



COMMUNITY HOUSING STUDY
WHITEHORSE HOUSING REPORT
NOVEMBER, 2000



WHITEHORSE
COMMUNITY HOUSING REPORT

A STUDY ON HOUSING QUALITY

A Research Project by:
Yukon Housing Corporation

Report Date: November 2000

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
GENERAL INFORMATION.....	1
DWELLING ADEQUACY – KEY HIGHLIGHTS	2
ENERGY EFFICIENCY	2
STATE OF REPAIR.....	2
BASIC FACILITIES.....	2
HEALTH AND SAFETY DEFICIENCIES.....	2
DESIRED IMPROVEMENTS.....	3
DWELLING AFFORDABILITY - KEY HIGHLIGHTS	3
AFFORDABILITY PROBLEM.....	3
DWELLING SUITABILITY – KEY HIGHLIGHTS	3
CROWDING	3
ACCESSIBILITY FOR DISABLED AND ELDERLY.....	3
ACCESS TO HOME OWNERSHIP – KEY HIGHLIGHTS	4
RENTING.....	4
SENIORS AND ELDERS NEEDS - KEY HIGHLIGHTS	4
DWELLING SUITABILITY	4
COMMUNITY HOUSING STUDIES METHODOLOGY	5
BACKGROUND	5
STUDY DESIGN.....	5
PROCESS.....	6
SAMPLE DESIGN AND SAMPLE SIZE	6
TIME OF DATA COLLECTION	7
DATA QUALITY	7
USEFULNESS OF DATA.....	7
CONFIDENTIALITY	7
REPORT FORMAT	7
USE OF INFORMATION.....	8

1 DWELLING ADEQUACY	9
1.1 ENERGY EFFICIENCY.....	9
1.1.1 Annual Energy Cost per Square Foot	10
1.1.2 Annual Energy Cost versus Dwelling Size	11
1.1.3 Annual Energy Cost versus Dwelling Type	12
1.1.4 Annual Energy Cost per Square Foot versus Age of the Dwelling	13
1.1.5 Annual Energy Cost versus Dwelling's Main Window Type	14
1.1.6 Annual Energy Cost Versus Dwelling's Main Window Pane Type.....	16
1.1.7 Annual Energy Cost Versus Dwelling's Wall Thickness	17
1.1.8 Annual Energy Cost versus Dwelling's Main Heating Fuel.....	18
1.1.9 Annual Energy Cost versus Dwelling's Main Heating System.....	19
1.1.10 Annual Energy Cost versus Heat Loss Prevention Measures	21
1.1.11 Percentage of Dwellings with an Energy Related Repair Need.....	22
1.1.12 Annual Energy Cost per Square Foot versus Energy Related Repair Need.....	23
1.2 STATE OF REPAIR	24
1.2.1 Major Repair Needed	25
1.2.2 Major Repair Needed versus Household Income.....	26
1.2.3 Type of Major Repair Needed.....	27
1.2.4 Percentage of Households that Own their Dwellings Planning Major Repair.....	28
1.2.5 Estimated Cost of Planned Major Repair	29
1.2.6 Percentage of Dwellings Needing Minor Repair.....	30
1.2.7 Type of Minor Repair Needed.....	31
1.3 BASIC FACILITIES	32
1.1.1 Basic Facilities.....	33
1.4 HEALTH AND SAFETY DEFICIENCIES	34
1.4.1 Health and Safety Deficiencies	35
1.4.2 Smoke Alarms	36
1.4.3 Mechanical Ventilation.....	37
1.4.4 Kitchen/Bathroom Exhaust Systems.....	38
1.4.5 Water Supply.....	39
1.4.6 Sewage Disposal.....	40
1.5 DESIRED IMPROVEMENTS	41
1.5.1 Desired Improvements	42
2 DWELLING AFFORDABILITY	43
2.1 PRESENCE OR ABSENCE OF AFFORDABILITY PROBLEM	43
2.1.1 Affordability	44

3	DWELLING SUITABILITY	45
3.1	CROWDING.....	45
3.1.1	Bedrooms.....	46
3.1.2	Percentage of Households That Use Other Rooms as Bedrooms	47
3.2	ACCESSIBILITY FOR DISABLED AND ELDERLY	48
3.2.1	Percentage of Households with at Least One Disabled Person	49
3.2.2	Accessibility Feature(s) Required	50
4	ACCESS TO HOME OWNERSHIP.....	51
4.1	RENTERS	51
4.1.1	Reasons for Renting.....	52
5	SENIORS AND ELDER'S NEEDS.....	53
5.1	HOUSEHOLD TYPE	53
5.1.1	Household Type Breakdown.....	54
5.1.2	Household Type versus Repair Need	55
5.1.3	Household Type versus Basic Household Facilities.....	56
5.1.4	Dwelling Affordability for Household type.....	57
5.1.5	Dwelling Manageability for a Senior.....	58
5.1.6	Problems a Senior would have Living in this Dwelling	59

WHITEHORSE COMMUNITY HOUSING STUDY

EXECUTIVE SUMMARY

GENERAL INFORMATION

The Yukon Housing Corporation, in conjunction with the Northern Research Institute, undertook a housing study in Whitehorse from January to March 2000. The purpose of the study was to look at the quality of housing in the city. A total of 1,324 randomly selected households were interviewed.

Whitehorse households make up 62 percent of the total households interviewed for the Yukon wide data. As a result, the Whitehorse information has a significant impact on the Yukon wide statistics. As a consequence, readers will note that many of the Whitehorse results are very similar to the Yukon wide results.

This summary provides key highlights of the Whitehorse housing study. The study looks at dwelling adequacy, dwelling affordability, dwelling suitability, and access to home ownership as well as seniors and elders needs. It also compares Whitehorse with the Yukon.

DWELLING ADEQUACY – KEY HIGHLIGHTS

The study looks at *dwelling adequacy* which refers to:

- ❑ the energy efficiency of the dwelling;
- ❑ the state of repair of the dwelling;
- ❑ the presence or absence of basic facilities in the dwelling;
- ❑ the need for health and safety considerations in the dwelling including running water, electricity, heat, and smoke alarms; and
- ❑ the desire of the occupants to improve the dwelling.

ENERGY EFFICIENCY

Just over 30 percent of Whitehorse households pay over \$2 per square foot to heat their homes (page 10)¹. A number of factors come into play when considering energy costs including the type of window pane, the thickness of walls, and the kind of heating system. Energy related repair needs in Whitehorse are 9 percent versus 14 percent for the Yukon (page 22). In general, however, energy efficiency results in Whitehorse are very similar to Yukon wide results.

STATE OF REPAIR

Twenty-six percent of all dwellings in Whitehorse require major repairs compared with 33 percent of dwellings in the Yukon (page 25). Just over 10 percent of Whitehorse households require major repairs to wall, foundations, floors, ceilings, roof or exterior siding (page 27), while 5 percent of dwellings require minor repairs (page 30). Minor repairs include such things as windows, plumbing and roofing repairs (page 31). The state of repair of households in Whitehorse is similar to the Yukon wide results.

BASIC FACILITIES

The majority of Whitehorse dwellings have basic amenities. Only 2 percent of dwellings lack amenities such as a hot and cold water (page 33). The Yukon wide results are higher with 4 percent of dwellings lacking basic facilities.

HEALTH AND SAFETY DEFICIENCIES

Twenty-four percent of Whitehorse dwellings have health and safety deficiencies (page 35). These deficiencies may range from not having a kitchen exhaust system to not having adequate sewage disposal. For example, 9 percent of dwellings do not have working smoke alarms (page 36). Results are very similar between Whitehorse and the Yukon.

¹ The page numbers identified throughout this summary refer to the data in the Whitehorse Community Housing Report.

DESIRED IMPROVEMENTS

Respondents stated they would like to make improvements in several areas from remodelling a kitchen to major structural repairs. Six percent of respondents would like to replace their dwelling's roof or siding (page 42). Another 5.4 percent would like to do major repairs to the dwelling's structure. Whitehorse and Yukon wide results are very similar in all categories.

DWELLING AFFORDABILITY - KEY HIGHLIGHTS

The study looks at *dwelling affordability* which refers to:

- whether the occupants pay 30 percent of their gross income to cover shelter costs.

AFFORDABILITY PROBLEM

Sixty percent of Whitehorse respondents do not have an affordability problem while 10 percent have a problem (page 44). The respondents with an affordability problem spend more than 30 percent of their income for shelter. Again, Whitehorse and Yukon results are similar.

DWELLING SUITABILITY – KEY HIGHLIGHTS

The study looks at *dwelling suitability* which refers to:

- the number of bedrooms in the dwelling; and
- the ease of access for the disabled and elderly.

CROWDING

Only 5 percent of Whitehorse households do not have enough bedrooms (page 46). This compares with 6 percent for the Yukon.

ACCESSIBILITY FOR DISABLED AND ELDERLY

About 12.9 percent of Whitehorse households have one disabled person (page 49). These households are generally equipped with accessibility features such as ramps and wheelchair access. However, items such as handrails and grab bars are needed in 8.9 percent of Whitehorse households with at least one disabled person (page 50). This compares with 11.9 percent in the Yukon.

ACCESS TO HOME OWNERSHIP – KEY HIGHLIGHTS

The study looks at *access to home ownership* in terms of:

- reasons for renting.

RENTING

There are many reasons why people choose to rent rather than buy their own homes. In the study, renters' responses range from "there is a lack of desirable housing in the community" to "they are only staying in the community for a short period of time." However, the most significant reason given for not purchasing a home is the requirement for a down payment. Thirty-five percent say the need for a down payment prevents them from purchasing a home (page 52). This compares with 32 percent in the Yukon.

SENIORS AND ELDERS NEEDS - KEY HIGHLIGHTS

The study looks at the *needs of seniors and elders* in terms of:

- dwelling suitability.

DWELLING SUITABILITY

Senior and mixed senior households make up 28 percent of Whitehorse households (page 54). Mobility problems are the biggest issue for seniors and elders at 38.8 percent (page 59). Whitehorse and Yukon results are similar.

COMMUNITY HOUSING STUDIES METHODOLOGY

BACKGROUND

In 1986, national census data was released that indicated the need for improved housing quality in Yukon. That data suggested that housing quality in the territory was among the lowest in Canada. Since then, the Yukon Housing Corporation has adapted existing programs and created new programs to assist Yukoners to improve the quality of their housing.

The Yukon Housing Corporation wishes to continue its effort to help Yukoners improve their housing. In order to do that, the Yukon Housing Corporation requires good quality information to determine if its programs are helping to improve housing in the Yukon, and to possibly refocus the Yukon Housing Corporation's policies, programs and services to meet the needs identified by Yukoners.

STUDY DESIGN

In an effort to get up-to-date information on housing conditions and the housing needs of Yukoners, the Yukon Housing Corporation designed and managed a housing data collection project that consisted of a series of community housing surveys completed throughout the Yukon. These surveys were carefully designed to obtain answers to the Yukon Housing Corporation's critical policy questions. These policy questions can be grouped into three general standards of housing quality. These standards are also used to assess housing quality throughout Canada. They are:

- ❑ *Dwelling Adequacy* (physical condition): refers to the presence or absence of basic health and safety features in the home, for example, running water, electricity, heat, smoke alarms.
- ❑ *Dwelling Affordability* (dwelling costs with respect to household income): refers to a measure of the ability of the occupants to pay for their housing. This includes an analysis of the affordability of home ownership as compared to home renting.
- ❑ *Dwelling Suitability* (factors such as crowding and accessibility): refers to the appropriateness of the dwelling for the current occupants, for example, is it accessible, are there enough bedrooms. This section included a special analysis of seniors' and elders' needs.

Each of these three housing quality standards contains sub-themes. For example, the first one, *Dwelling Adequacy*, is comprised of the following:

- ❑ Energy Efficiency,
- ❑ State of Repair,
- ❑ Presence or Absence of Basic Facilities,
- ❑ Health and Safety Items, and
- ❑ Desirable Improvements.

The information provided in the responses to the community housing surveys allows the Yukon Housing Corporation to determine the quality of dwellings in each community.

This housing quality indicator report provides a summary of the responses to the questions in your community housing survey. It also provides information on a Yukon wide basis to allow you to compare housing conditions in your community with those in the Yukon in general.

PROCESS

The Yukon Housing Corporation hired the Northern Research Institute to complete the door-to-door surveying. The Northern Research Institute recruited and trained the surveyors, and administered the survey.

Community Housing Surveys were completed for the communities of Beaver Creek, Burwash Landing, Carcross, Carmacks, Dawson City, Destruction Bay, Haines Junction, Marsh Lake, Mayo, Ross River, Teslin, Watson Lake, and Whitehorse.

In each of the 13 communities surveyed, the local government, and the relevant First Nation government were informed of, and included in the process. Their assistance was critical to our success in obtaining excellent quality housing data in these studies. In return, the Yukon Housing Corporation committed to providing this report on housing quality to these communities.

The Northern Research Institute hired interviewers from each community with the exception of one community where no local people applied for the positions. In every case, the local government and the relevant First Nation government office were contacted in advance of the survey. In many communities, the Yukon Housing Corporation and Northern Research Institute staff met with officials from those offices to review the surveying process in the community and to provide information to those concerned.

SAMPLE DESIGN AND SAMPLE SIZE

The Yukon Housing Corporation and the Northern Research Institute physically mapped all occupied dwellings in each of the communities that were surveyed. From this “population” of dwellings, we randomly sampled a specific number of households to interview. For each community, the Yukon Housing Corporation determined the correct number of households to survey in such a way as to make the quality of the data the same in each community. As a result, in each community, the data is statistically accurate within 10 percent, 19 times out of 20. In Whitehorse², 1,324 households were surveyed out of an estimated 8,386 dwellings.

² For the purposes of this study, the following neighbourhoods were surveyed in the Whitehorse area: Arkell, CopperRidge, Cowley Creek, Crestview, Downtown, Granger, Hidden Valley, Hillcrest, Hot Springs Road, Ibx Valley, Lobird, Logan, Mary Lake, McIntyre, McPherson, Northland and Takhini Trailer Courts, Pilot Mountain, PineRidge, Porter Creek, Riverdale, Squatters' Row, Valleyview, and Wolf Creek.

TIME OF DATA COLLECTION

The surveying was done in Whitehorse between January and March 2000.

DATA QUALITY

In each community surveyed, a random sample survey was completed. Of the approximately 11,700 households in the Yukon, 2,138 households were surveyed through this process. In each community, this survey yielded very high quality, statistically valid data. The confidence interval of the data is 95 percent; the margin of error is 10 percent³.

USEFULNESS OF DATA

The housing data is stored in a database that will allow us to look at the data in a variety of ways in order to assess the housing conditions and needs of many different groups within the Yukon population. By analyzing the data in a variety of ways, the Yukon Housing Corporation will be able to make the best possible program and policy decisions to help Yukoners improve their housing.

The data will also provide communities and First Nations with a useful tool that will help them to make decisions about housing improvement priorities.

Data can be provided in more detailed breakdowns and cross-tabulations. It can also be provided in the form of customized reports. For example, an energy report will be prepared.

CONFIDENTIALITY

The Yukon Housing Corporation is obliged to protect the identities of individual respondents. In general, no information that is confidential under the provisions of the Statistics Act and the Protection of Privacy Act will be divulged.

REPORT FORMAT

This report will consist of a series of pages of charts. Each page will focus on one specific housing topic. The top chart on each page will show the data for that topic from each community, and the bottom chart will show the corresponding Yukon wide data. The data is presented in this way to allow easy comparison of community data with that of the territory as a whole.

In many cases, the charts will show one factor against another factor. Please note, one factor alone is not completely predictive of another factor. In most cases, there are numerous factors that influence the end result.

³ When a sample survey is conducted, the results depend on who was selected to be in the survey. A different sample of people might yield different results. The amount of variability in the results obtained from different samples is called the sampling error. We can measure the sampling error by applying statistical formulas. This error can be reported in various ways, one of which is a confidence interval. A confidence interval is a range of likely values. When a sample survey is conducted, we can estimate the proportion of people with some characteristic. Often accompanying the point estimate, a 95 percent confidence interval is given. If you repeated the survey over and over, 95% of the time the result would be within the given range, which in this case, is 10%.

In the report, a series of charts are presented. For example, energy costs are considered in the context of wall thickness versus energy costs per square foot; window type versus energy costs per square foot; and measures to control energy loss versus energy costs per square foot. These comparisons allow the reader to draw conclusions about the total effect of all of the factors regarding energy costs per square foot.

USE OF INFORMATION

Data is provided for information purposes only. Interpretation and use of data in decision making is the sole responsibility of the user.

1 DWELLING ADEQUACY

The following characteristics of dwellings were used as indicators of the adequacy of the dwelling:

- energy efficiency,
- state of repair,
- basic facilities, presence or absence,
- health and safety considerations, presence or absence of various features, and
- desirable improvements.

1.1 ENERGY EFFICIENCY

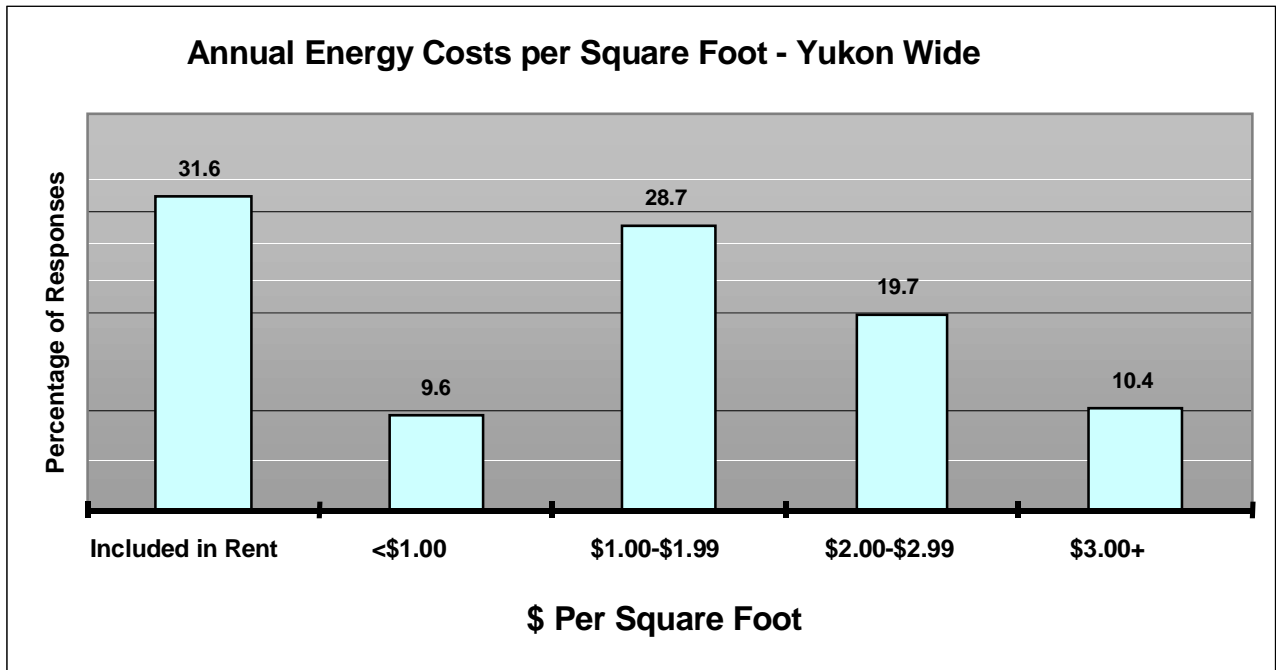
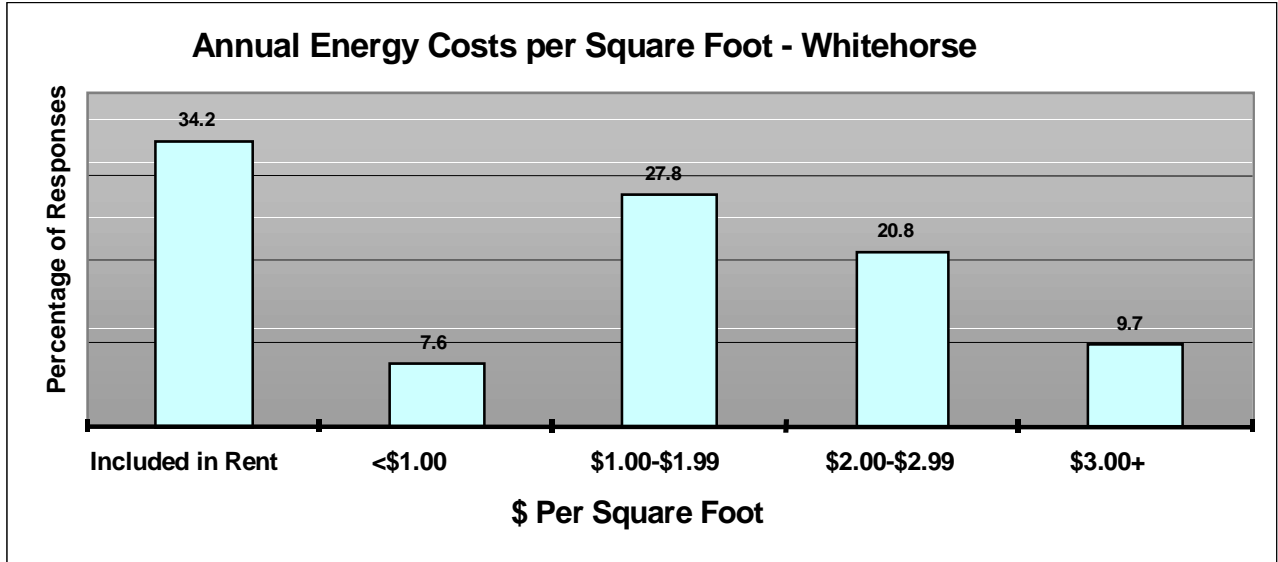
The following 12 sub-themes illustrate various factors related to the energy efficiency of dwellings in Whitehorse and the Yukon:⁴

- ⇒ **ANNUAL ENERGY COST PER SQUARE FOOT,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING SIZE,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING TYPE,**
- ⇒ **ANNUAL ENERGY COST PER SQUARE FOOT VERSUS AGE OF THE DWELLING,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING'S MAIN WINDOW TYPE,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING'S MAIN WINDOW PANE TYPE,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING'S WALL THICKNESS,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING'S MAIN HEATING FUEL,**
- ⇒ **ANNUAL ENERGY COST VERSUS DWELLING'S MAIN HEATING SYSTEM,**
- ⇒ **ANNUAL ENERGY COST VERSUS HEAT LOSS PREVENTION MEASURES,**
- ⇒ **PERCENTAGE OF DWELLINGS WITH AN ENERGY RELATED REPAIR NEED,**
- ⇒ **ANNUAL ENERGY COST PER SQUARE FOOT VERSUS ENERGY RELATED REPAIR NEED.**

⁴ ANNUAL ENERGY COST PER SQUARE FOOT: In calculating the energy cost per square foot, it should be noted that dwelling square footage includes the main floor and the second floor if applicable. It does not include the basement square footage even if the basement is heated. As well, the calculation of the annual energy cost includes the annual cost of heating fuel and the annual cost of electricity.

1.1.1 ANNUAL ENERGY COST PER SQUARE FOOT

These bar charts depict heating costs per square foot that households pay in Whitehorse and in the Yukon.

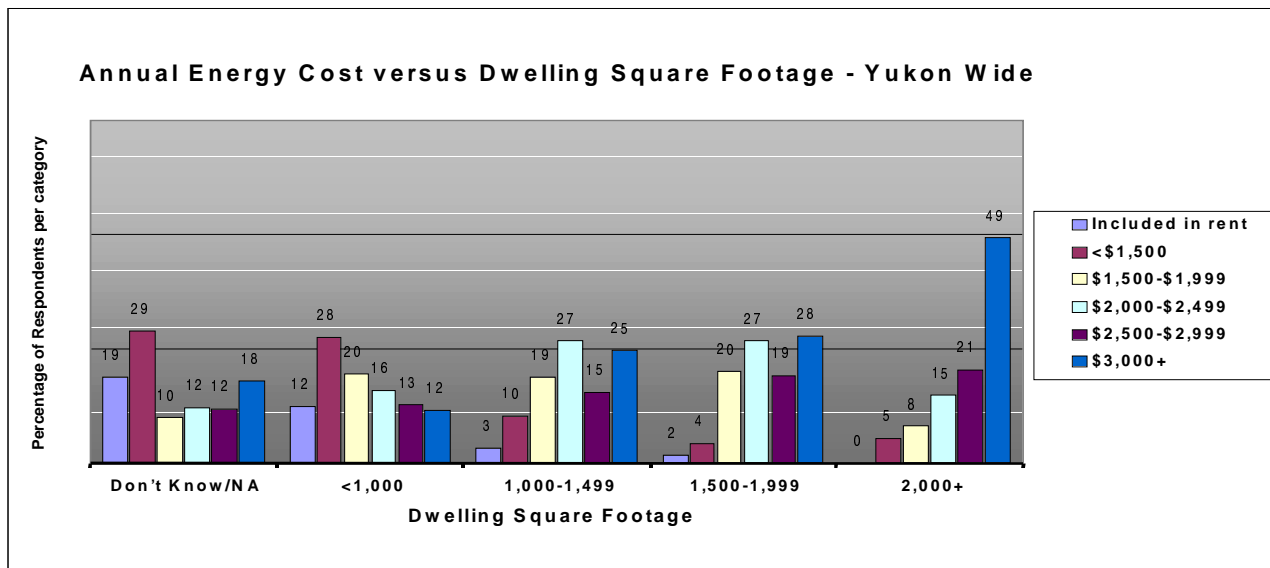
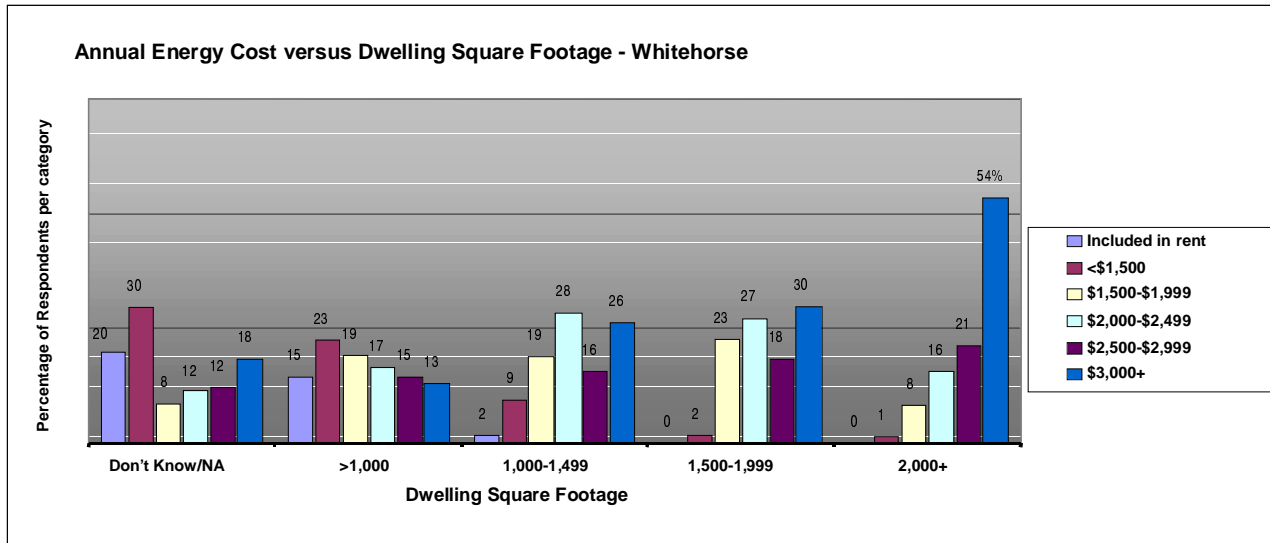


HIGHLIGHTS

- Energy costs per square foot in Whitehorse households are very similar to those in the Yukon as a whole.
- Approximately 30 percent of both Whitehorse and Yukon households pay over \$2 per square foot for heating energy.

1.1.2 ANNUAL ENERGY COST VERSUS DWELLING SIZE

These bar charts show the relationship between annual energy costs for householders and the square footage of their dwellings.



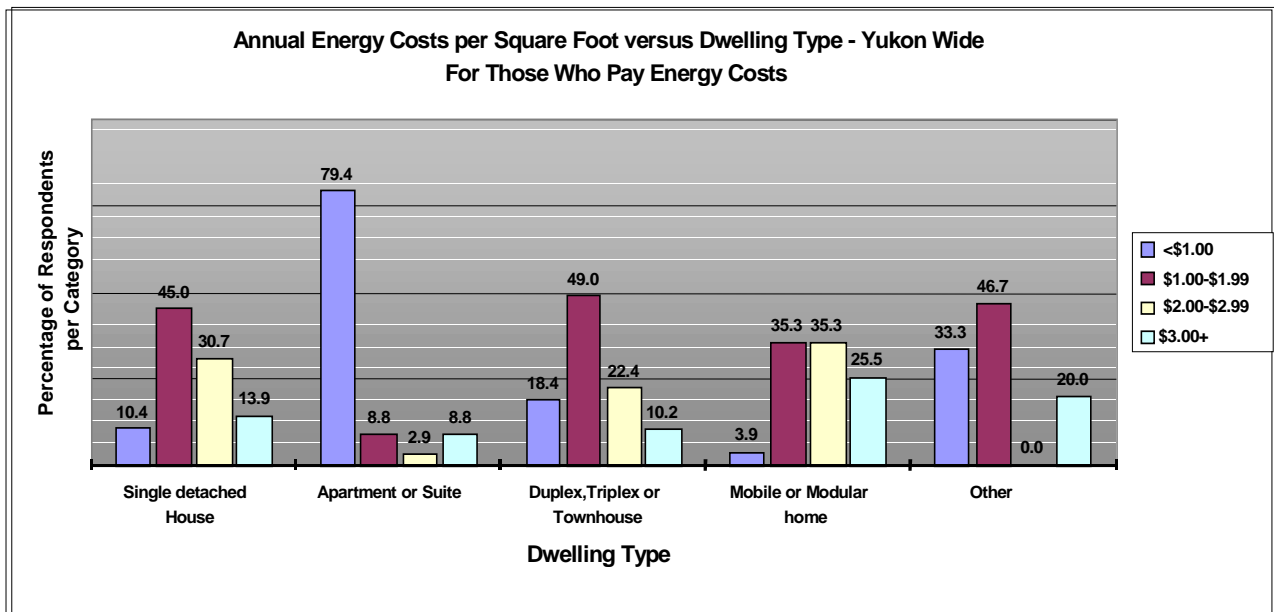
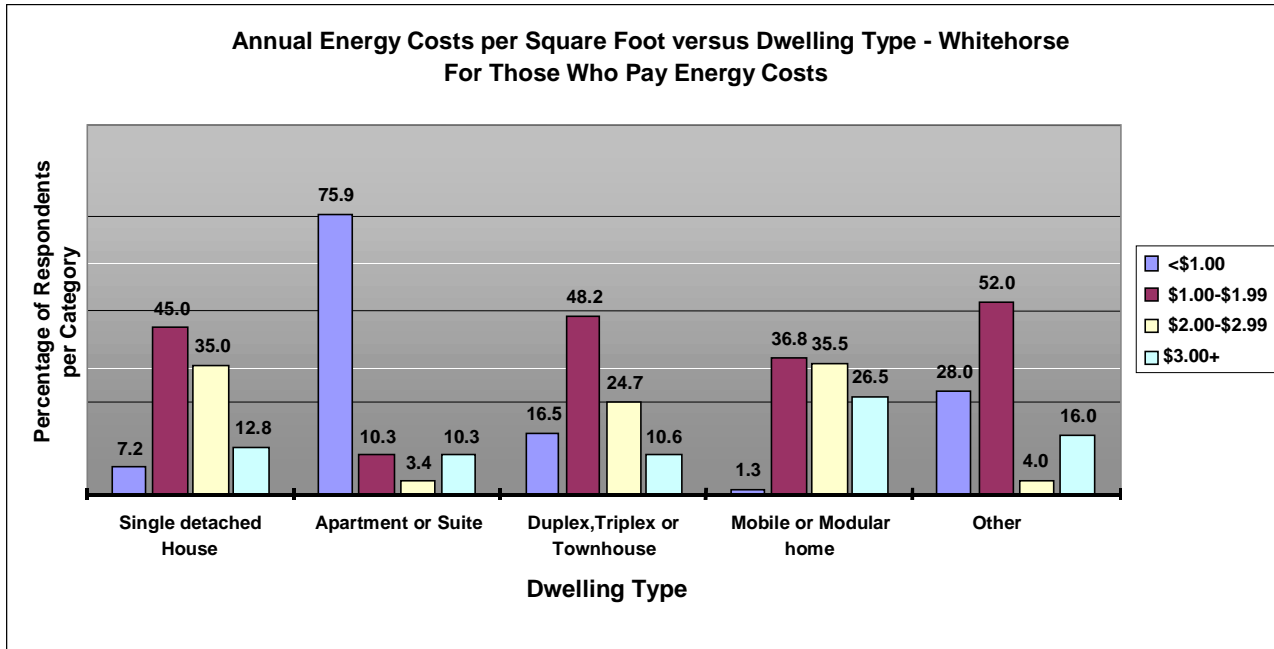
HIGHLIGHTS

- Whitehorse numbers are very similar to Yukon wide numbers.
- Heating bills rise with home size. However, there are exceptions. Larger homes in the territory tend to be constructed more recently. This chart shows that the percentage of homes greater than 2000 square feet paying \$1500+ for their heating is actually lower than the corresponding percentage for homes between 1500 and 2000 square feet. This shows that the impact of energy efficiency improvements in newer homes is probably quite significant.⁵

⁵ Refer to 1.1.4, ANNUAL ENERGY COSTS PER SQUARE FOOT VERSUS AGE OF THE DWELLING, on page 13 for more details.

1.1.3 ANNUAL ENERGY COST VERSUS DWELLING TYPE

These bar charts show the relationship between annual energy costs per square foot for householders and the dwelling type.

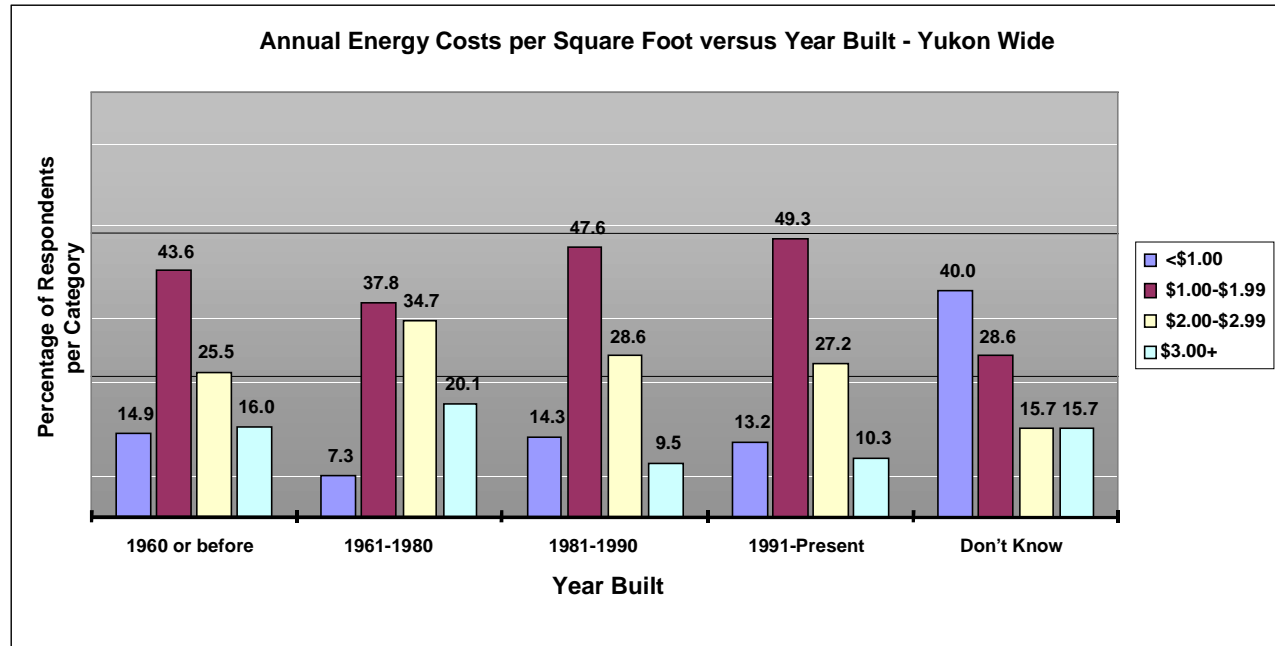
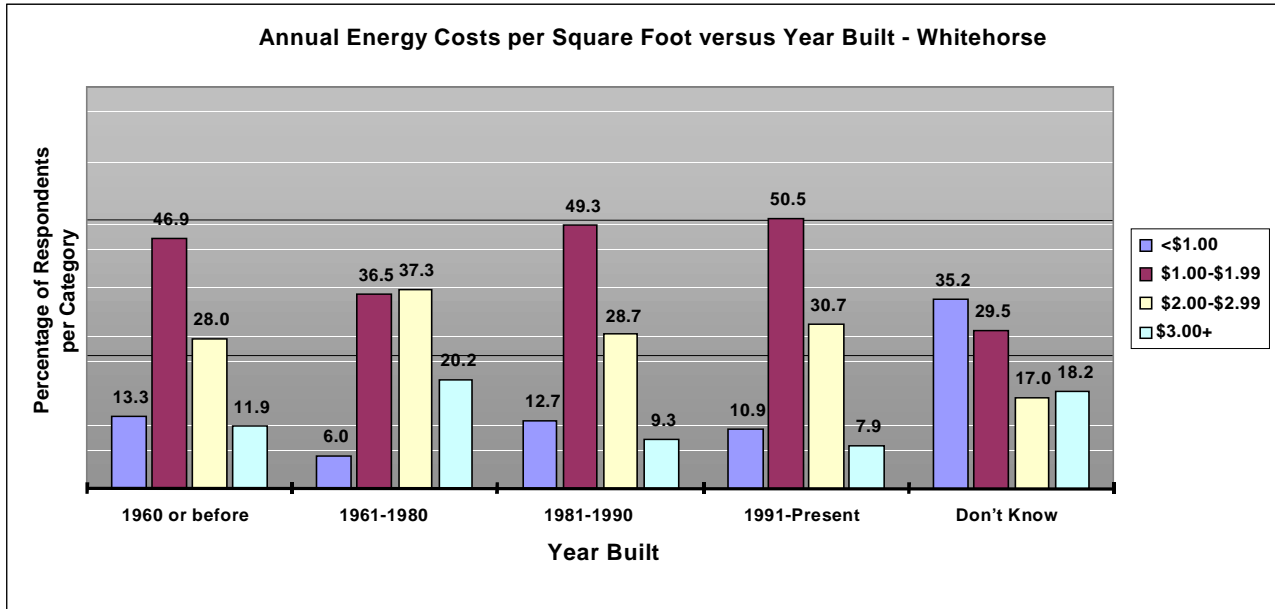


HIGHLIGHTS

- Whitehorse results are very similar to Yukon wide results.
- For heating energy costs, mobile or modular homes tend to be the most expensive per square foot.
- For heating energy costs, apartments or suites tend to be the least expensive per square foot.
- The “Other” category includes dwellings that do not fit into any other category, for example, a five-plex or a mobile home with additions.

1.1.4 ANNUAL ENERGY COST PER SQUARE FOOT VERSUS AGE OF THE DWELLING

These bar charts show the relationship between annual energy costs per square foot for householders and the age of the dwelling.

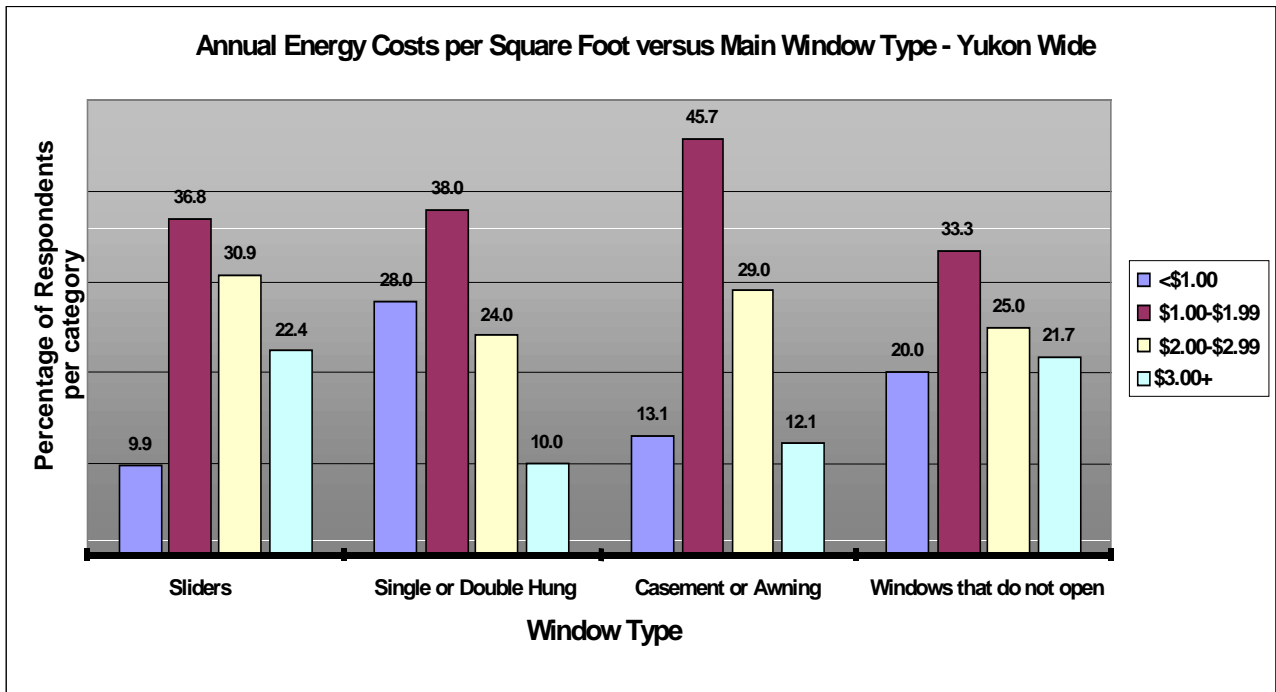
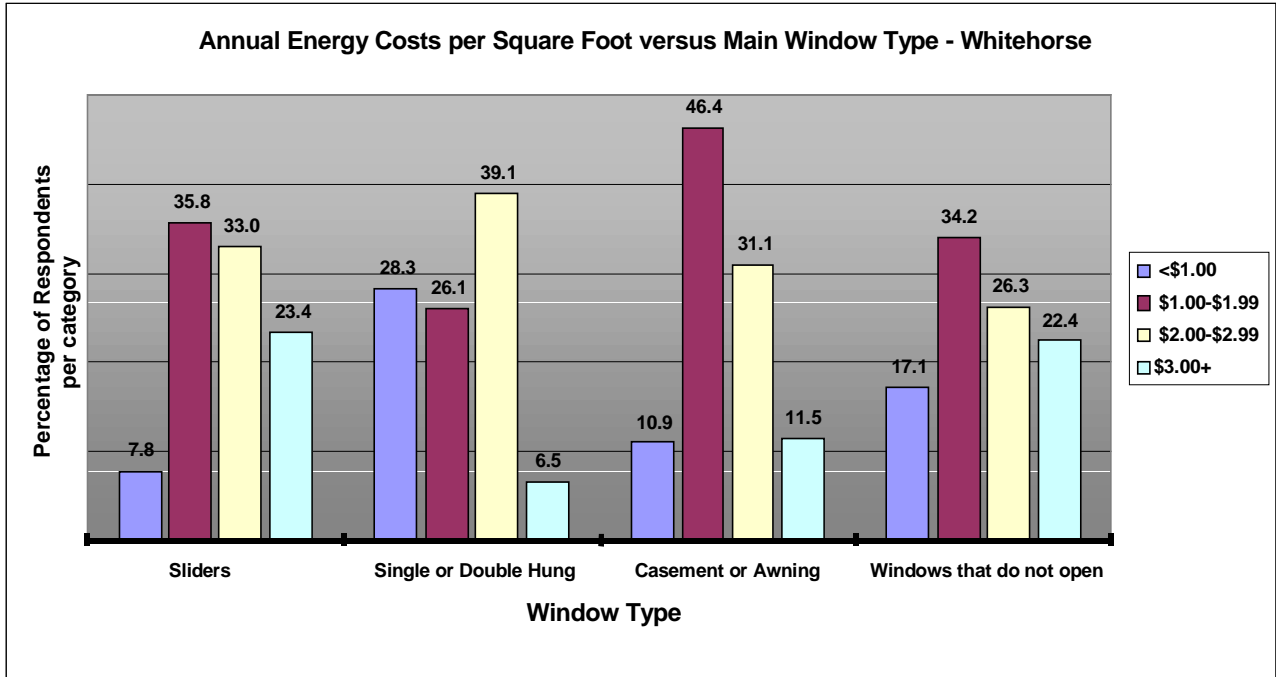


HIGHLIGHTS

- Whitehorse results are very similar to Yukon wide results.

1.1.5 ANNUAL ENERGY COST VERSUS DWELLING'S MAIN WINDOW TYPE

These bar charts show the relationship between annual energy costs per square foot for householders and the dwelling's main window type.



Definitions:

Sliders – windows that slide horizontally,

Single Hung – Lower portion of window slides upwards,

Double Hung – Lower portion of window slides upwards, and upper portion slides downwards, and

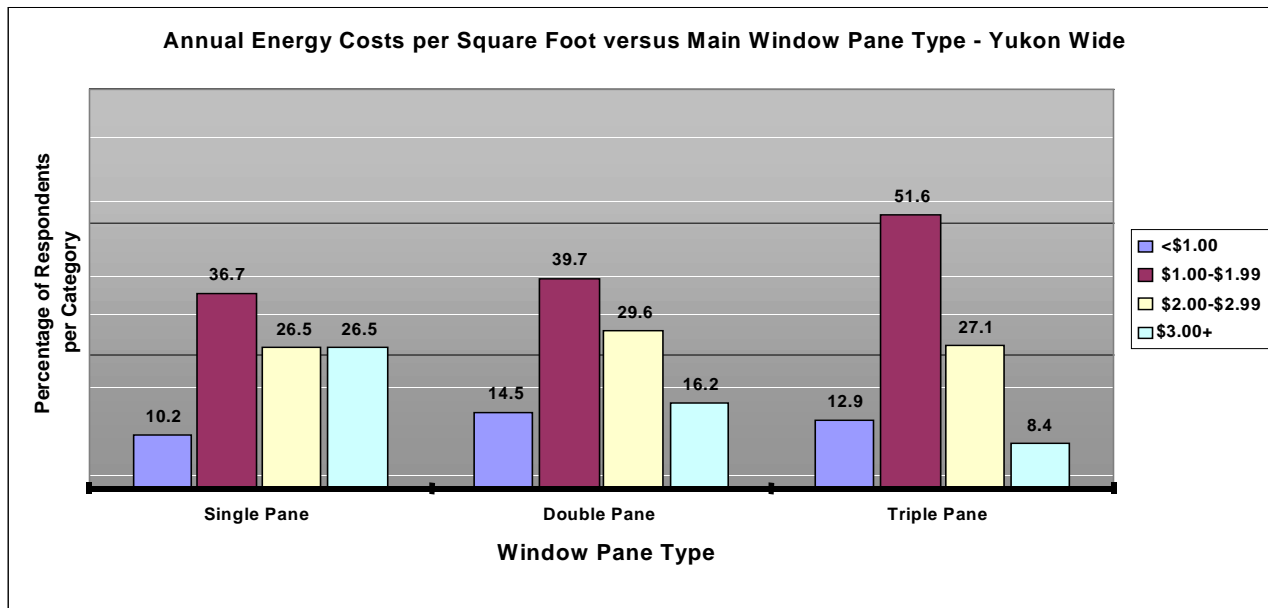
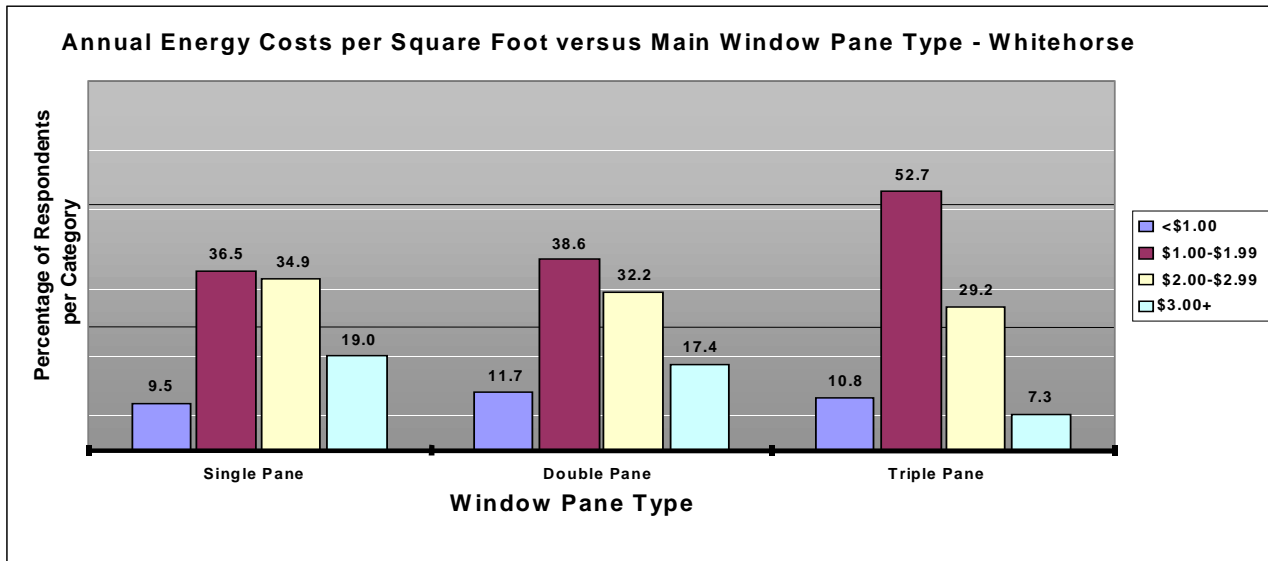
Casement – a portion of the window swings out horizontally or vertically.

HIGHLIGHTS

- Whitehorse results are similar to Yukon wide results.
- Slider windows seem to be associated with higher energy costs per square foot.
- There is a weak association of single or double hung windows with somewhat better energy efficiency. Casement or awning windows show a similar association with energy efficiency. Note, it is important to remember that there are other factors, such as levels and locations of insulation, and door types, that have a significant impact on energy costs.

1.1.6 ANNUAL ENERGY COST VERSUS DWELLING'S MAIN WINDOW PANE TYPE

These bar charts show the relationship between annual costs per square foot for householders and the dwelling's main window pane type.

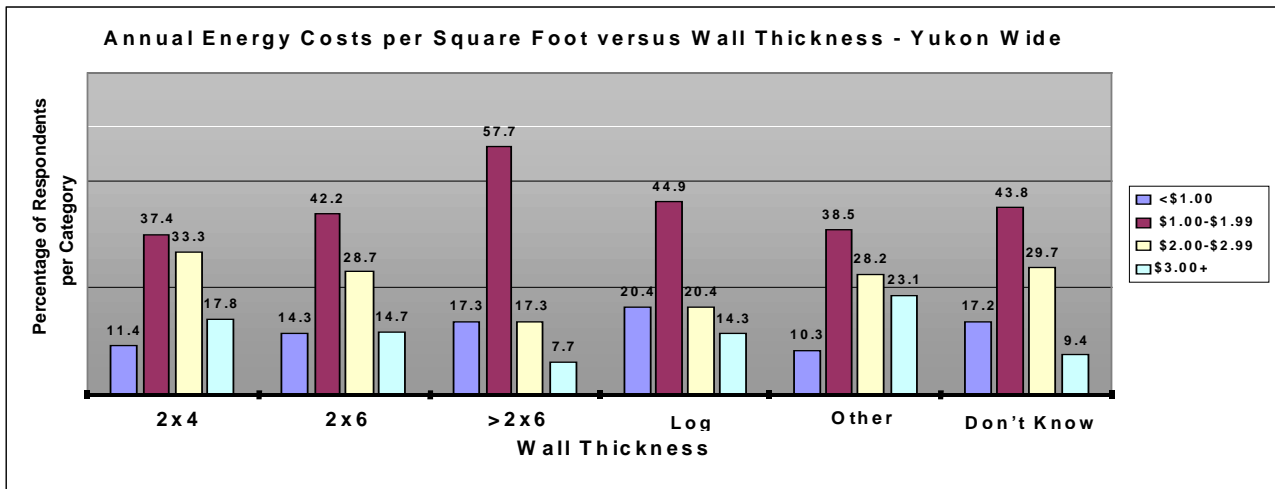
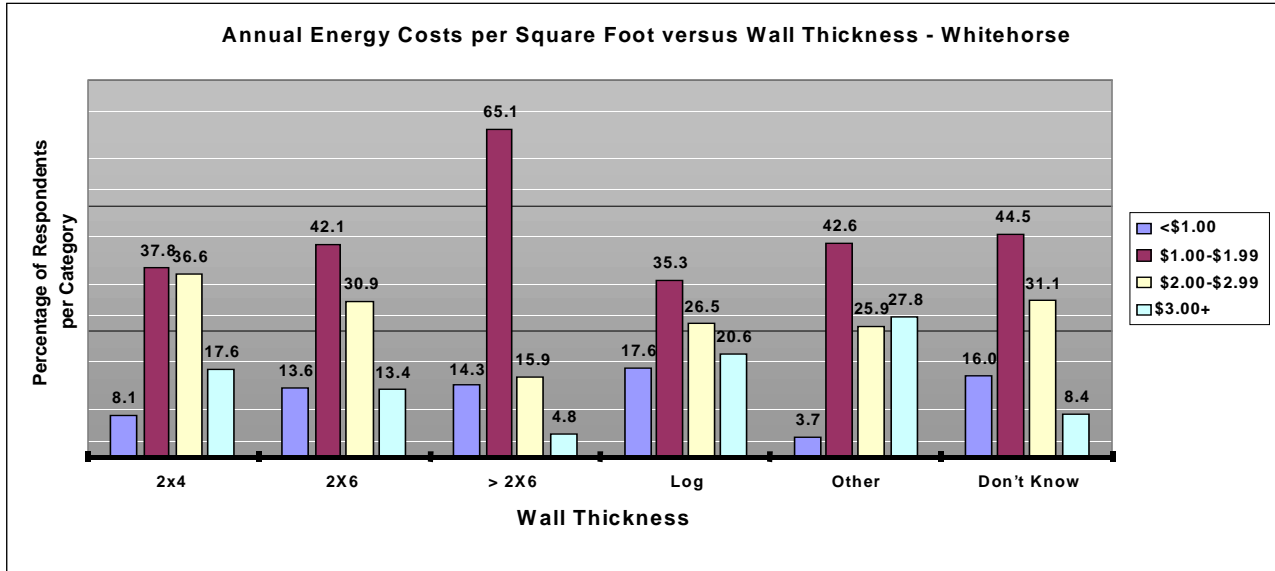


HIGHLIGHTS

- Generally, increased numbers of window panes is associated with lower energy cost ranges.
- Whitehorse results are similar to Yukon wide results.

1.1.7 ANNUAL ENERGY COST VERSUS DWELLING'S WALL THICKNESS

These bar charts show the relationship between annual energy costs per square foot for householders and the dwelling's wall thickness.

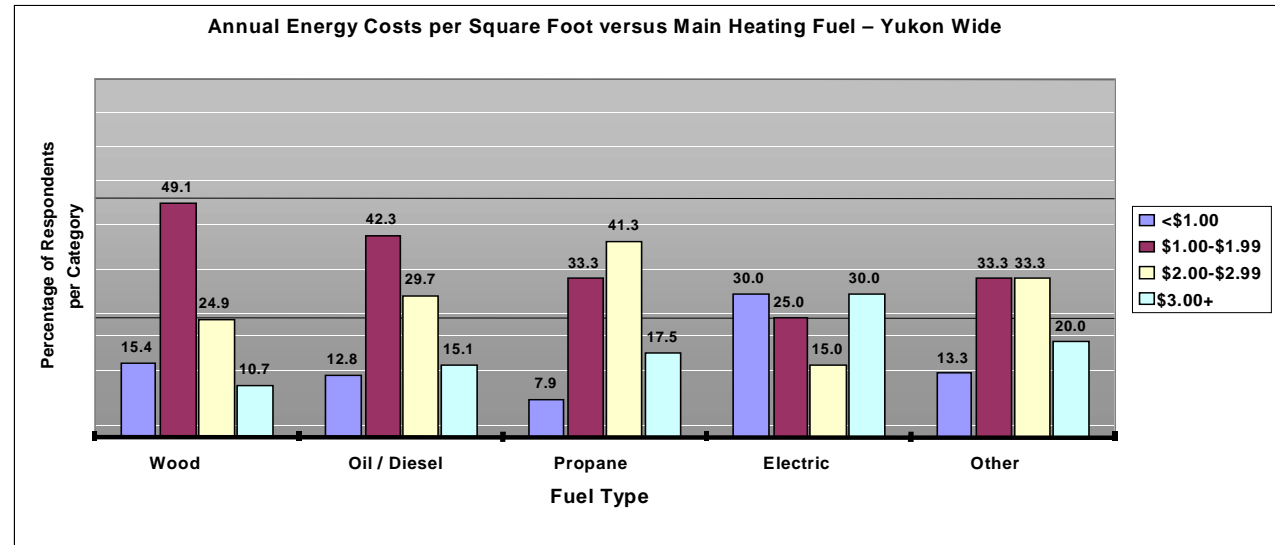
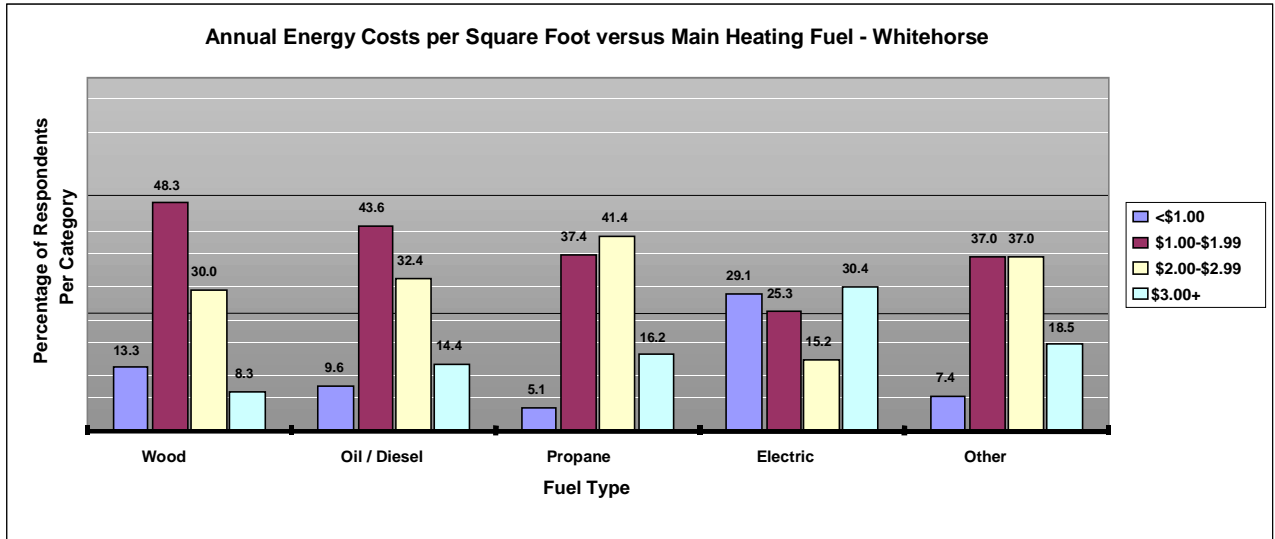


HIGHLIGHTS

- Generally, increased wall thickness is associated with the prevalence of lower energy cost ranges.
- Increasing wall thickness to “>2X6” has a significant lowering impact on energy costs.
- 75 percent of dwellings with wall thickness greater than 2X6 have heating costs less than \$2 per square foot.
- Only 46 percent of dwellings with 2X4 walls have heating costs less than \$2 per square foot.
- The “Other” category includes wall construction that does not fit into any other category, for example, 2X3 walls.

1.1.8 ANNUAL ENERGY COST VERSUS DWELLING'S MAIN HEATING FUEL

These bar charts show the relationship between annual energy costs per square foot for householders and the dwelling's main heating fuel.

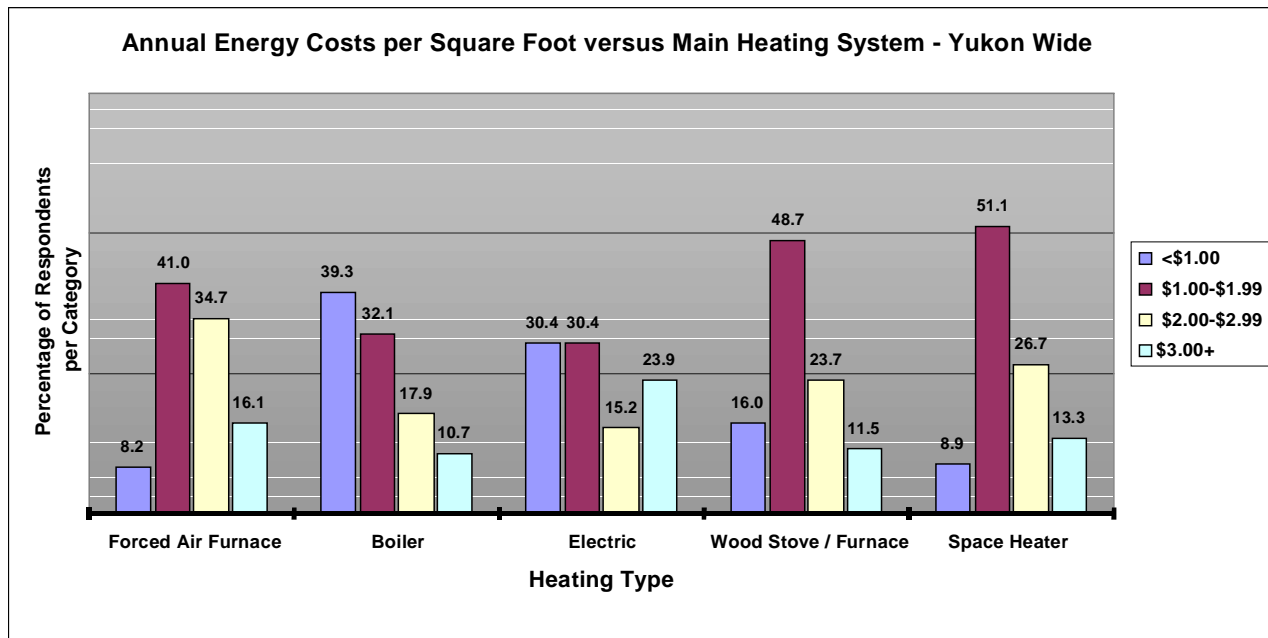
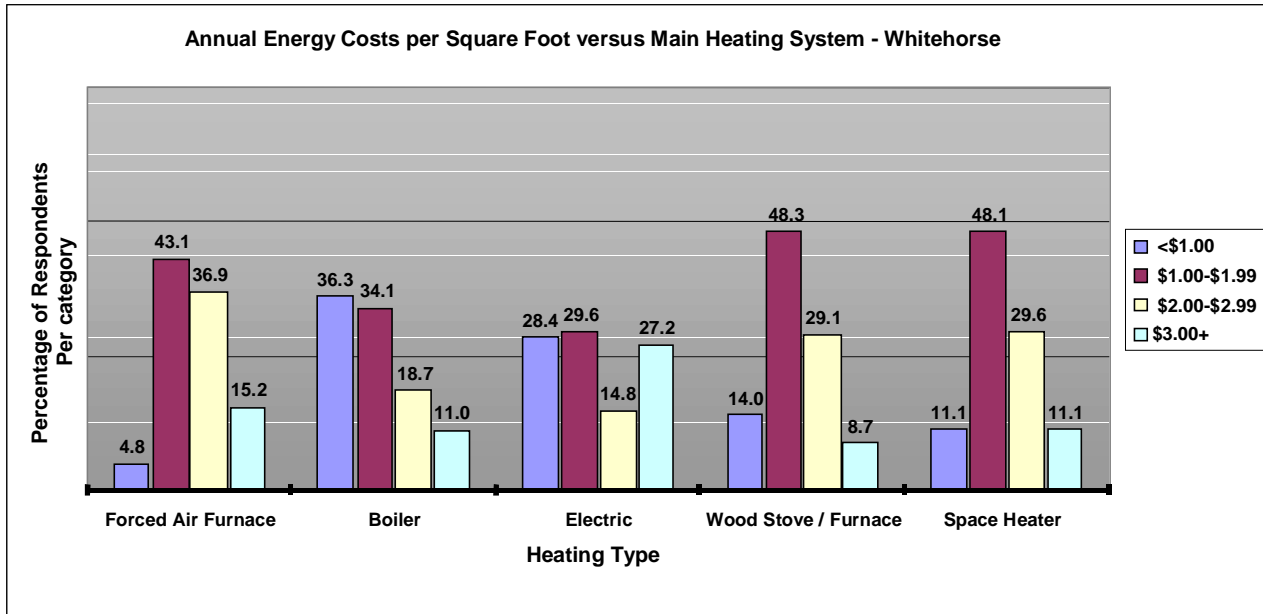


HIGHLIGHTS

- ❑ 8 percent of wood heated dwellings have costs greater than \$3 per square foot.
- ❑ 14 percent of oil/diesel heated dwellings have costs greater than \$3 per square foot.
- ❑ 16 percent of propane heated dwellings have costs greater than \$3 per square foot.
- ❑ 30 percent of electrically heated dwellings have costs greater than \$3 per square foot.
- ❑ 54 percent of electrically heated dwellings have costs less than \$2 per square foot.
- ❑ It is very important to remember that factors other than the type of heating fuel have an impact on heating efficiency and costs.
- ❑ The "Other" category includes heating fuel that does not fit into any other category, for example, kerosene. "Other" also represents the use of more than one type of fuel in the dwelling. For example, the main fuel source may be oil, the second source may be wood. In this example, wood is included in the "other" category.

1.1.9 ANNUAL ENERGY COST VERSUS DWELLING'S MAIN HEATING SYSTEM

These bar charts show the relationship between annual energy costs per square foot for householders and the dwelling's main heating system.



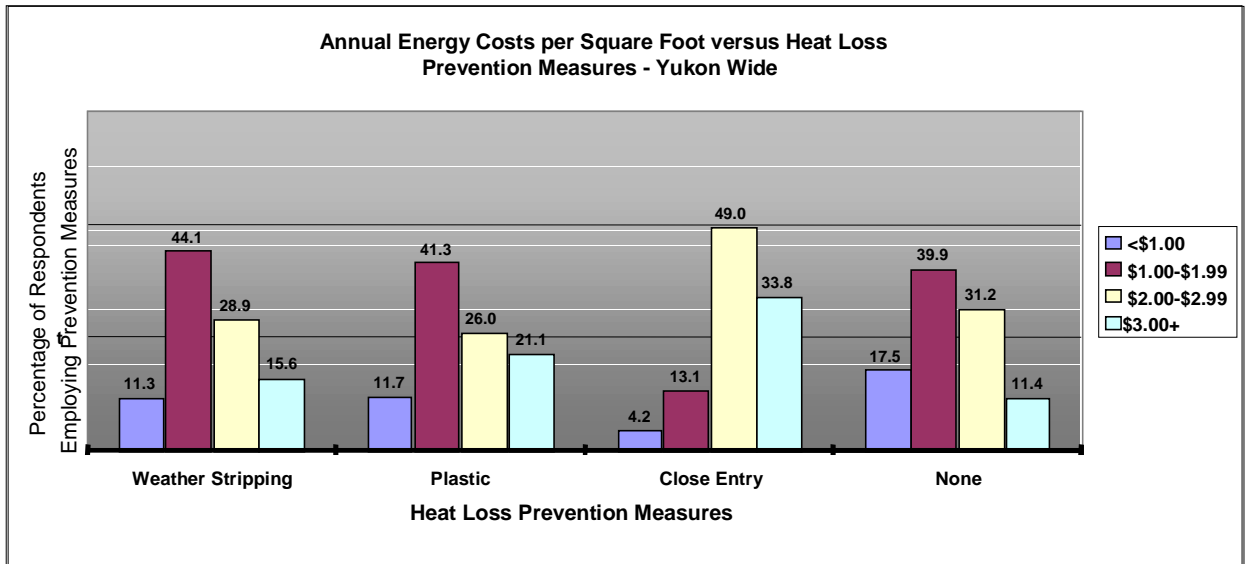
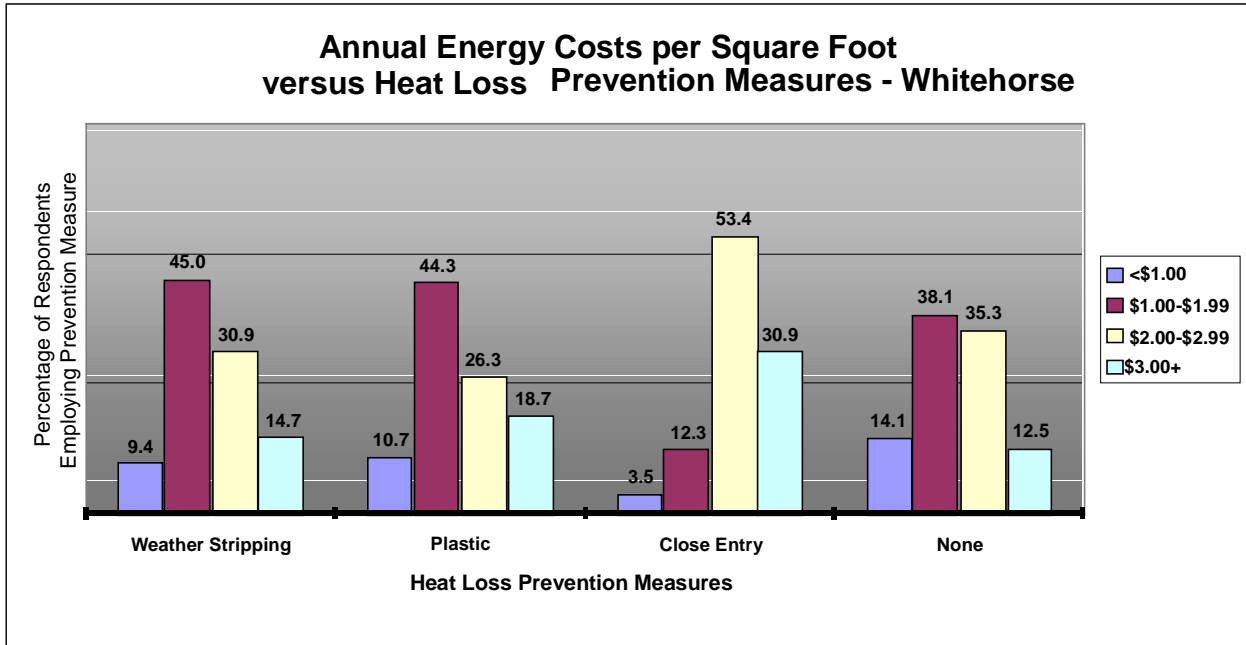
HIGHLIGHTS

- Of dwellings whose main heating system is a forced air furnace, 15.2 percent have heating costs greater than \$3 per square foot and 47.9 percent have costs less than \$2 per square foot.
- Of dwellings whose main heating system is a boiler, 11 percent have heating costs greater than \$3 per square foot and 70.4 percent have costs less than \$2 per square foot.

- Of dwellings whose main heat system is electricity, 27.2 percent have heating costs greater than \$3 per square foot, and 58 percent have costs less than \$2 per square foot.
- Of dwellings whose main heating system is a woodstove/furnace, 8.7 percent have heating costs greater than \$3 per square foot, and 62.3 percent have costs less than \$2 per square foot.
- Of dwellings whose main heat system is a space heater, 11.1 percent have heating costs greater than \$3 per square foot, and 59.2 percent have costs less than \$2 per square foot.

1.1.10 ANNUAL ENERGY COST VERSUS HEAT LOSS PREVENTION MEASURES

These bar charts show the relationship between annual energy costs per square foot for householders and measures taken to reduce heat loss.



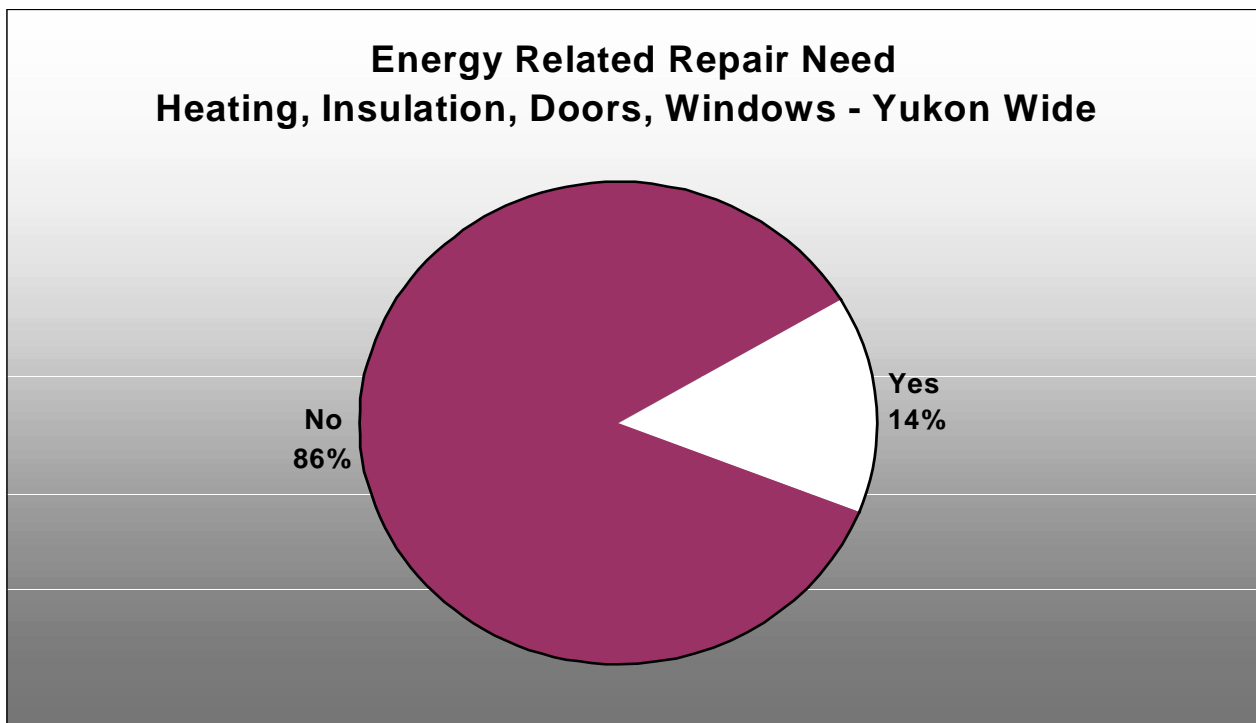
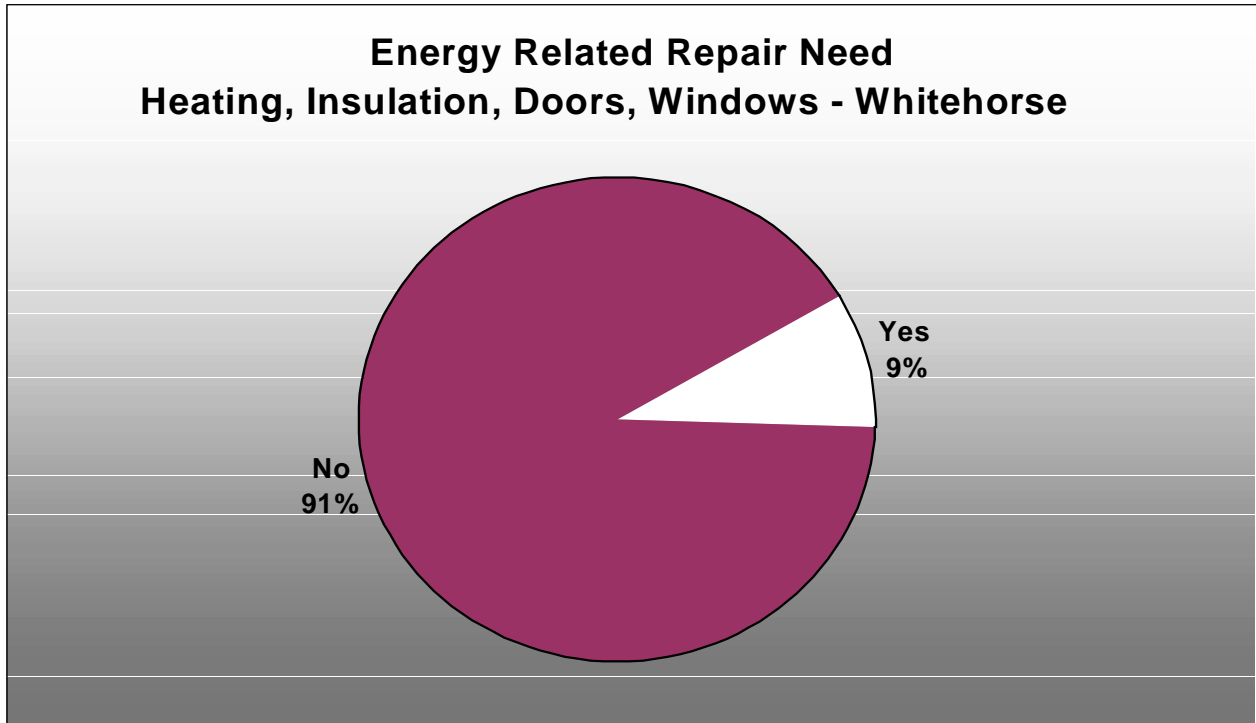
Note: "Plastic" – means "installing plastic over windows in the winter."

HIGHLIGHTS

- Whitehorse results are similar to Yukon wide results.
- Of households that close an entry as a heat loss prevention method, 84 percent have heating costs over \$2 per square foot. Only about 4 percent of these households heat their homes for less than \$1 per square foot.
- Of households that use no heat loss prevention methods, 52 percent have heating costs lower than \$2 per square foot. Only 13 percent of these households pay more than \$3 per square foot for heating.

1.1.11 PERCENTAGE OF DWELLINGS WITH AN ENERGY RELATED REPAIR NEED

These pie charts show the percentage of dwellings requiring energy related repairs.

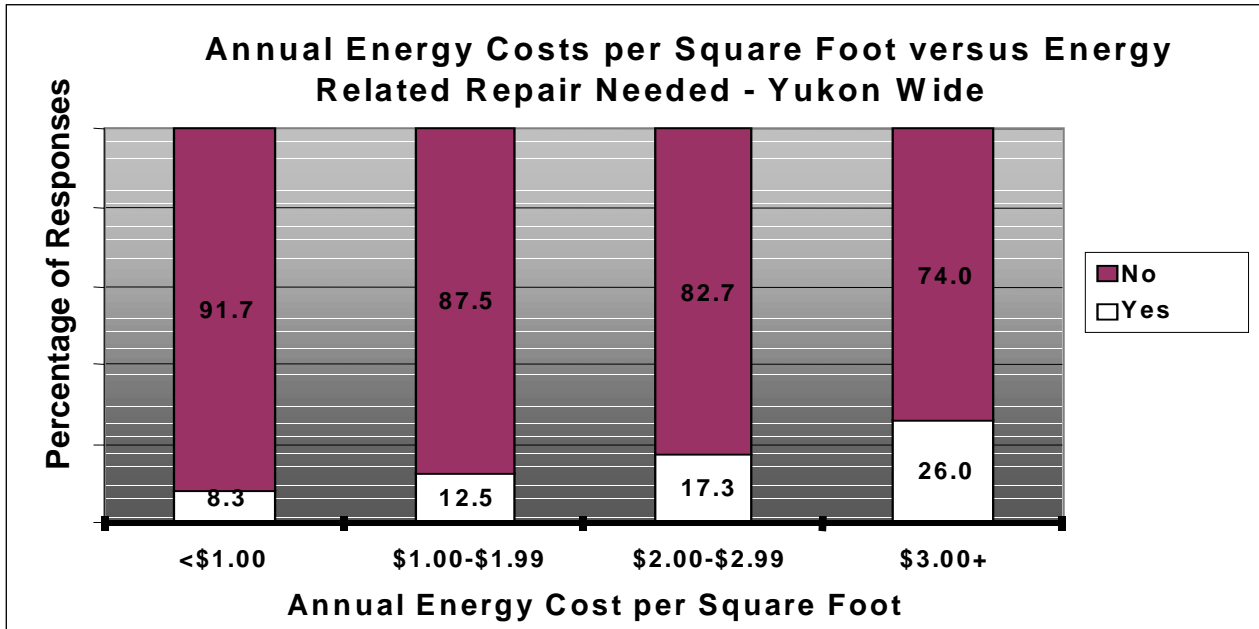
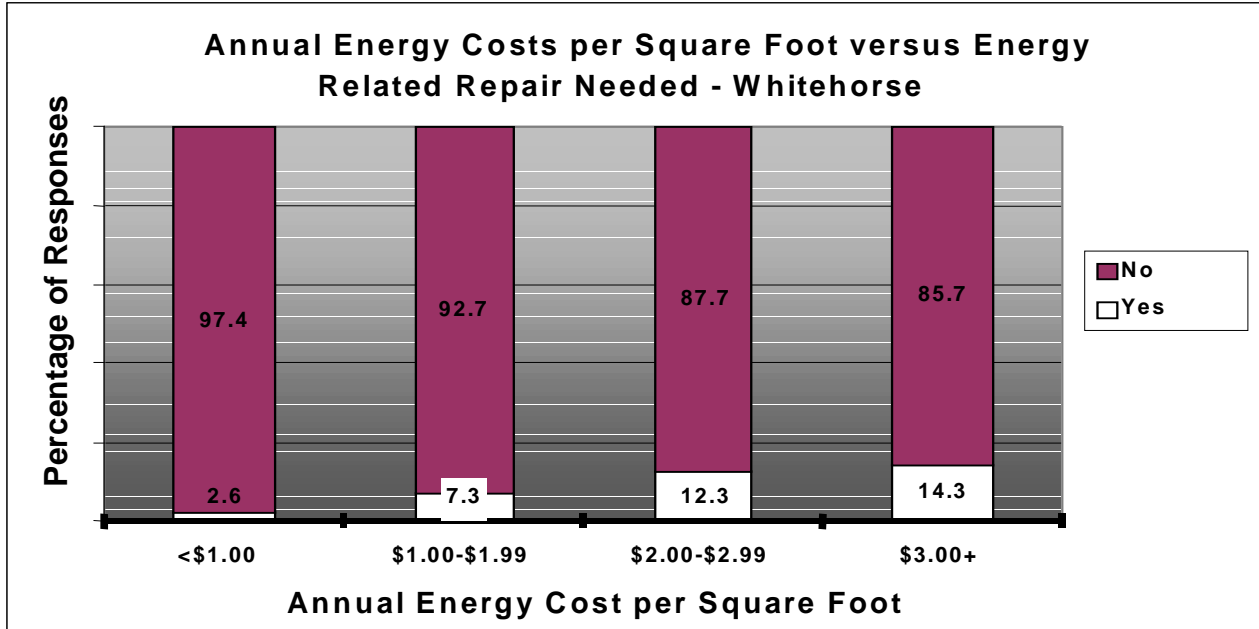


HIGHLIGHTS

- Whitehorse results show slightly less need, 9 percent of Whitehorse dwellings versus 14 percent of all Yukon dwellings, for energy related repairs than the average Yukon household.

1.1.12 ANNUAL ENERGY COST PER SQUARE FOOT VERSUS ENERGY RELATED REPAIR NEED

These bar charts show the relationship between annual energy costs per square foot for householders and energy related repair needs.



HIGHLIGHTS

- Higher energy costs are correlated with higher perceived need for energy related repairs.
- In each cost category, there is significantly less perceived need for energy related repairs in Whitehorse as compared to the Yukon as a whole.
- There is significant room for improvement of the energy efficiency of dwellings in Whitehorse and the Yukon.

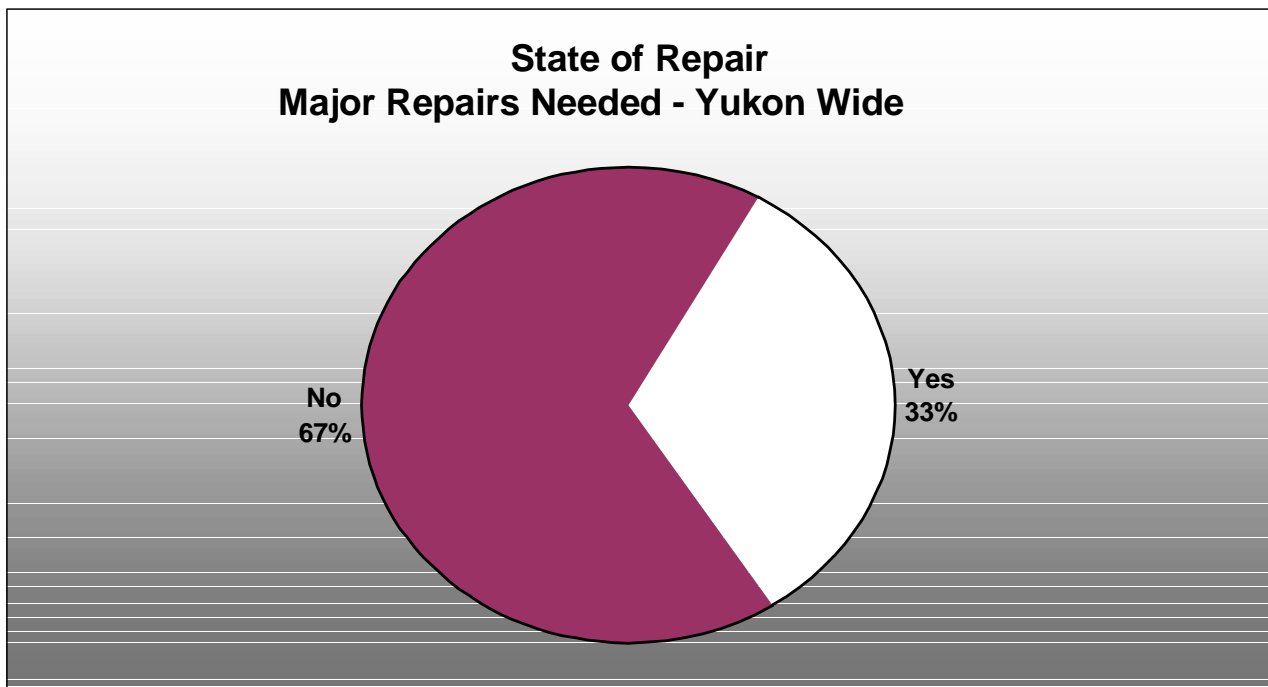
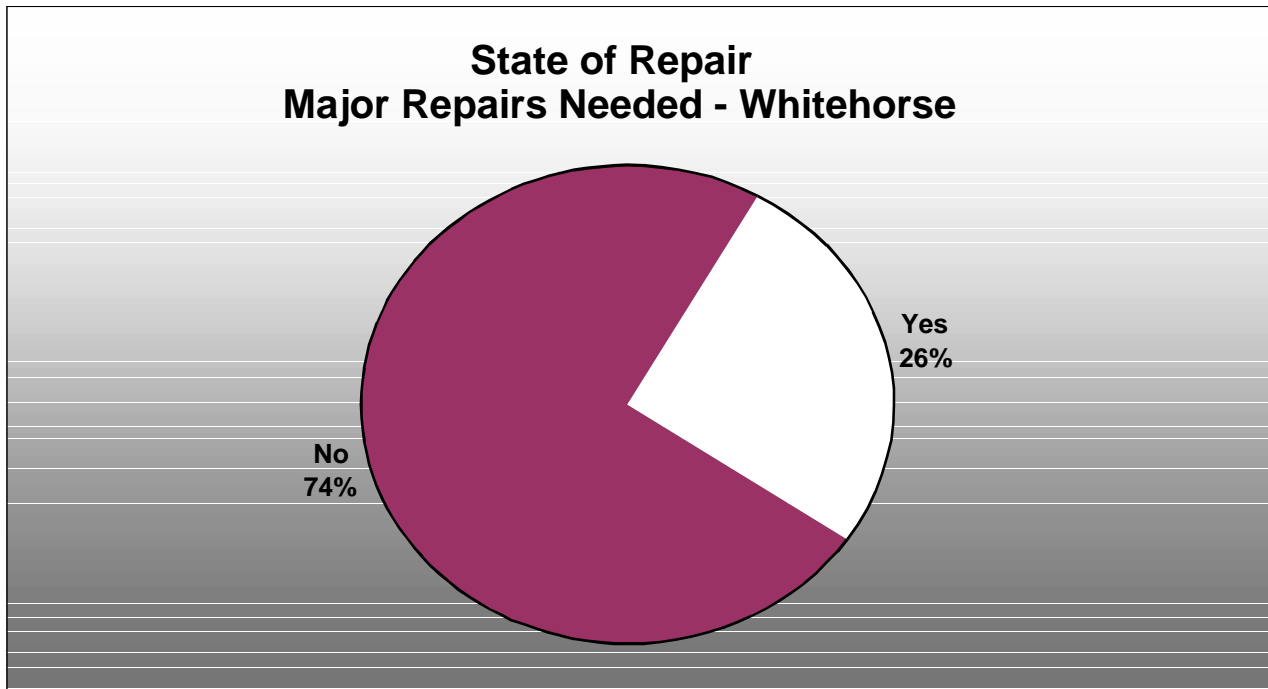
1.2 STATE OF REPAIR

The next seven sub-themes show various indicators related to the state of repair of dwellings in Whitehorse and the Yukon:

- ⇒ **MAJOR REPAIRS NEEDED,**
- ⇒ **MAJOR REPAIRS NEEDED VERSUS HOUSEHOLD INCOME,**
- ⇒ **TYPES OF MAJOR REPAIRS NEEDED,**
- ⇒ **PERCENTAGE OF HOUSEHOLDS THAT OWN THEIR DWELLINGS PLANNING MAJOR REPAIRS,**
- ⇒ **ESTIMATED COST OF PLANNED MAJOR REPAIRS,**
- ⇒ **PERCENTAGE OF DWELLINGS NEEDING MINOR REPAIRS,**
- ⇒ **TYPES OF MINOR REPAIRS NEEDED.**

1.2.1 MAJOR REPAIR NEEDED

These pie charts show the percentage of dwellings that require major repairs both in Whitehorse and the Yukon.

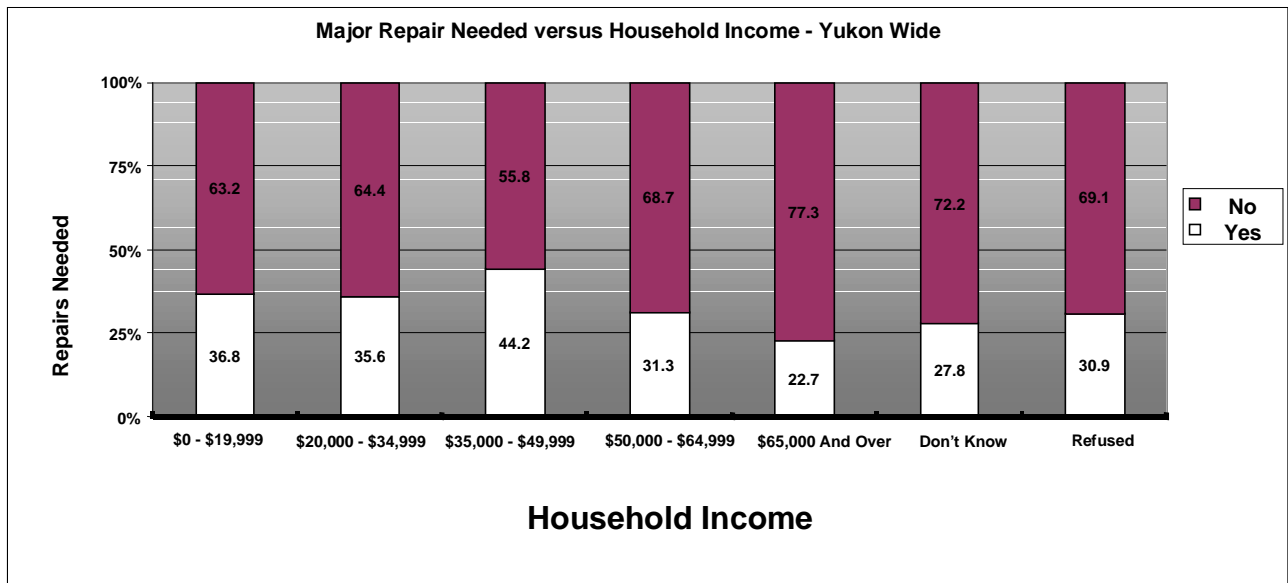
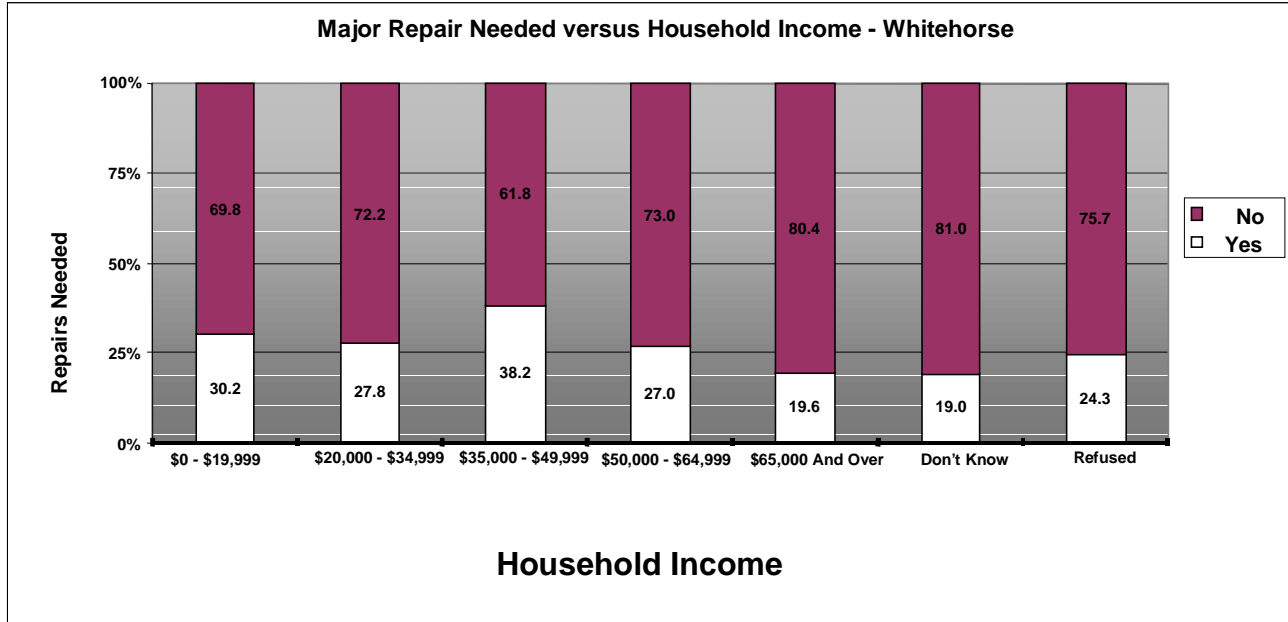


HIGHLIGHTS

- 26 percent of dwellings in Whitehorse require major repairs.
- 33 percent of dwellings in the Yukon require major repairs.

1.2.2 MAJOR REPAIR NEEDED VERSUS HOUSEHOLD INCOME

These bar charts compare household income with the need for major repairs on the household's dwelling.

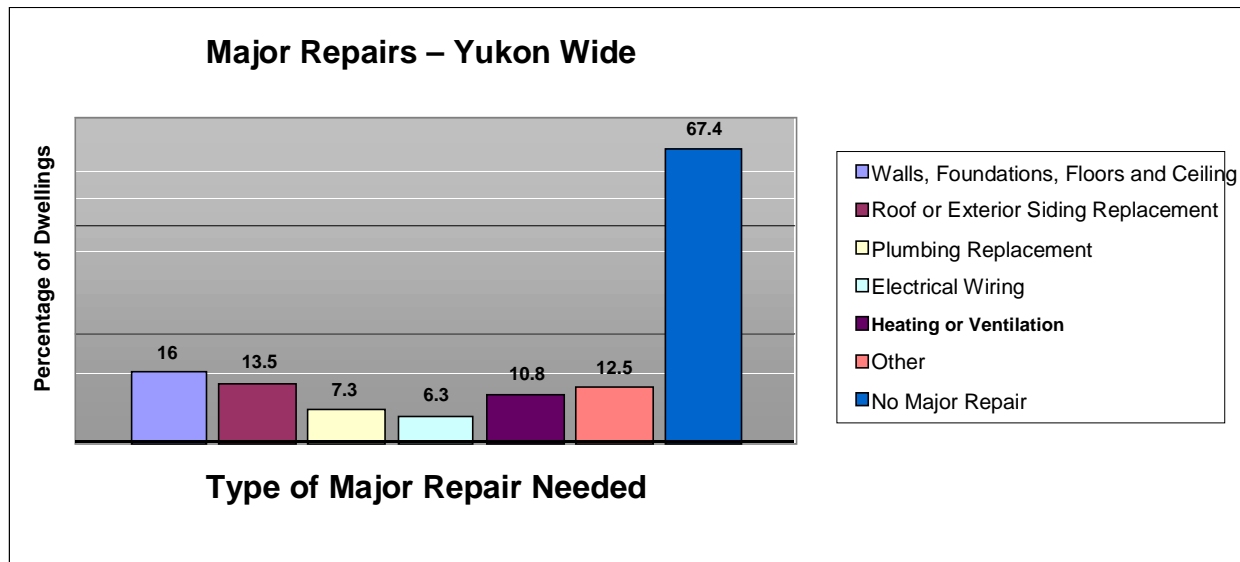
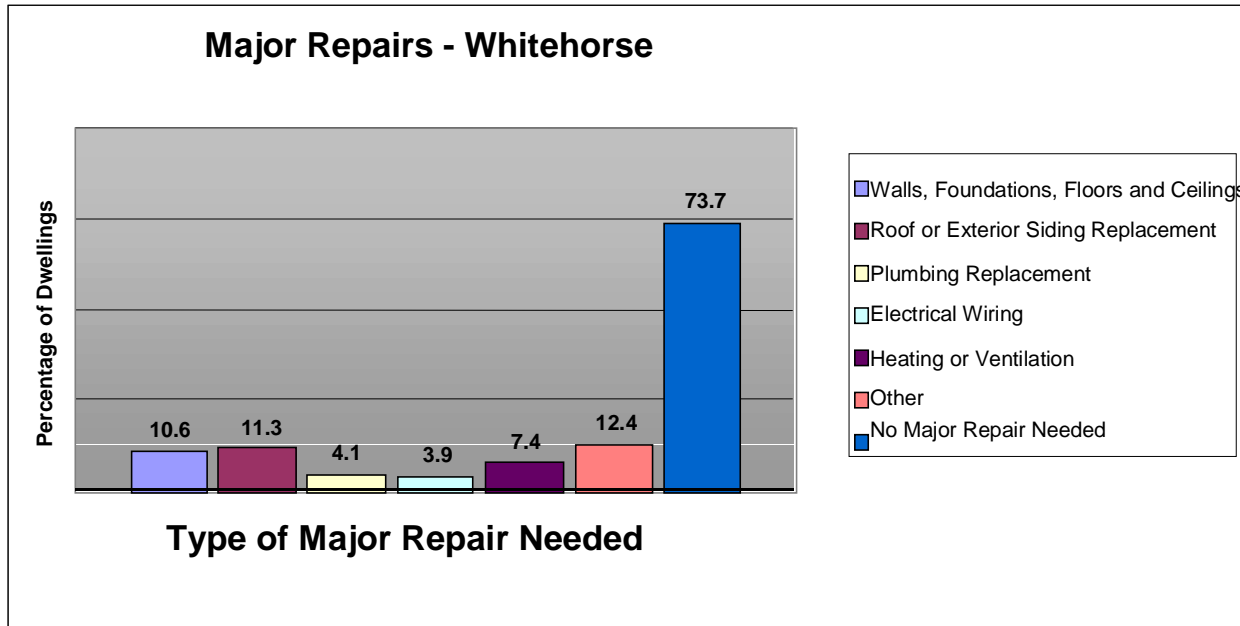


HIGHLIGHTS

- Although it is not a direct relationship, both Whitehorse and Yukon wide results show that increasing household income is generally correlated with decreased need for major repairs.
- Households with incomes of \$35,000 to \$49,999 show the greatest need for major repairs.

1.2.3 TYPE OF MAJOR REPAIR NEEDED

The types of repairs needed are shown below. Respondents may have provided more than one response.

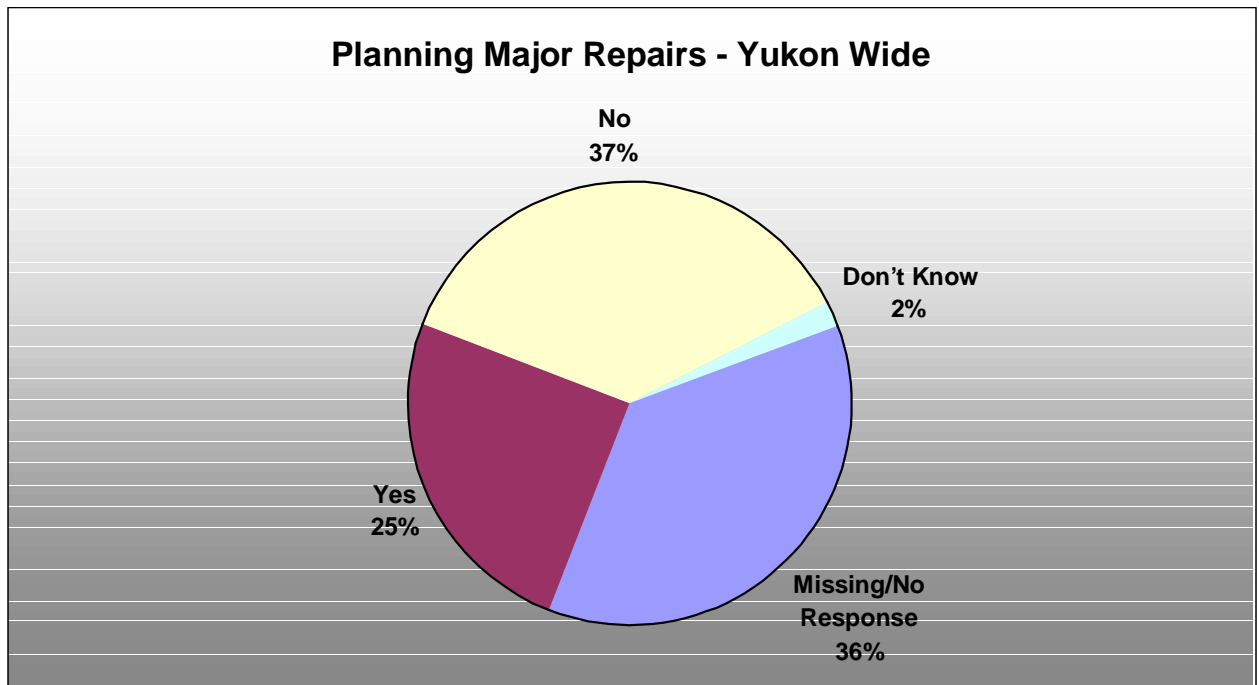
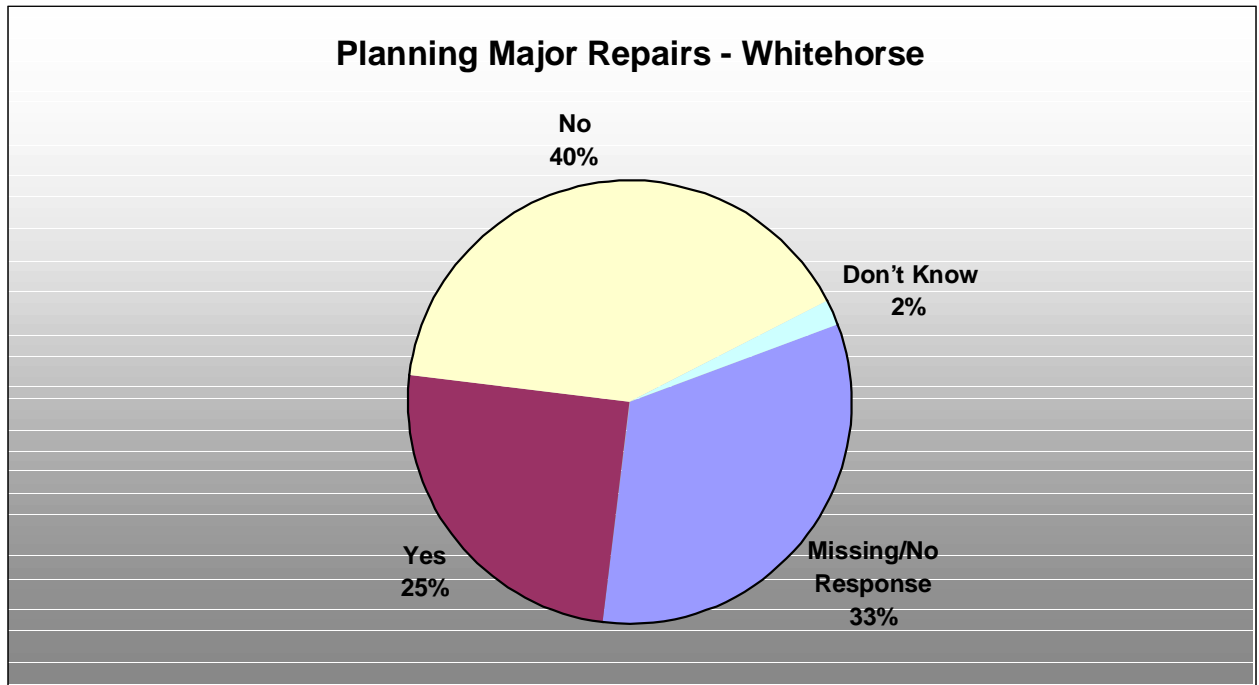


HIGHLIGHTS

- While the numbers are slightly lower for Whitehorse than for the Yukon generally, over 10 percent of Whitehorse households responded that their dwellings required major repairs to walls, foundations, floors or ceilings as well as replacement of roof and/or exterior siding.
- “Other” refers to major repairs not included in another category.

1.2.4 PERCENTAGE OF HOUSEHOLDS THAT OWN THEIR DWELLINGS PLANNING MAJOR REPAIR

These pie charts show the percentage of households planning major repairs.

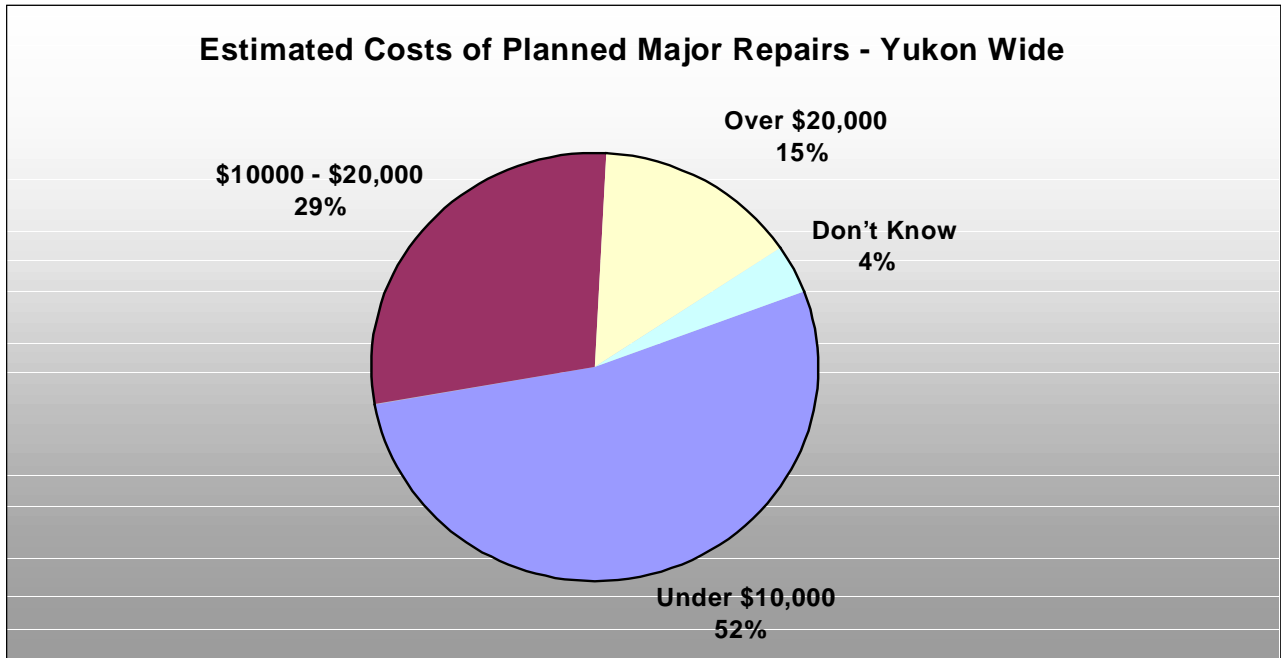
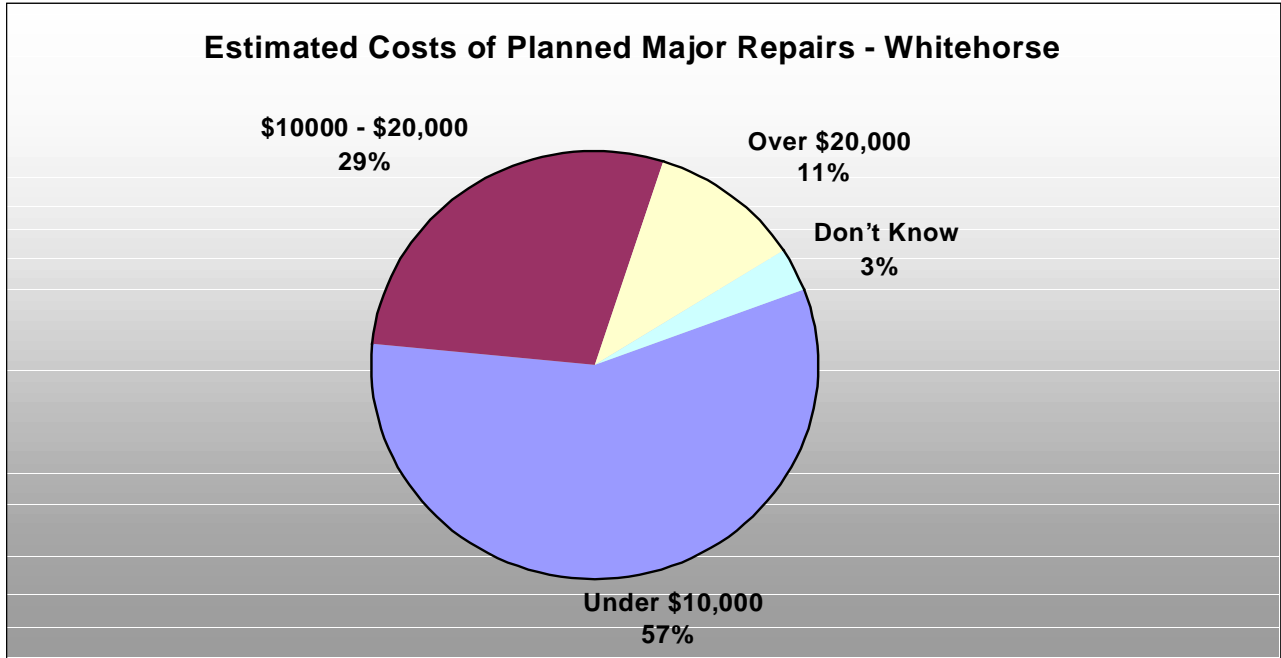


HIGHLIGHTS

- In Whitehorse, 25 percent of all owner households are planning to do major repairs.

1.2.5 ESTIMATED COST OF PLANNED MAJOR REPAIR

The following pie charts summarize the estimated costs of major repairs by owner households who plan to make major repairs to their homes in the next two years:

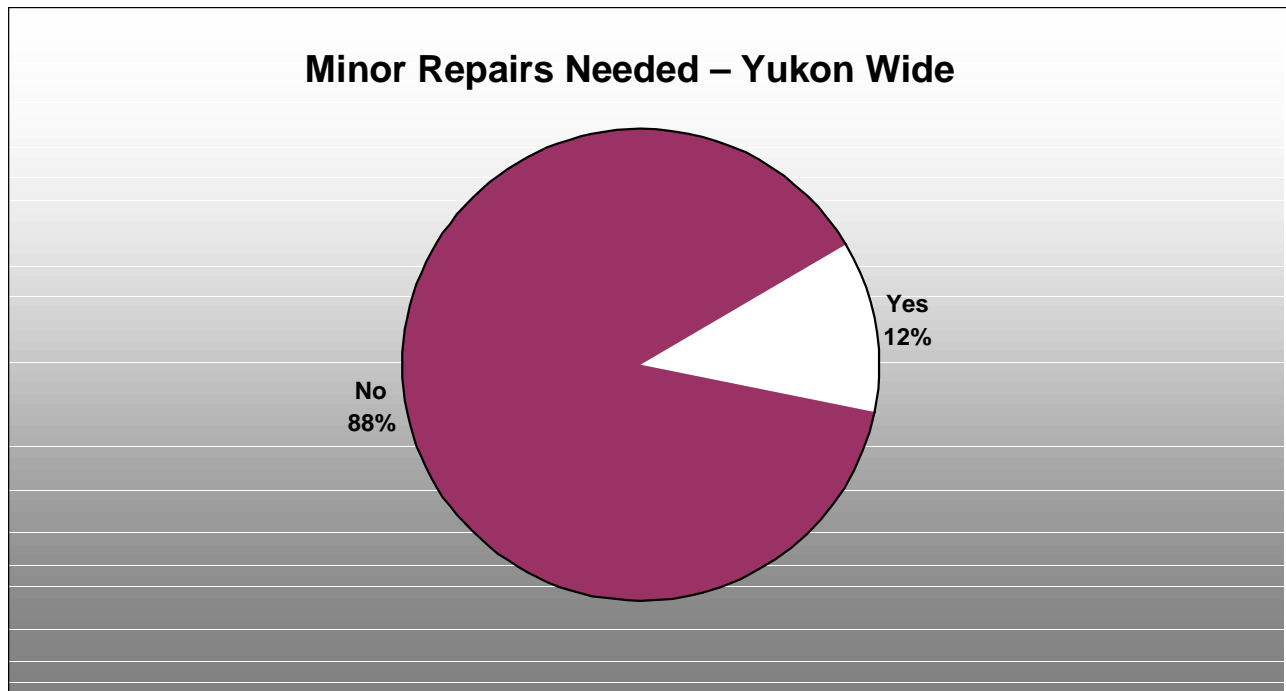
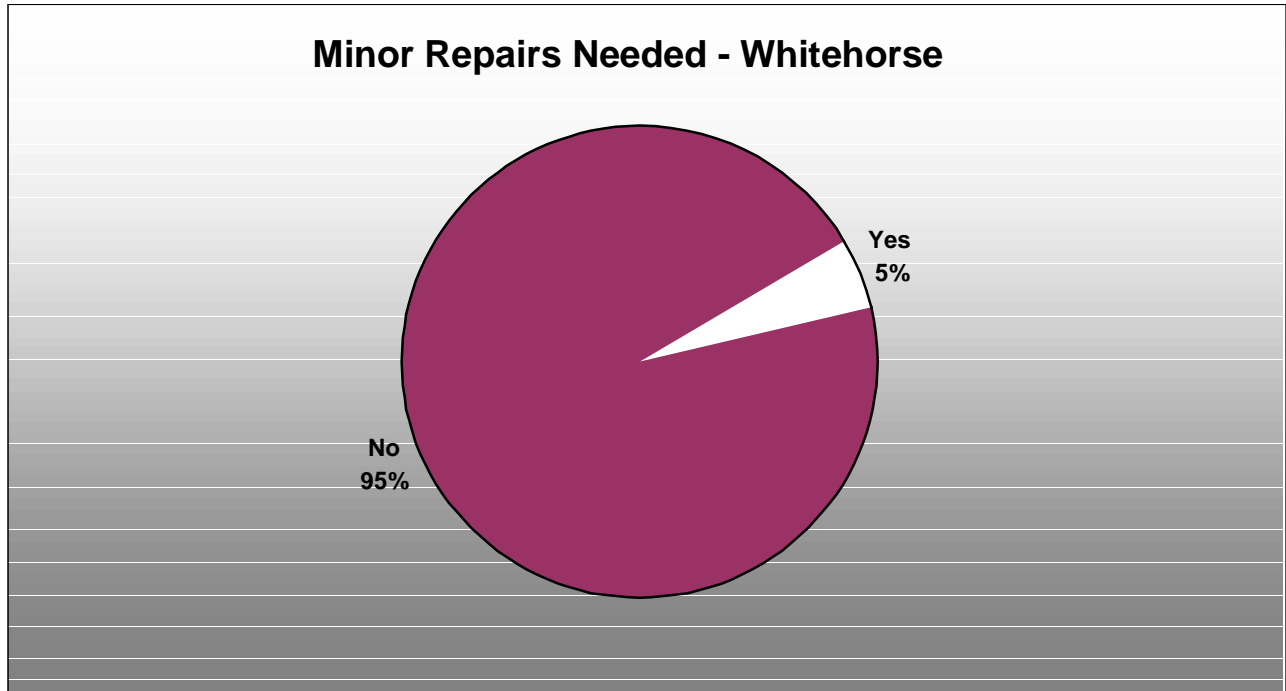


HIGHLIGHTS

- Whitehorse results are similar to Yukon wide results.
- 86 percent of Whitehorse owner households planning to do major repairs indicated their major repairs would cost less than \$20,000.
- 57 percent of this same group estimated their major repairs would cost less than \$10,000.

1.2.6 PERCENTAGE OF DWELLINGS NEEDING MINOR REPAIR

The following pie charts show the percentage of households that indicated their dwellings needed minor repairs:

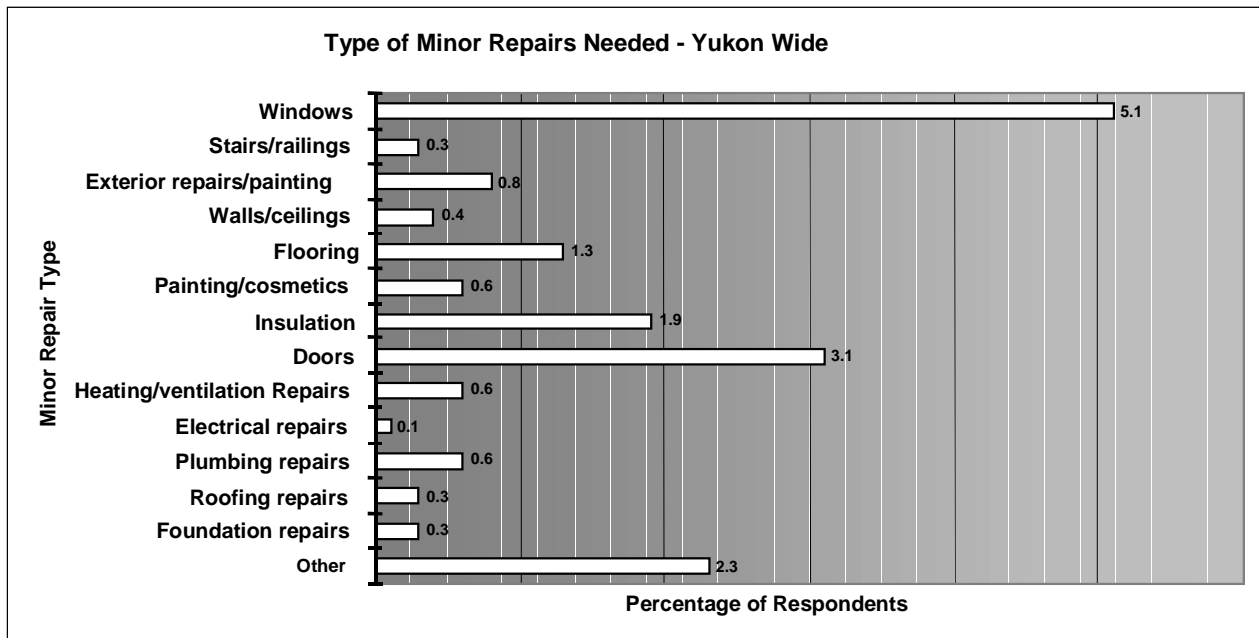
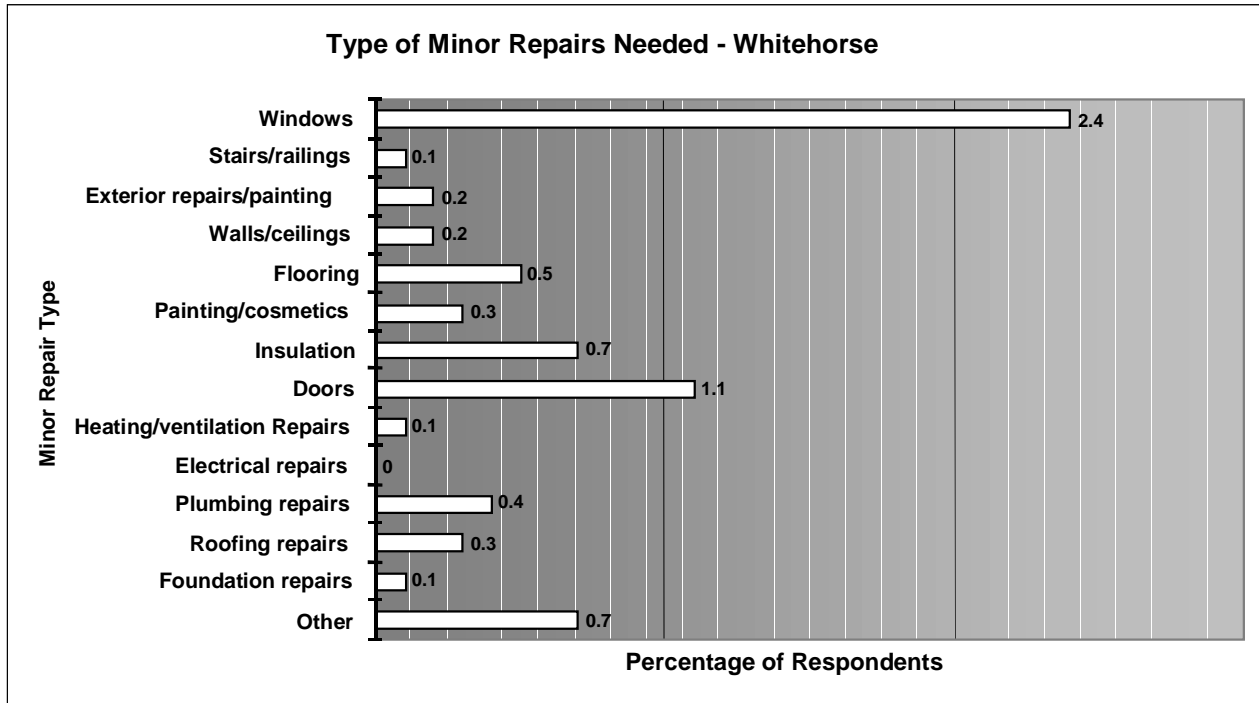


HIGHLIGHTS

- Five percent of Whitehorse dwellings require minor repairs. This is less than half the Yukon wide percentage.

1.2.7 TYPE OF MINOR REPAIR NEEDED

The following bar charts show the percentage of households that indicated their dwellings needed repairs other than major repairs. Note, respondents may have indicated the need for more than one type of repair.



HIGHLIGHTS

- While the need for minor repairs is low overall especially in Whitehorse, the variety of minor repairs required is quite diverse.
- “Other” refers to minor repairs not included in another category.

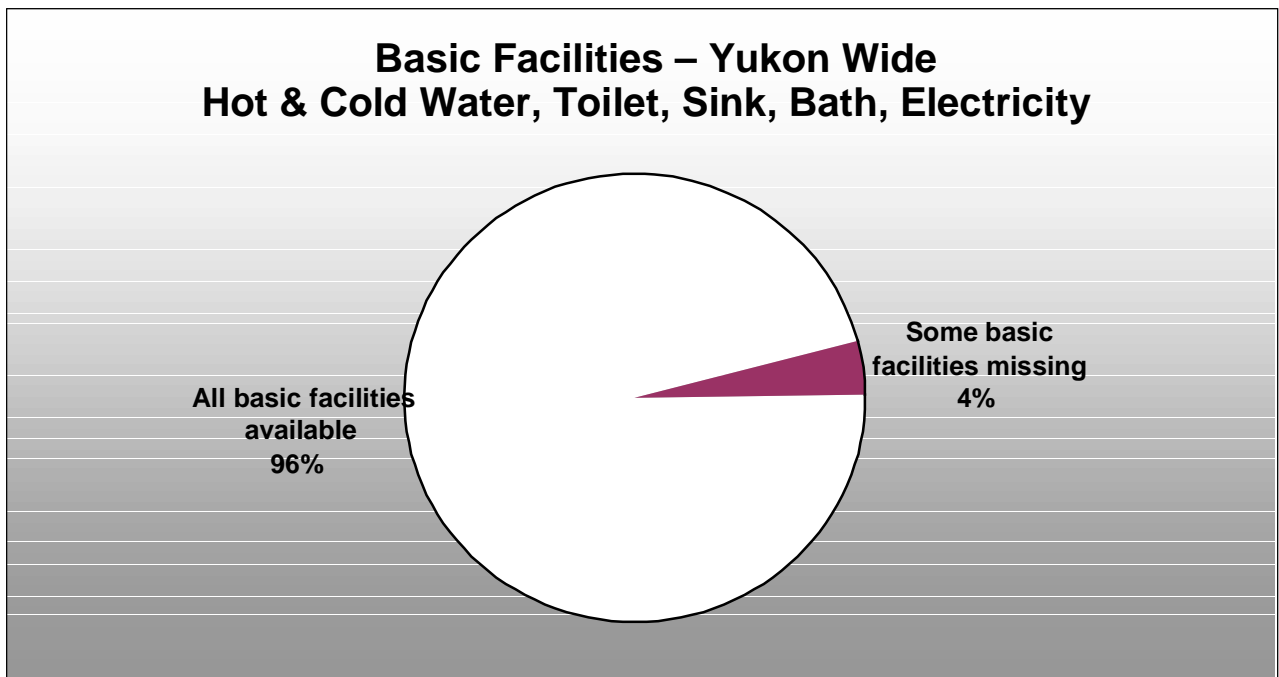
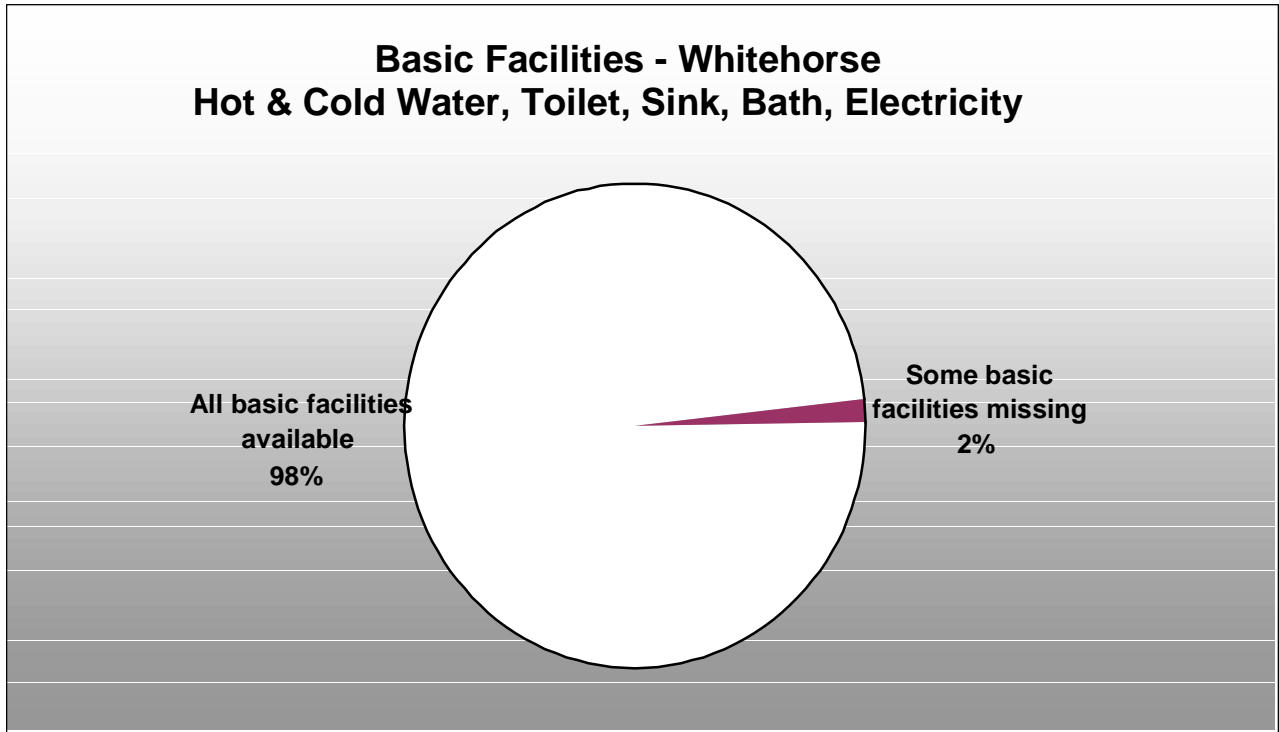
1.3 BASIC FACILITIES

Basic facilities include hot and cold water, indoor toilet, sink, bath, and electricity. The next sub-theme shows the percentage of households that have basic facilities:

⇒ **BASIC FACILITIES.**

1.3.1 BASIC FACILITIES

The following pie charts show the percentage of households that have basic facilities:



HIGHLIGHTS

- The vast majority of dwellings within Whitehorse have all basic facilities available.
- In the Yukon as a whole, 4 percent of dwellings are missing at least some of these basic facilities.

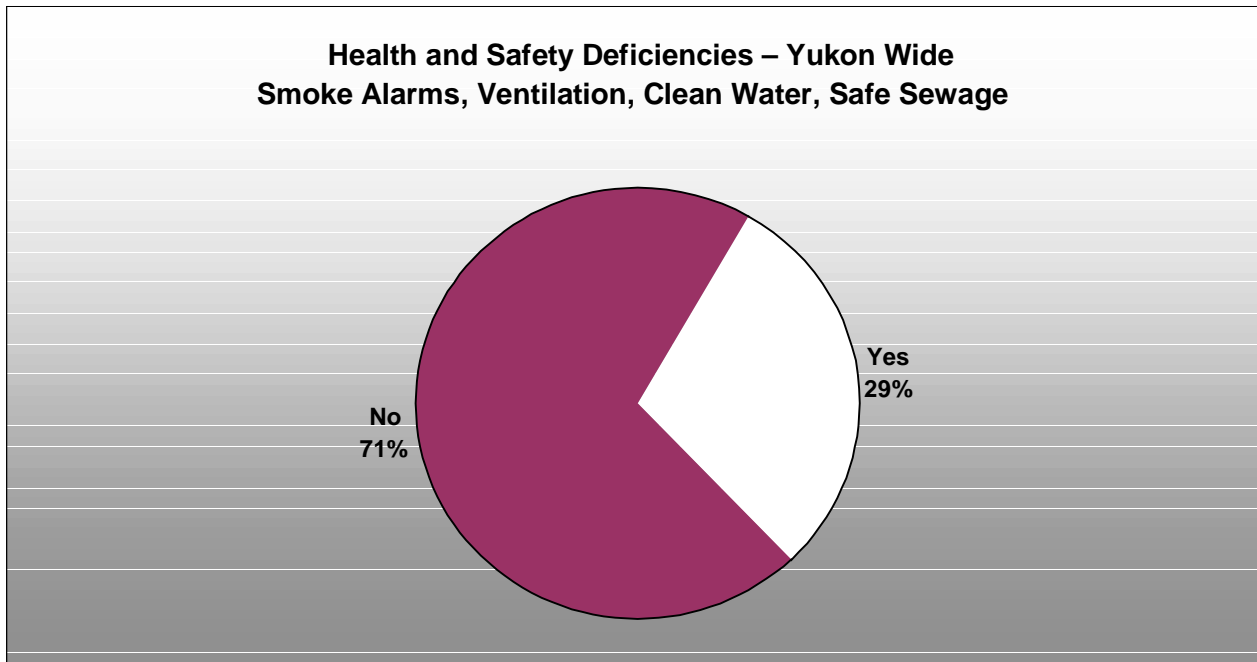
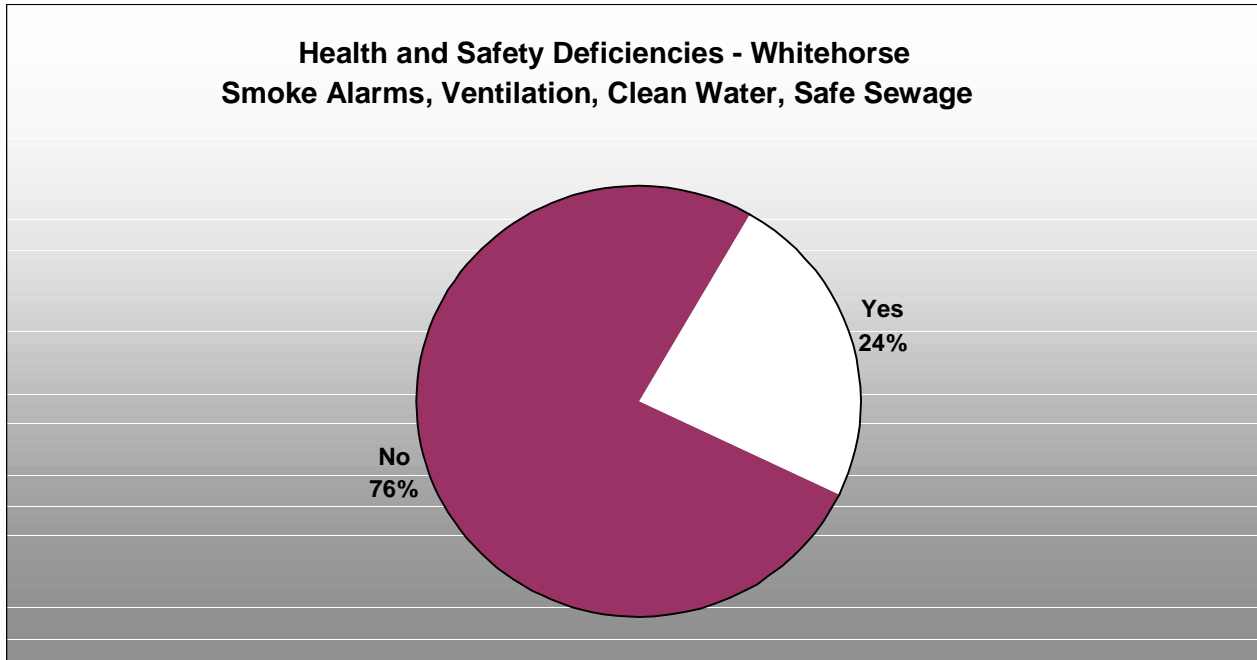
1.4 HEALTH AND SAFETY DEFICIENCIES

The next six sub-themes show the percentage of households that have health and safety deficiencies including lack of smoke alarms, ventilation, clean water, and safe sewage:

- ⇒ **HEALTH AND SAFETY DEFICIENCIES,**
- ⇒ **SMOKE ALARMS,**
- ⇒ **MECHANICAL VENTILATION,**
- ⇒ **KITCHEN/BATHROOM EXHAUST,**
- ⇒ **WATER SUPPLY,**
- ⇒ **SEWAGE DISPOSAL.**

1.4.1 HEALTH AND SAFETY DEFICIENCIES

The following pie charts show the percentage of households that have health and safety deficiencies:

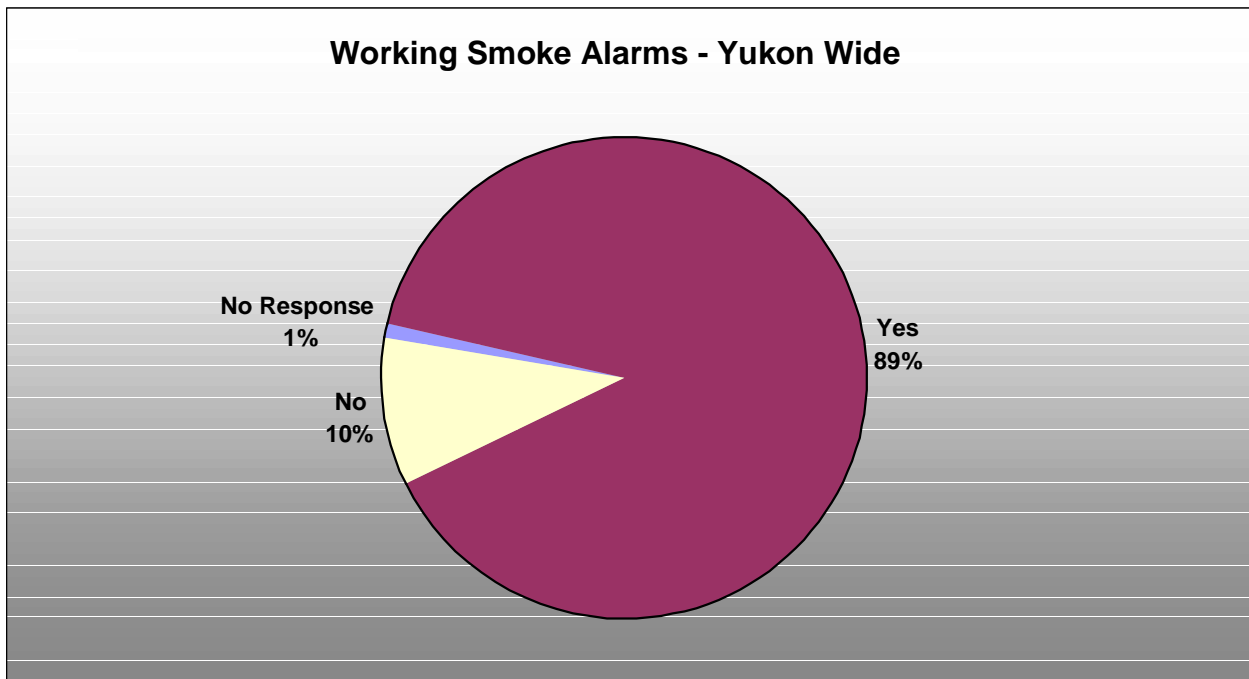
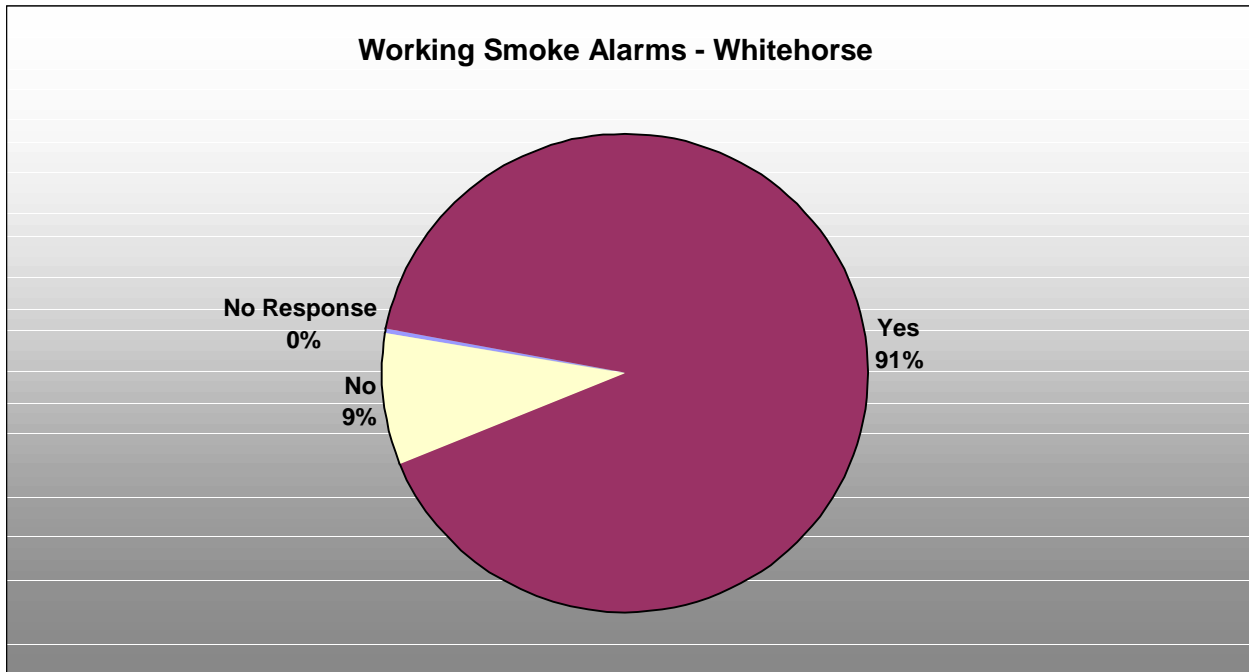


HIGHLIGHTS

- 24 percent of all Whitehorse dwellings are deficient in at least one of these features.
- Within the Yukon as a whole, 29 percent of dwellings are deficient in at least one of these features

1.4.2 SMOKE ALARMS

The following pie charts show the percentage of households that have working smoke alarms:

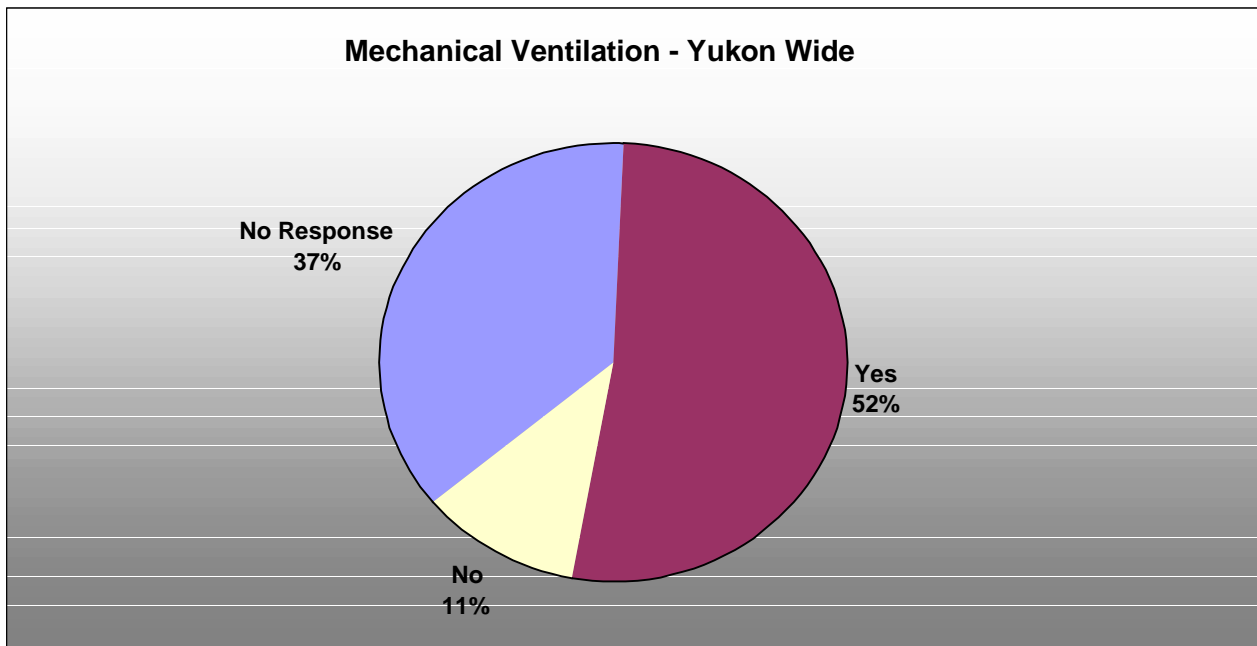
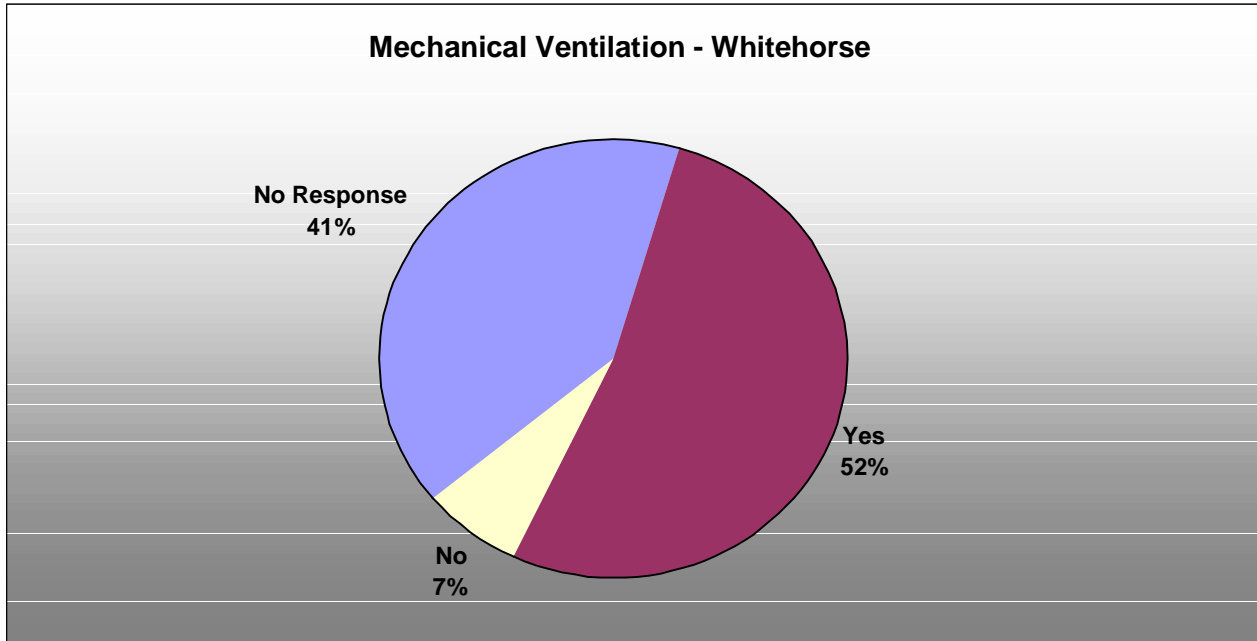


HIGHLIGHTS

- Whitehorse and Yukon Wide results are similar.
- 10 percent, approximately 1,100 dwellings in the Yukon, do not have working smoke alarms.

1.4.3 MECHANICAL VENTILATION

Mechanical ventilation includes heat recovery ventilators, central fans without heat recovery, and direct fresh air supplied by ducting to a furnace or wood stove return air duct. The following pie charts show the percentage of households that have mechanical ventilation:

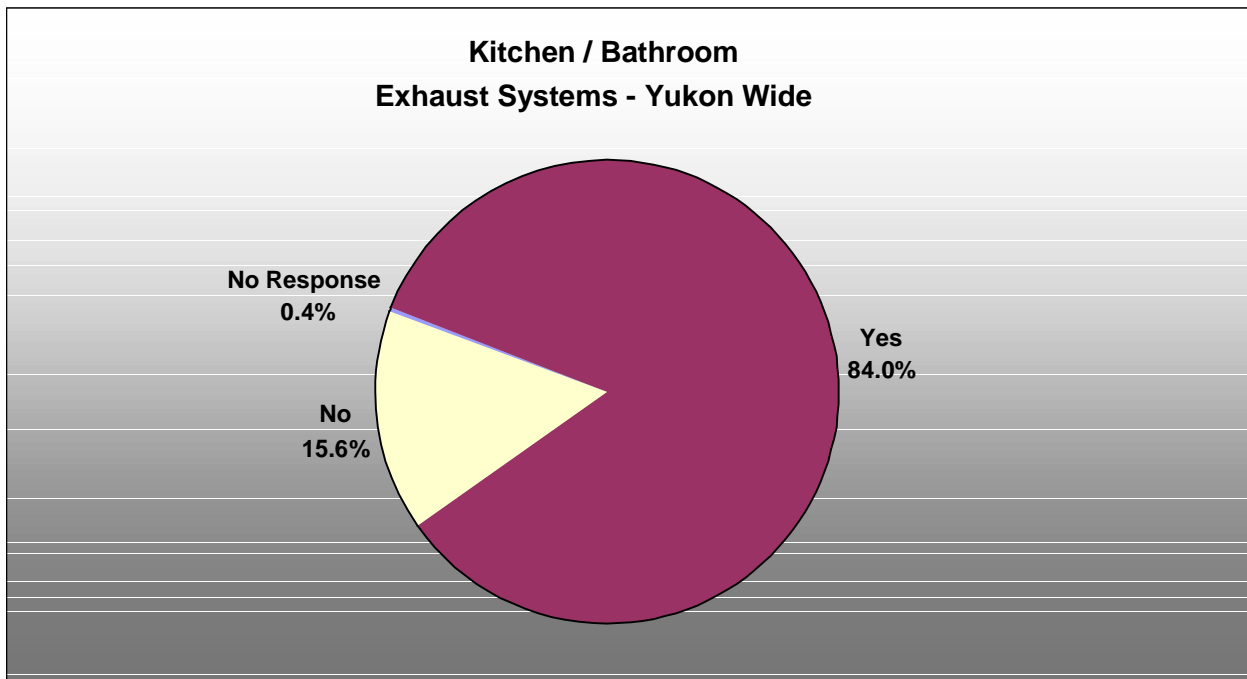
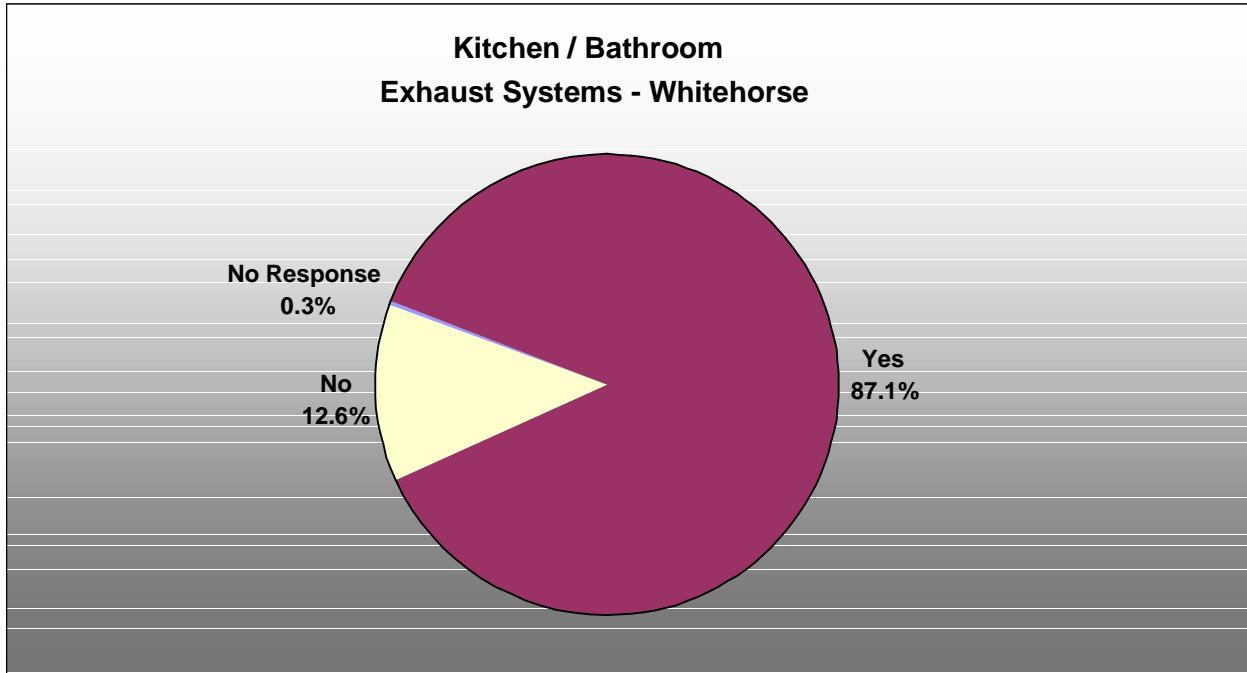


HIGHLIGHTS

- Whitehorse and Yukon wide results are similar.
- In each case, 52 percent of respondents said “yes”, but the non-response is quite high. Data can be explored further to determine more accurately the need for mechanical ventilation. This high level of non-response” may be an indication that respondents did not know what mechanical ventilation was.

1.4.4 KITCHEN/BATHROOM EXHAUST SYSTEMS

The following pie charts show the percentage of households that have kitchen/bathroom exhaust systems:

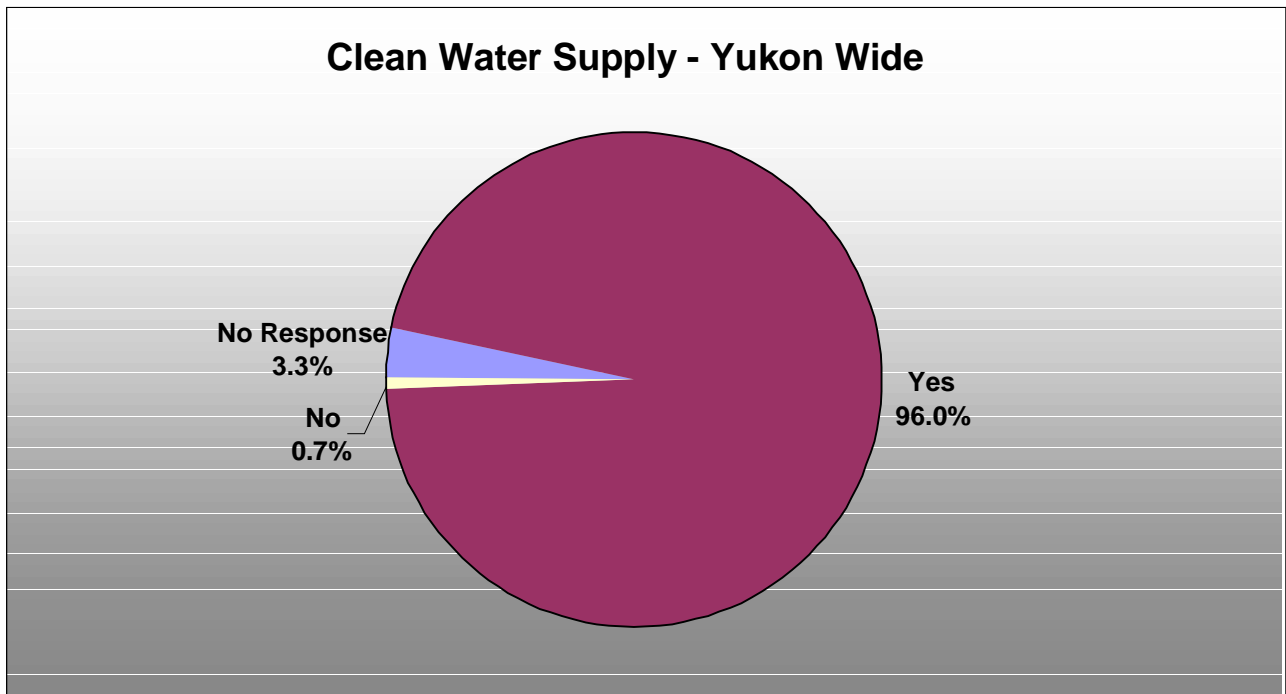
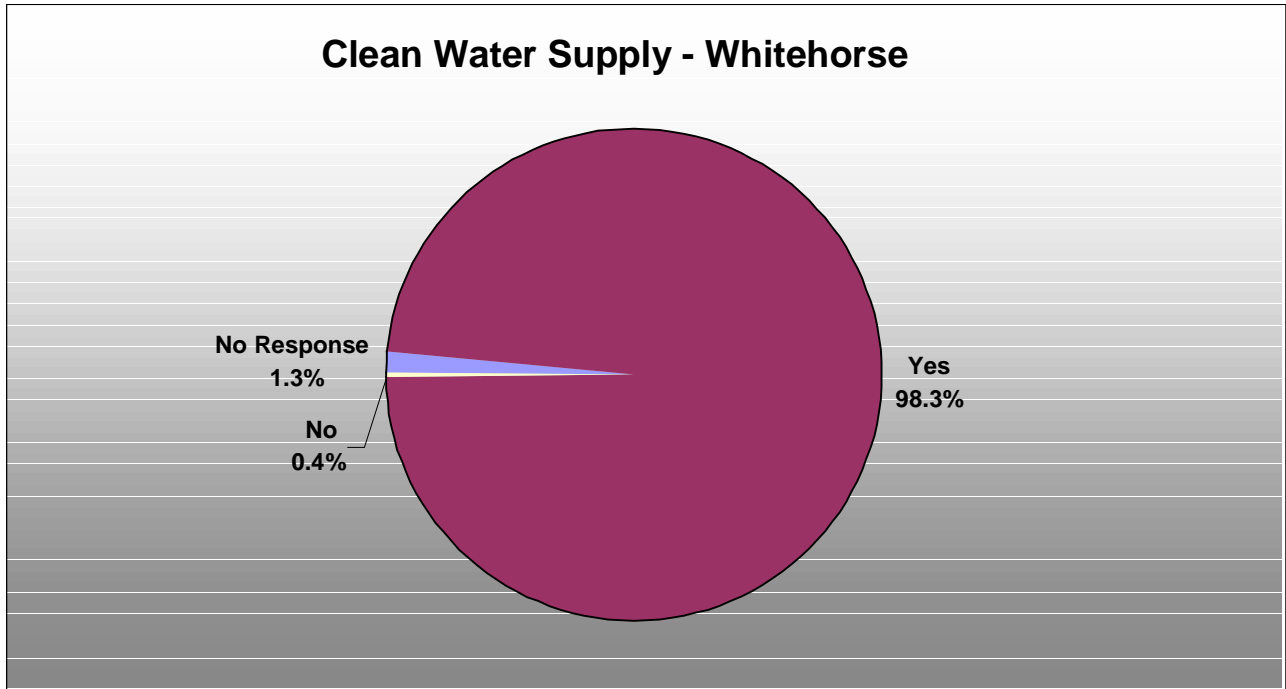


HIGHLIGHTS

- A significant portion of the dwellings both in Whitehorse and the entire Yukon do not have kitchen and/or bathroom exhaust systems. Since the vast majority of household water is used in either of these two rooms, this situation may indicate a ventilation and/or moisture-control problem.

1.4.5 WATER SUPPLY

The following pie charts show the percentage of households that have a clean water supply:

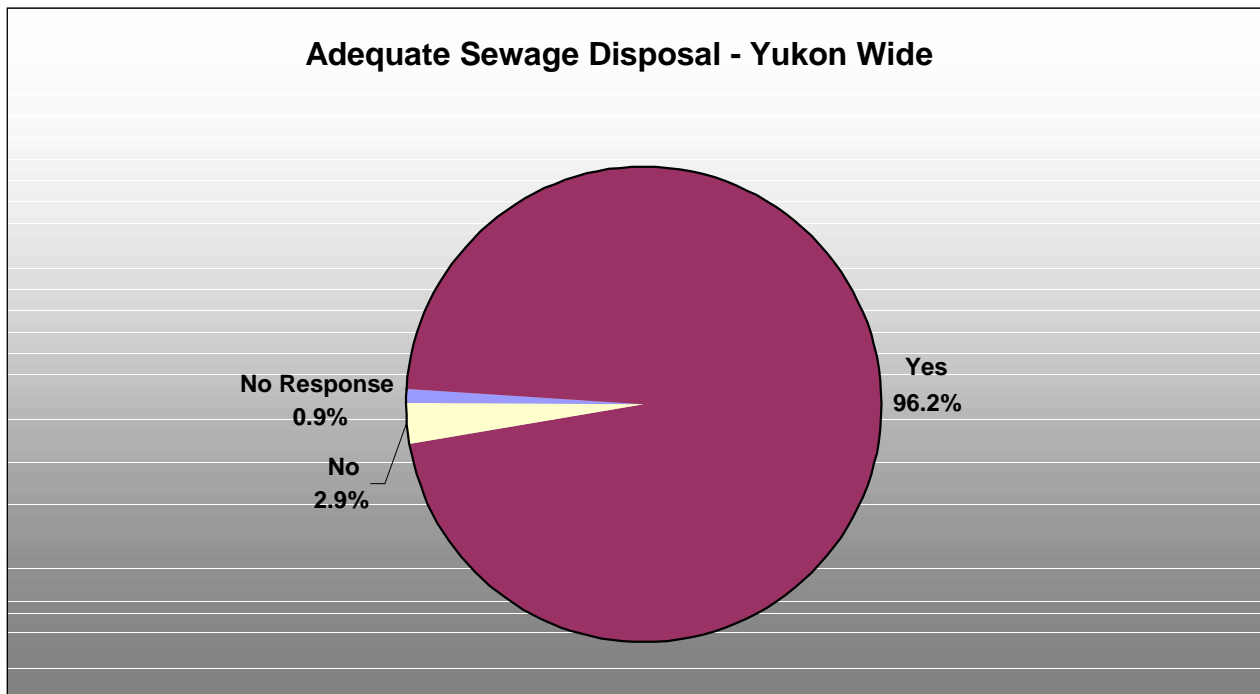
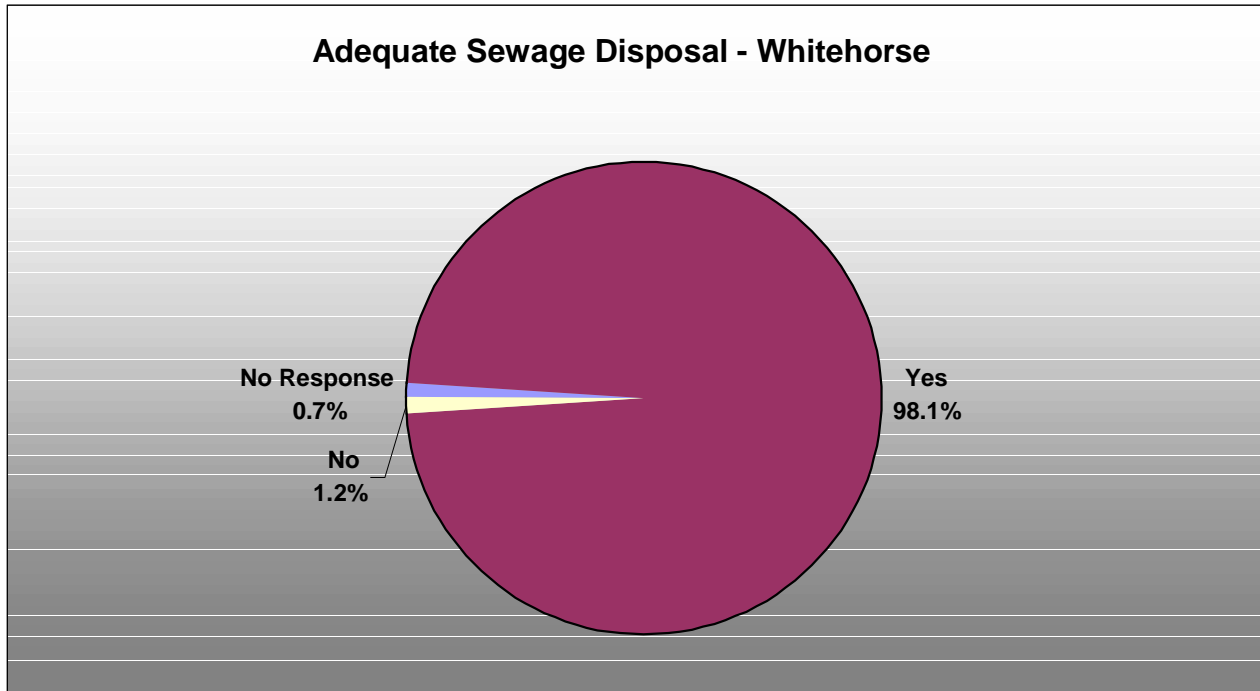


HIGHLIGHTS

- The vast majority of households in both Whitehorse and in the Yukon in general do have a clean water supply.

1.4.6 SEWAGE DISPOSAL

The following pie charts show the percentage of households that have adequate sewage disposal:



HIGHLIGHTS

- Again, the vast majority of households in both Whitehorse and in the Yukon in general do have adequate sewage disposal.

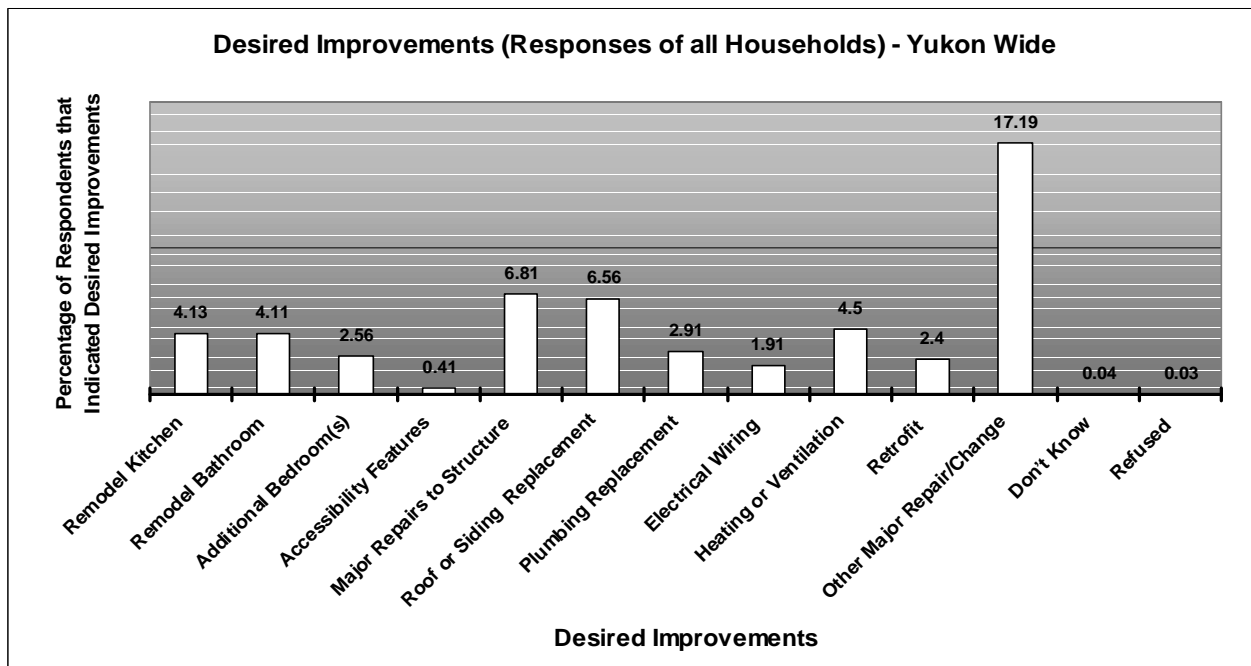
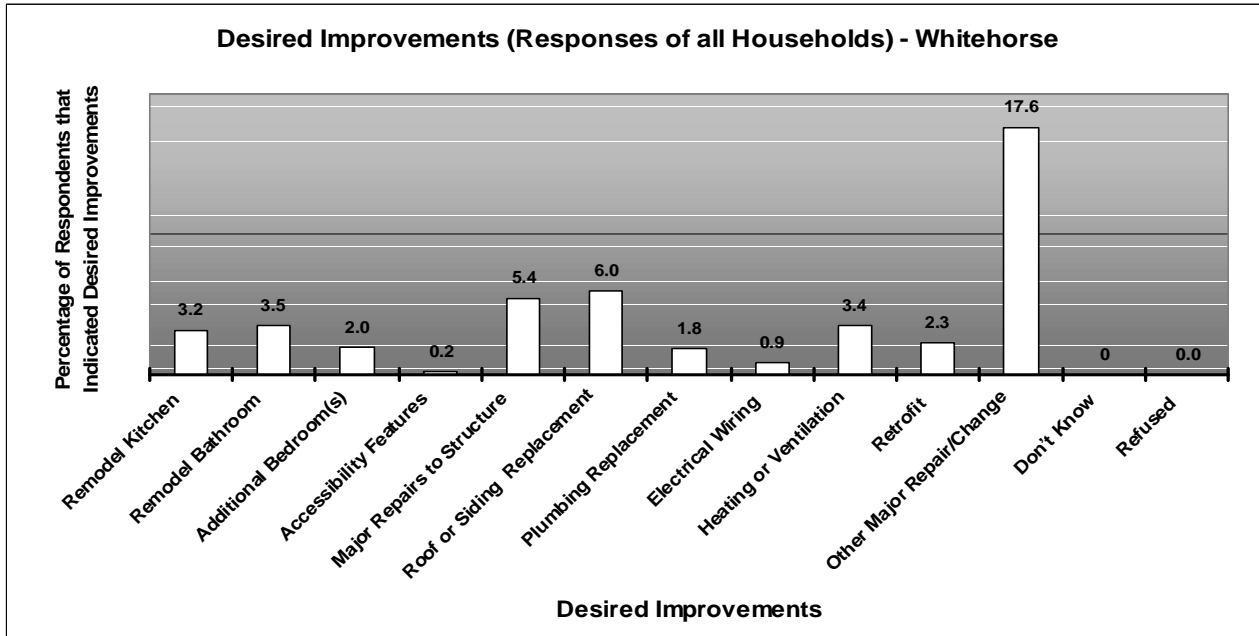
1.5 DESIRED IMPROVEMENTS

Respondents were asked what types of changes or repairs they would like to make in the next two years. The next sub-theme shows the percentage of households that desire improvements:

⇒ **DESIRED IMPROVEMENTS.**

1.5.1 DESIRED IMPROVEMENTS

“Major Repairs to Structure” includes repairs to walls, foundation, floors and ceiling. “Other Major Repair/Change” addresses the development of and/or addition of new space. These bar charts show the percentage of respondents who indicated various desired improvements:



HIGHLIGHTS

- Whitehorse and Yukon wide results are similar.
- There are a large variety of types of desired improvements.
- Apart from the non-specific “other” category, “Roof”, “Bathroom”, “Structural” and “Heating” improvements are most desired in Whitehorse.

2 DWELLING AFFORDABILITY

Dwelling affordability is a measure of the ability of the occupants of a dwelling to pay for their housing. Dwelling affordability was determined using ranges of incomes and ranges of expenses. Using these ranges, and the standard of 30 percent shelter cost to income ratio as a cut-off, it was possible to determine households where there was an affordability problem, households where there was no affordability problem, and households where there was a “possible” affordability problem. There were also households where respondents did not provide household income and/or expense information. These fell into the “insufficient data” category.

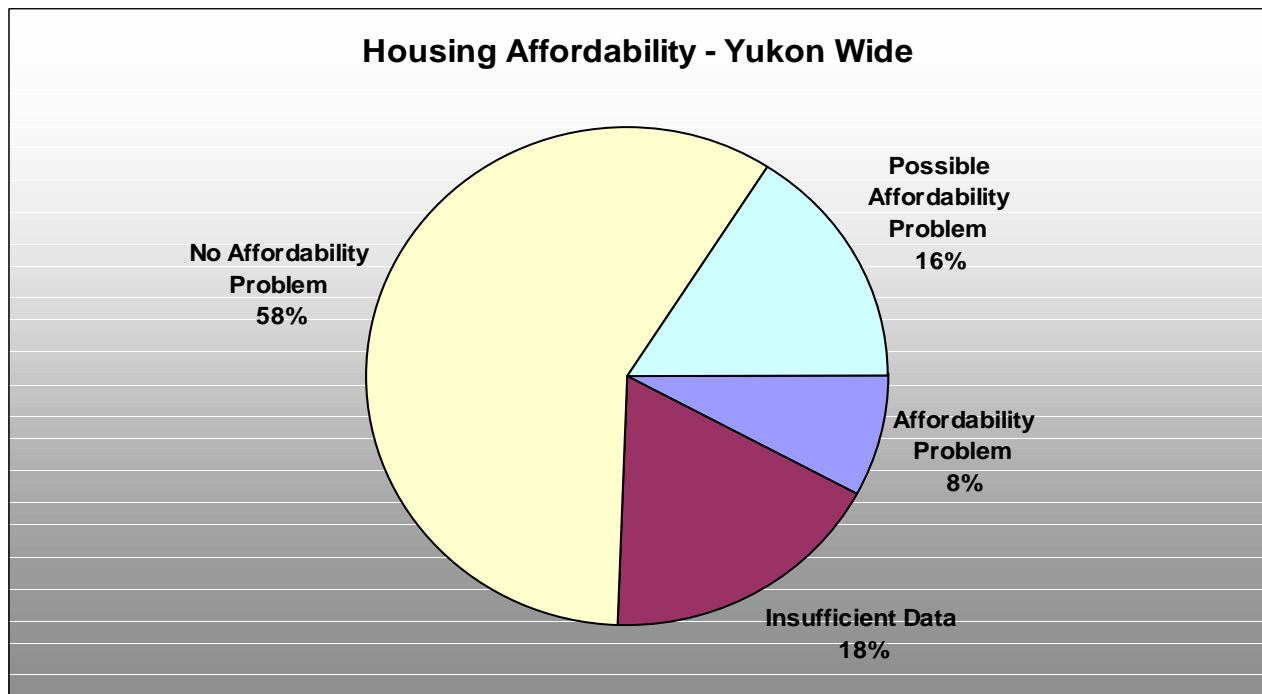
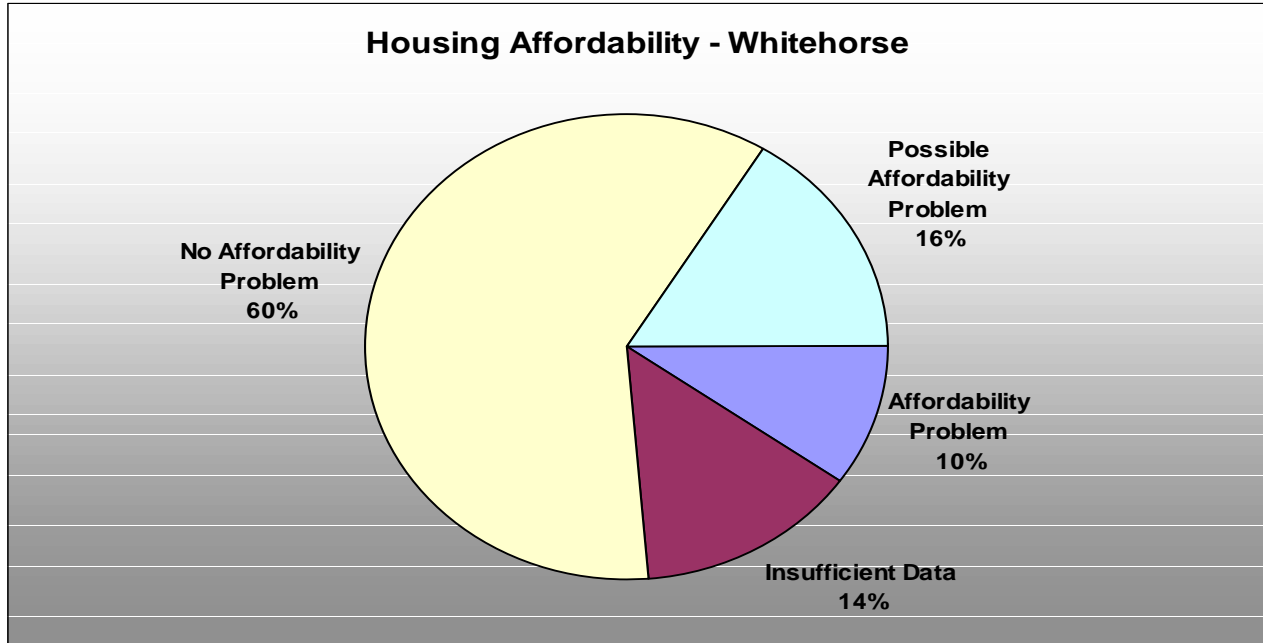
2.1 PRESENCE OR ABSENCE OF AFFORDABILITY PROBLEM

Respondents were asked whether they had an affordability problem. The next sub-theme shows dwelling affordability in Whitehorse and in the Yukon:

⇒ **AFFORDABILITY.**

2.1.1 AFFORDABILITY

The following pie charts show the percentage of households in each category.



HIGHLIGHTS

- Whitehorse and Yukon wide results are similar.
- In Whitehorse, 10 percent of households indicated having an affordability problem where they are spending more than 30 percent of their income on shelter costs. Another 16 percent indicated a possible affordability problem

3 DWELLING SUITABILITY

“Dwelling suitability” in housing refers to the appropriateness of the dwelling for the people living in it including factors such as crowding and accessibility.

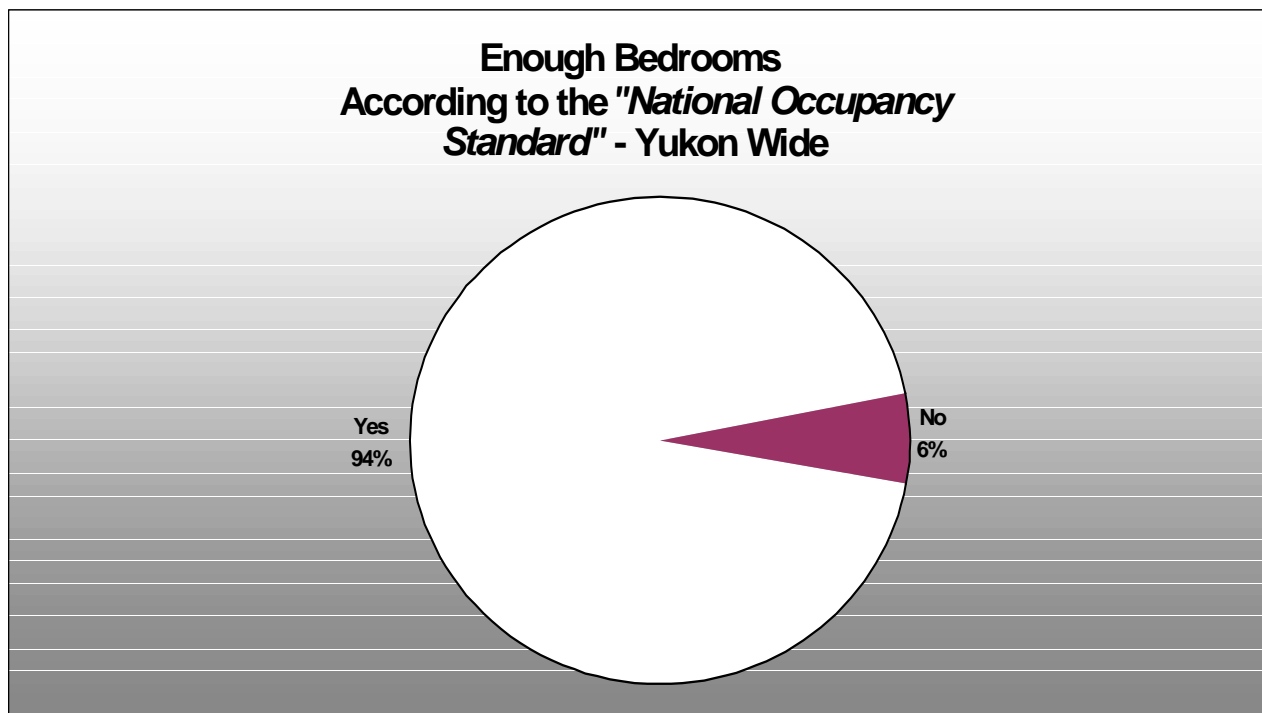
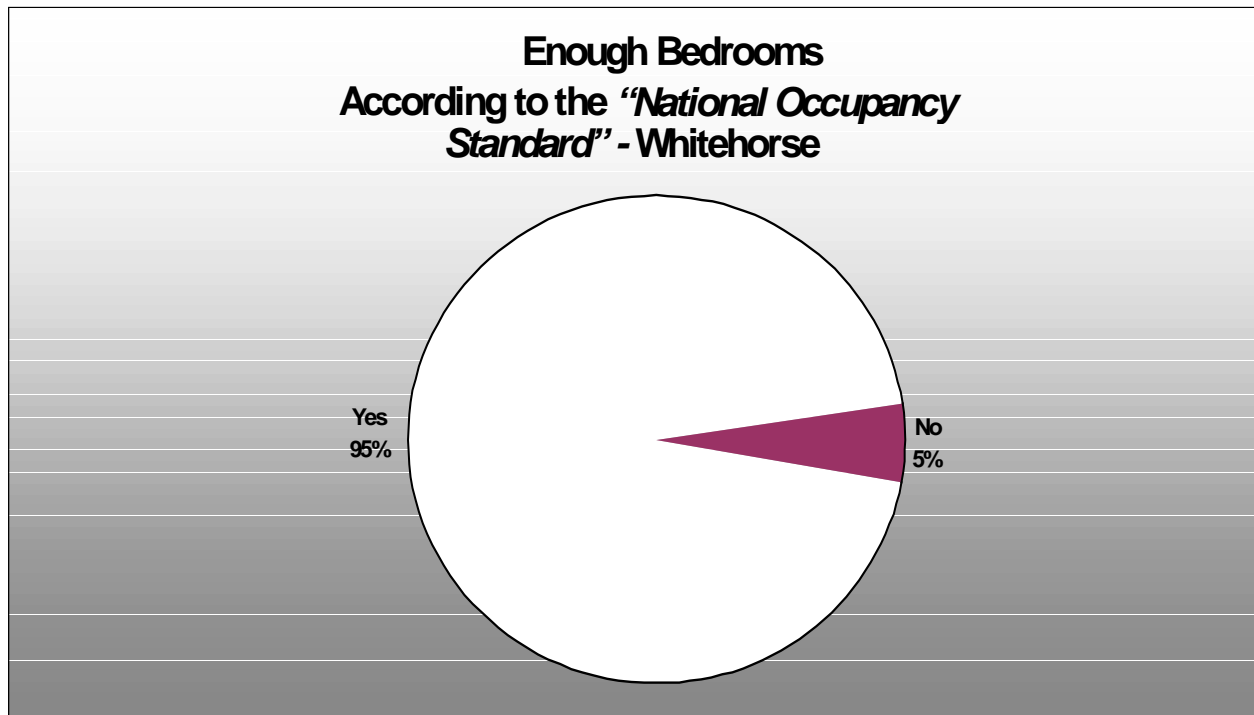
3.1 CROWDING

The National Occupancy Standard stipulates, for example, a minimum number of bedrooms required in a dwelling depending on the age and gender composition of the household. According to this standard, for example, separate bedrooms are required for each adult over the age of 18 unless that adult is in a married or common-law relationship with another household member. The next two sub-themes address crowding:

- ⇒ **BEDROOMS,**
- ⇒ **PERCENTAGE OF HOUSEHOLDS THAT USE OTHER ROOMS AS BEDROOMS.**

3.1.1 BEDROOMS

The following pie charts show the percentage of households with enough bedrooms:

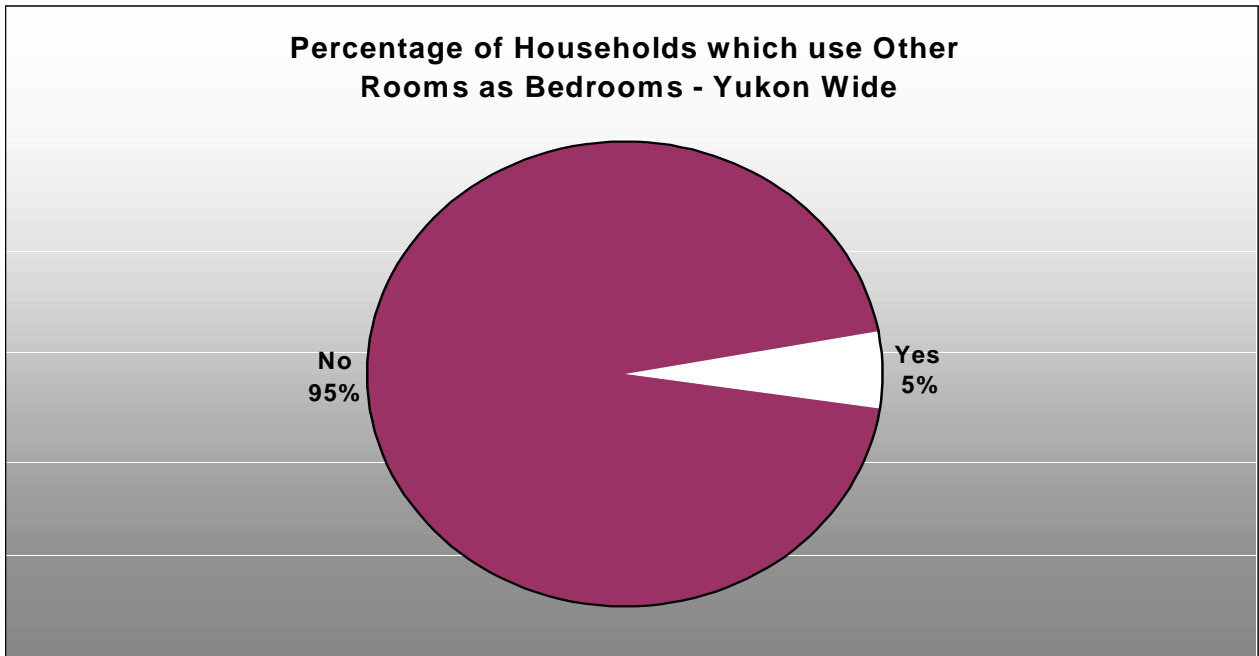
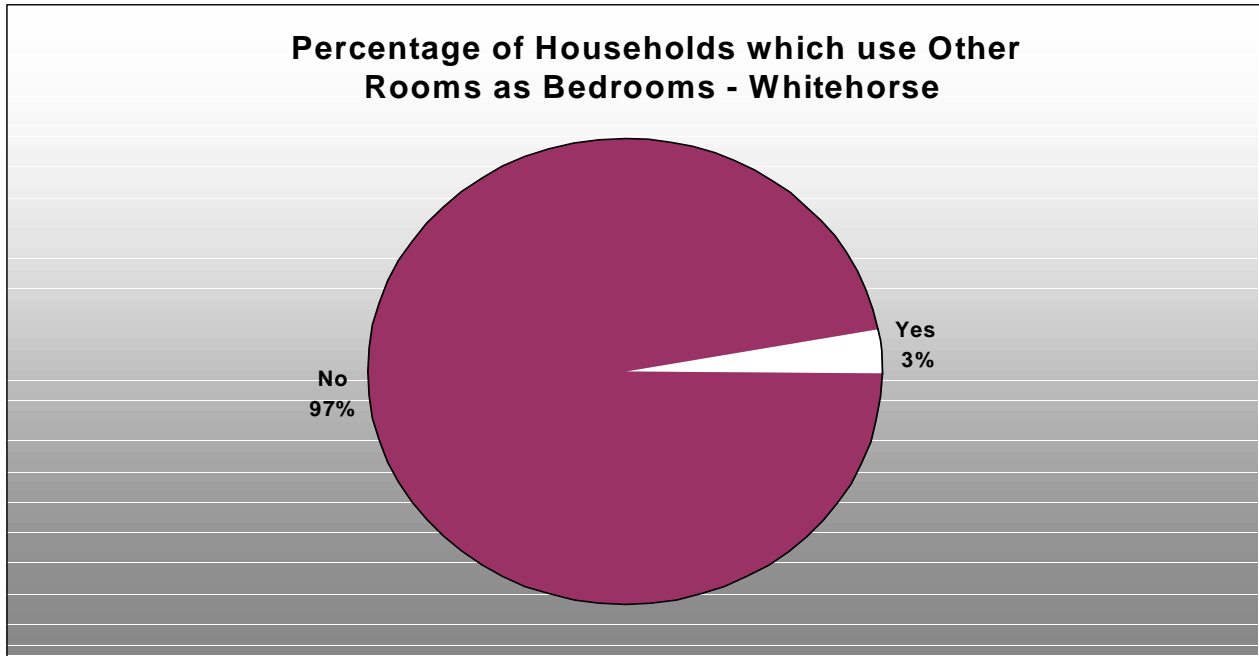


HIGHLIGHTS

- Whitehorse and Yukon wide results are similar.
- According to the National Occupancy Standard, about 5 percent of all households in Whitehorse and 6 percent in the Yukon in general do not have enough bedrooms.

3.1.2 PERCENTAGE OF HOUSEHOLDS THAT USE OTHER ROOMS AS BEDROOMS

Some households use rooms other than bedrooms as bedrooms. The percentage of households that do this is shown below for both Whitehorse and the Yukon.



HIGHLIGHTS

- Although the numbers are slightly higher for the Yukon as a whole than for Whitehorse, the majority of households both in Whitehorse and throughout the Yukon do not use other rooms as bedrooms.

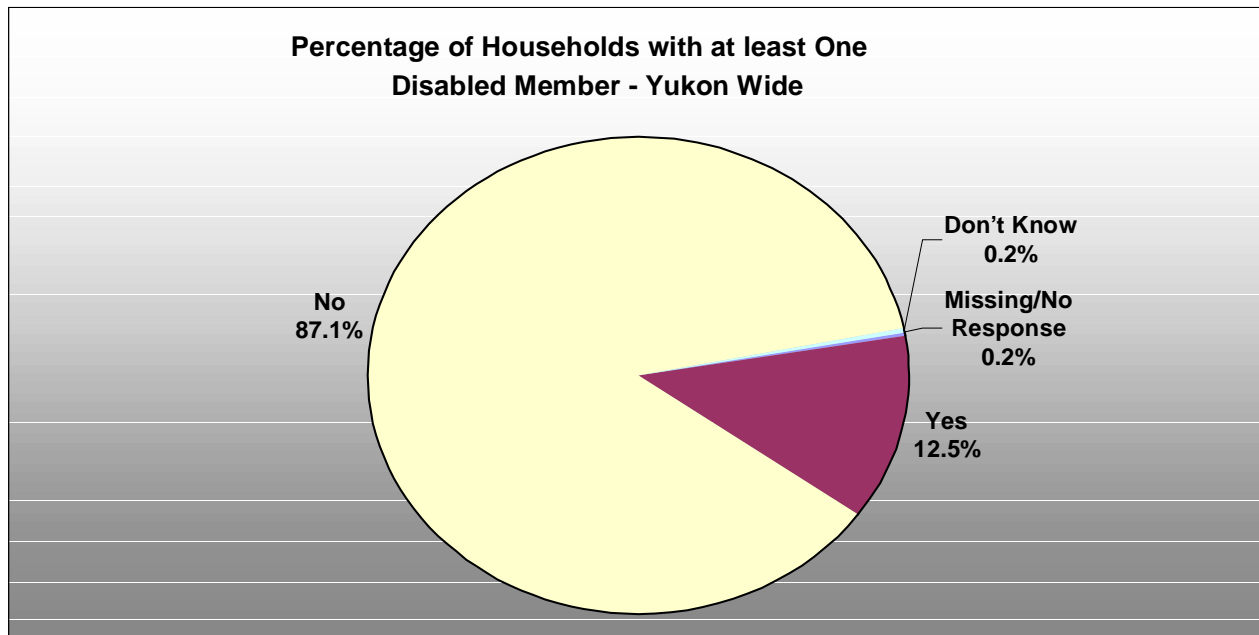
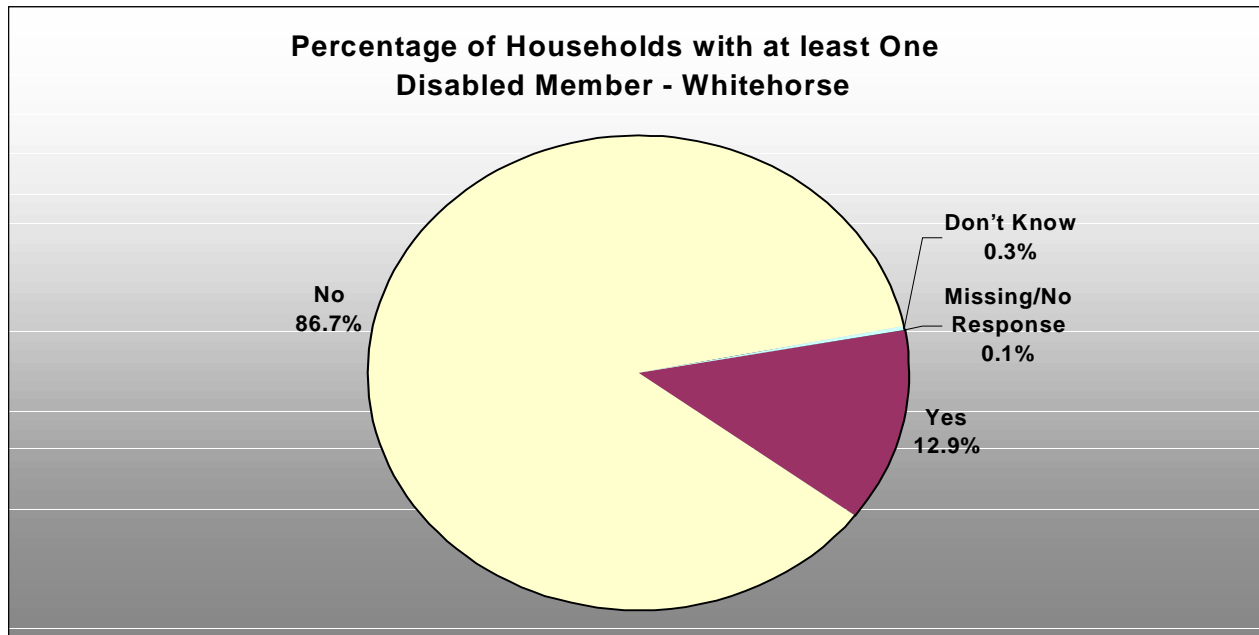
3.2 ACCESSIBILITY FOR DISABLED AND ELDERLY

Another factor used in determining the suitability of housing is accessibility of the dwelling for those households with one or more disabled members. In order to determine the importance of this factor, the number of households that have disabled members must be determined. This information is shown in the next two sub-themes:

- ⇒ **PERCENTAGE OF HOUSEHOLDS WITH AT LEAST ONE DISABLED PERSON,**
- ⇒ **ACCESSIBILITY FEATURE(S) REQUIRED.**

3.2.1 Percentage of Households with at Least One Disabled Person

“Disability” was defined as either a mobility impairment requiring a wheelchair, other mobility impairment (for example, arthritis), visual, auditory, or other disability. The following pie charts show the percentage of households that have at least one disabled person:

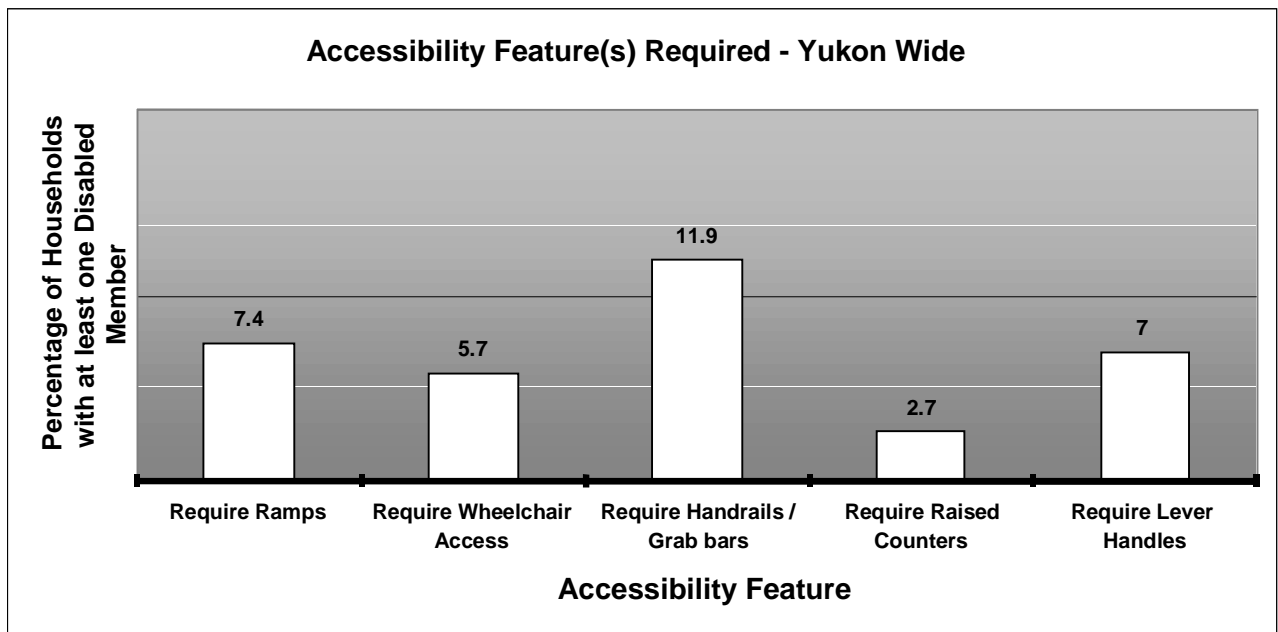
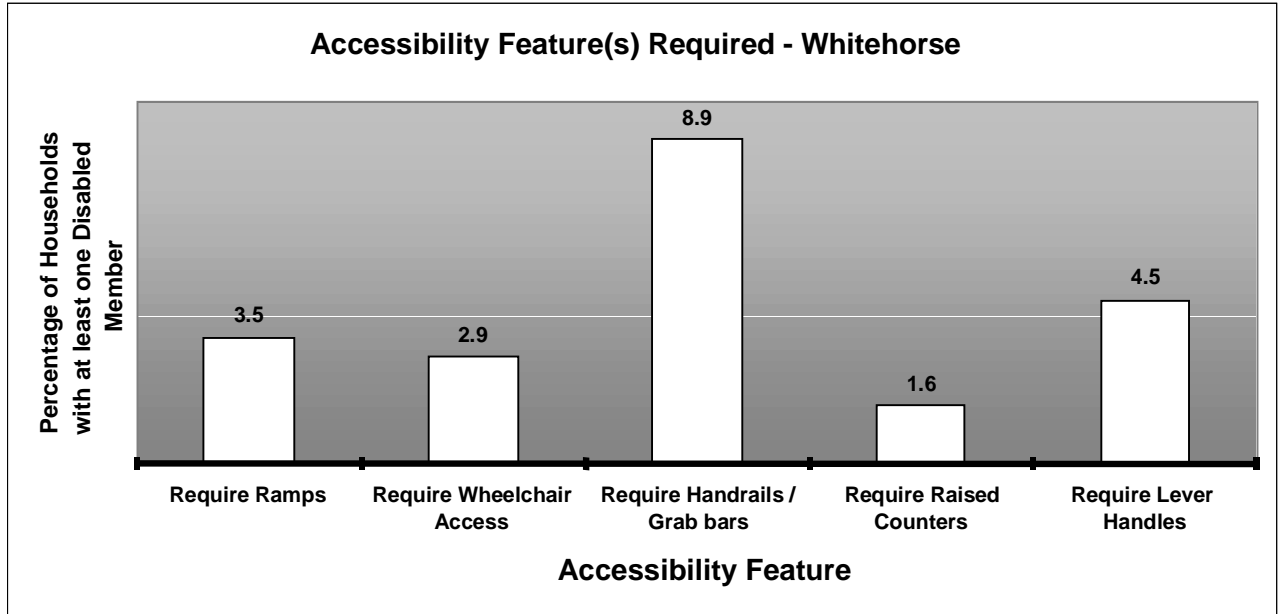


HIGHLIGHTS

- Approximately 13 percent of households in Whitehorse and across the Yukon have at least one disabled person.
- The majority of households with at least one disabled person have one disabled person only.
- Across the Yukon approximately 130 households have more than two disabled people.

3.2.2 Accessibility Feature(s) Required

These bar charts illustrate the kinds of features still required by households with at least one disabled person.



HIGHLIGHTS

- Whitehorse numbers are significantly lower than the Yukon wide numbers indicating that Whitehorse households with disabled members are generally somewhat better equipped than similar rural households.
- The requirement for grab bars, lever handles and ramps is still considerable.

4 ACCESS TO HOME OWNERSHIP

This category of information helps us to determine why renters have chosen to remain renters rather than buying a dwelling.

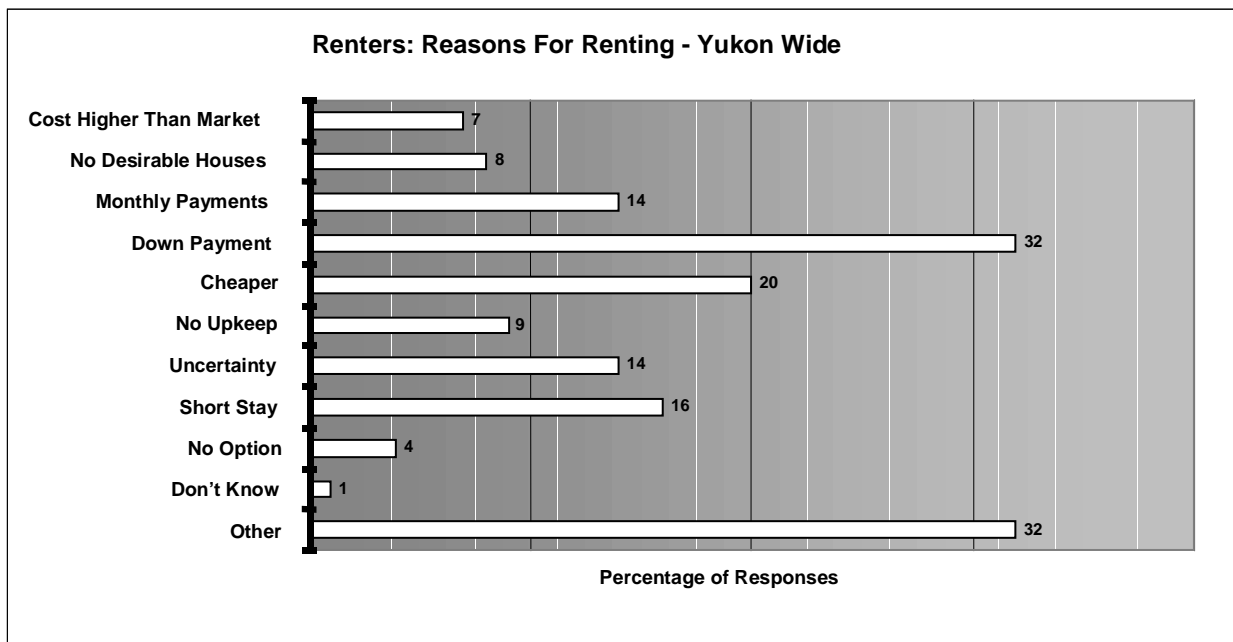
4.1 RENTERS

The next sub-theme shows the responses of renters when asked, “Why have you chosen to rent rather than purchase housing?”

⇒ **REASONS FOR RENTING.**

4.1.1 REASONS FOR RENTING

These bar charts show the responses of renters.”



HIGHLIGHTS

- Whitehorse numbers are similar to Yukon wide numbers.
- Aside from the unspecified “Other” answer, “Down Payment,” “Cheaper,” and “Short Stay” were the most common answers.
- “Other” includes reasons not captured in another category.

5 SENIORS AND ELDERS NEEDS

The last set of housing quality indicators this study covers is the housing needs of seniors and elders. The study of the appropriateness of, and the need for adaptations in seniors and elders housing is essentially a sub-study of “Dwelling Suitability”. However, because of our aging population, it has become increasingly important to understand the housing needs of this sub-group of the population. We have made a particular effort in this study to understand current, and probable future needs of this group. Again, in order to understand the importance of this, the number of households must be determined.

5.1 HOUSEHOLD TYPE

The following charts show the percentages of various types of households in the population. They also illustrate a range of housing quality indicators associated with the three kinds of households:

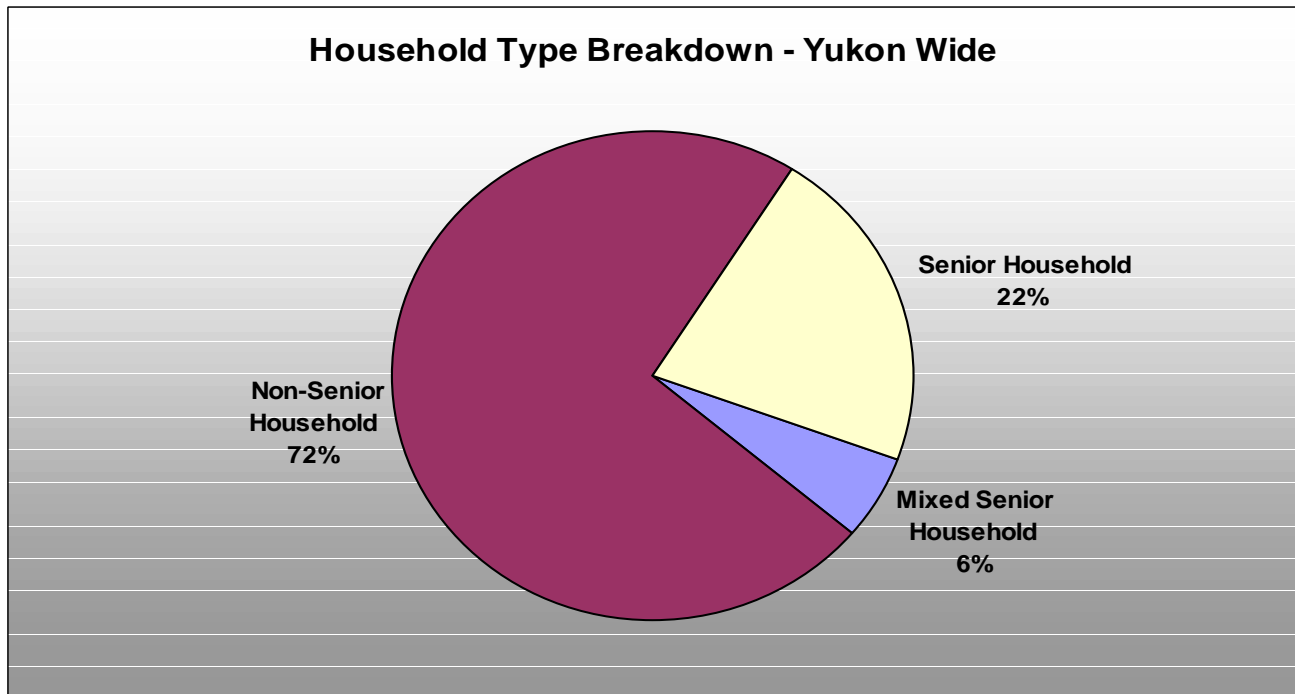
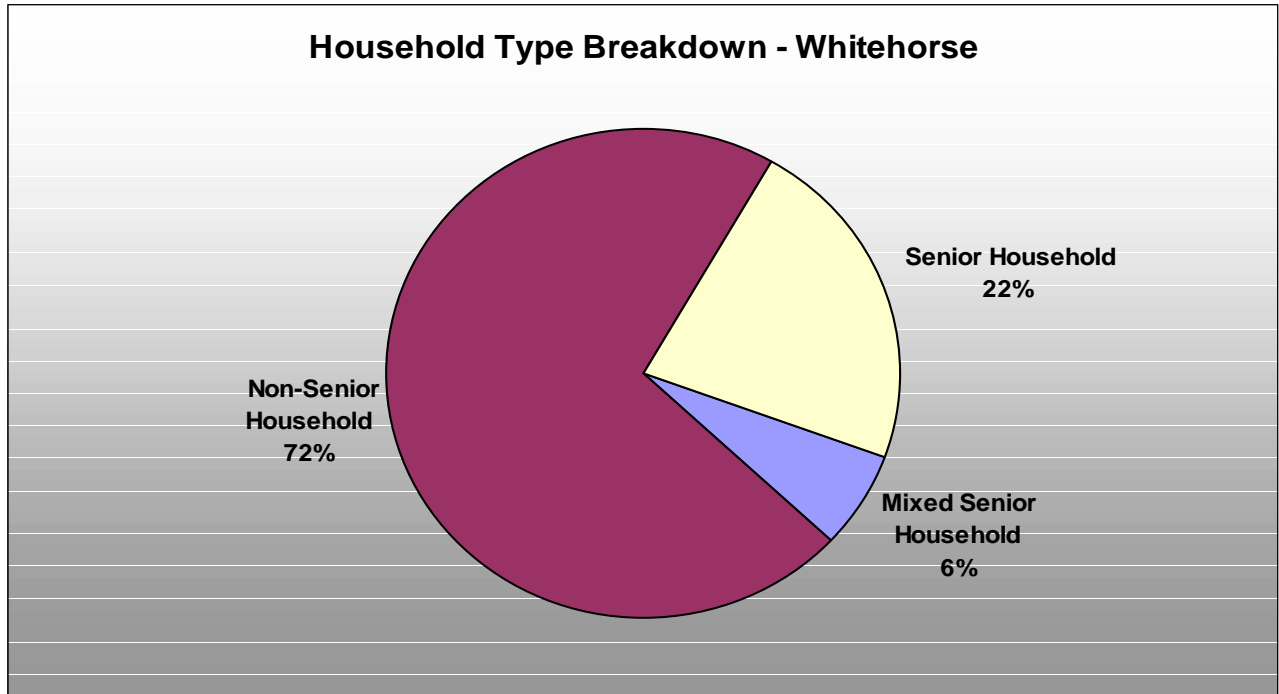
- *Senior Household*: refers to a household in which all members are 55 years of age and over.
- *Mixed Senior Household*: refers to a household in which there is at least one member 55 years of age and over, and at least one member less than 55 years.
- *Non-Senior Household*: refers to a household in which there are no members over the age of 55.

The next six sub-themes address household type:

- ⇒ **HOUSEHOLD TYPE BREAKDOWN,**
- ⇒ **HOUSEHOLD TYPE VERSUS REPAIR NEED,**
- ⇒ **HOUSEHOLD TYPE VERSUS BASIC HOUSEHOLD FACILITIES**
- ⇒ **DWELLING AFFORDABILITY FOR HOUSEHOLD TYPE,**
- ⇒ **DWELLING MANAGEABILITY FOR A SENIOR,**
- ⇒ **PROBLEMS A SENIOR WOULD HAVE LIVING IN THIS DWELLING.**

5.1.1 HOUSEHOLD TYPE BREAKDOWN

The following pie charts show household type breakdown:

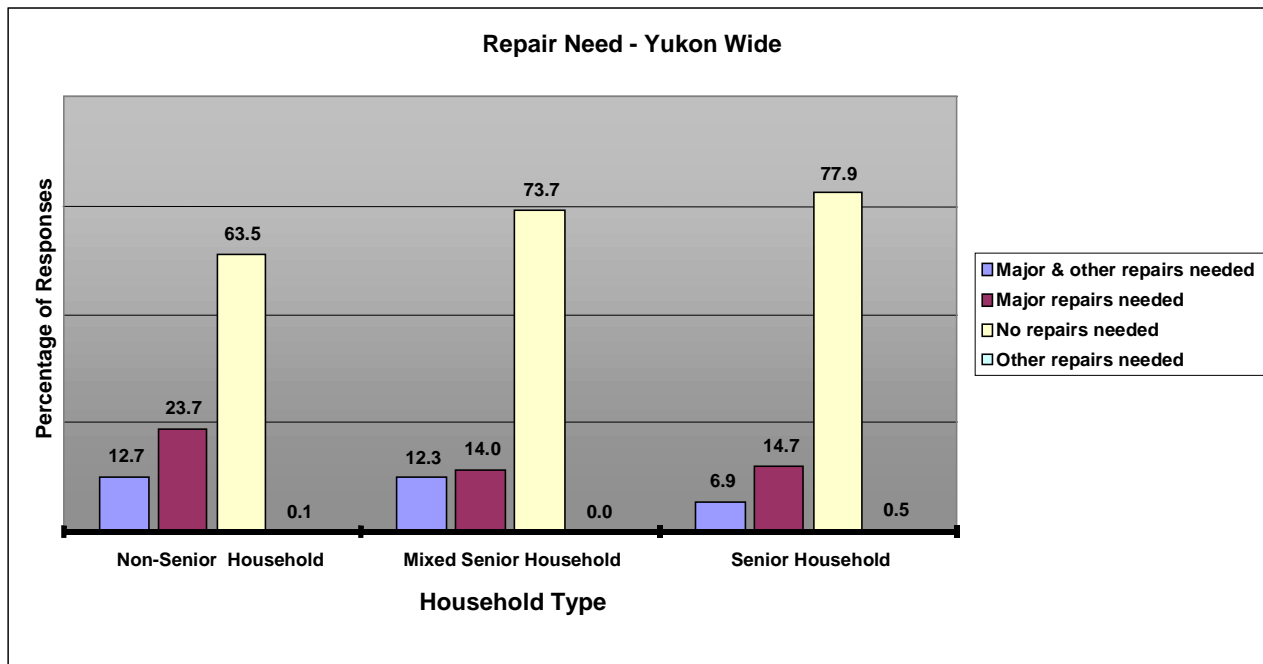
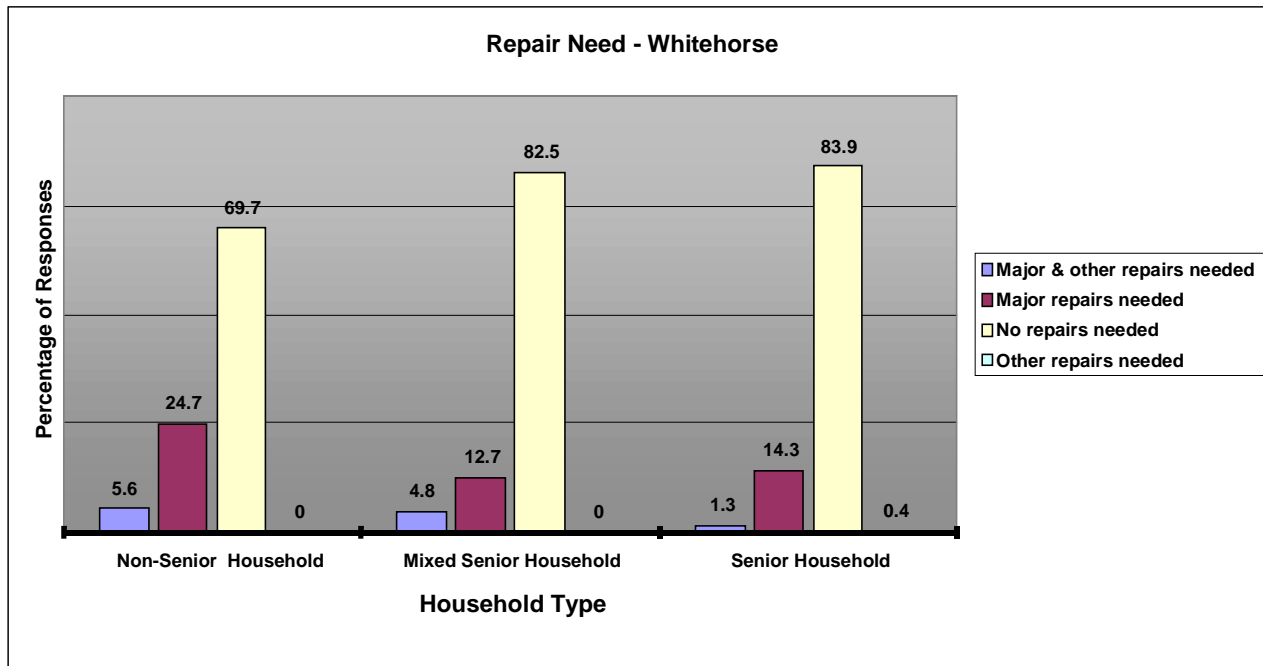


HIGHLIGHTS

- Whitehorse percentages are the same as Yukon wide numbers.
- Senior households represent 22 percent of all households in Whitehorse.
- 28 percent of households in Whitehorse have at least one senior member.

5.1.2 HOUSEHOLD TYPE VERSUS REPAIR NEED

These bar charts are included to show the kinds of household that are in need of repair.

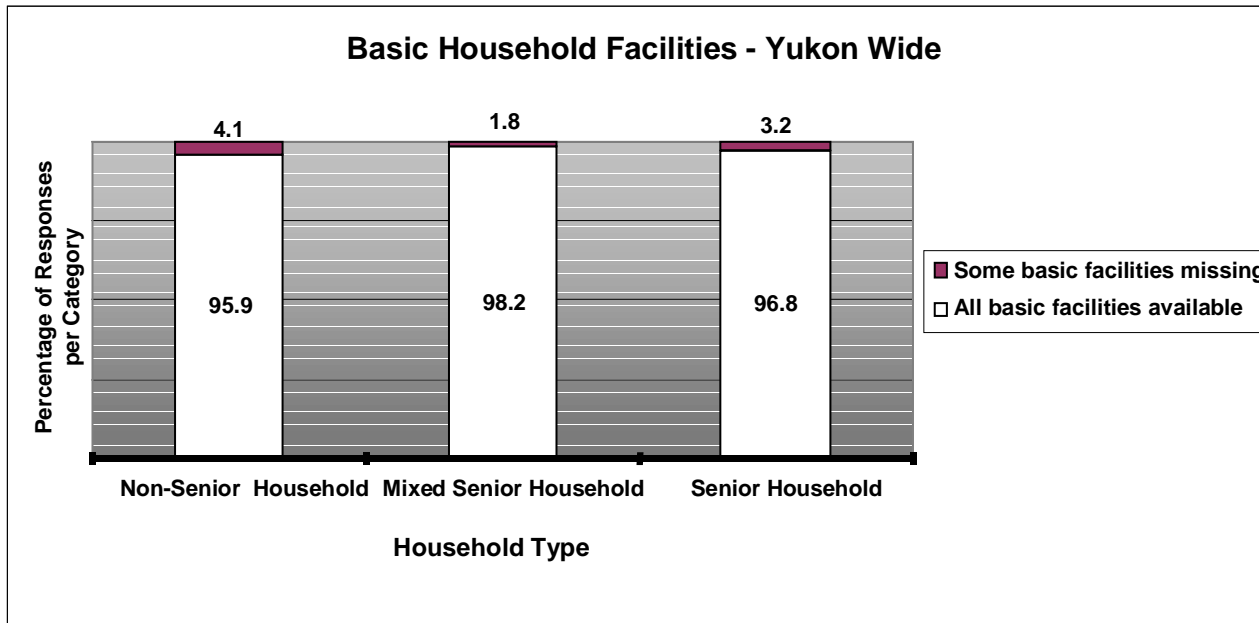
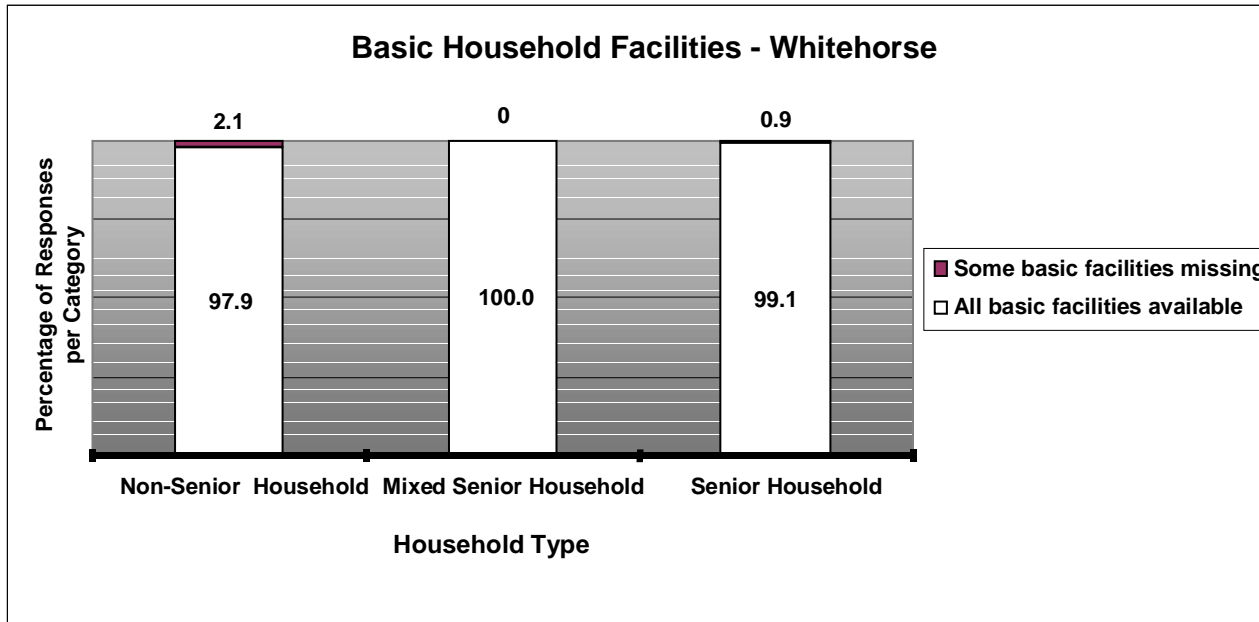


HIGHLIGHTS

- The prevalence of repair need is similar in similar kinds of households throughout the territory.
- Although as the household ages, the perceived need for major repairs declines, the need for major repairs remains very significant in all three types of households

5.1.3 HOUSEHOLD TYPE VERSUS BASIC HOUSEHOLD FACILITIES

These bar charts compare the kinds of households with the presence or absence of basic facilities.

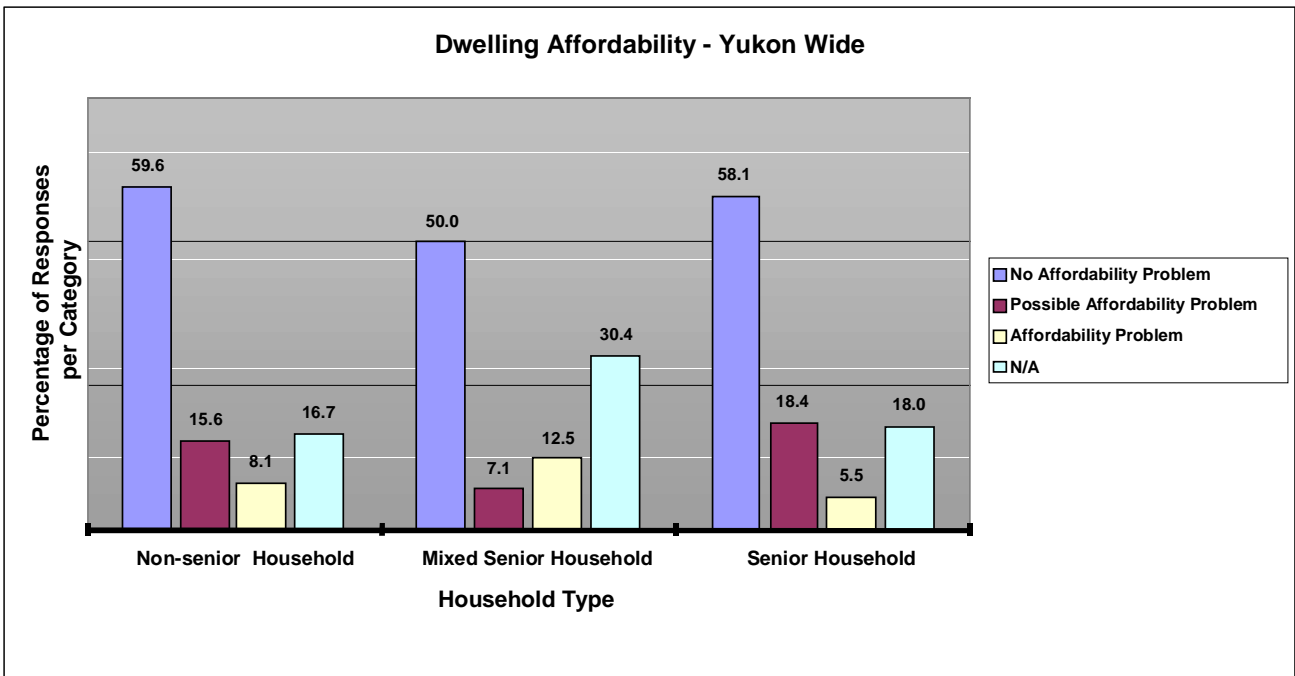
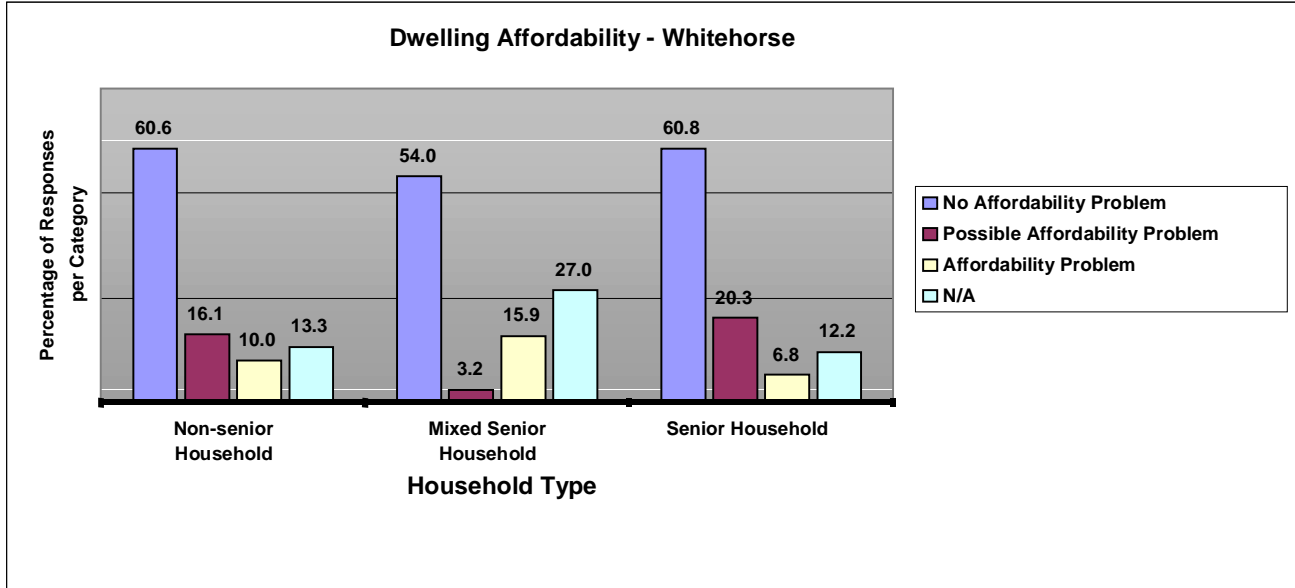


HIGHLIGHTS

- Almost all household categories have basic household facilities
- 100 percent of mixed senior households have basic facilities. In terms of the actual number of households surveyed, this accounts for approximately 80 Whitehorse households.

5.1.4 DWELLING AFFORDABILITY FOR HOUSEHOLD TYPE

These bar charts compare the dwelling affordability for the kinds of households.

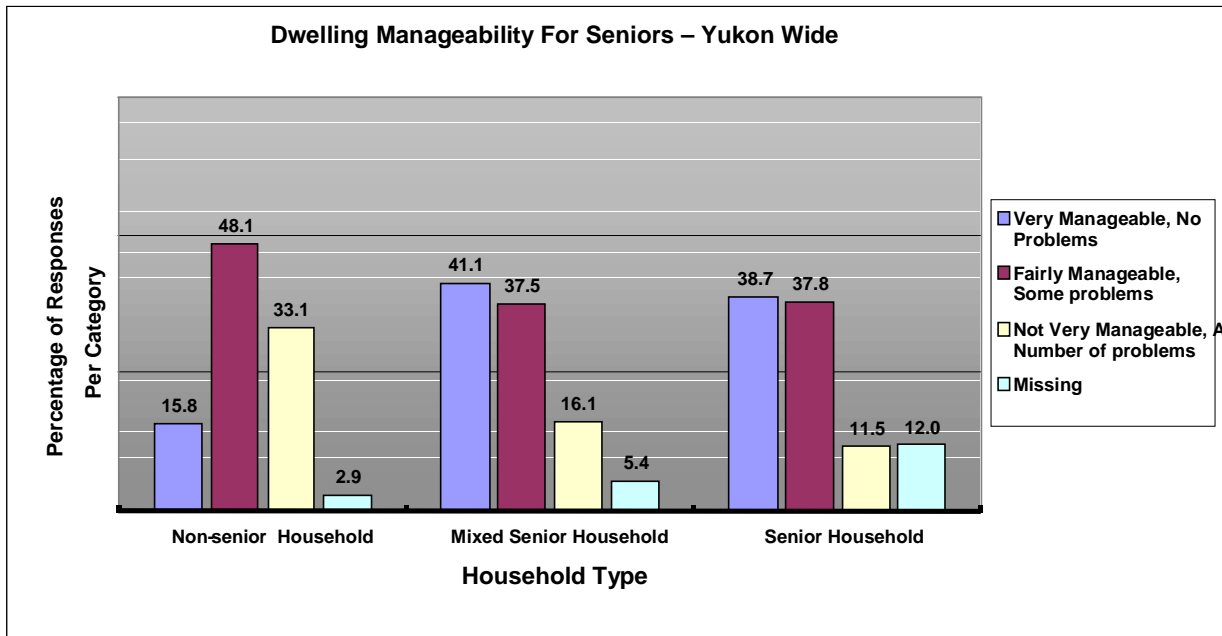
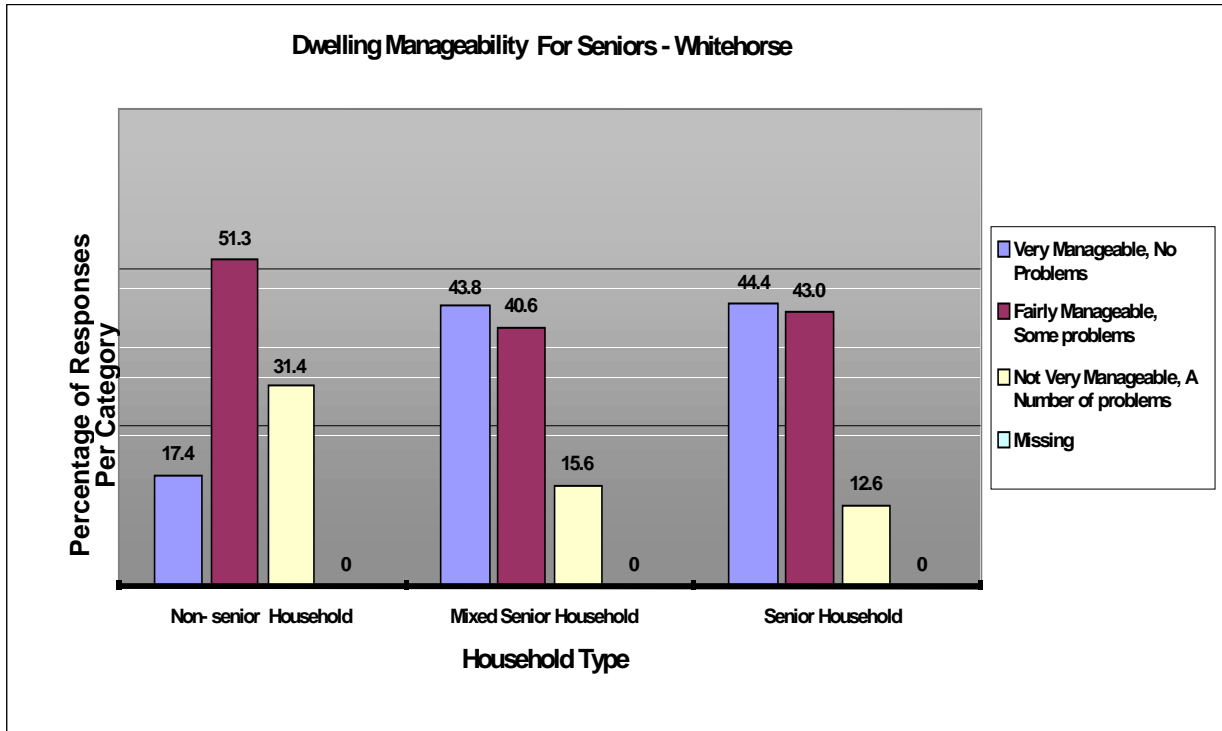


HIGHLIGHTS

- In Whitehorse, affordability problems are most prevalent in mixed senior households at 15.9 percent.
- 6.8 percent of senior households in Whitehorse have affordability problems.
- 20.3 percent of senior households have a possible affordability problem indicating that a considerable number of Whitehorse senior households are probably close to having an affordability problem.

5.1.5 DWELLING MANAGEABILITY FOR A SENIOR

These bar charts provide the responses from the three different types of households. The question asked is, “How manageable would this dwelling be for a senior?”

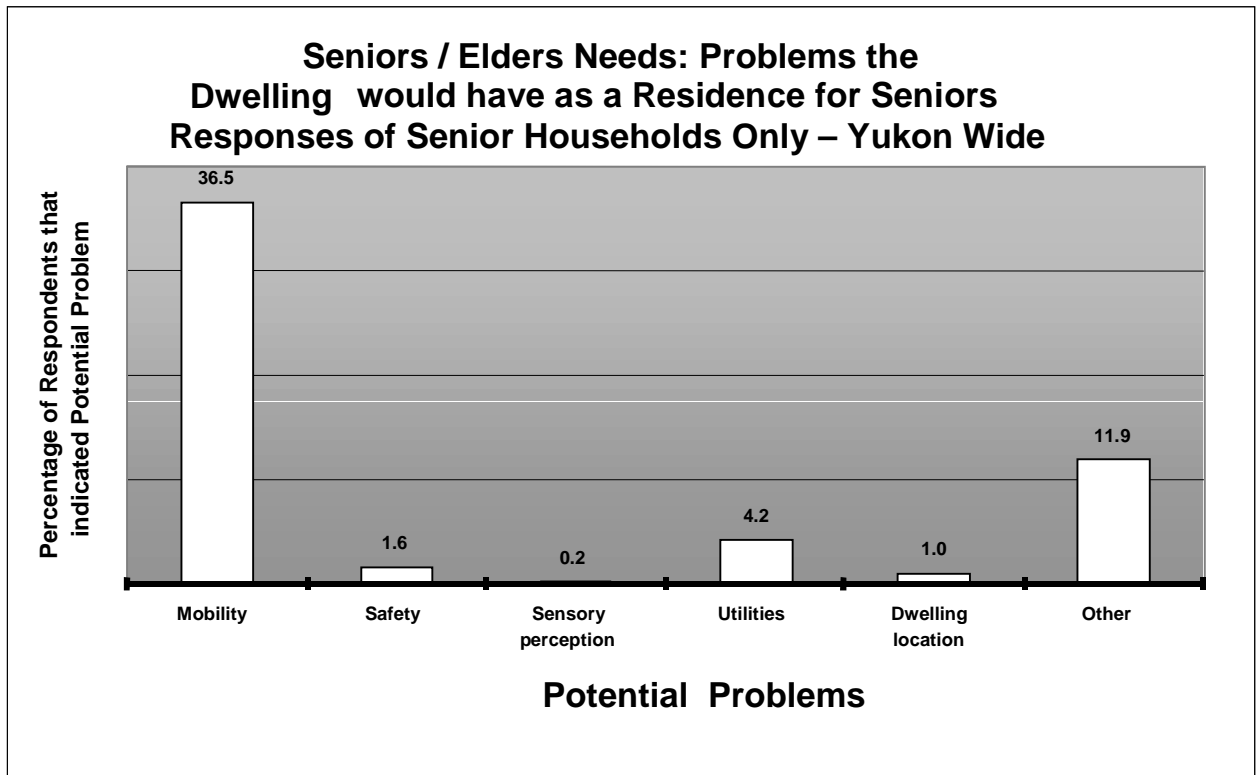
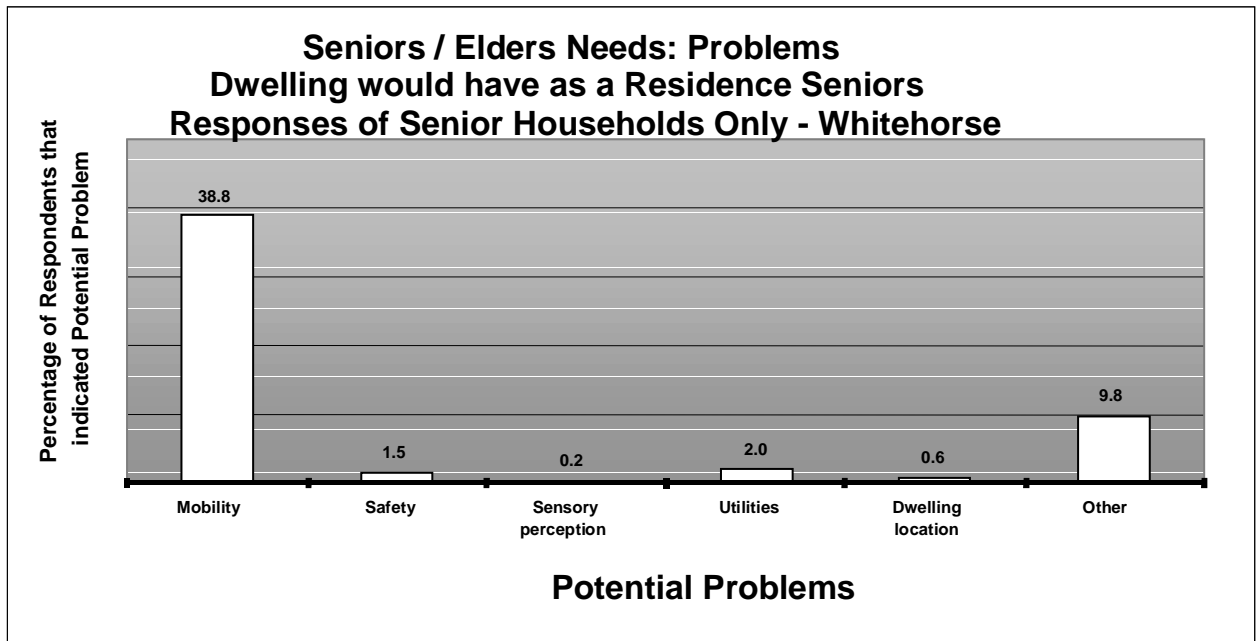


HIGHLIGHTS

- Whitehorse results are very similar to Yukon wide results.
- As the household ages, the estimate of manageability seems to increase. This may be because seniors: are less demanding for improvements; are more used to coping without better facilities out of habit; or have already made the improvements in their homes to make living easier.

5.1.6 PROBLEMS A SENIOR WOULD HAVE LIVING IN THIS DWELLING

These are the responses of the senior households only.



HIGHLIGHTS

- ❑ Whitehorse results are very similar to Yukon wide results.
- ❑ Mobility is the primary dwelling manageability problem for seniors in their homes.
- ❑ “Utilities” refers to potential problems resulting from using and maintaining such things as light, power or water.