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Purpose of Report

This report was produced by the Queen's Business Consulting (QBC) group on behalf of the Prince Edward County Attainable Housing Network (PECAHN). In conjunction with PECAHN, consultants on the QBC team built and distributed a survey collecting data regarding housing demand in the County. Insights drawn from the survey results served as independent market research to inform and aid PECAHN in the redevelopment process of the former Wellington District Community Centre. All results collected were reflective of the 4-month long engagement with PECAHN between January 2019 and April 2019.

The remainder of the report outlines a housing analysis conducted pertaining to the following groups of respondents, to better understand the housing environment within the County. Once demand was assessed for the aforementioned groups, a demographic analysis for each group was performed such that additional relevant data was captured. Demographic personas featured the following data: resident ages, family sizes and composition, household income, and special needs relating to housing. The two groups are:

- 1. Respondents who are able to afford market-rent housing in PEC.
- 2. Respondents who require affordable, or subsidized, housing in PEC.

Furthermore, the report outlines business environment analysis pertaining to the following group of respondents, to better understand how the lack of housing infrastructure has hindered hiring practices within the local economy:

1. Business owners from within the PEC business community

Overall, the independent research data gathered will help support PECAHN's application for funding to build an affordable housing complex in Wellington, as well as shape the decision regarding the appropriate housing development mix.

Queen's Business Consulting Team

QBC is a venture managed by senior undergraduate Commerce students under the direction of Smith School of Business faculty. QBC offers a wide range of cost-effective consulting services to owners, managers, and staff of small and medium-sized business as well as professionals from non-for-profit and public organizations.



Since 1973, QBC has worked with over 300 different businesses and public organizations. As Canada's top undergraduate consulting program, QBC aims to provide high-value and high-impact consulting services.

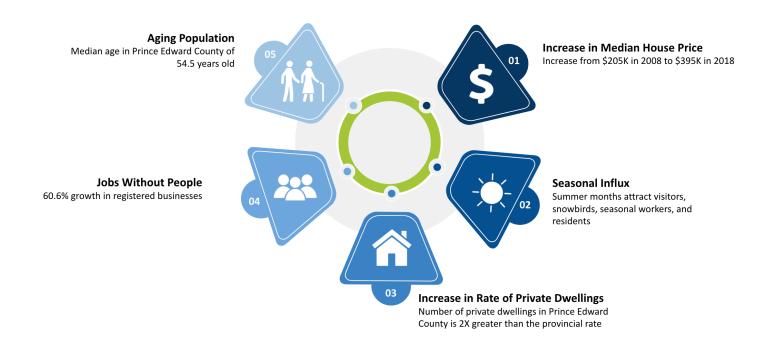
Prince Edward County Attainable Housing Network

PECAHN is a registered business entity composed of Wellington residents and volunteers aiming to transform the local unused arena lands of Wellington into affordable housing units. Currently headed by Barry Davidson, the entity has commissioned QBC to determine the most pressing types of affordable housing demand. Once the information is acquired, PECAHN will determine the appropriate amount and type of housing complexes to build, as well as the economically feasible mix of market-rent and affordable housing units. **PECAHN aims to have 33% to 50% of affordable units**, with the balance rented at market value. PECAHN hopes that, for the units that offer available rent supplements, family's 30% income and the rent and utilities is offset. This data is subject to change as the statistics for AMR are updated.

	1 BEDROOM	2 BEDROOMS	3-4 BEDROOMS	5+ BEDROOMS
Average Market Rent (AMR)	\$987	\$1187	\$1250	\$1505
Affordable Monthly Rent (80% of AMR)	\$790	\$950	\$1000	\$1204

Data provided by by Prince Edward-Lennox & Addington Social Services

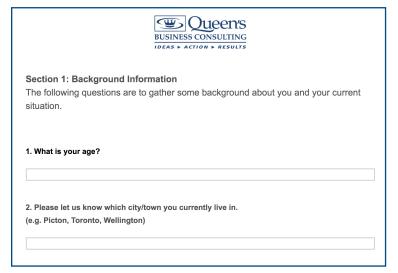
Situational Snapshot in PEC





Composition

The housing demand survey was built via the survey software platform Qualtrics and featured 26 questions spread over two core sections encompassing information pertaining to respondent general background and specific housing situations. In the former section, data including age, current location, level and sources of income, occupation, and employment circumstances, was gathered. In the latter section, data pertaining to family composition and desired housing type, duration, and location was amassed.



Screenshot of online survey

Distribution Methods

The survey was distributed across various owned, shared, and earned media outlet channels. The survey was live and collecting data between the dates of March 7th to April 4th (2019).

Owned Media Channels	The online survey was originally distributed via the Prince Edward County Attainable Housing Facebook page to an audience of 145 people. Thereafter, it was shared across several County community Facebook pages.
Shared Media Channels	The online survey, as well as several paper copies, were distributed via several groups including: PELASS, Rotary Club of Wellington, Wellington & District Storehouse Food Bank, Picton Food Bank, PEC Chamber of Commerce, PEC Innovation Centre, and several local churches.
Earned Media Channels	The online survey then garnered media attention and an in-house press release with the survey link included. It was shared via the Picton Gazette, Belleville Intelligencer, Wellington Times, Quinte News, and County Live.

Profile - All Respondents

Overall, the survey received **330 household responses**. The following graphs depict the overall demographic breakdown of respondents.

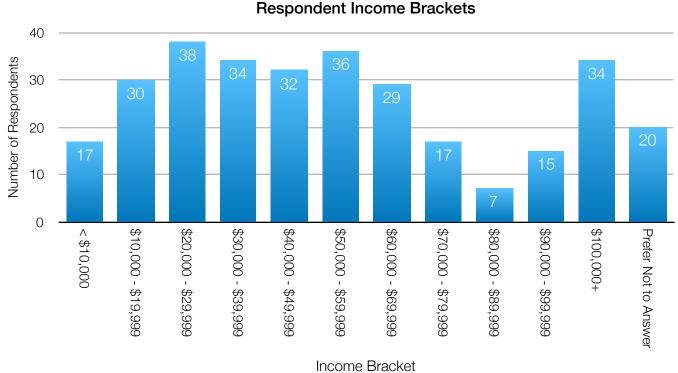
Top 5 Locations of Respondents 54% Picton

2.8%

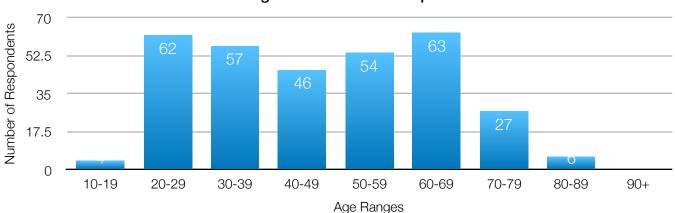


11% Wellington5.3% Bloomfield4.7% Belleville

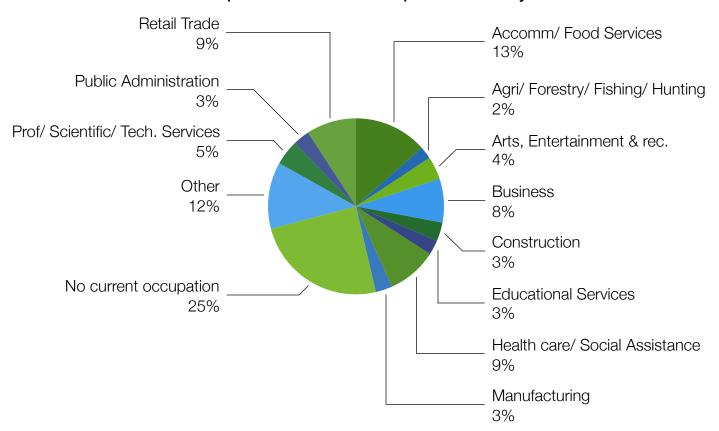
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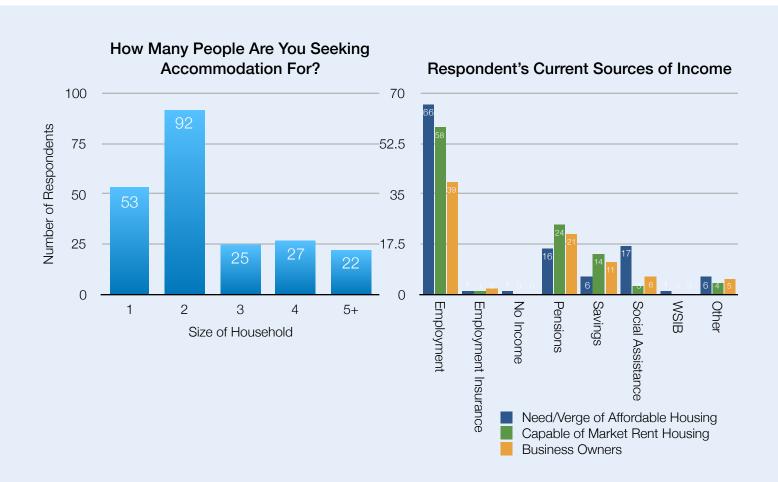


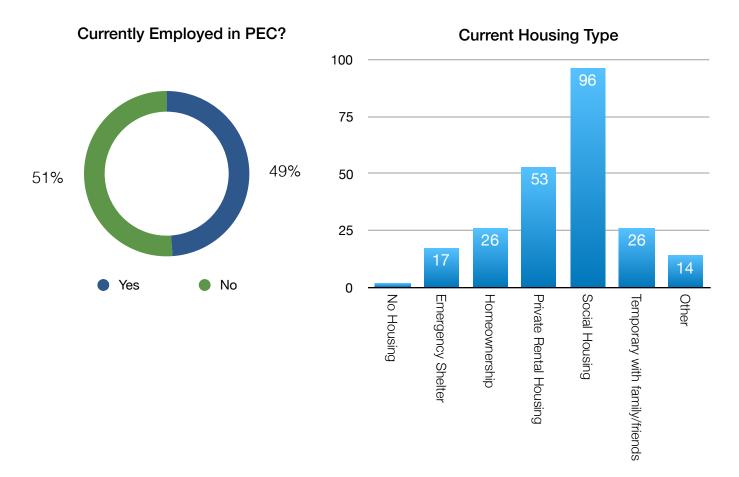
Age Distribution of Respondents

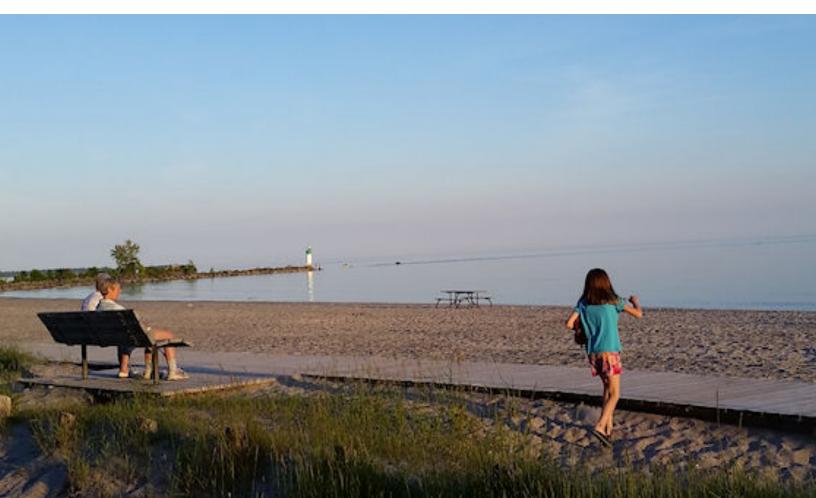


Respondent's Current Occupational Industry





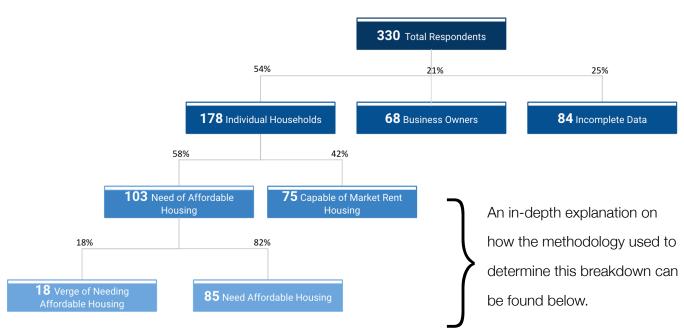




Overview

After the data was received, it was divided into sub-segments according the three key objectives. Initially, the data was divided into two primary groups; business owners and individuals (representing all those respondents that do not identify as business owners). In analyzing data from business owners, the objective was to determine the correlations between employer ability to hire and available housing in the region. By analyzing individual data, the survey sought to determine the proportion of individuals in need, or on the verge of needing affordable housing as well as those that are capable of affording market-rent housing. The following is a breakdown of the segmentation of respondents.

Total Respondents Breakdown



Determining Demand for Affordable Housing



Determine the 30% income threshold per respondent. The Canada Mortgage and Housing Corporation (CMHC) defines affordable housing as the price where a household spends less than 30% of their household income on "acceptable shelter".



Extrapolate the number of bedrooms each household requires. This was determined based on the number of people each respondent was seeking accommodation for, and the family composition of each respondent. Below is a chart which shows the assumptions made in regards to each demographic segment:

Number of Each Type of Individuals in a Household

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	1	2	3	4	5+
Children (0-17)	1 bedroom	2 bedrooms	2 bedrooms	3 bedrooms	4 bedrooms
Adults (18-59)	1 bedroom	1 bedroom*	2 bedrooms	3 bedrooms	4 bedrooms
Seniors (60+)	1 bedroom	1 bedroom*	3 bedrooms	4 bedrooms	5 bedrooms

*According to the 2016 StatsCan Census, less than 1% of households in PEC represent 2 or more person non-census-family households. Therefore, 2 adults and 2 seniors represent one bedroom each



Determine the cost of each respondent's annual *market* **rent.** This was determined based on the number of bedrooms each respondent required multiplied by the cost of each type of bedroom. The following shows the annual market rent price of each type of bedroom:

TYPE OF BEDROOM	ANNUAL MARKET RENT*
1 bedroom	\$11,844
2 bedrooms	\$14,244
3-4 bedrooms	\$15,000
5+ bedrooms	\$18,060



Determine Need, Verge, Capable. This was determined based on the proportion of annual income each respondent would spend on their respective annual market rent. If respondents spent >30% of their income, they were identified as **in need** of affordable housing. If they spent 26-30% of their income, they were identified as **on the verge** of needing affordable housing. If they spent <26% of their income, they were identified as **capable** of affording market rent housing.

KEY FINDINGS - INDIVIDUAL HOUSEHOLDS

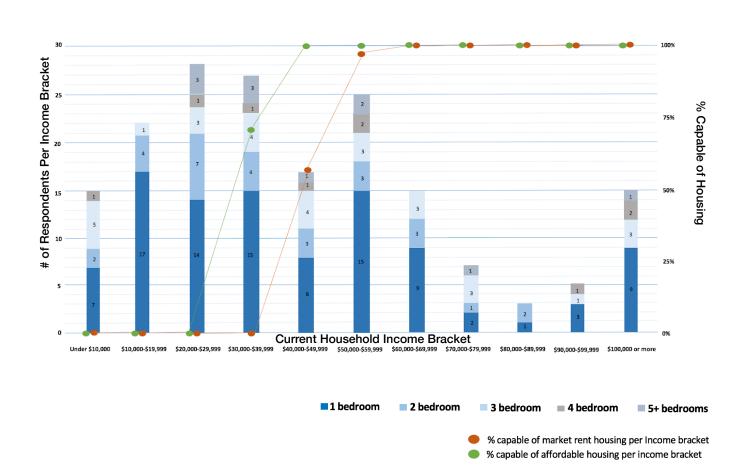
The chart below illustrates four different data points: (1) the total number of respondents per income bracket (2) the total number of bedrooms desired by respondents in each income bracket, (3) the percentage of individuals that can afford the set market rate per income bracket (red line) and (4) the percentage capable of the set affordable housing rate per income bracket (green line).

This chart emphasizes that, within the \$30,000-\$39,999 income range, 70% of the respondents are capable of accessing affordable housing. Thereafter, for the remaining income ranges, 100% of the respondents were capable of accessing affordable housing.

The chart also emphasizes that within the \$40,000-\$49,999 and \$50,000-\$59,999 income ranges, 57% and 92% of the respondents are capable of affording market rent housing, respectively. Thereafter, for the remaining income ranges, 100% of the respondents were capable of affording market rent housing.

The main takeaway from this graph involves the three main segments of the population with varying abilities to access the proposed Wellington housing complex at the current affordable prices. The first, with incomes at and below the \$20,000-\$29,999 income range, is the most vulnerable population who would require subsidies to afford the client's affordable rate. The second, with income ranges between \$30,000-\$39,999 and \$40,000-\$49,999, is the middle gap that is the primary target for the client's affordable rent units. Finally, those with income ranges above \$40,000-49,000 are either on the verge or can comfortably afford the average market rent units.

Affordable & Market Rent Housing

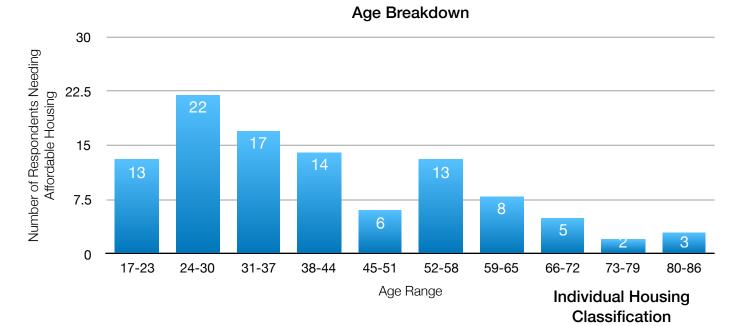


Profile - Affordable Housing

The primary focus of the survey involved determining demand for affordable units in Prince Edward County. By extrapolating from the data collected in the survey, it was determined that 103 individuals, or 58% of respondents were in need or on the verge of requiring affordable housing. Of this group, 29.13% of individual households were capable of affording housing at the set affordable rate. When considering living situations, the majority of this population lived in either private rental housing or in temporary accommodations with family and friends. The most common family composition was a single parent

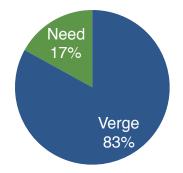
with an only child, and the primary industries of employment include retail trade, accommodations and food services, or unemployment. Finally, 66% of respondents were currently residing in Picton.

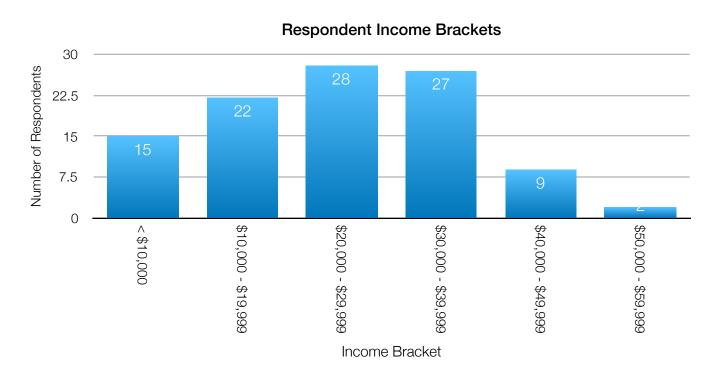
The following analysis is based on the **103 respondents** identified as on the verge of needing affordable housing and those who currently need affordable housing. The following graphs show an overall demographic breakdown of these respondents.

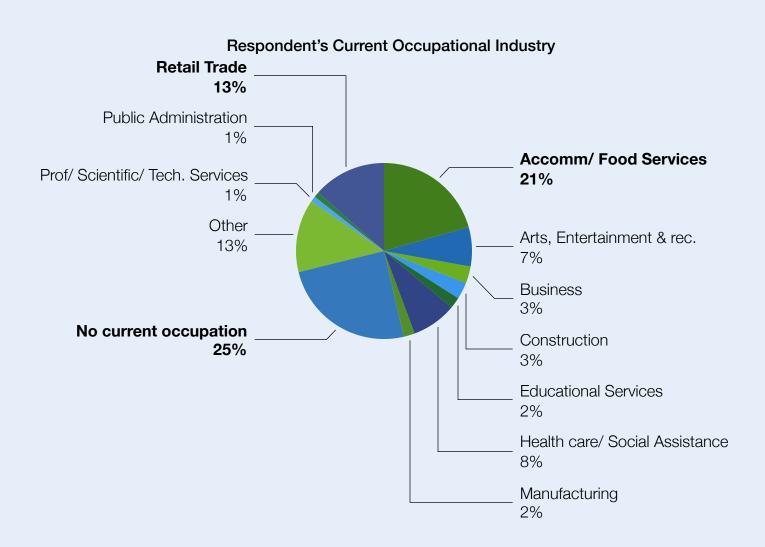


Top 5 Locations of Respondents

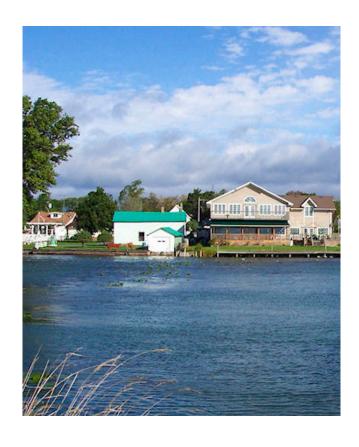
Picton 66%, Belleville 8.7%, Wellington 5.8%, Bloomfield 4.8%



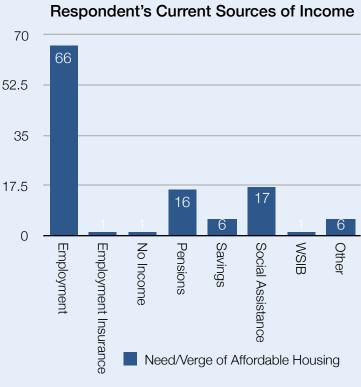




Current Housing Accommodation 60 45 Who Housing Frivate Rental Housing Fivate Rental Housing No Housing Emergency Shelter Size of Household





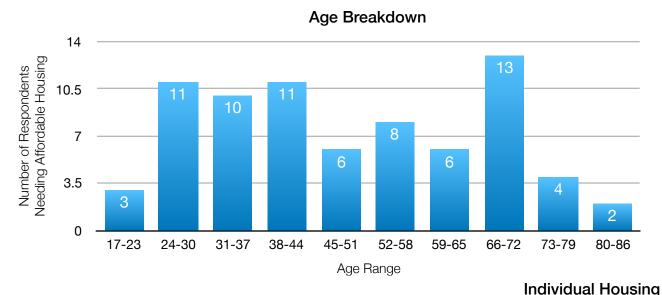


Profile - Market Rent Housing

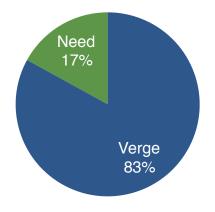
Another objective involved deriving the breakdown of individuals that can afford market-rent housing in **respondents** were currently residing in Picton. Prince Edward County. After analyzing the data, it was determined that, 75 respondents, or 42% of individual households are capable of affording market-rent housing. Of this group, the majority of individuals are currently homeowners or living in private rental housing. The most consistent housing breakdown involved a one-bedroom apartment for an adult-couple. Primary employment industries included accommodations and food services, healthcare and social

assistance, or unemployment. Finally, 47% of

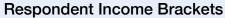
The following analysis is based on the 75 respondents identified as capable of affording marketing rent. The following graphs show an overall demographic breakdown of these respondents.

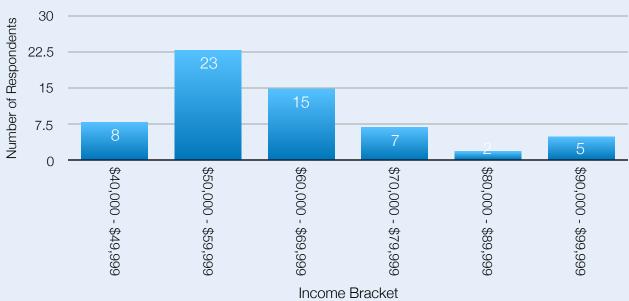


Top 5 Locations of Respondents Picton 47%, Wellington 15%, Bloomfield 5.3%, Milford 4%

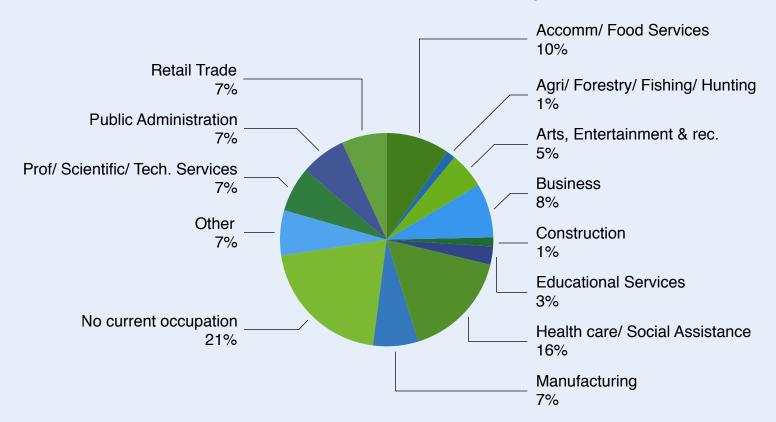


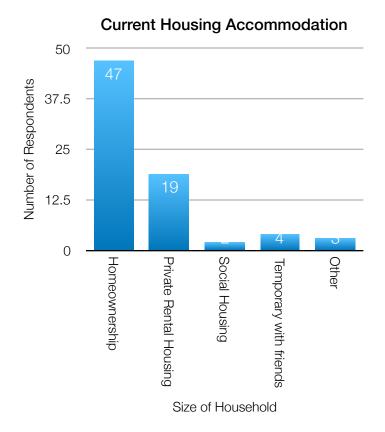
Classification

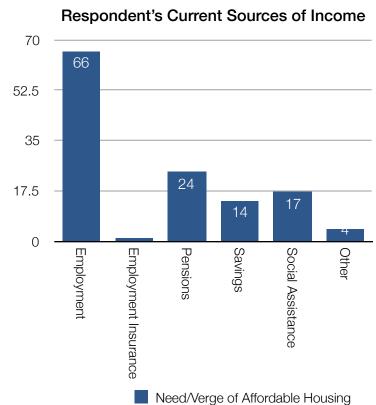


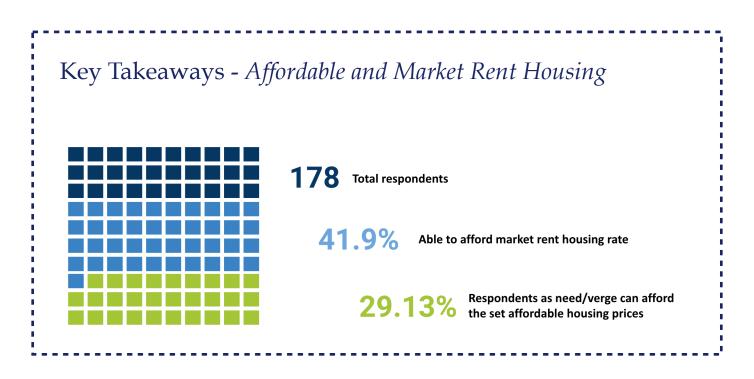


Respondent's Current Occupational Industry



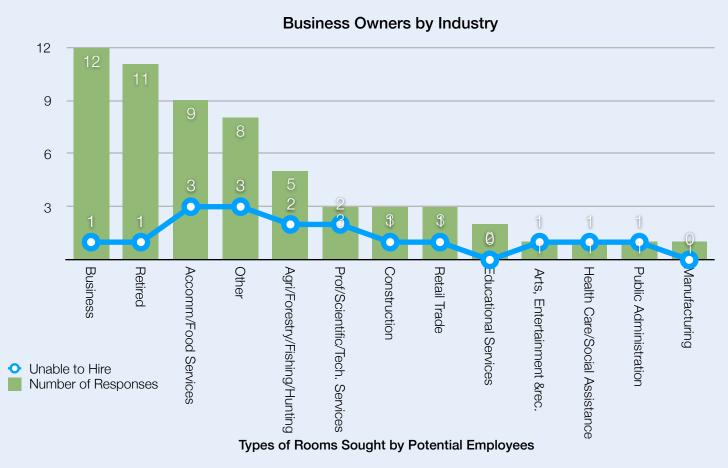






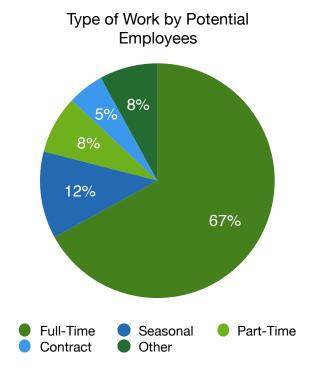
Insights

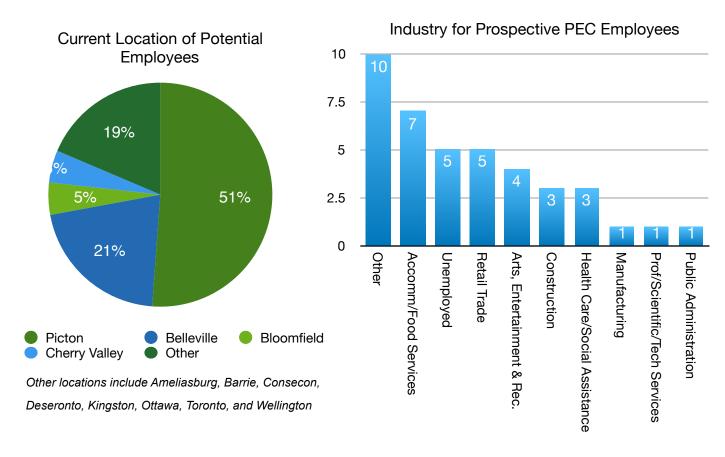
The final objective sought to determine the effect of the housing crisis on business owners and potential employees in Prince Edward County. Of the 68 business owners that responded to the survey, **27% of individuals** were unable to hire potential employees due to a lack of affordable housing options in the region. The chart below illustrates the industry breakdown from respondents and highlights the number of individuals who identified their inability to hire potential employees. Additionally, the current residence site of business owners was compared against their workplace to determine the number of business owners that commute to the County for work. It was determined that **57% of business owners** that live outside of the County commute in for work.



NUMBER OF BEDROOMS	TOTAL RESPONSES	PERCENTAGE BREAKDOWN
1 bedroom	16	39%
2 bedrooms	8	20%
3 bedrooms	10	24%
4 bedrooms	3	7%
5+ bedrooms	4	10%

After understanding the challenges faced by business owners, the survey sought to better understand the demographic breakdown of employees that struggled to find employment due to lack of affordable and available housing. Of the total survey respondents, 17% of individuals identified that they had turned down an employment offer in Prince Edward County due to lack of available or affordable housing. On average, potential employees were 34 years old and living in Belleville or other locations in the County. Of these employees, 67% were looking for full-time while work while only 12% sought seasonal work. The most prevalent industries of respondents included Accommodation and Food Services, Retail Trade, Other, or unemployment. On average, potential employees had a cumulative household income of \$30,000. As a result, 86% of respondents were unable to afford market rent housing and a further 67.5% of these individuals were unable to afford the set attainable housing rate.

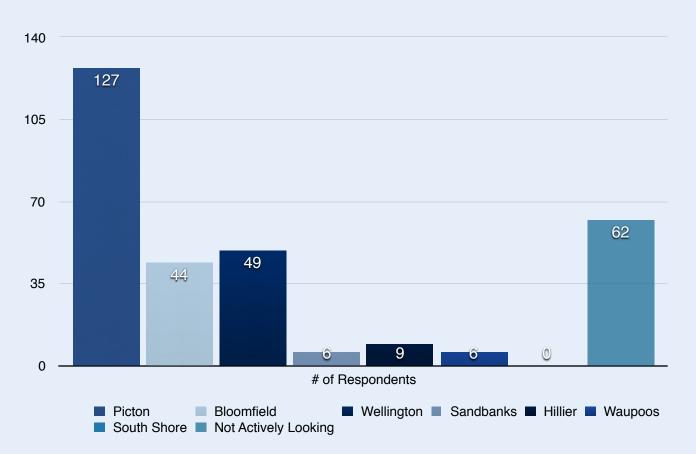




Insight One - Overall Location Preferences

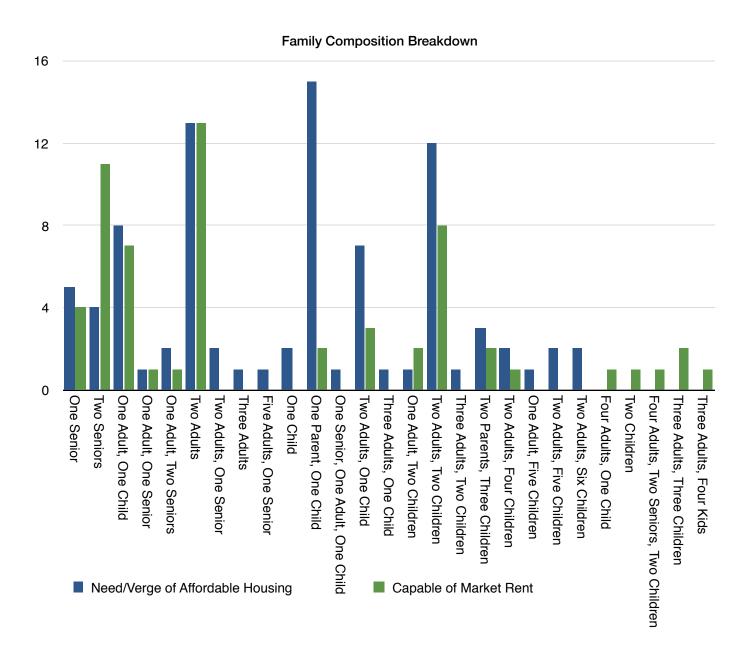
The client's current attainable housing project will be developed in the old arena land of Wellington, Ontario, one of the nine separate regions that make up PEC. The survey sought to determine the relative interest of clients to live in Wellington. When rating the level of interest in living in Wellington (one as the lowest, 10 as the highest), average survey response was a four. Further analysis illustrates respondent's desire to live in Picton, with nearly three times more selections than any other location when asked to state desired housing location. Under this criteria, however; Wellington ranks second to Picton as the most desired housing location. However, this does not imply that residents of PEC are completed averted to Wellington, as it received the second most desired housing location, closely followed by Bloomfield.

Location of Respondents



Insight Two - Building Complex Breakdown

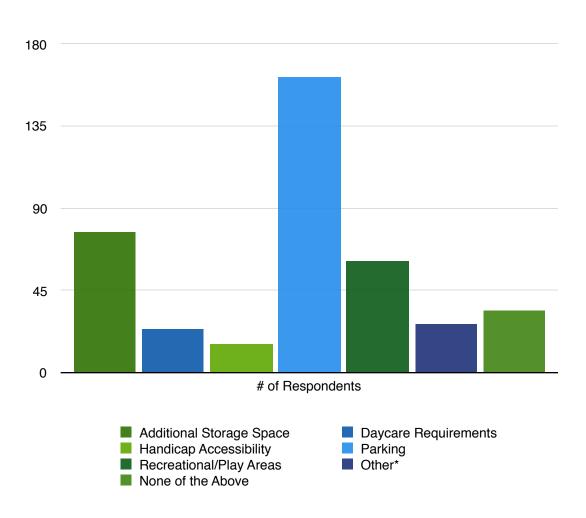
One of the objectives of the survey involved determining a suggested composition for rooms in the affordable housing units. Of the respondents requiring affordable housing, **51% of individuals** require one-bedroom accommodations. Of the respondents capable of affording market rent housing, **63% of individuals** are seeking one-bedroom accommodations. Additionally, 19.42% and 16.5% of respondents seeking affordable housing are looking for 2-bedroom and 3-bedroom accommodations, respectively. Conversely, 17.33% and 10.67% of market rent capable respondents are interested in 3-bedroom and 2-bedroom accommodations, respectively. To this end, it is recommended that the client focus primarily on the construction of one bedroom units.



Insight Three - Housing Accommodation Needs

At the end of the survey, respondents were asked to indicate any other amenities that they required. Over 85% of survey respondents own their own vehicle and depend on it as a primary mode of transportation. As such, there was a significant demand for parking from respondents. Additionally, there was a high demand for recreational play areas and daycares in the area, as a large portion of families answered the survey. These amenities could contribute to a positive culture in the neighbourhood, as they could create a sense of ownership and community. Finally, with regards to individuals that requested special requirements or accommodations, relevant factors include service animals, affordable utilities, easy outdoor access, and even fenced yards for children. These factors largely contribute to fostering a vibrant community and will likely play a significant role in attracting individuals to Wellington.



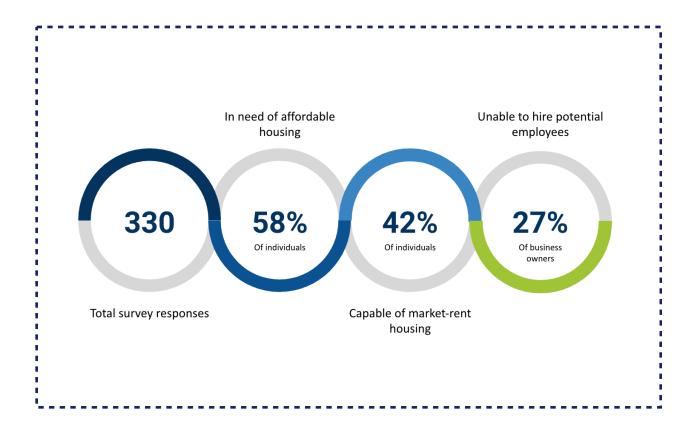


Risks & Biases

While creating and analyzing the survey, several challenges were incurred that may have affected the outcome of the data. The first potential risk involves survey distribution. Because the team of consultants was located in Kingston, it was difficult to physically distribute the survey to respondents. This reality may have resulted in difficulties in survey representation whereby predominantly Internet users were targeted through the survey. This could have resulted in a bias towards a significant response rate from targeted demographics and less response from groups such as elderly individuals. Another bias could have stemmed from inconsistencies in survey questions. Several questions in the survey use incongruent metrics which made it challenging to analyze those questions against one another. This led to flaws in the survey, as many questions did not receive the intended answers from participants. Finally, working under the tight deadline of a 12 week project, the survey was only accessible to respondents for two and a half weeks which may have led to a lesser response rate.

Mitigation

To mitigate the risks outlined above, the consultants took a number of proactive steps to improve survey performance. Firstly, at the beginning of the project, the group made a visit to Prince Edward County to engage with and meet stakeholders. This fostered connections that became valuable in the survey distribution process. Secondly, to fill in blanks in the data, reports such as the Vital Signs Report and the Census were used to aid in guiding and advancing the process. Finally, to mitigate the risk of survey representation, the survey was deliberately distributed through a diverse stream of networks including newspapers, churches, and Rotary Clubs to reach a varied demographic. By implementing proactive measures and responding to challenges as they arose, the risks and biases associated with the survey process were mitigated.



Thank you to those respondents who took the time to fill out the distributed survey. The analyzed data is intended to provide an in-depth review for an affordable housing project. This data has created figures for a demographic breakdown, recommendations for the desired bedroom mix, as well as housing accommodation and requirements identified. The intention of this project is to create several mixed housing units that incorporate both affordable and market value units. The insights that Queen's Business Consulting has gained from this data is invaluable. Thank you to all who helped and participated!