

**Making Life Even Better**

**Cha7élkwnech/Gambier Island**

**SURVEY  
RESULTS  
Preliminary**



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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, the southwest being 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 more 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 4<sup>th</sup> to September 5<sup>th</sup>, 2023. The survey recorded 421 valid online responses and 3 physical (paper) responses for a total of 424.

The island has been divided into 4 regions for the purpose of analyzing the priorities of both island-wide and community/region-specific: Southwest, Bays, East and North. The distribution of responses is shown in Figure 1. The report is divided as follows:

- ❖ Demography
- ❖ Economic activity
- ❖ Transportation
- ❖ Issues

\*May vary from year to year

## Communities per region

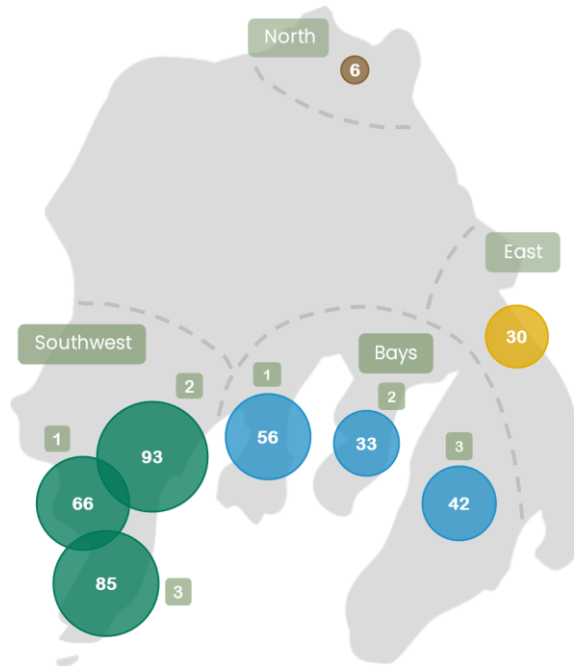


Figure 1. Geographic distribution of survey respondents

### 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

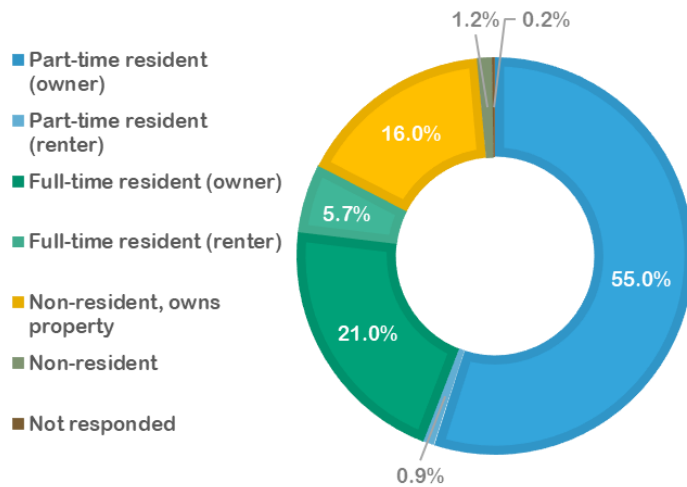
### North

- Douglas Bay
- Ekins Point
- Camp Latona

# Demography

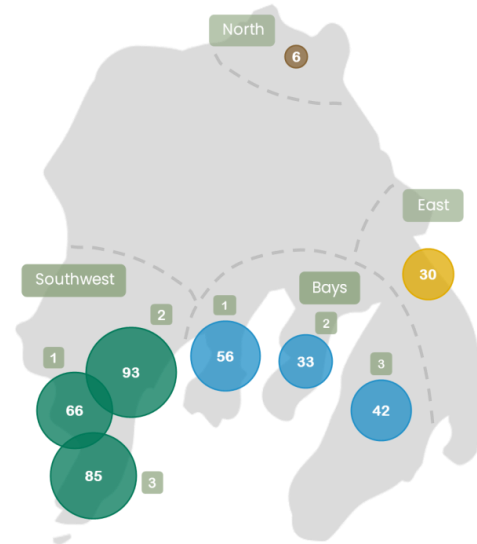
## Residency & Home Ownership

Response rate: **99.76%**



## Where do they live?

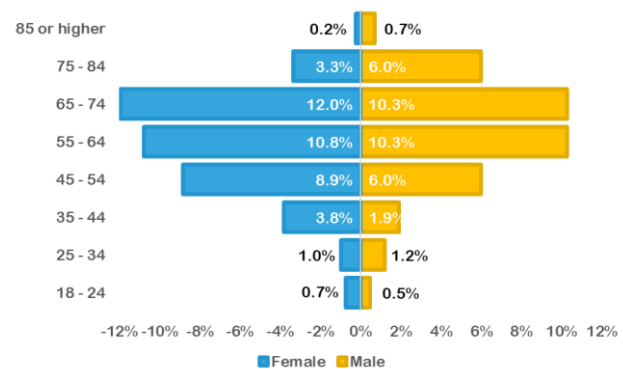
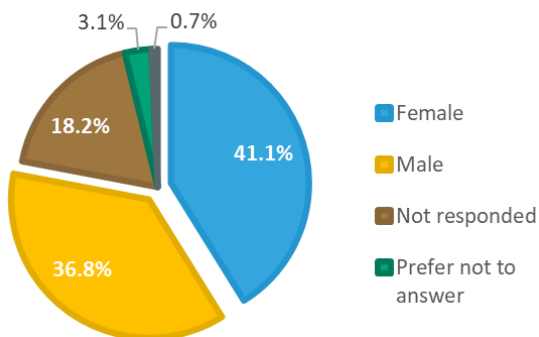
Response rate: **98.56%**



- ★ **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

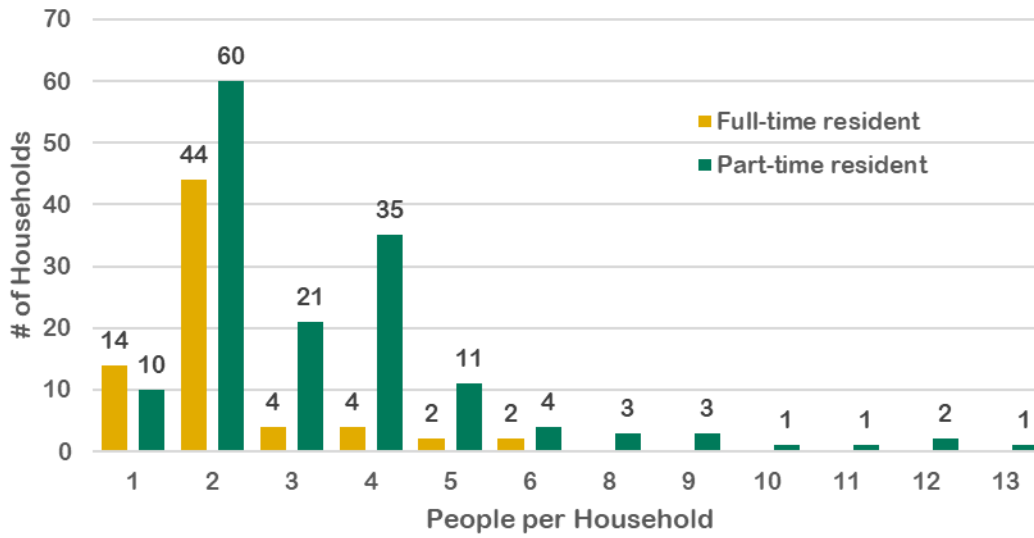
Response rate: **80.66%** and **81.13%** respectively



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

## Household size

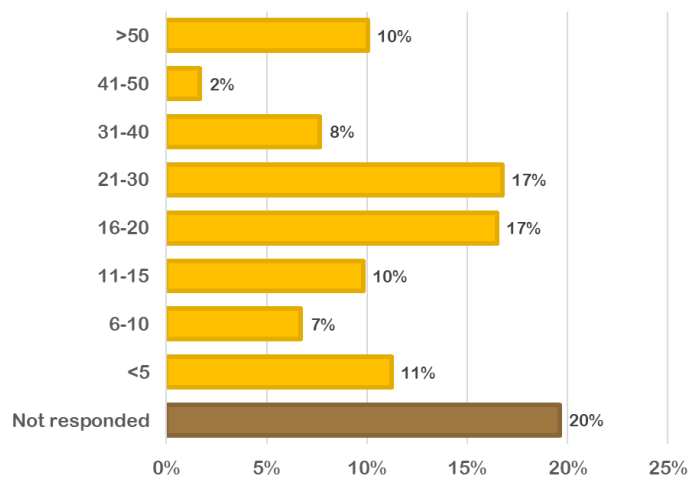
Response rate: **95.6%**



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

## Years living or owning on Gambier Island

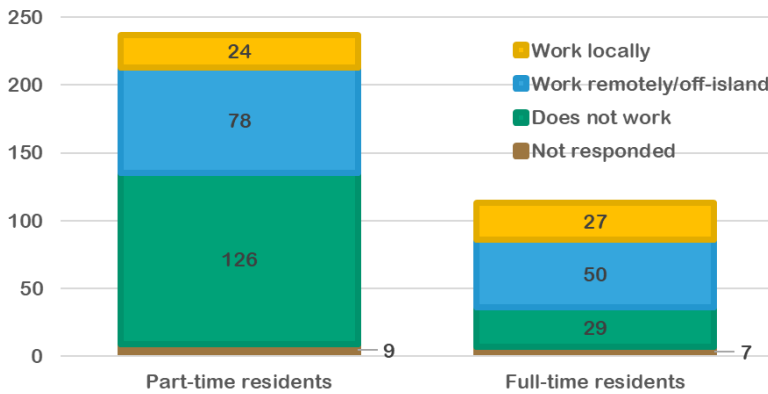
Response rate: **80.4%**



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

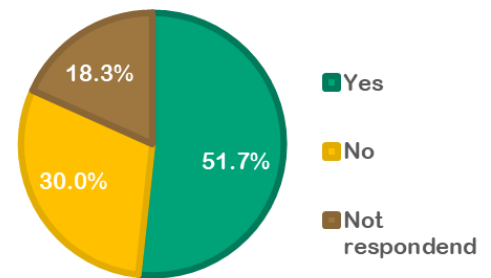
## How do they work?

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



## Have Pets/Livestock

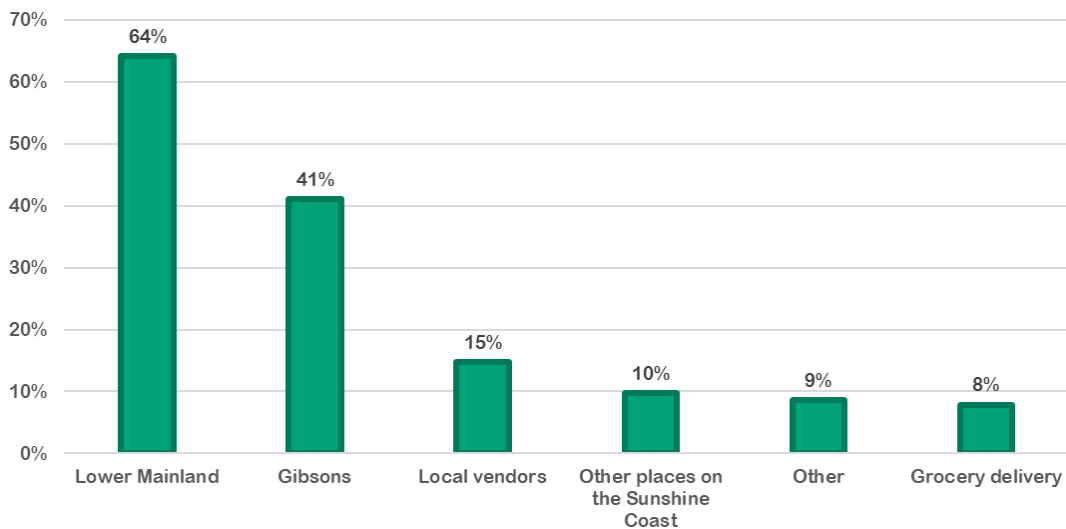
Response rate: **81.7%**



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

## Locations for groceries

Response rate: **82.3%**

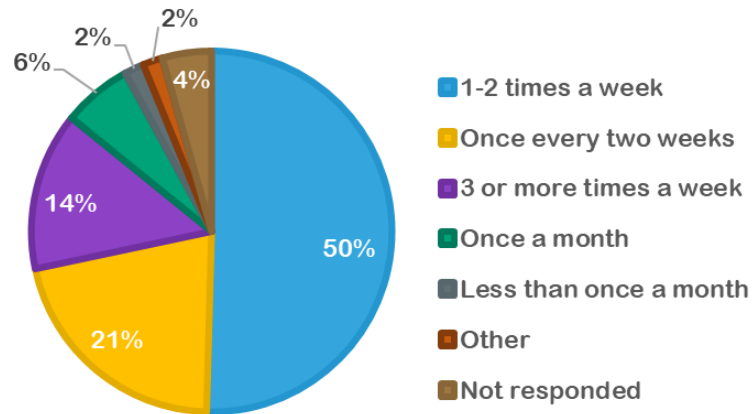


\* Only **15%** of respondents **buy groceries locally**.



## Times leaving the island (full-time)

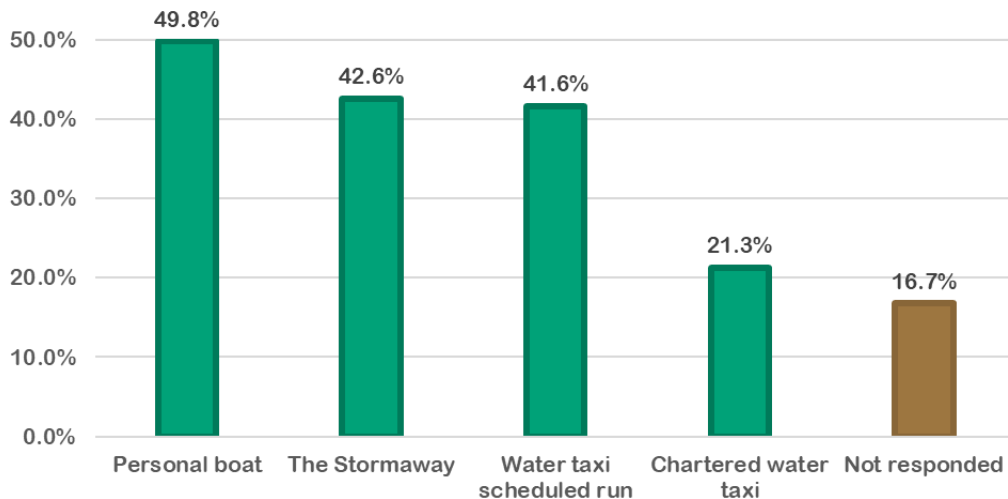
Response rate: **95.6%**



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

## Means of transportation from/to Gambier

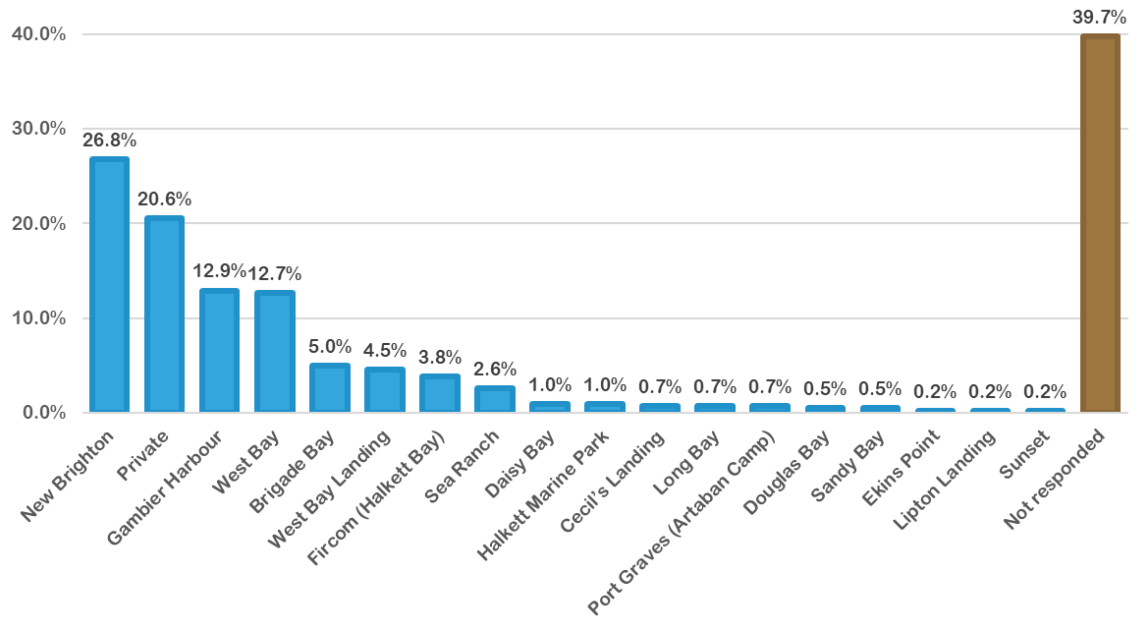
Response rate: **83.3%**



★ **75.6%** of respondents use **public transportation** services (Stormaway/Scheduled Water Taxi).

## Docks used by residents

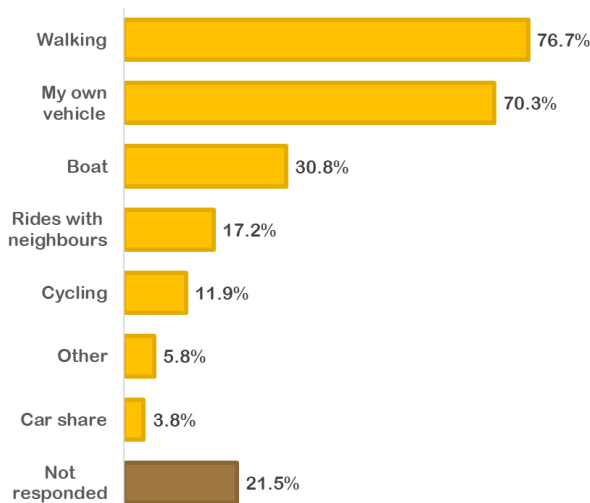
Response rate: **59.3%**



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

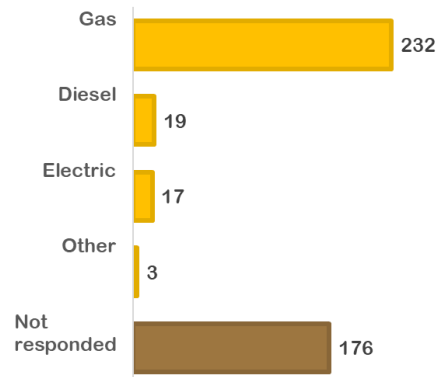
## Means to get around the island

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

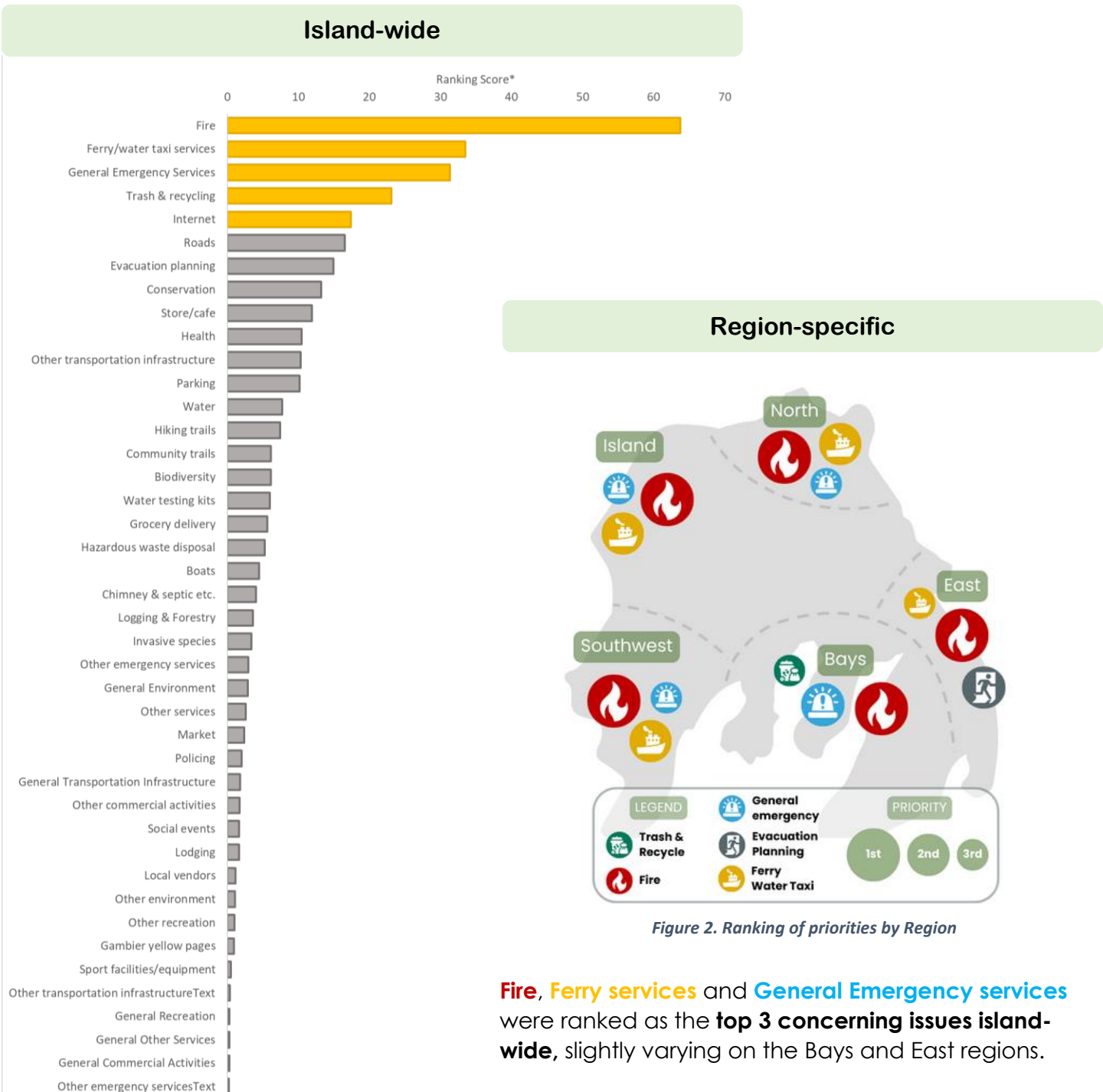
Response rate: **69.1%**



- \* **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**.

## Issues ranked by the communities

Response rate: **88.7%**



**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.

# 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, 1 being 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 is considered to convert 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 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

DataSmith (2018). Chord Diagram Generator. Retrieved from:

<http://www.datasmith.org/2018/06/02/a-bold-chord-diagram-generator/>

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<https://gambierislandconservancy.ca/>

Roszkowska, E. (2013). Rank Ordering Criteria Weighting Methods – a Comparative Overview. OPTIMUM. STUDIA EKONOMICZNE NR 5 (65) 2013. Retrieved from:

<https://www.semanticscholar.org/reader/f983e8c4eb7d7c30694dd72c5849dd6fee8a5c79>