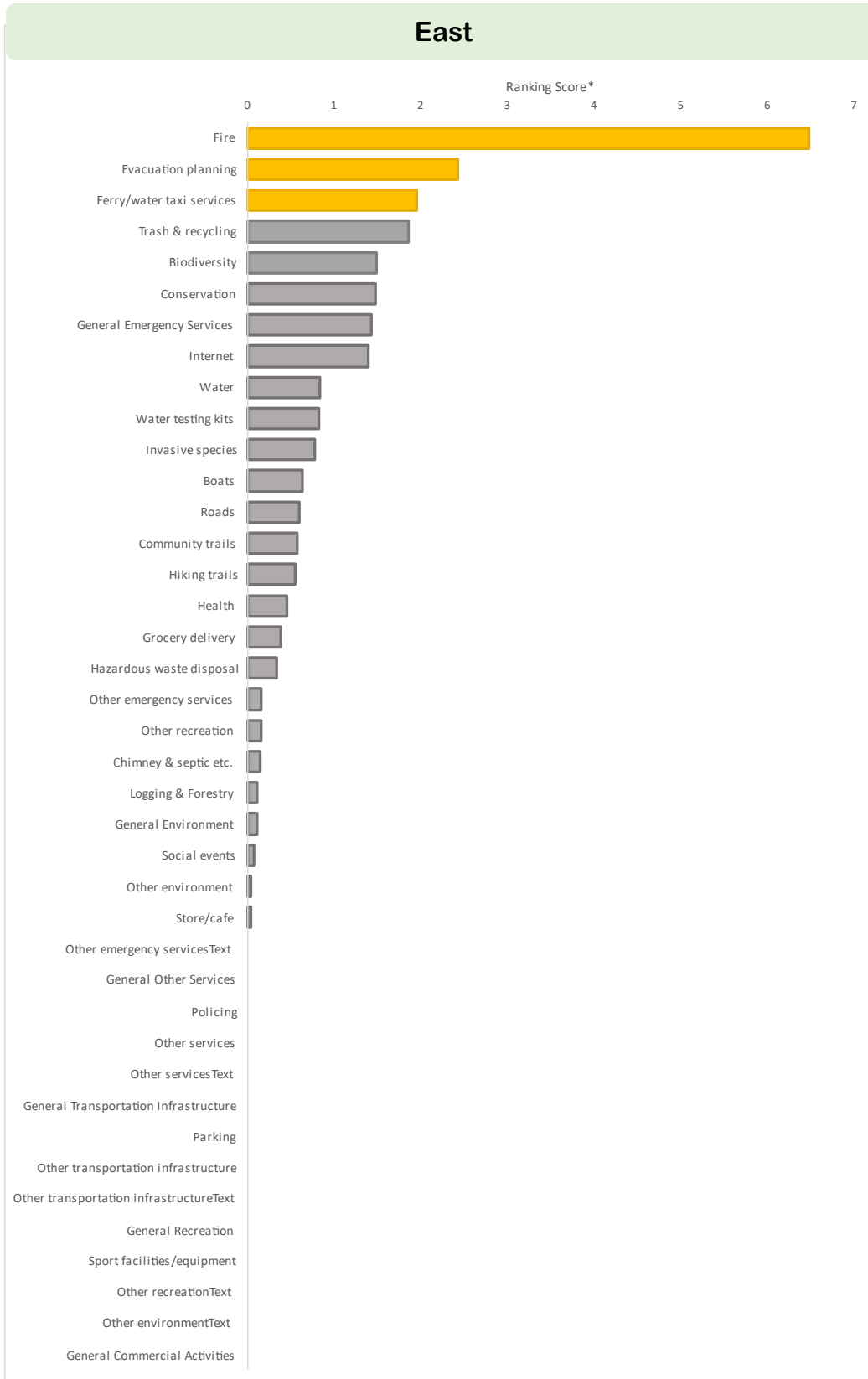
Figure 2. Ranking of priorities by Region

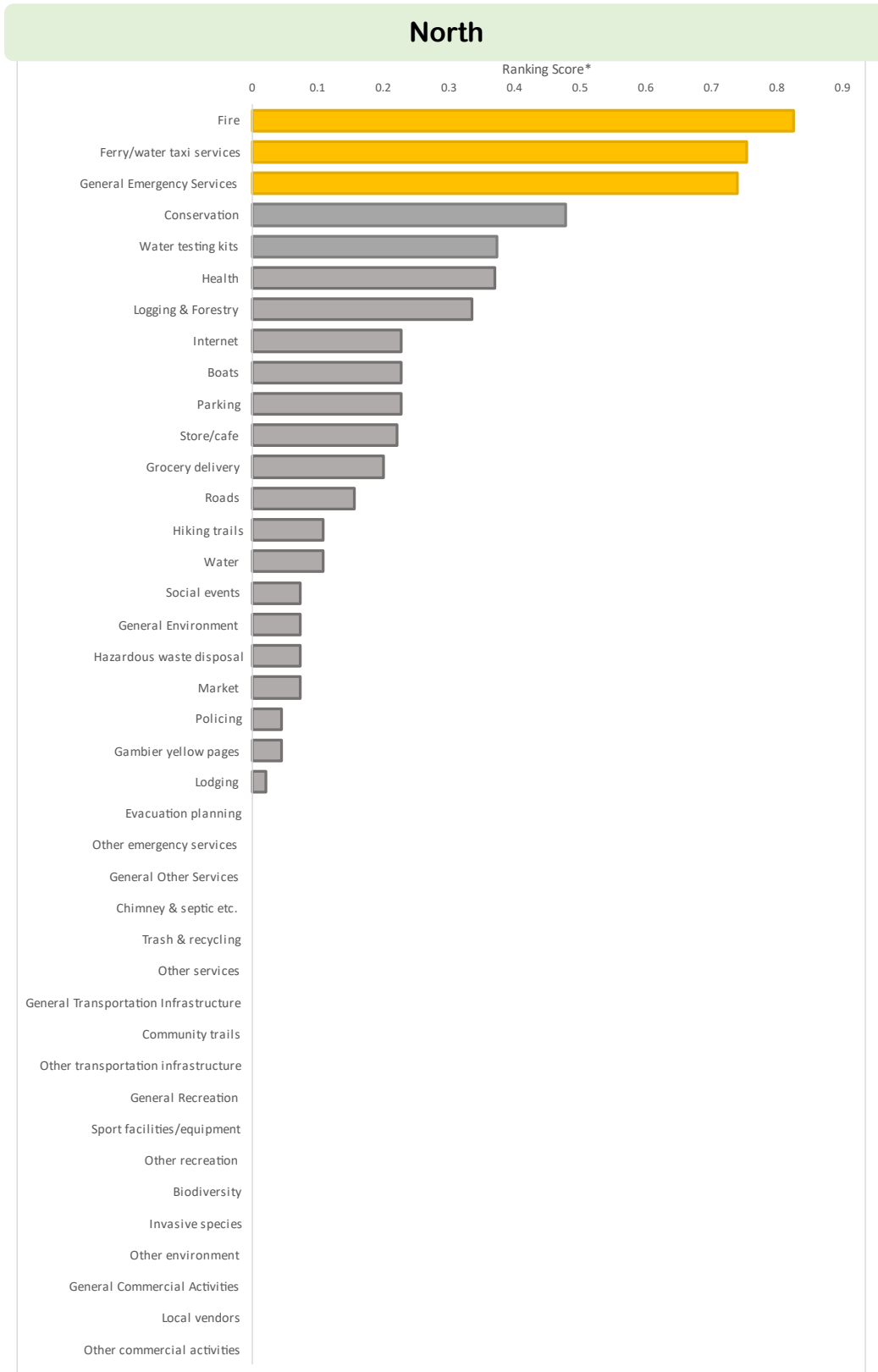
Fire, Ferry services and **General Emergency services** were ranked as the **top 3 concerning issues island-wide**, slightly varying on the Bays and East regions.



Bays







Issues

*Ranking score methodology

In the survey, participants were asked to: 1) Select their 7 most concerning issues out of a list of 40, and 2) Rank the 7 issues from 1 to 7, being 1 the highest priority. The first question provides information about **how frequent a particular issue was selected** within the 7 most concerning issues. The second question gives more insight into the **relative importance of each one of them compared to the others**. Both the frequency and the relative importance were considered to obtain the relative ranking score for each issue, using a **rank ordering weights method** which converts the ordinal ranking of a number of elements into numerical weights.

A ranking method weight determination involves **two steps**: ranking the elements according to their importance and then weighting the elements from their ranks using a rank order weighting formula. The first step was conducted during the survey by each individual respondent. For the second step, the **rank-order centroid (ROC)** method/formula was used, as it is considered to be superior in terms of accuracy, ease of use, and in decision quality among multiple researchers (Roszkowska, 2013).

Equation 1. Rank-order centroid formula (Roszkowska, 2013)

$$w_j(\text{ROC}) = \frac{1}{n} \sum_{k=j}^n \frac{1}{r_k}$$

Based on the ranking used in the survey (1 to 7), a weight was applied to each rank value using Equation 1, resulting in the relative weights shown in Table 1. Each relative weight was applied to the particular issue as a score depending on the given individual rank, and then all the individual scores were totaled to have the overall ranking score for each issue. For example, if one respondent ranked Fire as 1 and two ranked it as 2, its ranking score would be $0.37+0.23+0.23=0.83$

Table 1. Relative weights per rank value

Ranking order by importance	Relative weights w_j
1	0.37
2	0.23
3	0.16
4	0.11
5	0.07
6	0.04
7	0.02

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Appendix B

Community Asset Mapping Tables

Asset Category			Asset	Location	Ownership			
Community-based Assets			Private community marina	Brigade Bay				
			Volunteering (maintenance, community events)	Brigade Bay				
			8 Fire sheds	Brigade Bay				
			Fire trailer	Brigade Bay				
			Fire equipment	Brigade Bay				
			Homeowner's Society	Brigade Bay				
			Equipment/fire training	Brigade Bay				
			Information and equipment sharing with other communities, especially Eastern communities	Brigade Bay				
			2 large First aid kits	Brigade Bay				
			3 full Trauma kits	Brigade Bay				
			First Aid/CPR training	Brigade Bay				
			Registered Helicopter landing pad	Brigade Bay				
			Marine rescue training	Brigade Bay				
			Community kayak rack	Brigade Bay				
			2 work parties a year	Brigade Bay				
			Fire equipment	Gambier Estates	Maintained by the community			
			Strata-organized community framework	Sea Ranch				
			Community vehicles	Sea Ranch	Strata owned (owner funded)			
			Fire equipment	Sea Ranch				
			Volunteerism, solidarity	Southwest Peninsula				
			Commercial kitchen	Southwest Peninsula				
			Book/Art shack	Southwest Peninsula				
			3 GFEG trailers	Southwest Peninsula				
			Fire truck	Southwest Peninsula				
			WhatsApp group for emergency services	Southwest Peninsula				
			West Bay landing Community Association	West Bay Landing				
			Community hall	West Bay Landing				
			Personal Assets			Private docks	Gambier Estates	
						UTV's (Utility Task Vehicles)	West Bay Landing	
						Back-hos, tractor, log splitters	West Bay Landing	Personal, but is shared by the community
Fire fighting equipment, Fire hoses and soap suppressant attachments	West Bay Landing	Privately owned, some neighbors combine resources to protect more than one house under one system						
Private docks	West Bay Landing							
Utilities	Water	200,000 gallons of stored water throughout the community that are typically 500 to 2500 gallons each.	Brigade Bay	Combination of tanks bought by property owners, and tanks bought by the community				
		Community non-potable water distribution system	Gambier Estates	Maintained by the community				
		Central water tank system	Sea Ranch					
		water storage tanks	Southwest Peninsula					
		GFEG water tanks	Southwest Peninsula					

Asset Category		Asset	Location	Ownership	
Infrastructure	Electricity and Heating	Drilled wells	West Bay Landing	Personally owned	
		Internet	Southwest Peninsula		
		Hydro	Southwest Peninsula		
	Transportation	Aerial	Power	West Bay Landing	Personally owned
			Helicopter pad	Southwest Peninsula	
			Helicopter pad	Brigade Bay	
		Marine	Helicopter pad	West Bay Landing	Personally owned
			Dock	Brigade Bay	
			Barge ramp	Brigade Bay	
			Boat ramp	Gambier Estates	
			Fircom government dock	Gambier Estates	
			Community dock	Sea Ranch	Private (owner funded)
			Barge ramp	Sea Ranch	Owner funded and maintained
			Tug and barge	Southwest Peninsula	
			6 Docks	Southwest Peninsula	
			Barge ramp	Southwest Peninsula	
			3 Barge ramps (1 next to the West Bay Landing dock, one next to Lipton and one next to Cecil)	West Bay Landing	All maintained by the community
		4 Community docks (3 in West Bay, 1 in Centre Bay (West Bay Landing, Lipton Landing and Lorne Landing in West Bay and Cecil Landing in Centre Bay))	West Bay Landing	Maintained through the maintenance fees paid by each property	
		Terrestrial	10 km of steep road	Brigade Bay	
			Heritage road	Gambier Estates	
	One lane access road		Sea Ranch		
	Trails connecting communities		Southwest Peninsula		
	Two government roads, several easement roads		West Bay Landing	Maintained through maintenance fees and volunteers within the community	
Buildings	Community Centre	Southwest Peninsula			
	Equipment shed near community center with O2 and defibrillator	Southwest Peninsula			
	BC Hydro/ TELUS Building	Southwest Peninsula			
Services and Trades	Vehicle mechanics	Southwest Peninsula			
	Cranes	Southwest Peninsula			
	Dump trucks, excavators	Southwest Peninsula			
	Water taxi service	West Bay Landing			
Industry and Economy	Wood mills	Southwest Peninsula			
	Air BnB's	Southwest Peninsula			
	Gravel Pit - part of wood lot	Southwest Peninsula			
	Local food and craft vendors	Southwest Peninsula			
	Mills	West Bay Landing	Privately owned		

Asset Category	Asset	Location	Ownership
Resources and Natural capital	Anavets Park	Southwest Peninsula	
	Natural diversity	Southwest Peninsula	
	Fresh water	Southwest Peninsula	
	SCRD Thomas Lipton marine park	West Bay Landing	

Community Asset Mapping: Issue-Specific

Issue	Community-specific/Island-wide	Community	Assets
Fire	Community-specific	Southwest	Fire equipment (4 - one in each community, two in New Brighton)
	Community-specific	Southwest	Emergency Fire Water Tank (6 - two in each community)
	Community-specific	Bays	Emergency Fire Water Tank
	Community-Specific	Southwest	Cistem (Private Property)
	Community-Specific	Southwest	Wells on Private Property (x5)
	Community-Specific	Camp Fircom	Water Tank, Pumps, Hoses
	Community-Specific	Bays	Individual Water Pumps on Private Property (x3)
	Community-Specific	Fircom-Sunset	Volunteer Fire Committee
	Community-Specific	Camp Fircom	Fire Response Network with Fircom & Sunset Communities
	Community-Specific	Camp Arbatan	Small Firefighting system
	Community-Specific	Daisy Bay	Water tank, fire extinguishers, community contact list
	Island-Wide		Social Media Groups
	Island-Wide		Volunteerism
	Island-wide		GFEG Knowledge Pooling and Training
Island-Wide		Fire Summit Meeting (Organized in Sea Ranch)	
Island-wide		Equipment Co-ordination	
Ferry	Island-Wide		ABC Water Taxi
Waste and Recycling	Community-specific	Southwest/Island-wide	Barge Service
	Community-specific	Southwest	Individually-owned commercial trucks
	Community-specific	Southwest	Roads
	Community-specific	Southwest	Community/Public Docks
	Island-Wide		Social Media groups
	Community-specific	Southwest	Community Center
	Community-specific	Bays	Community Docks
General Emergency and Evacuation Planning	Community-specific	Southwest	Whatsapp Emergency Group (West Bay)
	Community-specific	Bays	Whatsapp Emergency Group (South east)
	Community-specific	Southwest	Helicopter landing pad
	Community-specific	Southwest	Internet access
	Community-specific	Southwest	BC Hydro
	Community-specific	Southwest	Defibrillator - AED (3 - one in each community)
	Community-specific	Southwest	Fire equipment (4 - one in each community, two in New Brighton)
	Community-specific	Southwest	Public docks (3 - one in each community)
	Community-specific	Southwest	Roads
	Island-Wide		Lions Bay SAR
	Community-specific	Southwest	Facebook Community group
	Community-specific	North	Community docks (2)
	Community-specific	Bays	Emergency contact list organized by community member
	Community-specific	Bays	GPS location of fire fighting equipment
	Community-specific	Bays	Fire committee in charge of emergency communications, equipment, response (Fircom Plateau)
	Community-specific	Bays	Fully-equipped first aid room, with supplies that match OFA 3 certified
	Community-specific	Bays	Emergency facilities (Muster point, first aid room, evacuation route through community dock (Camp Fircom))
	Community-specific	Bays	Certified staff (4) (Camp Fircom)
	Island-Wide		Social Media groups

Appendix C

Engagement Materials

Appendix D

Survey & Engagement Results

Appendix E

Community Engagement Photos

Appendix F

Issue-specific Research

Appendix G

Ferry Report

Appendix H

Evaluation Matrix Tool

Evaluation Matrix

Issues	Actions	Rationale / Description	Criteria								Implementation Lead/Resources	Next Steps
			Cost	Level of agreement	Relevance	Community Capacity Demand	Impacts	Cost/Benefits	Urgency	Risk of not acting		
Ferry and Water Transportation	Develop a stakeholder-informed report to guide enhancements in BC Ferry and Stormaway Services	Create a comprehensive report that documents the current utilization patterns of the BC Ferry and Stormaway services (as provided by SoundPlanning in the Ferry Report).	Low	Medium	Low	Low	Low	Low	Low	Low	Ferry Report previously provided by SoundPlanning	The report should include qualitative insights and anecdotal evidence from recent stakeholder engagement sessions, which articulate the preferences and expectations of users regarding the enhancement of service offerings. The purpose of the report is to provide a robust evidentiary basis for presenting well-informed recommendations to policymakers and decision-makers regarding potential improvements or modifications to the BC Ferry and Stormaway services.
	Explore the potential for a ride-sharing platform in Gambier	Investigate the feasibility of creating a ride-sharing application or platform tailored for the residents of Gambier. This initiative aims to facilitate the sharing of departure and arrival schedules, enabling community members to offer or seek rides amongst themselves.	Low	Medium	Medium	Low	Medium	Medium	Medium	Medium	N/A	Efforts should be made to identify and engage potential users to assess interest levels and to explore viable payment models or expectations for those providing rides.
	Create a Committee to explore opportunities for enhancing Stormaway and BC Ferries services & keep up-to-date on Ferry contracting details	Establish a specialized committee tasked with initiating dialogues with Stormaway providers and BC Ferries.	Low	Medium	Medium	Medium	Low	Medium	Medium	Medium	N/A	This committee will meticulously review the contract details and formulate innovative terms for recommendation to local government, thereby advocating for expanded services. Additionally, consider collaborating with Keats Island association members to gain insights into prioritized route enhancements and to assess potential costs and benefits.
Fire	Expand fire sighting support with external stakeholders	There is a need for everyone to report fire. Tug boat, ferry operators passes by the Island often and could be of a point of support.	Low	High	Medium	N/A	Low	Medium	Medium	Low	-Route 13 Ferry Committee -Community champions, organizations across Gambier	- Connect with Route 13 ferry committee to understand BC Ferry Fire Reporting protocol - Build relationships with local tug boat operators, who may have better sightings of remote communities on Gambier.
	Improve community awareness on firefighting	There are multiple fronts to this action. 1) Include notes in the Welcome package 2) awareness on individuals have first response items 3) training the use of equipments 4) disseminate well-received resources 5) move rain barrels closer to the house 6) coordinating equipment purchase and use across Island	Low	High	Medium	Medium	Medium	High	Medium	Medium	-Home Ignition Zone -SLRD – Rural Fire Suppression Resident Guide -Firesmart Starts at Home	-Identify key community leaders in various communities on Gambier - Knowledge pooling and sharing across communities on Gambier -Identify existing contacts, groups who are organizing and mobilizing actions on this issue
	Establish fire ban enforcement protocol	There is a need for accountability and enforcement of fire ban, despite the lack of law enforcement of Gambier. This could be a public education campaign on fire ban enforcement ban mechanisms via 1) BC Wilfire Service 2) Sunshine Coast Regional District 3) Conservation Officers 4) Law enforcement	Medium	Low	Medium	Medium	Medium	Medium	Low	Low	- Conservation Officer 24 hour Hotline: 1-877-952-7277	- Organize community awareness campaigns on fire ban enforcement - Identify target demographic (i.e.: local residents, visitors) and plan for appropriate communication strategies
	Organize community campaign to remove fire fuel	Forest fuels are the burnable materials in the forest, from underground to treetops. Forest fuels will ignite easier, and the fire spreads faster with lower fuel moisture. Communities across the Island have mentioned that some trees near the powerline could pose as a significant fire hazard.	Low	High	Medium	Medium	Medium	High	Medium	Medium	-Community Champion(s), multiple across each Gambier Community - SCRD, Community Wildfire Protection Plan -Call 1 800 BCHYDRO when tree/hedge is within 3m of Powerline	-SCRD Community Wildfire Plan Recommendation: Develop a comprehensive FireSmart plan that includes: communication & engagement goals, educational outreach, coordination with the BC Wildfire Service, Firesmart Assessments.
	Research the feasibility fire improvement district	Improvement districts provide municipal-like services to landowners who have requested and pay for those services. Improvement districts vary in size from small subdivisions to larger communities and are generally located in rural areas of B.C.	Medium	Medium	High	Medium	High	High	Medium	Medium	- Gambier Island SCRD Representative - GFEG & other community fire prevention organizations	- Consult with Gambier SCRD Representative on the pros and cons of pursuing this independent service authority - Liase with GFEG and other existing community fire prevention organizations on Gambier Island - Engage with other Fire Improvement districts in BC to understand pros & cons -Secure funding and hire consultants and legal opinions on the feasibility of this service provision framework
	Research the feasibility of volunteer firefighting group	Volunteer fire fighting groups provides is a cost-effective approach, and may have influence on property insurance. More community engagement would be ideal	Medium	Medium	High	Medium	High	High	Medium	Medium	- Gambier Island SCRD Representative - GFEG & other community fire prevention organizations	- Consult with Gambier SCRD Representative on the opportunities for structural support from SCRD - Liase with GFEG and other existing community fire prevention organizations on Gambier Island - Engage with volunteer firefighting groups in SCRD to understand pros and cons -Secure funding and hire consultants and legal opinions on the feasibility of this service provision framework

	Establish informal fire lighting protocols	Remote: Informal fire lighting protocols, communicating with your neighbour on campfire use	Low	N/A	Medium	Medium	Medium	High	Medium	Low	- GFECC & other community fire prevention organizations	- Knowledge pooling and sharing across communities on Gambier - Brainstorm ways and mediums to facilitate community conversations on fire lighting practices
	Participate in FireSmart Neighbourhood Recognition Program	Island-wide: there is a need for the systematic planning and implementation of fire protection. FireSmart Neighbourhood Recognition program sets out a framework for consideration. Prince George was one of the first communities in BC to adopt a Community Wildfire Protection Plan (CWPP). The CWPP was responsible for carving out strategies to reduce the long-term impact of the wildfires in the city	Medium	High	High	Medium	Medium	Medium	Medium	Medium	- FireSmart Neighbourhoods Program	- Consult with FireSmart Canada representative on the requirements, costs to enter the program - Engage with communities to advocate for participation in fire planning - Liaise with community champions on fire to understand needs, interests and aspirations
	Seek external funding for more equipments	Local provincial funding for more equipment & proper basics of fire response, in the absence of SCRD support	Low	High	High	Low	Medium	High	Medium	Medium	- Community Capacity for Research	- Identify appropriate and eligible funding opportunities for property owners and community organizations to partake in.
	Organize responsible recreation campaigns targeting summer visitors	(Island-wide) Organize an education campaign at frequented areas around the Island to inform visitors of their fire prevention responsibility	Low	High	Medium	Medium	Medium	High	Medium	Medium	- Gambier Island Conservancy - Making fire safely while hiking - Responsible Recreation	- Collaborate with Gambier Island Conservancy to understand opportunities for public education campaigns - Explore community capacity to take on this action
	Research the feasibility of a funded firefighting service	(Remote) Many residents from remote communities voiced the desire for professional firefighting service as a fire response. 1) this could be arranging services from neighbouring municipalities like West Vancouver 2) creating an Island-specific professional firefighting service 3) assurance that structures & buildings are covered	Medium	N/A	High	Low	Medium	Medium	Medium	High	- Gambier Island SCRD Representative - community champions in private-access only communities	- Engage with residents and champions in private- access only communities to understand needs, interests, and aspirations for this service - Engage with other funded firefighting service in BC to understand pros & cons - Secure funding and hire consultants to proceed with service arrangement with fire protection organizations.
	Establish covenants on Gambier Island properties during subdivision	A restrictive covenant mandates the home owners and developers to undertake measures to reduce the risk posed by Wildfires. It includes appropriate roofing material, fuel buffer zones, screening of decks and attics and installing approved spark arresters	Low	N/A	High	Low	Medium	High	Medium	Medium	- Gambier Island Island Trusts Representative - Community champions across Gambier Island	- Consult with Gambier Island Island Trusts representative to understand how this tool can be applied on Gambier during development processes - Engage in community-wide conversation about the application of this tool
Emergency Services and Evacuation Planning	Create a Neighbourhood / Community Emergency Plan	Plan that shows how to respond in different scenarios, levels of emergencies, and scales (island wide, region/community, neighbourhood, individual/household). Items that it should include are: - A communication protocol - Activation protocol for the ICP or EOC - An assembly/muster point - A contact list - An evacuation plan - An inventory and maps of existing services and equipment - Backup systems in case of outages or loss of services - A life span/maintenance strategy for all equipment. - Recovery strategies	High	High	High	Medium	High	Medium	High	High	Gambier HRVA Plan2Adapt Community Emergency Preparedness Fund through the stream Disaster Risk Reduction - Climate Adaptation* Community Emergency Preparedness Fund through the stream Emergency Support Services Equipment and Training* Complete Communities Funding program Disaster Financial Assistance for communities	- Use (and potentially update) the Hazard, Risk and Vulnerability Analysis (HRVA) that is in place for Gambier Island to identify the emergency scenarios to plan for. - Expand the Asset Mapping Tool for every community through community meetings and using mapping skills from any of the residents. If necessary, hire a private consultant in charge of a comprehensive assessment of the communities. - Secure funding to hire consultants that specialize in rural community emergency planning and asset management. - Start discussing each item in community meetings, while waiting for funding. Items that can have a quick start are: Contact list, Muster point, Evacuation drills to muster point, Inventory of existing services and equipment and Communication protocol for household and neighbourhood level. - With support from experts, build every item listed previously all in the same document or in separate documents at different times (when not enough funding/resources are available). These have to be community-specific, meaning each community group or association needs to gather and discuss to move forward, although funding sources can be through GICA. - Partnerships with other islands; inter-island sharing of resources (bring the proposal to Island Trustee). - Consider in the emergency plans the collaborative and cooperative nature of the communities: People to volunteer their home to help families in a Neighbourhood/Household level emergency; Invite neighbours to dinner and do micro action/response plans and discuss resources for Neighbourhood level emergencies.

<p>Commission an Incident Command Post (ICP)</p>	<p>The Province and the Regional District have Emergency Response Plans and Operation centers to address emergency situations. However, they require on-site contact points and local response groups to coordinate with. An Incident Command Post is the primary location for on-scene incident command and management. It manages and coordinates all communication and first response to emergencies and is the contact point with higher levels of response (Regional District, Province).</p>	<p>High</p>	<p>Medium</p>	<p>High</p>	<p>High</p>	<p>High</p>	<p>Medium</p>	<p>High</p>	<p>High</p>	<p>Community Emergency Preparedness Fund through the stream Emergency Operations Centres Equipment and Training* BC Infrastructure planning grant program* Complete Communities Funding program Next Generation 911 Funding program Community Gaming Grants</p>	<ul style="list-style-type: none"> - To operate, it needs a physical location on-site (it could be off site if there is not enough staff on-site). Identify a key location with good accessibility (physical and for services), reliable communication and safe. For SW it can be located in community center. For remote communities, identify a location with the aforementioned characteristics. e.g. Camp Fircom, Camp Artaban, etc. If not possible, plan to build one or locate it at an existing auxiliary unit in a property. - Staffing the ICP: Full-time residents trained to take command of the ICP. Part-time residents trained to take command of the ICP and that coordinate their stay on the island to ensure someone is present. - Equipment and Resources: Reliable communication devices and power, with back-up systems. Emergency Plans, Evacuation Plans, Communication Protocols all on hand.
<p>Produce an Evacuation Plan for multiple scenarios and scales</p>	<p>Ancillary to the Emergency Plan: How to evacuate residents with different abilities, in different scales and levels of emergency, and different scenarios, by using existing resources and infrastructure? Sets out the procedures to coordinate internal evacuation with third parties off island.</p>	<p>Medium</p>	<p>High</p>	<p>High</p>	<p>Medium</p>	<p>High</p>	<p>Medium</p>	<p>High</p>	<p>High</p>	<p>SCRD Evacuation Brochure SCRD Evacuation Plans Community Emergency Preparedness Fund through the stream Public Notification and Evacuation Route Planning*</p>	<ul style="list-style-type: none"> - Air/water medevac (medical evacuation) procedures in place. Some communities may not be able to have both. - Select an assembly/muster point for marine or air evacuation - Establish a communications strategy during all stages of evacuation (See Alternative communication systems and Communication protocol) - Secure funding to hire consultants that specialize in rural community evacuation planning. - Have a maintenance structure in place for critical infrastructure, as roads and main docks.
<p>Have alternative communication systems during an emergency</p>	<p>The use of social media (as WhatsApp and Facebook) has been the main channel of communication and dissemination of information around all communities. However, it may not be as reliable in case of an emergency due to intermittent cell and internet signal and lack of coverage in certain areas (such as the mountains), and in some cases, residents have no access to technological devices. Alternative communication systems are required for effective and direct notification and information in case of an emergency.</p>	<p>High</p>	<p>Medium</p>	<p>Medium</p>	<p>Medium</p>	<p>Medium</p>	<p>Medium</p>	<p>High</p>	<p>Medium</p>	<p>BC Infrastructure planning grant program* SCRD Emergency Alert System Voyent Alert! Complete Communities Funding program Next Generation 911 Funding program Community Emergency Preparedness Fund through the stream Public Notification and Evacuation Route Planning*</p>	<ul style="list-style-type: none"> - Assessment and intervention of dead zones - Install live telephone wire at strategic spots along trails and at dead zones - Carry a satellite messenger/ personal emergency locator beacon or Automatic Packet Reporting System, or have them at strategic spots around the island (can be included in a neighbourhood emergency kit) - Have an alarm system with specific protocols depending on the level of emergency connected to a control and monitoring center (See ICP). Goal: island-wide integrated system. Start by smaller community systems. - Register for the SCRDR Emergency Alert System Voyent Alert!
<p>Communication protocol for households and for ICP for different Emergency Levels (household, neighbourhood, community/ region, island-wide)</p>	<p>Residents usually are unaware of what protocols to follow in case of any type of emergency (health, injury, fire, etc.). As one of the first actions, communicating the situation to the appropriate bodies is of utmost importance to have a timely and adequate response. Knowing who to call first, what information to provide, and through which channels, can make all the difference.</p>	<p>Medium</p>	<p>High</p>	<p>High</p>	<p>High</p>	<p>High</p>	<p>Medium</p>	<p>High</p>	<p>High</p>	<p>Community Emergency Preparedness Fund through the stream Public Notification and Evacuation Route Planning*</p>	<ul style="list-style-type: none"> - Identify multiple emergency scenarios, levels and conditions (see Emergency plan) and look for existing resources and services on- and off-island for each scenario. - Put together a Contact list, indicating the type of service provided, that includes: Key residents from the island (on-island personal emergency contact, first responders, ICP, neighbours, residents in key locations and with key resources), critical service providers (BC Hydro, Telus, Sunshine Coast, camps, natural parks and other bodies on island, etc). External emergency response services: 911, Lions bay/Sechelt Search and Rescue SAR, BC Emergency Health Services (BCEHS), Joint Rescue Coordination Centre (marine emergencies), etc. This list is not exhaustive and needs the input from multiple stakeholders associated with the multiple emergency scenarios (community, government institutions and private companies).

Asset management plan per community	A tactical plan for managing infrastructure and other assets to deliver a desired level of service. It outlines the condition and assessment of assets and based on their lifecycle, the maintenance frequency and the decommissioning plan. Having an Asset management plan ensures the sustainability and resilience of systems in a community.	Medium	Medium	High	High	Medium	Medium	Medium	Low	Asset Management Planning Funding Program* BC Infrastructure planning grant program* Community Emergency Preparedness Fund through the stream Disaster Risk Reduction – Climate Adaptation* Clean Energy for Rural and Remote Communities Program	<ul style="list-style-type: none"> - Equipment inventory: Expand the Community Asset Map with community-specific input and have it up to date. - Equipment assessment: identification of assets conditions, and missing equipment - Acquisition plan per community, indicating the resources needed, and financial strategy
Place neighbourhood/ community emergency kits at key locations	Some communities have acquired and placed community emergency kits (large red storage units) around the area, containing first aid response tools, fire suppression equipment and more. Nonetheless, the coverage of these kits has been found to be insufficient, leaving gaps in locations with higher hazard of an emergency event or where more vulnerable populations live	Medium	High	High	Medium	Medium	Medium	High	Medium	Community Asset Map (keep feeding it) Red Cross Canada BC Infrastructure planning grant program* Asset Management Planning Program Funding* Complete Communities Funding program Risk Management Grants	<ul style="list-style-type: none"> - Assess and identify key locations based on risk, vulnerable population, unreliable cell phone and internet connection, etc. Use the existing HRVA for Gambier as a starting point, and expand it to a community-specific assessment. - Install neighbourhood kits with AED, hand crank radio, first aid equipment, food and medical supplies, locator beacon/satellite messenger, fire suppression equipment, etc. Add GPS locations to equipment, use colour coded and numbered maps to help others locate essential infrastructure and equipment. Requires annual update
Ensure household preparedness	In resource-constrained contexts, a level of self-sufficiency is required. Ensuring you and your household are ready for emergencies is key. Your household should have an emergency preparedness kit with enough supplies to meet the needs of your entire family for at least 3 days.	Low	High	Medium	Low	High	High	Medium	High	BC's Household Emergency Plan SCRD's Emergency Preparedness Guide Red Cross Kit Guide	<ul style="list-style-type: none"> - Have household 72-hour emergency kit (for family and pets) - Have a family/household emergency plan - Have practiced and trained for emergency situations - Emergency supplies for at least 72 hours
Organize a Neighbourhood Program Team based on the Sunshine Coast Neighbourhood Emergency Preparedness Program NEPP	Neighbourhood programs are designed to help neighbourhoods/communities pre identify their skills and resources and organize them in case of disaster.	Low	Medium	Medium	High	Medium	Medium	High	Medium	NEPP booklet BC Neighbourhood Preparedness Guide SUNSHINE COAST EMERGENCY PROGRAM 604- 885-6887 emergency.program@scrd.ca	Follow the NEPP booklet and BC Neighbourhood Preparedness Guide
General Emergency and First Aid/CPR Training	Knowing how to respond to an emergency or disaster is part of living in community, being able to help each other when the situation calls for it. Communities need that all residents have the basic knowledge for first aid response, not necessarily being certified. Although, it is necessary for each community to have a group of Firsts Aid/CPR certified volunteers with the proper training to attend larger emergencies.	Low	High	High	Medium	Medium	Medium	High	High	Community Emergency Preparedness Fund through the stream Emergency Support Services Equipment and Training* ESS courses General Emergency Training (free) Training (paid) Emergency Management Webinars	<ul style="list-style-type: none"> - Assign a volunteer group that is willing to become First Aid Responders in the community - Select an institution to provide the training services (training location to be convenient for everyone). - Train them in the community-specific emergency response and communications protocols. - Off-island contacts to respond in a medical emergency, more professional and prepared, and with evacuation vehicles.
Conduct drills based on the emergency response plans/evacuation procedures put in place	As repetitive training activities, drills increase skill and coordination of response protocols, and can be used to build confidence around communities.	Low	High	Medium	Low	Medium	Medium	High	Medium	go2HR Drill Template OHS Emergency response plan template	Drills require a plan or protocol to put in practice, but drills can also train people on smaller tasks if a complete plan is not yet accomplished: Micro-drills in a household or neighbourhood level can be practiced once a household plan is established; evacuation to a muster point once it is selected; medical response and First Aid/CPR drill. <ul style="list-style-type: none"> - Select which scenario and level of emergency wants to be practiced (See Emergency Plan) - Schedule at least one drill per year and notify the community accordingly - Do a post-drill feedback session with everyone involved. What worked, what didn't, improvements for next time (assign responsibilities).

	Wellness and Rehab room	Some community members have mentioned the importance of aging in place in Gambier. This requires a health-driven strategy that ensures a safe, accessible and supporting environment. A wellness and rehab room was suggested, as a designated space with medical equipment and tools, where medical check-ins can be conducted. Such a space would work as a First aid room as well.	Medium	Medium	High	Medium	Medium	Medium	Medium	Medium	Low	<p>BC Infrastructure planning grant program* Complete Communities Funding program Community Gaming Grants</p>	<p>- Identify a key location with good accessibility (physical and for services), reliable communication and safe. For SW it can be located in community center. For remote communities, identify a location with the aforementioned characteristics, e.g. Camp Fircom, Camp Artaban, etc. If not possible, plan to build one or locate it at an existing auxiliary unit in a property. - Acquire the equipment necessary for normal operations - Arrange for a rural nurse/doctor to visit weekly or monthly (See Rural nurses/doctors visiting regularly).</p>
	Rural nurses/doctors visiting regularly	An important dimension of aging in place is health. Gambier residents would benefit from an on-island medical check services, in which a health professional visits the island on a regular basis.	Medium	High	Medium	Low	Medium	Medium	Medium	Medium	Low	<p>VCH Rural Practice Program</p>	<p>- Apply to the Rural Practice Program from VCH - Ensure there is a space or room where the medical checks can be carried out. The wellness and rehab room doesn't have to be in full operation.</p>
	Better response/more presence from police	Safety in some neighbourhoods has been a concern and some residents feel there has to be more police presence.	Medium	Low	Medium	High	Medium	Medium	Medium	Medium	Medium	<p>CCOPA website and resources</p>	<p>Establish a Community Policing Volunteers group or a Citizens On Patrol (COP)</p>
Waste and Recycling	Expand upon existing social and digital networks focused on buy-nothing and upcycling to encourage waste diversion	Create community engagement on waste diversion and provide a platform for exchange of items	Low	High	Medium	Low	Low	Medium	Low	Low	Low	<p>- Whatsapp/Facebook groups - Gambier Island Website</p>	<p>Identify community and island-wide communication forums such as Facebook groups, WhatsApp groups, email newsletters etc. and establish guidelines and procedures for residents to procure/giveaway items, including eligibility of items</p>
	Organize community-led ocean and shoreline cleanup of marine debris	One of the largest waste issues on Gambier Island is ocean waste and large marine debris that washes up to the shores. Residents often take to collecting plastics and Styrofoam as it is noticed, but there is no system in place for larger-scale clean up, or for reporting larger debris such as abandoned docks and vessels.	Low	High	Medium	High	Medium	Medium	Low	Medium	Medium	<p>Howe Sound Biosphere Tools and Resources</p>	<p>Clean Coast, Clean Waters Initiative Fund</p>
	Develop island-wide and community best practices for waste disposal, diversion and management procedures of various forms of waste such as; toxic waste, renovation and construction waste, large waste, ocean waste, and biological/organic waste	There are many forms of waste that accumulate and poses issues with respect to disposal, diversion and management for residents of Gambier Island. These include; solid waste, recyclables, composting and food waste, bio-waste and toxic waste, explosives and chemical waste, building/construction/renovation waste, ocean waste, and large waste such as boats, cars and docks. A Best Practices document for residents that provides guidance on how to divert, manage, and dispose of all these different types of waste would be a significant support to the community. It is recommended that this document be a stand-alone product, but can also be incorporated into a revised "welcome package" for existing and future Gambier Island residents. It is also recommended that this product be prefaced by an overarching guideline that residents should "take what they bring", which establishes community and individual responsibility for waste accumulation year-round.	Low	High	High	Medium	High	High	Medium	Medium	Medium	<p>- I Found a Wrecked, Abandoned or Hazardous Vessel: What to do Chart</p>	<p>See below for a list of resources to reference when developing best practices for waste management in remote communities.</p> <p>Once island-wide and community best practices for waste management of various forms of waste are established, disseminate this information in an accessible and transparent format. This information is recommended to be an addition to the Gambier Island "welcome package" as well as included in a community charter/resource booklet (See "General" section).</p> <p>Additionally, it is recommended that GICA explore and invest in workshops and seminars to educate the public on best management practices for disposal, diversion and management of various forms of waste</p> <p>It is recommended that GICA consider including the principle of "take what you bring" as a best management practice for waste disposal; this means that residents would be responsible for the end-of-life and disposal of all items and materials they bring or arrange to be delivered to Gambier Island.</p>
	Develop clear communication channels for community-organized support in garbage collection/drop-off for vulnerable residents	It was raised to the SoundPlanning team through community engagement that the most vulnerable residents on Gambier Island with respect to waste management, are seniors and those with disabilities. Since residents are required to bring their waste to collection sites, which are often the public docks, those who do not have the physical capabilities to transport their waste face increased challenges during the annual waste collection servicing. It was also raised to the SoundPlanning team that there are informal, existing networks within the community based in volunteerism where residents offer support to these vulnerable groups if needed. This is not widely known amongst the community however, and it is recommended that this network be more formally integrated to the existing community communication channels.	Low	Medium	Low	Medium	Medium	Medium	Low	Low	Low	<p>- Whatsapp/Facebook groups - Gambier Island Website</p>	<p>Identify existing communication channels and facilitate engagement by streamlining with larger community forums</p>

	Develop a community-organized system of waste collection	In speaking with key stakeholders from the Sunshine Coast Regional District during the Community Engagement phase of this project, it was raised to the Sound Planning team as well as to community members that the feasibility of arranging a second waste collection for Gambier Island per year is low. This is due to costs and the logistics involved in waste collection. The recommendation for organizing a community-led waste collection service calls for several considerations and logistics. See report for more information	High	Medium	High	Medium	High	Medium	Medium	Medium	Medium	<ul style="list-style-type: none"> • Sunshine Coast Landfill and Transfer Station Guide 	Community-organized waste collection systems will require: <ul style="list-style-type: none"> a. Utilization of a large truck for waste collection that may either be purchased by the community or leased for use from a resident b. Utilization of a barge service to collect waste and transport it to the landfill options include using an existing service on Gambier Island, or hiring an external barge service. See Appendix X for a list of potential service providers. c. Utilization of a large truck for transportation of waste from Barge to landfill. See Appendix X for a list of fees associated with various forms of waste.
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Notes:
*Requires coordination with Gambier Island Local Trust Area and the Sunshine Coast Regional District (Local governments are eligible)

Appendix I

Evaluation Criteria Selection

Criterion	Description	Implications	Risk from not considering it	Scale of measurement
Cost	Financial resources required for implementation.	High costs may limit feasibility; lower costs increase viability and chances of a promptly start.	Budget overruns, financial strain, potential abandonment of projects.	Low to High (e.g., \$, \$\$, \$\$\$)
Timespan	Duration of complete implementation.	Longer timespans may delay results; shorter timespans improve efficiency.	Delays, missed opportunities, increases uncertainty, neglects quick actions.	Short to Long (e.g., months, years)
Level of Agreement	Degree of consensus or support within the communities.	High agreement fosters engagement; low agreement may lead to resistance or lack of cooperation.	Resistance, lack of support, challenges in implementation, abandonment of projects.	Low to High (e.g., 1 to 3)
Urgency	Immediacy and criticality of addressing issues.	High urgency requires quick action; lower urgency allows for phased approach.	Delayed response to critical issues, increased impact of emergencies, missed opportunities, loss of communities support.	Low to High (e.g., 1 to 3)
Scale	Extent to which the action item addresses issues.	Larger scale may lead to more significant or widely distributed impacts; smaller scale may be community-specific but pose fewer constraints.	Limited impact, missed opportunities to address broader community needs.	Small to Large (e.g., Local, regional, island-wide)
Control	Degree of communities control over implementation.	High control enhances ownership; low control may lead to dependency.	Disengagement, dependency, reduced long-term sustainability, face multiple barriers	Low to High (e.g., 1 to 3)
Preparedness	Communities' readiness and capability to implement.	High preparedness reduces risks and enhances successful and quicker implementation.	Ineffective implementation, face multiple barriers, increased risks, lack of adaption, neglects quick actions.	Low to High (e.g., 1 to 3)
Community Capacity Demand	Ability of the community to mobilize resources and skills.	High capacity facilitates effective implementation and sustainability.	Underutilization of resources, neglect of existing assets, unrealistic actions.	Low to High (e.g., 1 to 3)
Uncertainty	Level of unpredictability and ambiguity of process and outcomes.	High uncertainty may require flexibility and increased risk management, and will depend on third parties	Inadequate risk management, potential project abandonment, unforeseen impacts and waste of resources.	Low to High (e.g., 1 to 3)
Cost/Benefits	Ratio between financial investment and anticipated outcomes.	Higher ratio indicates better cost-effectiveness.	Inefficient resource allocation, wasted resources, missed opportunities.	Low to High (e.g., 0 to 3+)
Impacts	Overall effects, positive or negative, on the community.	Assessment of positive and negative outcomes. Can show if new issues are caused by the solution.	Unintended consequences, missed positive outcomes, unforeseen negative effects.	Low to High (e.g., 1 to 3)
Risk of Not Acting	Potential negative consequences of not addressing the issue, and missed opportunities. (What will happen if we don't do anything short term, medium term, long term)	Assessment of risks if the action idea is not implemented. How critical is the issue and how not addressing it may impact quality of life and community values (safety, accessibility, community and resilience)	Missed opportunities, increased vulnerability, potential escalation of issues, worsen quality of life, lack of community support.	Low to High (e.g., 1 to 3)
Relevance	Alignment of the action item with context, community needs and current funding opportunities	High relevance ensures resources are directed toward pressing issues and communities priorities.	Misallocation of resources, addressing less critical issues, neglecting pressing needs, missing opportunities of funding	Low to High (e.g., 1 to 3)
Complexity	The intricacy, sophistication and dependance of the action item.	High complexity may require specialized skills and detailed planning, more resources and involvement of multiple stakeholders	Inadequate planning, potential project failure, challenges and barriers in implementation, neglect of important stakeholders, missed opportunities for new relations and connections	Low to High (e.g., 1 to 3)
Environmental Impact	Effect of the action item on the local environment.	Assessment of impact on biodiversity, ecosystems, and natural resources.	Neglect possible harm to ecosystems, depletion of natural resources, long-term environmental damage, solution could lead to new issues.	Low to High (e.g., 1 to 3)
Technological Feasibility	Compatibility with communities' existing technologic capacity	Ensures practical and up-to-date solutions, considering existing technology of the community	Implementation challenges, lead to expensive and complex solutions, inefficiencies, out-of-context solutions.	Low to High (e.g., 1 to 3)
Regulatory Compliance	Adherence of the action item to existing laws and regulations.	Ensures legal and ethical implementation. Indicates if an action would require policy implementation before.	Legal issues, reputational damage, challenges in obtaining approvals, delays on implementation.	Low to High (e.g., 1 to 3)
Education and Awareness	Level of emphasis required on educating the community and promoting awareness.	Ensures informed decision-making, capacity building and active participation. Indicates if education is required before implementation	Uninformed decision-making, reduced community engagement, challenges in fostering ownership.	Low to High (e.g., 1 to 3)