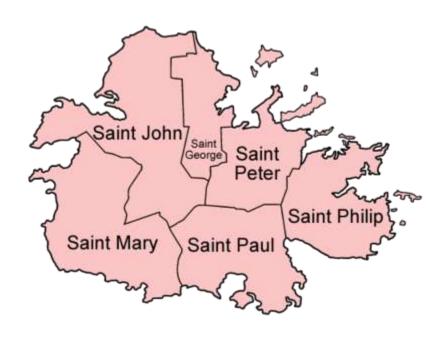
# Antigua and Barbuda National ICT Household Survey



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#### Acknowledgements

The Telecommunications Division of the Ministry of Information, Broadcasting and Telecommunications wishes to thank all who contributed to the successful preparation and execution of this the Antigua and Barbuda ICT Household Survey. We wish to thank the staff of the National Statistics Office for their valuable input, guidance and work in bringing this project to a successful conclusion. Thanks are extended to the staff at the Planning Office of the Ministry of Finance for their review of the survey and for their assistance in planning the execution of the work. Thanks also to the team at the Telecommunications Division for their hard work in making the survey possible. Finally, we especially wish to thank all those members of the national community who gave a few moments of their valuable time to complete the survey.

#### **Introduction**

The national Information and Communications Technology (ICT) Household survey was launched in April of 2008 at a press briefing at the Office of the Prime Minister on the Queen Elizabeth Highway in St. John's Antigua. As stated then, the purpose of the household survey was to gather statistics on the use of ICTs in the national community. The survey follows upon two similar surveys which were conducted recently to gauge the extent of ICT usage with the public sector as well as within the business sector.

In addition to finding out what is going on in the national community vis-à-vis ICTs, it is expected that the results of household ICT survey will provide concrete evidence and facts upon which national ICT policy and strategies can be engineered. In this regard the survey will provide data to help monitor progress towards global development targets, in particular the Millenium Development Goals (MDGs).

The survey gives essential information for planning at national and regional levels. It provides that information on a consistent basis, both about the country as a whole and about parishes and administrative districts in relation to one another. Furthermore the results of this national survey can be use as benchmarks for current ICT statistics and will also provide a basis for monitoring and evaluating current and ongoing ICT initiatives.

In 2005 the *Partnership on Measuring ICT for Development* (a consortium of United Nations and other developmental agencies<sup>1</sup>) developed a core list of ICT indicators to standardize and harmonize ICT statistics at a global level. The purpose of the core list was to develop internationally comparable statistics on the information society that could be collected by all countries. The Antigua and Barbuda ICT Household survey (see page 36) references in large measure the Partnership's list of core indicators on access to, and use of, ICT by households and individuals.

<sup>-</sup>

<sup>&</sup>lt;sup>1</sup> International Telecommunication Union (ITU), Organization for Economic Co-Operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics, UN ICT Task Force, The World Bank, UN Economic Commission for Africa (ECA), UN Economic Commission for Latin America and the Caribbean (ECLAC), UN Economic and Social Commission for Asia and the Pacific (ESCAP), UN Economic and Social Commission for Western Asia (ESCWA), and EUROSTAT

#### **Survey Mechanisms**

By definition, a survey draws on a representative subset of the population and uses this as a proxy for the entire population. In general a sample size of about ten percent (10%) was used and the resulting data is projected as representative of what is taking place in the population as a whole. The ICT Household survey collected its information from the primary unit, the household<sup>2</sup>. Consequently, approximately two thousand four hundred (2400) households (or ten percent (10%) of all households in Antigua and Barbuda) were visited and were requested to complete a short survey questionaire<sup>3</sup>.

The ICT Household Survey was a collaborative exercise between the Ministry of Information, Broadcasting and Telecommunications and the National Statistics Office (NSO). The Chief Statistician was in overall charge of the Survey process with the day-to-day work being headed by the Senior Statistician of the Census and Surveys section of the NSO. As far as the field work was concerned, a total of about 30 enumerators canvassed the country collecting the data. They were supervised by 4 supervisors and 2 liaison officers.

The country was divided by the NSO, for census and survey taking purposes, into Enumeration Districts (EDs). The EDs are contiguous areas in each of the six<sup>4</sup> parishes in Antigua as well as in Barbuda. Each ED has stable physical boundaries and contains around 100 households. For the purposes of this exercise approximately 11 households (approximately 10% of households) in each ED were listed to be surveyed. Consequently a 10% sample of the approximately 24,000 households within the 288 Enumeration Districts of the country were assigned to the 30 enumerators. Each enumerator canvassed all of the EDs assigned to him/her and located ALL of the households on the list provided, and enumerated them, only. A field supervisor was assigned to every seven (7) enumerators and the enumerator reported to him/her on a regular basis during the course of the survey.

The ICT Survey was conducted under the General Statistics Act of 1975. Under this Act, both the public and institutions have an obligation to cooperate with survey activities. All individual data is strictly confidential and has to be used for statistical purposes only. This means that the information can only be used for the purpose of compiling statistics and no individual information can be disclosed to anyone outside the survey organization.

<sup>2</sup> "The concept of household is based on the arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living. A household may be either (a) a one-person household, that is to say, a person who makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multiperson household, or (b) a multiperson household, that is to say, a group of two or more persons living together who make common provision for food or other essentials for living. The persons in the group may pool their incomes and may, to a greater or lesser extent, have a common budget; they may be related or unrelated persons or constitute a combination of persons both related and unrelated" (UN, 1998, paragraph 1.324).

<sup>&</sup>lt;sup>3</sup> Two thousand three hundred and twenty two (2322) households responded to the survey.

<sup>&</sup>lt;sup>4</sup> St. John's, St. Georges, St. Peter, St. Phillip, St Paul and St. Mary. For the purposes of this survey the St. John's parish was divided into St. John's City and St. John's Rural.

#### **Survey Results**

#### Profile of Respondents<sup>5</sup>

Figure 1 and Table 1 indicate that the two largest numbers of households that were surveyed are in the St. John's City and St John's Rural areas. This is primarily because these are the most populated areas in the country and collectively they have about sixty percent (60%) of all the households. Barbuda and the parish of St. Phillip have the smallest numbers of households; each having only two percent (2%) of the number of households in the country.

As shown in Figure 2, the majority of the respondents were parents. Fifty five percent (55%) were female and thirty three percent (33%) were male (see Figure 5). Sex was not stated for twelve percent (12%) of the interviewees. Figure 6 reveals that except for the parish of St. George the number of females who answered the survey was greater that the number of males.

With regard to the income level of households, about twenty percent (20%) of respondents indicated that their household's monthly income<sup>6</sup> was less than \$2,000 and so they can be considered low income. Fifty percent of the households can be considered middle income. The majority of those so indicating (forty one percent – 41% of respondents) noted that their household income was between \$2,000 and \$5,000. Only two percent (2%) of respondents stated that their household's monthly income exceeded \$10,000. The household income profiles are given in Figure 3, and in Table 2 below. Figure 4 clearly shows that the majority of households in all of the parishes are in the \$2,000 to \$5,000 monthly income range. A weighted scoring model of household income levels shown in Appendix C on page 50 gives a detail listing of enumeration districts categorized by income bracket.

<sup>&</sup>lt;sup>5</sup> The words respondent, interviewee and householder are used interchangeable throughout this document and refers to the person who answered the survey questionnaire.

<sup>&</sup>lt;sup>6</sup> In Eastern Caribbean (EC) dollars. US\$1 = EC\$2.71

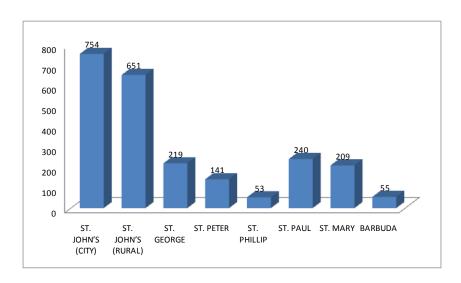


Figure 1: Number of Households Surveyed by Parish

				<b>-</b>	
				Total	
		Number of	Number of	Number of	%
		Households in	Households in	Houses in	Household
Parish	Number of Eds	Largerst ED	Smallest ED	ALL Eds	S
ST. JOHN'S	63	22	1	754	
(CITY)					32%
ST. JOHN'S	36	26	1	651	
(RURAL)					28%
ST. GEORGE	27	11	1	219	9%
ST. PETER	20	12	10	141	6%
ST. PHILLIP	19	11	11	53	2%
ST. PAUL	14	16	1	240	10%
ST. MARY	5	11	11	209	9%
BARBUDA	6	11	5	55	2%
Grand Total	190			2322	100%

Table 1: Profile of Enumeration Districts by Parish

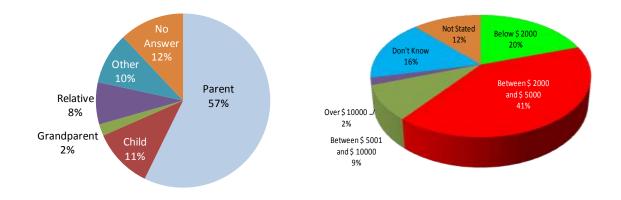


Figure 3: Monthly Income of Households

**Figure 2: Characteristic of Survey Respondents** 

DARIGU	D 1 42222	Between \$ 2000 and \$	Between \$ 5001 and \$	Over\$	Don't	Not	
PARISH	Below \$ 2000	5000	10000	10000	Know	Stated	Total
ST. JOHN'S (CITY)	155	357	55	4	90	93	754
ST. JOHN'S (RURAL)	83	191	59	20	181	117	651
ST. GEORGE	58	81	37	13	23	7	219
ST. PETER	39	51	8	2	28	13	141
ST. PHILLIP	7	26	9	1	9	1	53
ST. PAUL	43	125	35	2	8	27	240
ST. MARY	66	83	4	2	40	14	209
BARBUDA	13	28	5			9	55
TOTAL	464	942	212	44	379	281	2322

Table 2: Household Income Levels by Parish

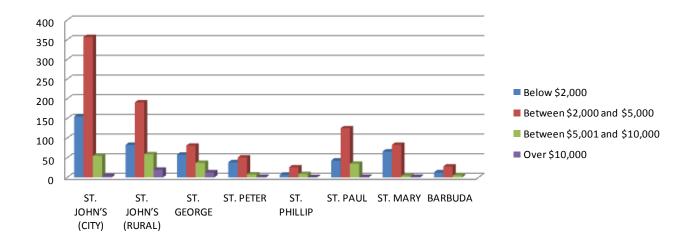


Figure 4: Income Distribution by Parish

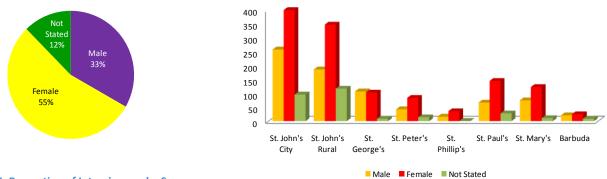


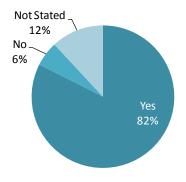
Figure 5: Proportion of Interviewees by Sex

Figure 6: Sex of Respondents by Parish

#### Old ICTs

Old ICTs refer to communication technologies that predate computers and the Internet. These mainly refer to radios and televisions. The survey has found than in Antigua and Barbuda that there is an almost ubiquitous access to radios and televisions. Eighty two percent (82%) or respondents indicated that they have a radio in their household whilst ninety seven percent (97%) indicated that they have a television. These statistics are shown in Figure 7 and Figure 8.

Seventy two percent (72%) of householders indicated that they have cable television. The proportion of households with cable TV is shown in Figure 9.



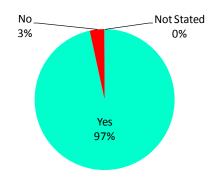


Figure 8: Proportion of Households with TVs

Figure 7: Proportion of Households with Radios

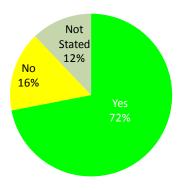


Figure 9: Proportion of Households with Cable TV

#### Computer Ownership

When asked, less than half of the respondents (47%) indicated that their household owned a computer. This is seen in Figure 10 and in Figure 19. Comparatively, a greater proportion of the households in Barbuda and in St. John's City own computers than in any other parts in the country. This is reflected in Figure 11, Figure 12 and Figure 13. The majority of interviewees in the parishes of St. John's Rural, St. Mary, St. Paul, St. John's City and in Barbuda indicated that their household own one or more computers. This is not so in St. Peter, St. Phillip or in St. George where less than half of the households in these areas own a computer. This is also shown in Figure 13.

When examined by income, the data reveals that the majority of households in the low to upper low income brackets<sup>7</sup> do not have computers (see Figure 14). Figure 15 through to Figure 18 show the steady increase in computer ownership as income levels rise; from twenty nine percent (29%) for those households with a monthly income below \$2,000 to ninety eight percent (98%) for those households with a monthly income that exceeds \$10,000.

When asked for a reason as to why there are no computers in their household, thirty nine percent (39%) of those without computers stated that they were too expensive. Thirty four percent (34%) indicated that they had other priorities. Only fourteen percent (14%) responded they do not need a computer. This is seen in Figure 20.

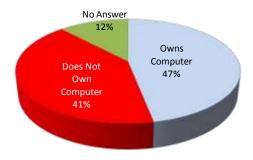


Figure 10: Proportion of Households that own Computers

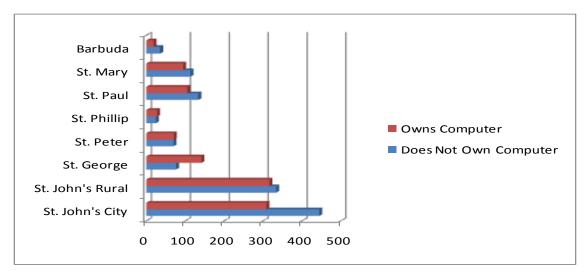


Figure 11: Household ownership of Computers by Parish

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<sup>&</sup>lt;sup>7</sup> See Appendix C for income ranges

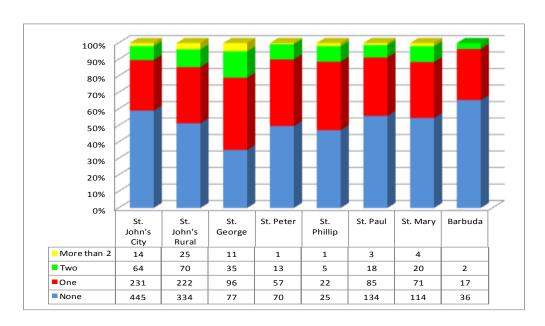


Figure 12: Profile of Household Computer Ownership by Parish

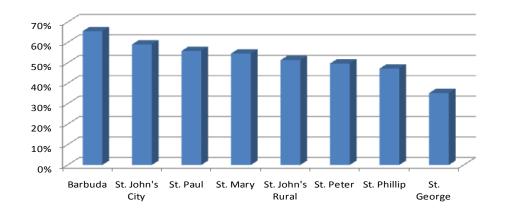


Figure 13: % of Households with computers by Parish

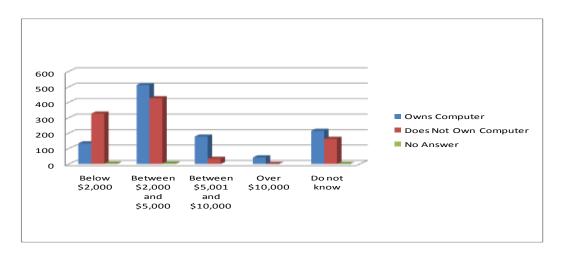


Figure 14: Computer Ownership by Income Levels



Figure 15: Computer Ownership for Households with Monthly Income below \$2,000

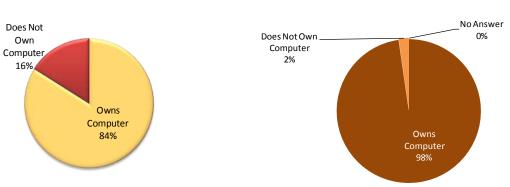


Figure 17: Computer Ownership for Households with Monthly Income between \$5,001 and \$10,000

Figure 18: Computer Ownership for Households with Monthly Income over \$10,000

Figure 16: Computer Ownership for Households with

Monthly Income between \$2,001 and \$5,000

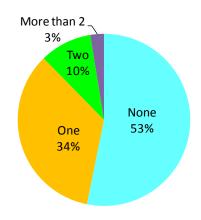


Figure 19: Number of Computers owned by Households

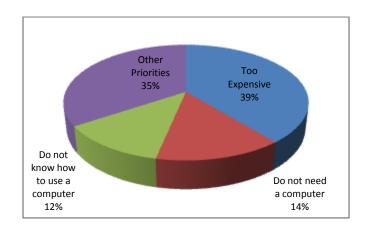


Figure 20: Reasons for Not Owning a Computer

#### Computer Usage

Though forty seven percent (47%) of households own a computer (see Figure 10) sixty percent (60%) of respondents indicated that they had used a computer during the past 12 months. In fact the table in Appendix D on page 56 confirms that the in every enumeration district across the country more households have used computers that those that own computers. Figure 22 shows the usage of computers by households across all parishes. In general over half of all housholders in every parish have used a computer in the past year. The area with the highest proportion of householders that have used computers in the past 12 months is the parish of St. George. This is seen in Figure 23.

Figure 24 and Figure 25 shows that computer usage is highest in the 30 - 39 and 40 - 49 age ranges. These figures also show that computer usage is lowest in the over 60 age range. When examined by the education level attained by interviewees, the data reveals that over seventy percent (70%) of persons who have attained a secondary school education or higher have used a computer during the last 12 months. This is shown in Figure 26.

In regards to the usage of computers by sex, more females have used computers than males in the last 12 months. Figure 27 shows that of the respondents who said they used computers sixty two (62%) were female whereas twenty eight percent (28%) were male. Figure 28 and Figure 29 show that of the male respondents to the survey sixty eight percent (68%) indicated that they had used a computer in the past 12 months. For the survey's female respondents, sixty nine percent (69%) indicated that had done similiarly.

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Figure 21: Computer usage by households in past 12 months

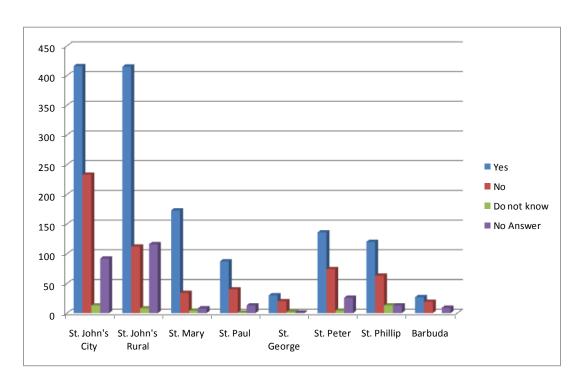


Figure 22: Computer usage by households in past 12 months by Parish

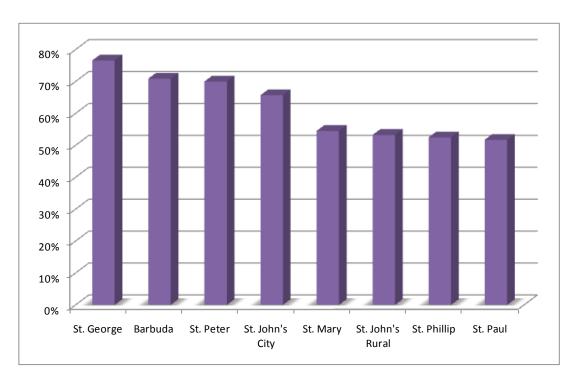


Figure 23: % of Respondents who used computers in last 12 months by Parish

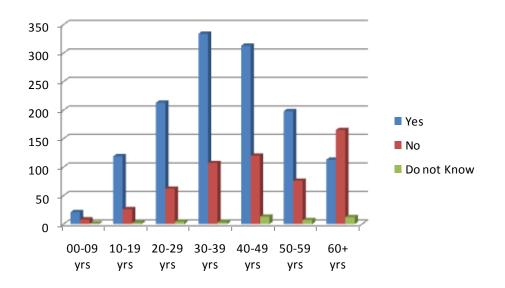


Figure 24: Computer Usage by Age of Respondent

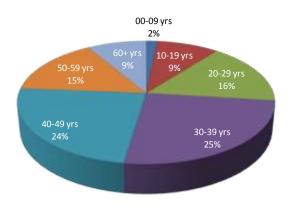


Figure 25: % of respondents who used computers over last 12 months by Age

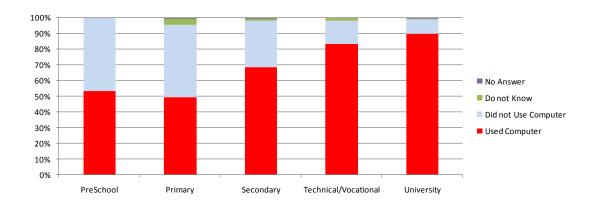


Figure 26: Computer Usage by Education Level attained by Respondent

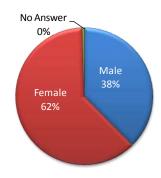


Figure 27: Computer Usage by Sex



**Figure 28: Computer Usage by Male Respondents** 

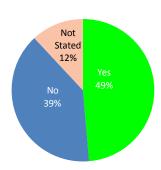
**Figure 29: Computer Usage by Female Respondents** 

#### Fixed and Mobile Phone Usage

When asked if they had a fixed line telephone in their household, forty nine percent of householders indicated that they did. The areas St. John's City and St. John's Rural have the majority of fixed line telephones in the country (about fifty four percent – 54% in total). Barbuda and the parish of St. George each have about three percent (3%) of the fixed line phones in the country. When examined individually by parish, the lowest percentage of households in the parishes of St. John's City and St. John's Rural have fixed line phones than those that do in other parts of the country. In St. Phillip, more so than in any other part of the country, more household have fixed line telephones than do not. This is shown in Figure 32.

More households have mobile telephones than fixed line phones. Seventy eight percent (78%) of the households surveyed indicated that they have one or more mobile phones. Only twelve percent (12%) of the households indicated that they did not have access to a mobile unit. As with fixed units the majority of mobile telephones are in the St. John's City and St. John's Rural areas. Similarly, Barbuda and the parish of St. George both have about two percent (2%) of the mobile phones in the country. Figure 35 shows that almost three-quarter of the households in every parish have mobile phones. The greatest density of mobile phones is in the parish of St. George.

As shown in Figure 36 Cable and Wireless has the greatest share of the mobile telephone market; fifty six percent (56%). Digicel has twenty six percent (26%) and APUA PCS has fourteen percent (14%).





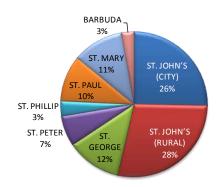


Figure 31: Distribution of Fixed Line Telephones by Parish

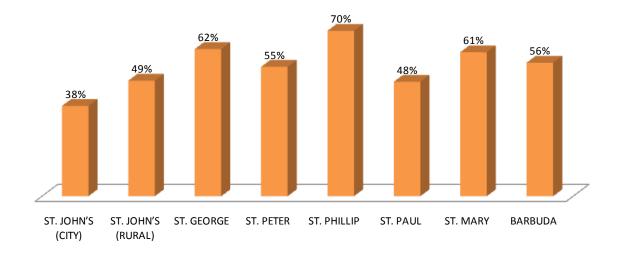


Figure 32: Proportion of Households with Fixed line phones by Parish



Figure 34: Distribution of Mobile Telephones by Parish

Figure 33: Proportion of Households with Mobile Phones

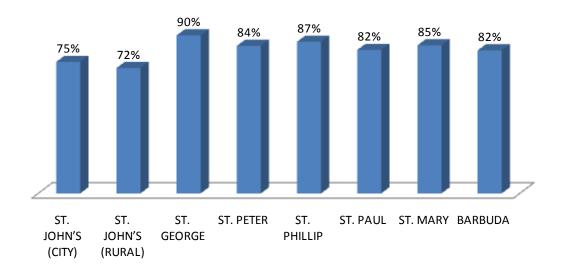


Figure 35: Proportion of Households with Mobile phones by Parish

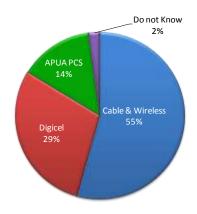
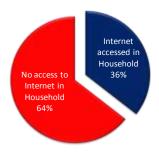


Figure 36: Household Usage of Mobile Phones by Provider

#### Internet Access

Of the two thousand three hundred and twenty two (2322) respondents to the survey only eight hundred and thirty (830) or thirty six percent (36%) indicated that they have Internet access at their household. St. George has the largest proportion of households with Internet access whilst Barbuda has the lowest.



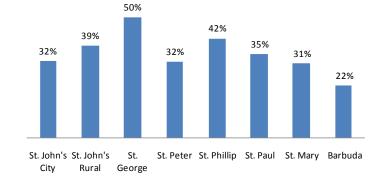
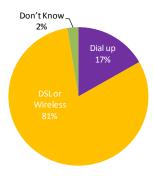


Figure 37: Internet Access at Home

Figure 38: % of respondents with Internet at home by Parish

When asked why they did not have Internet access at their house forty three percent (43%) of respondents indicated that it was too expensive whereas nineteen percent (19%) said that it was not necessary. Nine percent (9%) indicated that either they did not know how to access the Internet or that they did not know what the Internet was about.

Eighty one percent (81%) of persons with Internet access in their home indicated that they have high speed or wireless connection. The number of household getting connected to the Internet has been increasing every year. Thirty nine percent (39%) of the respondents who have Internet access indicated that they had gotten connected during the last 12 months. Only nine percent (9%) of those who have Internet access had gotten connected more than five years ago.



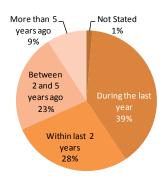


Figure 39: Type of Internet Access in Households

Figure 40: When Internet Access obtained in the household

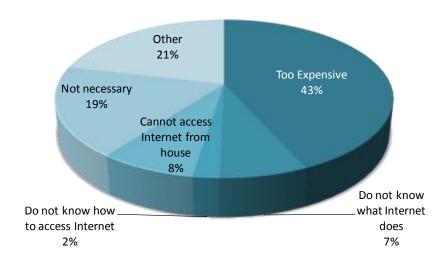
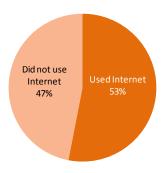


Figure 41: Reasons for Not Accessing the Internet

#### Internet Usage

Fifty three percent (53%) of households used the Internet over the last 12 months. Sixty eight percent (68%) of households that use the Internet are in St. George. This is the highest use of the Internet in the country. In Barbuda only forty four percent (44%) of households used the Internet. This is the lowest in the country.



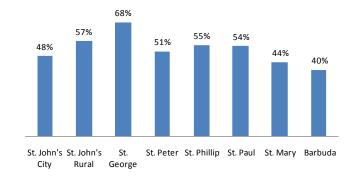


Figure 42: Internet usage over the last 12 months

Figure 43: Proportion of householders who have used the Internet by Parish

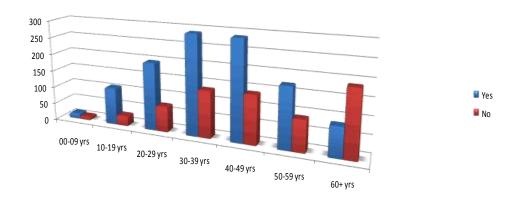


Figure 44: Internet use during the last 12 months by age of respondents

When examined by the age of the respondents Figure 44 shows that except for the persons in the over 60 age category, more respondents have used the Internet than have not in all other age ranges. As is the case with computer usage, more respondents who have attained a secondary or post secondary education have used the Internet in the last 12 months. This is shown in Figure 45.

Over fifty percent (50%) of those who accessed the Internet did so at home. Twenty percent (20%) did so at work. Only one percent (1%) had accessed the Internet at a Community Access Center over the past 12 months. Figure 46 shows this.

Most respondents use the Internet for communications (email, chatting etc.) and for web browsing. Relatively few respondents indicated that they use the Internet for Government services.

Figure 48 shows what most people buy on the Internet. Interestingly, more respondents indicated that they purchase air line tickets than any other product. With regard to the facilitation for online purchasing seventy percent (70%) of respondents indicated that it is easy or very easy to get a debit or credit card in Antigua and Barbuda. This is shown in Figure 49.

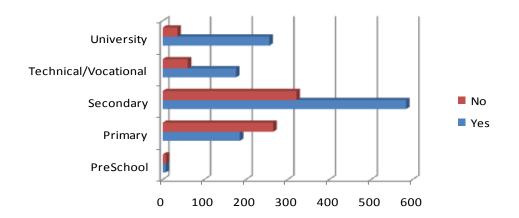


Figure 45: Internet Usage by Level of Education attained by Respondent

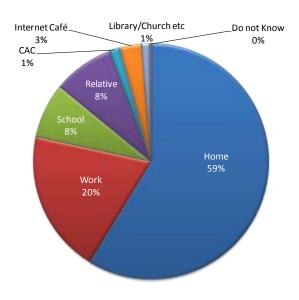


Figure 46: Where was the Internet Accessed most often

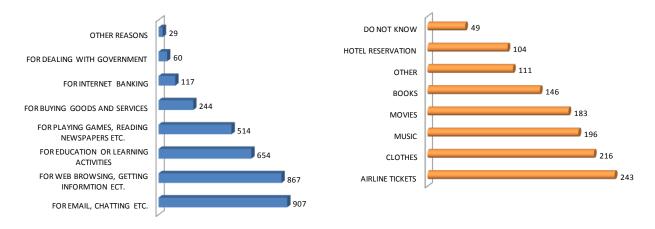


Figure 47: Reasons for using the Internet

Figure 48: Purchases by Respondents who used the Internet in the last 12 months



Figure 49: Responses to getting Credit or Debit Cards

#### Awareness of ICT initiatives

This section of the ICT Household survey sought to determine how aware respondents were of the various ICT initiatives that are on-going in the country. Over the past two years the Government has embarked on its Connect Antigua and Barbuda Initiative which seeks to bridge the digital divide in the country. At its foundation several Community Access Centers or CACs have been developed, each of which house several computers with high speed Internet access. The majority of survey respondents

(fifty seven percent – 57%) indicated that they were aware of the CAC initiative. When asked how they felt about the usefulness of the CAC initiative ninety five percent (95%) agreed or strongly agreed with the program. Although four percent (4%) of those who were aware of the CAC initiative did not give an answer, only one percent (1%) of respondents disagreed with the initiative. These statistics are reflected in Figure 50 and Figure 51.

	Total
Yes	1333
No	511
No Answer	478
	2322



Figure 50: Awareness of CACs

Strongly Agree	749
Agree	518
Disagree	11
Strongly	3
Disagree	
No Answer	52
	1333

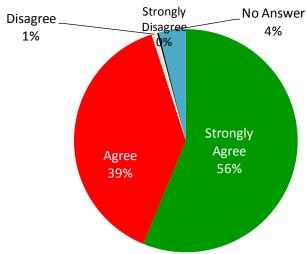


Figure 51: Usefulness of CACs

The Government, through its Information Technology Center, has embarked on a project to ensure that all ministries are online through its main website portal at <a href="www.antigua.gov.ag">www.antigua.gov.ag</a>. When asked if they were aware of this website the majority of respondent (forty one percent – 41%) said that they did not. Slightly less; thirty nine percent (39%) of respondents; indicated that they did. When those who were aware of the portal were asked about its usefulness fifty two percent (52%) either agreed or strongly agreed. The percentage of the respondents in this group who disagreed was negligible but a large proportion had no opinion or gave no response. Figure 52 and Figure 53 present these findings.

	Total
Yes	898
No	945
No Answer	488

2322

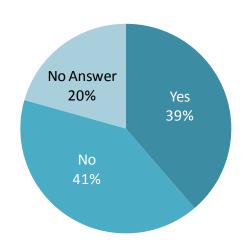


Figure 52: Awareness of Government Website

Strongly Agree	213
Agree	254
Disagree	29
Strongly Disagree	8
No Answer	394
	898

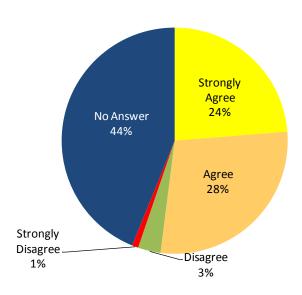
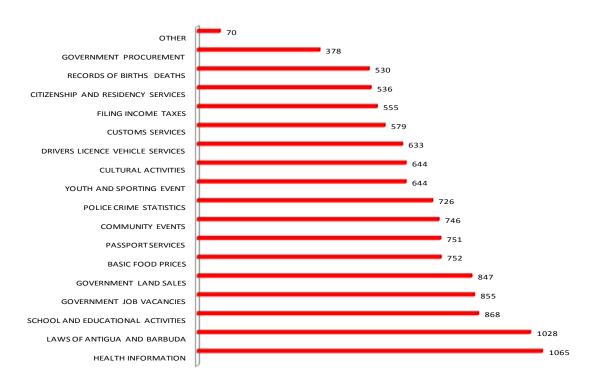


Figure 53: Usefulness of Government Website

Respondents were asked to choose from among eighteen options of government services that they would like to see online. The top three items that were chosen are Health Information, the Laws of Antigua and Barbuda and School and Educational events. The order of respondent choices is given in Figure 54.



#### Conclusion

The following conclusions can be drawn from the data collected from the survey:

- a. The ownership of both mobile and fixed line phones is high however cell phone ownership far outstrips that on fixed line telephone ownership in households across the country. This fact means that services (especially m-commerce services) could receive wider coverage if they are targeted specifically towards the mobile phone using community in the country.
- b. Fewer households own a computer than those that do not. There is a direct relationship between income levels and computer ownership. The digital divide does exist in the country especially in the parishes of St. George, St. Phillip, St. Peter and St. John's Rural. The future placement of Community Access Centres should seek to address this.
- c. More people use computers than those who own these devices. This suggests that there is an obvious need for computers. Many householders (thirty nine percent 39%) who did not have a computer indicated that this was because it was too expensive. The majority of households are in the low or middle low income category. This data suggest that consideration should be given to adopting strategies to lessen the cost of computers to the general public. There are different mechanisms that members of the business community and the government could adopt to address this. Flexible computer pricing plans is one such as well as computer price subsidies for low income persons is another.
- d. Less than ten percent (10%) of persons over 60 years used a computer in the past year. The elderly is a valuable resource in any country but the data suggests that there is an age dimension to the digital divide in Antigua and Barbuda. Specific computer learning programs, given at the Community Access Centres and elsewhere, which target the elderly, can help to address this problem.
- e. Although 53% of respondents used the Internet only fifty percent (50%) of these (or twenty six 26% of respondents) access the Internet from home. The data suggest that there is a need and a market for Internet access at home. Since forty three of respondents suggest that expense was the reason for not accessing the Internet, various pricing options also need to be examined for reducing the cost of access and expanding the number of persons getting on-line.
- f. In Barbuda is only twenty two percent (22%) of households are connected to the Internet. This is the lower than elsewhere in the country.
- g. The data shows that the Internet is highly accessed at work and at school and primarily by persons with a secondary school education or greater. This suggests an academic achievement dimension to the digital divide which could be addressed through the Ministry of Education's adult education programs.
- h. Many people seem to be aware of Government's initiative with regard to its Community Access Centres. Fewer are aware of the Government's website and other initiatives. This is also reflected by some of the choices that people wish to see especially in the light that some of these already exist on the Government's website. More work and promotion of the Government's website is needed in this regard.

In conclusion, the author notes that the statistics revealed in this report, though comprehensive is not fully exhaustive. It is suggested that since the survey database can be cross referenced down to the street level (in some cases) it can be further massaged if and when more detailed reports are required.

# <u>APPENDIX</u>

# Appendix A

# **Detailed List of Enumeration Districts by Parish**

#### ST. JOHN'S (CITY)

	ED	NO. OF	SAMPLING
ENUMERATION DISTRICT	Number	H/HLDS	INTERVAL
Buckleys Street (Harbour)	10100	77	7
Buckleys Street (Central)	10200	62	6
Buckleys Street (South)	10300	79	7
Federation Road (North)	10400	84	8
Cooks Hill Road	10500a	110	10
Cooks Hill Road	10500b	110	10
Grays Hill (West)	10700a	107	10
Grays Hill (West)	10700b	107	10
Green Bay Extension	10800	77	7
George Street (South)	10900	67	6
Green Bay School	11100a	106	10
Green Bay School	11100b	106	10
Green Bay Central	11200	36	3
Wan Pond Road	11300	65	6
Matthews Street	11500a	134	12
Matthews Street	11500b	134	12
Kentish North	11800a	87	8
Kentish North	11800b	87	8
Station Road (North)	11900	81	7
Tindale Road (North)	12200a	100	9
Tindale Road (North)	12200b	100	9
Grays Hill Reservoir	12500a	109	10
Grays Hill Reservoir	12500b	109	10
Grays Hill (East)	12600a	100	9
Grays Hill (East)	12600b	100	9
Baxter Street	13100	68	6
Golden Grove School	13300	83	8
Golden Grove	13400a	101	9
Golden Grove	13400b	101	9
Edward Street	13500a	100	9
Edward Street	13500b	100	9
Ottos (West)	14100	79	7
Martins Road (East)	14200	58	5
Whenner Road (North)	14300	96	9
Brams Hamlet Road (West)	14500a	105	10
Brams Hamlet Road (West)	14500b	105	10
A.B.S. (Old)	14600a	119	11
A.B.S. (Old)	14600b	119	11

Holberton Hospital	14800	91	8
Nelson Street (West)	15000	77	7
Tanner Street	15200	57	5
Sutherlands (Central)	15600	87	8
St. Johnsons (East)	15800a	119	11
St. Johnsons (East)	15800b	119	11
Skeritts Pasture (South)	15900	71	6
Simon Bolivar Park	16100a	128	12
Simon Bolivar Park	16100b	128	12
Clare Hall (West)	16400	79	7
Upper Gambles	16500a	126	11
Upper Gambles	16500b	126	11
Cortsland	16600	82	7
Deneary	16700	61	6
Census Office (North St.)	16800	81	7
Point Water Front (East)	17000	69	6
Wapping Lane (South)	17300	66	6
Wapping Land (Central)	17400	73	7
Pelle Street East)	17500	64	6
Dickenson Bay St. (West)	17600	65	6
Villa School	17700	86	8
Pigott Street	17900	68	6
Gambles	18200	87	8
Cemetery	18300	93	8
Friars Hill (West)	18500	97	9
Upper Fort Road (North)	18600a	102	9
Upper Fort Road (North)	18600b	102	9
Upper Fort Road (Central)	18700a	105	10
Upper Fort Road (Central)	18700b	105	10
Villa (Central)	19100	78	7
Blackburn Park	19300	82	7
Fort James	19400	74	7
Barrymore	19500a	102	9
Barrymore	19500b	102	9

#### ST. JOHN'S (RURAL)

Hodges Bay (Benaire)	30100a	135	12
Hodges Bay (Benaire)	30100b	135	12
Hodges Bay (Royals)	30200a	119	11
Hodges Bay (Royals)	30200b	119	11
Cedar Grove (South)	30500a	126	11
Cedar Grove (South)	30500b	126	11
Crosbies (Mill Tower)	30800	89	8
Crosbies (W.I.O.C)	30900	99	9

Marble Hill	31000	97	9
Trade Winds	31100	68	6
McKinnons	31300a	126	11
McKinnons	31300b	126	11
McKinnons (Salt Pond)	31401a	122	11
McKinnons (Salt Pond)	31401b	122	11
Adelin Clinic	31500a	120	11
Adelin Clinic	31500b	120	11
Prison Farm	31600a	116	11
Prison Farm	31600b	116	11
Pigotts Ville	31800a	105	10
Pigotts Ville	31800b	105	10
Upper Clare Hall	31900a	125	11
Upper Clare Hall	31900b	125	11
Clare Hall School	32200a	103	9
Clare Hall School	32200b	103	9
Skyline	32301a	116	11
Skyline	32301b	116	11
Skeritts (East)	32400	112	10
Scotts Hill	32600a	111	10
Scotts Hill	32600b	111	10
Potters (East)	33000	79	7
Potters (Cemetery)	33200a	103	9
Potters (Cemetery)	33200b	103	9
Tomlinsons	33301a	116	11
Tomlinsons	33301b	116	11
Tomlinsons	33302a	144	13
Tomlinsons	33302b	144	13
Belmont	33402a	102	9
Belmont	33402b	102	9
St. Claire	33501	52	5
Buckleys (East)	33701	66	6
Buckleys (East)	33702	47	4
Clarkes Hill	33800	90	8
All Saints (Police Station)	34000	73	7
Bendals	34100	71	6
Emmanuel	34201a	101	9
Emmanuel	34201b	101	9
Emmanuel	34202	64	6
Bendals Road	34502a	100	9
Bendals Road	34502b	100	9
Belle View Heights	34600a	132	12
Belle View Heights	34600b	132	12
Moravian Conference Hall	34700a	132	12
Moravian Conference Hall	34700b	132	12
Bramms Hamlet (North)	34800a	104	9

Bramms Hamlet (North)	34800b	104	9
Bramms Hamlet (South)	34900a	124	11
Bramms Hamlet (South)	34900b	124	11
Montclear	35301a	148	13
Montclear	35301b	148	13
Union Road (North)	35800a	119	11
Union Road (North)	35800b	119	11
Five Island	36000	116	11

#### ST. GEORGE

New Winthropes (North)	40100	110	10
New Winthropes (South	40200	152	14
New Winthropes (East)	40300	106	10
Barnes Hill School	40400	121	11
Barnes Hill (East)	40500	115	10
Pigott School	40600	115	10
Pigotts Hill	40700	101	9
Pigotts (St. Mary's)	40800	88	8
Pigotts (Moravian)	41000	87	8
Pigotts (Central)	41100	70	6
Sea View Farm (Zion)	41200	101	9
Sea View Farm (Central)	41300	83	8
Renfrews	41400	102	9
Upper Lightfoots	41502	120	11
Upper Lightfoots	41601	99	9
Sugar Factory	41602	174	16
Carlisle	41700	106	10
Fitches Creek	41800	112	10
Coolidge	41900	108	10
Airport	42000	28	3
Airport	42000	28	3

#### ST. PETER

All Saints (Jones)	50100	145	13
All Saints (North)	50201	92	8
All Saints (North)	50202	56	5
All Saints (Playground)	50301	99	9
All Saints (Playground)	50302	41	4
All Saints (Anglican Church)	50400	103	9
Freemansville (South)	50500	103	9
Freemansville (North)	50600	134	12
Parham (Byans Wharf)	50900	89	8

Pares (East)	51100	110	10
Pares (West)	51200	62	6
Vernons	51300	106	10
Diamonds	51400	13	1

#### ST. PHILLIP

Willikies (West)	60200	80	7
Willikies (East)	60500	27	2
Freetown (North)	60600	94	9
Glanvilles (Central)	60900	57	5
Seatons (Central)	61100	101	9
Newfield	61300	109	10
St. Phillips	61400	52	4
Mill Reef/Half Moon Bay	61700	12	1
Long Bay	61800	17	1

#### ST. PAUL

All Saints (East)	70100	85	8
All Saints (South)	70200	81	7
Swetes (North West)	70300	125	11
Swetes (North)	70400	105	10
Swetes (Central)	70500	102	9
Swetes (South East)	70600	101	9
Swetes (East)	70700	107	10
Liberta (West)	70901	111	10
Liberta (West)	70902	99	9
Liberta (North Central)	71000	112	10
Liberta (South West)	71200	98	9
Green Hill	71300	97	9
Bethesda (East)	71400	105	10
Falmouth	71600	101	9
English Harbour (Town)	71800	87	8
English Harbour (Middle Ground)	72000	43	4
Marsh Village	72100	94	9
Dow Hill	72200	78	7
Christian Hill	72300	80	7
Table Hill Gardens	72400	54	5
Tyrells	72500	117	11
Pattersons	72600	88	8
Dieppe Bay	72700	33	3

#### ST. MARY

		l	
Bolans (Jolly Beach)	80100	112	10
Bolans (Tottenham	80200	55	5
Bolans Hill	80300	85	8
Bolans (Jolly Hill)	80401	64	6
Bolans (Central West)	80500	63	6
Bolans (Central East)	80600	73	7
Bolans Clinic	80700	82	7
Old Road (North)	80800	70	6
Old Road (Claremont)	80900	52	5
Old Road (Central)	81000	64	6
Old Road (West)	81201	56	5
Urlings (St. Mary's Church)	81300	60	5
Johnsons Point	81700	70	6
Crabb Hill	81800	49	4
Jennings (Central)	81900	105	10
Ebenezer (Hall)	82300	60	5
Ebenezer (Green Hill)	82400	90	8
John Hughes (BreakNeck)	82500	60	5
Boggy Peak	82700	62	6

#### **BARBUDA**

Codrington (North)	90100	154	14
Codrington (Central)	90200	92	8
Codrington (South)	90300	82	7
Barbuda (North)	90400	78	7
Barbuda (South)	90500	50	5

# Appendix B

#### **ICT Survey Form**

Enumeration	Household Number	
District	 Household Number	

# SECTION A - Characteristics of Individual completing this survey

1)	First Name			
2)	Surname			
3)	Address			
	(Road/Street/Village)			
		St. John's	St. George's	
4) Parish/Region	Daviele/Daviere	St. Peter's	St. Mary's	
	Parisn/Region	St. Phillip's	St. Paul	
		Barbuda		
5)	Home Telephone			
6)	Mobile Telephone			
7)	Email			
		Parent	Child	
8)	Relationship to others in the household	Grandparent	Relative	
		Other	(Specify)	

9) Employment status	Employed	Student	
Instruction  Go to Section B - Question  1 if Unemployed	Unemployed	Retired	
10) Employer	Government	Private sector	
	Self	Other	

# SECTION B - Household Characteristics Indicate how many people currently live in the household

1) How many people are in your household?

Person	Age	Se	ex	Highest Education Level Achieved					
		M	F	Pre School	Primary School	Secondary School	Technical / Vocational	University / Tertiary	
1.Respondent									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									

2) What is the average monthly income of your household?	1)	Below \$2,000	
moonie of your nodochold.	2)	Between \$2,000 and \$5,000	
	3)	Between \$5,001 and \$10,000	
	4)	Over \$10,000	
	5)	Do not know	
SECTION C – Radio and TV			
1) Do you have a TV at home?	Yes	□ No	
2) Do you have a Radio at home?	Yes	□ No	
Do you have Cable TV in the household?	Yes	□ No	
SECTION D – Telephones			
Does your household have a fixed line telephone at home?	Yes	□ No	
Do you or anyone in your household have a mobile telephone?		_	
Instruction  Go to Section <u>E - Question</u> 1if no  one has a mobile phone	Yes	□ No	

B) Indicate all of the Mobile Service Provider(s) used by you or any	a. Cable & Wireless	
member of your household?	b. Digicel	
	c. APUA - PCS	
	d. Do not know	

# **SECTION E - Computers**

1)	Have you or anyone in your household used a computer in the last 12 months?	Yes	No		Do not know	
2)	Have you or anyone in your household had any formal computer training? ( at school or at work)	Yes	No	Do not know		
3)	Do you or anyone in your household own a computer?					
	Instruction  If the answer to this question is YES then go to Question 5	Yes			No	

4)	If nobody in your household owns a computer, what is the main	a.	It is too expensive	
	reason?	b.	We do not need a computer	
	Instruction  Go to Section F – Question 6 after  answering this question	C.	We do not know how to use a computer	
		d.	We have other priorities	
5)	How many computers do your household own?	a.	One	
		b.	Two	
		C.	More than 2	
6)	What kinds of computers do your household own?	a.	Desktop	
		b.	Laptop	
		C.	Handheld PDA, Blackberry etc	
7)	How long ago was your household's last computer	a.	During the last year	
	purchased or acquired	b.	Within the last 2 years	
		C.	Between 2 and 5 years ago	
		d.	More than 5 years ago	

#### **SECTION F - Internet**

#### INTERNET ACCESS AT HOME

1)	Do you have access to the Internet in your household?	Yes	s 🗆	No	
2)	If you <b>DO NOT</b> have access to the Internet in your household, what is the main reason?	a. b.	Too expensive  Do not know what the does  Do not know how to the Internet		to
	Instruction  Go to Question 6 in this Section if	d.	Cannot access the I your area	nternet in	
	there is <u>NO</u> Internet access at this	e.	It is not necessary		
	house	f.	Other (explain):		
3)	Who is your Internet Service Provider?	a.	Cable & Wireless		
		b.	APUA		
		C.	ACT		
		d.	Image Locker		
		e.	Other (specify):		

4) What type of Internet access do you have in your household?	a. Low speed  Dial up	
	b. High speed  DSL or Wireless	
	c. Do not know	
5) When did you get Internet access in your household?	a. During the last year	
	b. Within the last 2 years	
	c. Between 2 and 5 years ago	
	d. More than 5 years ago	
INTERNET USE DURING THE L	AST 12 MONTHS	
6) Have you or any member of your household used the Internet in the last 12 months?	Yes No Do not know	
household used the Internet in the		
household used the Internet in the last 12 months?  Instruction  Go to Section G – Question 1 if the Internet has NOT used in last 12		
household used the Internet in the last 12 months?  Instruction  Go to Section G - Question 1 if the Internet has NOT used in last 12 months  7) How often do you or members of	know	
household used the Internet in the last 12 months?  Instruction  Go to Section G - Question 1 if the Internet has NOT used in last 12 months  7) How often do you or members of	a. Every day	

8) Where do you use or members of your household the Internet most	a.	At Home	
<u>often</u> ?	b.	At Work	
	C.	At School	
	d.	At a Relative or Friend	
	e.	At a Community Access Centre	
	f.	At an Internet café	
	g.	At another place (Library, Church etc.)	
	h.	Do not know	

9) What are your main reasons for you or members of your household using the Internet?	<ul> <li>a. For communicating         <ul> <li>sending or receiving email, making telephone calls, chatting etc</li> </ul> </li> <li>b. For getting information         <ul> <li>General web browsing, job searching etc</li> </ul> </li> <li>c. For buying goods or services</li> <li>d. For education or learning activities</li> </ul>	
	e. For Internet banking	
	f. For dealing with government	
	g. For leisure activities  o playing games, downloading pictures, music or movies, reading newspapers and books, listening to radio stations, watching TV, etc  h. For another reason. Explain:	
	TO another reason. Explain.	
10) Have you or any member of your	Yes □ No □ Do	
10) Have you or any member of your household purchased anything over the Internet in the last 12	res No Do not know	Ш
Instruction		
Go to <u>Section G – Question 1</u> if		

11) What did you or members buy	а	Books	
over the Internet?	u.	Books	Ш
	b.	Music	
	C.	Movies	
	d.	Clothes	
	e.	Hotel Reservation	
	f.	Airline Ticket	
	g.	Other	
	h.	Do not know	
12) Was it easy for you or a member of your household to get a <u>credit or</u>	a.	Very easy	
debit card?  For example: Visa or Master Card	b.	Easy	
	C.	Hard	
	d.	Very hard	

#### Section G – Awareness

ho	e you or any member of your usehold aware of the following	a.	Community Access Centres	Yes		No	
<u></u>	mputer and Internet initiatives?	b.	Government Website	Yes		No	
	<u>Instruction</u>						
Go to	Question 5 if answer to question						
ho	ave you or any member of your usehold ever used the vernment website?	Ye	es 🗌 No [		Do no		
	<u>Instruction</u>						
,	you agree that the vernment website is useful?	a.	Strongly Agree				
		b.	Agree				
		C.	Disagree				
		d.	Strongly Disagree	9			

Do you agree with the initiative to develop Computer Access	a. Strongly Agree	
Centres?	b. Agree	
	c. Disagree	
	d. Strongly Disagree	
5) If given a choice, which government services would you or	a. Passports services	
members of your household would most like to see on the		
Government website?	c. Driver's licence and Vehicle registration	
	d. Records of Births, Deaths and Marriages	
	e. Community Events and Community Services	
	f. Laws of Antigua & Barbuda	
	g. Government Land Sales	
	h. Filing Income Taxes	
	i. Customs services (import and export forms, payments etc.)	
	j. Basic Food Prices	
	k. Government procurement	
	I. Police/Crime Statistics	

	m. Youth and Sporting Events	
	n. School and Educational Events	
	o. Health Information	
	p. Government Job vacancies	
	q. Cultural Activities and Events	
	r. Other (Explain)	
		_
The enumerator must sign and date the survey for	n	
Interviewer:	Date: / /	
PRINT NAME		
Signature:		

### Appendix C

#### Weighted Scoring Model of Income Levels of Households

The income weight is computed as:

1 \* number of households reporting income levels below \$2,000, plus
2 \* number of households reporting income levels between \$2,001 and \$5,000, plus
3 \* number of households reporting income levels between \$5,001 and \$10,000, plus
4\* number of households reporting income levels over \$10,000
Divided by

Total number of household that reported income levels in the above 4 categories.

The resulting data is sorted and categorized using the following colour codes:

HIGH INCOME
UPPER MEDIUM INCOME
LOWER MEDIUM INCOME
UPPER LOW INCOME
LOW INCOME

#### **Weighted Scoring Model Results**

PARISH NAME	ENUMERATION DISTRICT	INCOME WEIGHT
ST. GEORGE	Fitches Creek	3.29
ST. JOHN'S (RURAL)	Marble Hill	3.22
ST. GEORGE	Coolidge	3.18
ST. JOHN'S (RURAL)	Crosbies (Mill Tower)	3.00
ST. JOHN'S (RURAL)	Emmanuel	3.00
ST. JOHN'S (RURAL)	Trade Winds	3.00
ST. JOHN'S (RURAL)	Crosbies (W.I.O.C)	2.88
ST. JOHN'S (RURAL)	McKinnons	2.85
ST. PHILLIP	Glanvilles (Central)	2.75
ST. PETER	Vernons	2.67
ST. JOHN'S (RURAL)	Hodges Bay (Benaire)	2.60
ST. GEORGE	Sugar Factory	2.55
ST. JOHN'S (RURAL)	Bendals	2.50
ST. JOHN'S (RURAL)	Buckleys (East)	2.50
ST. JOHN'S (RURAL)	Montclear	2.50
ST. PAUL	Dieppe Bay	2.50
ST. GEORGE	Pigotts (Central)	2.45

PARISH NAME	ENUMERATION DISTRICT	INCOME WEIGHT
ST. GEORGE	Renfrews	2.44
ST. JOHN'S (RURAL)	Clarkes Hill	2.40
ST. JOHN'S (CITY)	Upper Gambles	2.38
ST. PHILLIP	St. Phillips	2.36
ST. JOHN'S (CITY)	Gambles	2.33
ST. JOHN'S (RURAL)	Hodges Bay (Royals)	2.33
ST. JOHN'S (CITY)	Cortsland	2.29
ST. PETER	Parham (Byans Wharf)	2.29
ST. PHILLIP	Freetown (North)	2.29
ST. GEORGE	Upper Lightfoots	2.27
ST. JOHN'S (CITY)	Federation Road (North)	2.27
ST. MARY	Boggy Peak	2.27
ST. PAUL	Swetes (Central)	2.27
ST. PAUL	Swetes (North West)	2.27
ST. JOHN'S (RURAL)	Clare Hall School	2.21
ST. JOHN'S (CITY)	Upper Fort Road (North)	2.20
ST. PAUL	Bethesda (East)	2.20
ST. PAUL	All Saints (South)	2.18
ST. PAUL	Liberta (West)	2.18
ST. PAUL	Swetes (South East)	2.18
ST. JOHN'S (CITY)	Fort James	2.17
ST. JOHN'S (RURAL)	Skyline	2.17
ST. JOHN'S (RURAL)	Upper Clare Hall	2.17
ST. JOHN'S (CITY)	Cooks Hill Road	2.16
ST. JOHN'S (CITY)	Deneary	2.14
ST. PAUL	Liberta (South West)	2.14
ST. JOHN'S (RURAL)	Cedar Grove (South)	2.13
ST. JOHN'S (CITY)	Grays Hill (West)	2.11
ST. JOHN'S (CITY)	Holberton Hospital	2.11
ST. GEORGE	New Winthropes (South	2.10
ST. GEORGE	New Winthropes (North)	2.09
ST. JOHN'S (CITY)	George Street (South)	2.09
ST. JOHN'S (CITY)	Kentish North	2.09
ST. PAUL	Swetes (North)	2.09
BARBUDA	Barbuda (South)	2.00
ST. GEORGE	Upper Lightfoots	2.00
ST. JOHN'S (CITY)	A.B.S. (Old)	2.00

PARISH NAME	ENUMERATION DISTRICT	INCOME WEIGHT
ST. JOHN'S (CITY)	Barrymore	2.00
ST. JOHN'S (CITY)	Golden Grove School	2.00
ST. JOHN'S (CITY)	Green Bay Extension	2.00
ST. JOHN'S (CITY)	Point Water Front (East)	2.00
ST. JOHN'S (CITY)	Wapping Land (Central)	2.00
ST. JOHN'S (RURAL)	Belle View Heights	2.00
ST. JOHN'S (RURAL)	Moravian Conference Hall	2.00
ST. JOHN'S (RURAL)	Scotts Hill	2.00
ST. PAUL	All Saints (East)	2.00
ST. PAUL	Marsh Village	2.00
ST. PAUL	Pattersons	2.00
ST. PAUL	Swetes (East)	2.00
ST. PETER	All Saints (North)	2.00
ST. PHILLIP	Willikies (East)	2.00
ST. JOHN'S (RURAL)	Tomlinsons	1.95
ST. GEORGE	Pigotts (St. Mary's)	1.91
ST. JOHN'S (CITY)	Edward Street	1.91
ST. JOHN'S (RURAL)	Tomlinsons	1.91
ST. JOHN'S (CITY)	Sutherlands (Central)	1.90
ST. JOHN'S (RURAL)	Emmanuel	1.90
BARBUDA	Codrington (North)	1.89
ST. PAUL	Liberta (West)	1.89
BARBUDA	Codrington (Central)	1.88
ST. GEORGE	Barnes Hill (East)	1.88
ST. GEORGE	Carlisle	1.88
ST. JOHN'S (CITY)	Wapping Lane (South)	1.88
ST. JOHN'S (CITY)	Green Bay Central	1.86
ST. JOHN'S (CITY)	Green Bay School	1.86
ST. GEORGE	Pigott School	1.86
ST. JOHN'S (CITY)	Skeritts Pasture (South)	1.86
ST. JOHN'S (CITY)	Tindale Road (North)	1.86
ST. PAUL	Liberta (North Central)	1.86
ST. PETER	Pares (East)	1.86
ST. JOHN'S (CITY)	Grays Hill Reservoir	1.85
ST. MARY	Bolans (Jolly Beach)	1.83
ST. JOHN'S (RURAL)	McKinnons (Salt Pond)	1.82
ST. JOHN'S (RURAL)	Pigotts Ville	1.82

DADIGU NAME	ENLINATION DISTRICT	INCOME
PARISH NAME	ENUMERATION DISTRICT	WEIGHT 1.82
ST. PAUL	Tyrells	1.80
BARBUDA	Barbuda (North)	1.80
ST. GEORGE	Sea View Farm (Central) St. Claire	1.80
ST. JOHN'S (RURAL) ST. MARY	Ebenezer (Green Hill)	1.80
		1.80
ST. PETER ST. PETER	All Saints (Jones)	1.80
	All Saints (Playground)  Newfield	1.80
ST. PHILLIP ST. JOHN'S (RURAL)	Belmont	1.79
ST. MARY	Bolans Clinic	1.78
ST. PAUL	Dow Hill	1.78
	Matthews Street	1.77
ST. JOHN'S (CITY)		1.77
ST. JOHN'S (RURAL)	Potters (Cemetery)	1.76
ST. JOHN'S (CITY)	Grays Hill (East) Blackburn Park	1.75
ST. JOHN'S (CITY) ST. JOHN'S (CITY)	Simon Bolivar Park	1.75
ST. JOHN'S (CITY)	Upper Fort Road (Central)	1.75
ST. MARY	Johnsons Point	1.75
ST. JOHN'S (CITY)	Baxter Street	1.73
ST. MARY	Old Road (West)	1.73
ST. PAUL	Christian Hill	1.73
ST. JOHN'S (RURAL)	Bendals Road	1.71
ST. JOHN'S (RURAL)	Bramms Hamlet (North)	1.71
ST. PETER	All Saints (Playground)	1.71
ST. JOHN'S (CITY)	Buckleys Street (South)	1.70
ST. PAUL	Table Hill Gardens	1.70
ST. JOHN'S (CITY)	St. Johnsons (East)	1.69
ST. GEORGE	New Winthropes (East)	1.67
ST. JOHN'S (CITY)	Brams Hamlet Road (West)	1.67
ST. JOHN'S (CITY)	Cemetery	1.67
ST. JOHN'S (CITY)	Pigott Street	1.67
ST. JOHN'S (RURAL)	Five Island	1.67
ST. JOHN'S (RURAL)	Union Road (North)	1.67
ST. MARY	Bolans (Central East)	1.67
ST. PAUL	English Harbour (Middle Ground)	1.67
ST. PETER	Diamonds	1.67
ST. JOHN'S (CITY)	Buckleys Street (Central)	1.64

DADICH NAME	ENLINATEDATION DISTRICT	INCOME
PARISH NAME	ENUMERATION DISTRICT	WEIGHT
ST. JOHN'S (CITY)	Pelle Street East)	1.64
ST. JOHN'S (CITY)	Station Road (North)	1.64 1.64
ST. MARY	Bolans Hill	1.63
ST. GEORGE	Sea View Farm (Zion)	
ST. JOHN'S (CITY)	Census Office (North St.)	1.63
ST. JOHN'S (RURAL)	Skeritts (East)	1.63
ST. MARY	John Hughes (BreakNeck)	1.63
ST. PAUL	Green Hill	1.63
BARBUDA	Codrington (South)	1.60
ST. JOHN'S (CITY)	Clare Hall (West)	1.57
ST. MARY	Old Road (North)	1.57
ST. JOHN'S (CITY)	Villa School	1.56
ST. PETER	All Saints (Anglican Church)	1.56
ST. MARY	Bolans (Jolly Hill)	1.55
ST. MARY	Old Road (Claremont)	1.55
ST. GEORGE	Barnes Hill School	1.50
ST. JOHN'S (CITY)	Nelson Street (West)	1.50
ST. JOHN'S (CITY)	Tanner Street	1.50
ST. JOHN'S (CITY)	Villa (Central)	1.50
ST. JOHN'S (CITY)	Whenner Road (North)	1.50
ST. MARY	Crabb Hill	1.50
ST. MARY	Ebenezer (Hall)	1.50
ST. PAUL	English Harbour (Town)	1.50
ST. PETER	Freemansville (North)	1.50
ST. PETER	Freemansville (South)	1.50
ST. PHILLIP	Willikies (West)	1.50
ST. MARY	Jennings (Central)	1.45
ST. JOHN'S (CITY)	Buckle's Street (Harbour)	1.44
ST. JOHN'S (CITY)	Dickenson Bay St. (West)	1.44
ST. JOHN'S (RURAL)	Prison Farm	1.41
ST. GEORGE	Pigotts (Moravian)	1.40
ST. JOHN'S (CITY)	Golden Grove	1.40
ST. JOHN'S (RURAL)	Bramms Hamlet (South)	1.40
ST. MARY	Urlings (St. Mary's Church)	1.40
ST. JOHN'S (CITY)	Ottos (West)	1.38
ST. JOHN'S (CITY)	Friars Hill (West)	1.33
ST. JOHN'S (RURAL)	Adelin Clinic	1.33

PARISH NAME	ENUMERATION DISTRICT	INCOME WEIGHT
ST. JOHN'S (RURAL)	Potters (East)	1.33
ST. MARY	Bolans (Central West)	1.33
ST. MARY	Bolans (Tottenham	1.33
ST. MARY	Old Road (Central)	1.30
ST. PETER	Pares (West)	1.29
ST. GEORGE	Airport	1.25
ST. JOHN'S (RURAL)	All Saints (Police Station)	1.25
ST. PAUL	Falmouth	1.25
ST. GEORGE	Pigotts Hill	1.20
ST. JOHN'S (CITY)	Martins Road (East)	1.20
ST. PETER	All Saints (North)	1.13

Appendix D

Proportion of households that have used computers during the last 12 month

		11100145	PROPORTION OF HOUSEHOLDS	PROPORTION OF HOUSEHOLDS
Parish Name	ENUMERATION DISTRICT	INCOME WEIGHT	THAT HAVE USED COMPUTERS	THAT OWN COMPUTERS
ST. GEORGE	Fitches Creek	3.29	100%	64%
ST. JOHN'S (RURAL)	Marble Hill	3.22	100%	92%
ST. GEORGE	Coolidge	3.18	100%	91%
ST. GEORGE	Sugar Factory	2.55	100%	91%
ST. JOHN'S (RURAL)	Clare Hall School	2.21	100%	100%
ST. GEORGE	New Winthropes (South	2.10	100%	91%
ST. JOHN'S (CITY)	Pigott Street	1.67	100%	73%
ST. JOHN'S (CITY)	Friars Hill (West)	1.33	100%	67%
ST. JOHN'S (RURAL)	Tomlinsons	1.91	95%	59%
ST. GEORGE	Pigotts (Central)	2.45	92%	83%
ST. JOHN'S (RURAL)	Crosbies (W.I.O.C)	2.88	91%	91%
ST. PHILLIP	St. Phillips	2.36	91%	82%
ST. GEORGE	Upper Lightfoots	2.00	91%	82%
ST. GEORGE	Pigotts (St. Mary's)	1.91	91%	64%
ST. JOHN'S (RURAL)	Five Island	1.67	91%	64%
ST. MARY	Bolans Hill	1.64	91%	64%
ST. JOHN'S (CITY)	Villa School	1.56	91%	64%
ST. MARY	Bolans (Jolly Hill)	1.55	91%	36%
ST. JOHN'S (RURAL)	Trade Winds	3.00	90%	90%
ST. PETER	Parham (Byans Wharf)	2.29	90%	80%
ST. PETER	Pares (East)	1.86	90%	80%
ST. JOHN'S (CITY)	Cortsland	2.29	86%	86%
ST. PHILLIP	Freetown (North)	2.29	86%	71%
ST. JOHN'S (RURAL)	Pigotts Ville	1.82	83%	52%
ST. JOHN'S (RURAL)	McKinnons	2.85	82%	77%
ST. MARY	Boggy Peak	2.27	82%	77%
ST. PAUL	Swetes (North West)	2.27	82%	64%
ST. JOHN'S (RURAL)	Upper Clare Hall	2.17	82%	64%
ST. JOHN'S (CITY)	Holberton Hospital	2.11	82%	59%
ST. JOHN'S (CITY)	Barrymore	2.00	82%	82%
ST. JOHN'S (CITY)	Wapping Land (Central)	2.00	82%	73%

ST. JOHN'S (RURAL)	Tomlinsons	1.95	82%	73%
ST. JOHN'S (RURAL)	Belmont	1.79	82%	73%
ST. MARY	Bolans Clinic	1.78	82%	64%
ST. JOHN'S (CITY)	Baxter Street	1.73	82%	64%
ST. GEORGE	Sea View Farm (Zion)	1.63	82%	64%
ST. MARY	Ebenezer (Hall)	1.50	82%	55%
ST. MARY	Jennings (Central)	1.45	82%	55%
ST. PETER	All Saints (North)	1.13	80%	40%
ST. PAUL	Dow Hill	1.78	78%	78%
ST. JOHN'S (CITY)	Grays Hill (West)	2.11	77%	73%
ST. JOHN'S (RURAL)	McKinnons (Salt Pond)	1.82	77%	59%
ST. PETER	All Saints (Jones)	1.80	75%	67%
ST. JOHN'S (RURAL)	Hodges Bay (Royals)	2.33	74%	65%
ST. GEORGE	Renfrews	2.44	73%	82%
ST. GEORGE	Upper Lightfoots	2.27	73%	82%
ST. JOHN'S (CITY)	Federation Road (North)	2.27	73%	73%
ST. PAUL	Swetes (Central)	2.27	73%	32%
ST. GEORGE	New Winthropes (North)	2.09	73%	64%
ST. PAUL	All Saints (East)	2.00	73%	64%
ST. PAUL	Swetes (East)	2.00	73%	64%
ST. PHILLIP	Willikies (East)	2.00	73%	64%
ST. JOHN'S (CITY)	Sutherlands (Central)	1.90	73%	55%
ST. GEORGE	Carlisle	1.88	73%	55%
ST. JOHN'S (CITY)	Green Bay School	1.86	73%	55%
ST. PAUL	Tyrells	1.82	73%	55%
ST. GEORGE	Sea View Farm (Central)	1.80	73%	45%
ST. JOHN'S (RURAL)	St. Claire	1.80	73%	45%
ST. MARY	Old Road (West)	1.73	73%	45%
ST. GEORGE	New Winthropes (East)	1.67	73%	45%
ST. JOHN'S (CITY)	Pelle Street East)	1.64	73%	45%
ST. GEORGE	Barnes Hill School	1.50	73%	36%
ST. PETER	Freemansville (South)	1.50	73%	36%
ST. JOHN'S (CITY)	Dickenson Bay St. (West)	1.44	73%	27%
ST. GEORGE	Pigotts Hill	1.20	73%	18%
ST. JOHN'S (CITY)	Golden Grove School	2.00	70%	50%
ST. GEORGE	Airport	1.25	70%	40%
ST. JOHN'S (CITY)	Upper Gambles	2.38	69%	56%
ST. PETER	All Saints (Playground)	1.71	69%	50%
ST. JOHN'S (CITY)	Green Bay Central	1.86	68%	50%

ST. JOHN'S (CITY)	Grays Hill Reservoir	1.85	68%	41%
ST. JOHN'S (CITY)	Simon Bolivar Park	1.75	67%	38%
ST. PAUL	Bethesda (East)	2.20	64%	64%
ST. PAUL	Swetes (South East)	2.18	64%	64%
ST. JOHN'S (CITY)	Fort James	2.17	64%	64%
ST. JOHN'S (CITY)	Deneary	2.14	64%	55%
ST. JOHN'S (CITY)	George Street (South)	2.09	64%	55%
ST. PAUL	Swetes (North)	2.09	64%	55%
BARBUDA	Barbuda (South)	2.00	64%	55%
ST. JOHN'S (CITY)	Green Bay Extension	2.00	64%	55%
ST. JOHN'S (CITY)	Point Water Front (East)	2.00	64%	55%
ST. PAUL	Marsh Village	2.00	64%	55%
ST. PAUL	Liberta (West)	1.89	64%	55%
ST. GEORGE	Barnes Hill (East)	1.88	64%	55%
ST. JOHN'S (CITY)	Skeritts Pasture (South)	1.86	64%	45%
BARBUDA	Barbuda (North)	1.80	64%	45%
ST. MARY	Ebenezer (Green Hill)	1.80	64%	36%
ST. JOHN'S (CITY)	Cemetery	1.67	64%	36%
ST. JOHN'S (CITY)	Buckleys Street (Central)	1.64	64%	27%
ST. JOHN'S (CITY)	Clare Hall (West)	1.57	64%	27%
ST. MARY	Old Road (North)	1.57	64%	27%
ST. MARY	Old Road (Claremont)	1.55	64%	27%
ST. PAUL	Pattersons	2.00	63%	63%
ST. JOHN'S (CITY)	St. Johnsons (East)	1.69	62%	48%
ST. JOHN'S (RURAL)	Bendals Road	1.71	62%	62%
ST. JOHN'S (RURAL)	Adelin Clinic	1.33	61%	56%
ST. PAUL	Table Hill Gardens	1.70	60%	50%
ST. JOHN'S (RURAL)	Montclear	2.50	59%	59%
ST. JOHN'S (RURAL)	Skyline	2.17	59%	55%
ST. JOHN'S (RURAL)	Scotts Hill	2.00	59%	45%
ST. JOHN'S (RURAL)	Potters (Cemetery)	1.77	59%	41%
ST. JOHN'S (RURAL)	Prison Farm	1.41	59%	27%
ST. JOHN'S (CITY)	A.B.S. (Old)	2.00	59%	59%
ST. JOHN'S (CITY)	Gambles	2.33	58%	58%
ST. PETER	All Saints (Anglican Church)	1.56	58%	50%
ST. JOHN'S (RURAL)	Crosbies (Mill Tower)	3.00	55%	55%
ST. JOHN'S (RURAL)	Clarkes Hill	2.40	55%	55%
ST. PAUL	All Saints (South)	2.18	55%	55%
ST. PAUL	Liberta (West)	2.18	55%	55%

ST. PAUL	Liberta (South West)	2.14	55%	45%
BARBUDA	Codrington (North)	1.89	55%	45%
ST. GEORGE	Pigott School	1.86	55%	45%
ST. PETER	All Saints (Playground)	1.80	55%	45%
ST. PAUL	Christian Hill	1.73	55%	45%
ST. PETER	Diamonds	1.67	55%	45%
ST. JOHN'S (CITY)	Census Office (North St.)	1.63	55%	36%
ST. JOHN'S (RURAL)	Skeritts (East)	1.63	55%	36%
ST. MARY	John Hughes (BreakNeck)	1.63	55%	27%
ST. JOHN'S (CITY)	Villa (Central)	1.50	55%	27%
ST. JOHN'S (CITY)	Buckle's Street (Harbour)	1.44	55%	27%
ST. GEORGE	Pigotts (Moravian)	1.40	55%	27%
ST. MARY	Old Road (Central)	1.30	55%	18%
ST. JOHN'S (CITY)	Edward Street	1.91	53%	53%
ST. JOHN'S (CITY)	Upper Fort Road (North)	2.20	52%	38%
ST. JOHN'S (RURAL)	Union Road (North)	1.67	52%	33%
ST. JOHN'S (RURAL)	Emmanuel	3.00	50%	45%
ST. JOHN'S (RURAL)	Hodges Bay (Benaire)	2.60	50%	41%
ST. PAUL	Dieppe Bay	2.50	50%	41%
ST. JOHN'S (RURAL)	Cedar Grove (South)	2.13	50%	32%
ST. JOHN'S (CITY)	Upper Fort Road (Central)	1.75	50%	27%
ST. JOHN'S (RURAL)	Bramms Hamlet (North)	1.71	50%	50%
ST. PETER	Freemansville (North)	1.50	50%	25%
ST. JOHN'S (RURAL)	All Saints (Police Station)	1.25	50%	33%
ST. JOHN'S (RURAL)	Buckleys (East)	2.50	46%	33%
ST. PETER	Vernons	2.67	45%	55%
ST. MARY	Bolans (Jolly Beach)	1.83	45%	45%
ST. JOHN'S (CITY)	Blackburn Park	1.75	45%	45%
ST. MARY	Johnsons Point	1.75	45%	36%
ST. PAUL	Green Hill	1.63	45%	36%
ST. JOHN'S (RURAL)	Potters (East)	1.33	45%	27%
ST. PETER	Pares (West)	1.29	45%	18%
ST. JOHN'S (CITY)	Brams Hamlet Road (West)	1.67	45%	30%
ST. JOHN'S (CITY)	Cooks Hill Road	2.16	41%	36%
ST. JOHN'S (CITY)	Grays Hill (East)	1.76	41%	18%
ST. PHILLIP	Glanvilles (Central)	2.75	40%	40%
ST. JOHN'S (RURAL)	Moravian Conference Hall	2.00	38%	23%
BARBUDA	Codrington (Central)	1.88	36%	36%
ST. JOHN'S (CITY)	Wapping Lane (South)	1.88	36%	36%

ST. JOHN'S (CITY)	Buckleys Street (South)	1.70	36%	36%
ST. MARY	Bolans (Central East)	1.67	36%	27%
ST. MARY	Crabb Hill	1.50	36%	27%
ST. JOHN'S (CITY)	Tindale Road (North)	1.86	33%	19%
ST. JOHN'S (CITY)	Nelson Street (West)	1.50	33%	33%
ST. PAUL	English Harbour (Town)	1.50	30%	20%
ST. JOHN'S (RURAL)	Bendals	2.50	27%	27%
ST. PETER	All Saints (North)	2.00	27%	27%
ST. JOHN'S (RURAL)	Emmanuel	1.90	27%	18%
ST. PAUL	English Harbour (Middle Ground)	1.67	27%	18%
BARBUDA	Codrington (South)	1.60	27%	18%
ST. JOHN'S (RURAL)	Bramms Hamlet (South)	1.40	27%	18%
ST. MARY	Bolans (Central West)	1.33	27%	18%
ST. PAUL	Falmouth	1.25	27%	9%
ST. PHILLIP	Willikies (West)	1.50	25%	13%
ST. JOHN'S (CITY)	Golden Grove	1.40	23%	23%
ST. JOHN'S (RURAL)	Belle View Heights	2.00	22%	22%
ST. JOHN'S (CITY)	Whenner Road (North)	1.50	20%	20%
ST. PHILLIP	Newfield	1.80	18%	36%
ST. JOHN'S (CITY)	Matthews Street	1.77	18%	14%
ST. JOHN'S (CITY)	Station Road (North)	1.64	18%	18%
ST. MARY	Urlings (St. Mary's Church)	1.40	18%	18%
ST. JOHN'S (CITY)	Ottos (West)	1.38	18%	18%
ST. JOHN'S (CITY)	Martins Road (East)	1.20	18%	9%
ST. PAUL	Liberta (North Central)	1.86	10%	20%
ST. JOHN'S (CITY)	Kentish North	2.09	9%	0%
ST. JOHN'S (CITY)	Tanner Street	1.50	0%	0%
ST. MARY	Bolans (Tottenham	1.33	0%	0%