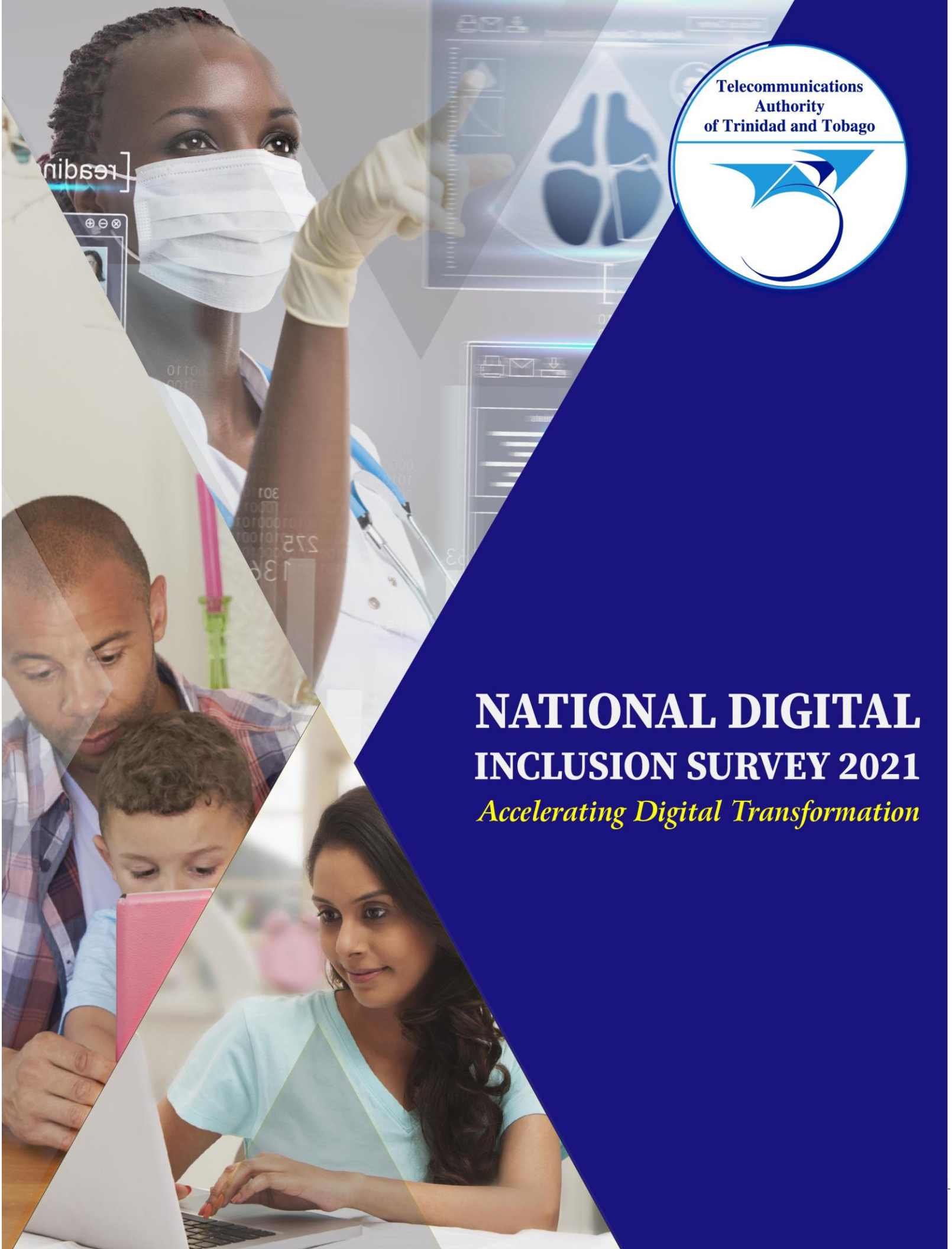

Telecommunications Authority of Trinidad and Tobago

NATIONAL DIGITAL INCLUSION SURVEY 2021

Accelerating Digital Transformation

National Digital Inclusion Survey 2021: Accelerating Digital Transformation

Final Report

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4IR	Fourth Industrial Revolution
AI	artificial intelligence
AR	augmented reality
B2C	business to consumer
BTS	basic telecommunications services
CAPI	Computer-Assisted Personal Interviews
CROP	Consumer Rights and Obligations Policy
CSO	Central Statistical Office
CSSP	Continuous Sample Survey of Population
DAI	Digital Access Index
DIS 2021	2021 Digital Inclusion Survey
DOI	Digital Opportunity Index
DSL	digital subscriber line
ED	enumeration district
EGDI	E-Government Development Index
FTA	free-to-air
GCI	Global Cybersecurity Index
GORTT	Government of the Republic of Trinidad and Tobago
HBS	Household Budget Survey
HTTP	hypertext transfer protocol
ICT	information and communications technology
IDI	ICT Development Index
IoT	Internet of Things
IP	Internet Protocol
ISDN	integrated services digital network
ITU	International Telecommunication Union
MDAs	ministries, departments and agencies
MICS	Multiple Indicator Cluster Survey
MMS	multimedia messaging service
MPI	Multidimensional Poverty Index
MSF	Master Sample Frame
MTI	Ministry of Trade and Industry
NRI	Network Readiness Index
OECD	Organisation for Economic Co-operation and Development
OTT	over-the-top
PPE	personal protective equipment
PSTN	public switched telephone network

PSU	Primary Sampling Unit
PWDs	persons with disabilities
QoS	quality of service
SDG	Sustainable Development Goals
SMS	short message service
TATT	Telecommunications Authority of Trinidad and Tobago
TCP	transmission control protocol
TOR	terms of reference
USB	universal serial bus
USU	Ultimate Sampling Unit
VoB	voice-over-broadband
VoIP	voice-over-Internet Protocol
WiMAX	worldwide interoperability for microwave access
WLL	wireless local loop

NATIONAL DIGITAL INCLUSION SURVEY 2021

FOREWORD

Foreword

As the Telecommunications Authority of Trinidad and Tobago (the Authority) celebrates its 18th year of regulating the telecommunications and broadcasting sectors, it gives us great pleasure to present the *National Digital Inclusion Survey Report (2021): Accelerating Digital Transformation.*

Trinidad and Tobago is no stranger to the pervasive and dynamic nature of technology and the opportunities and potential that can be derived from it. As such, we pause to recognise, in the following timeline, the phenomenal development that has taken place in the local telecommunications and broadcasting sectors since the 19th century:

a) Telegraphy cable connectivity (through Moruga) in 1875 – approximately 150 years ago
b) Fixed-line telephone service in 1883 – almost 140 years ago
c) Radio services in the early 1920s – approximately 100 years ago
d) Free-to-air television in 1962 – 60 years ago
e) Mobile service in 1991 – just over 30 years ago
f) Internet services in 1995 – just over 25 years ago
g) Subscription television service in the mid-1990s

This snapshot provides valuable insight into Trinidad and Tobago's historical involvement in technology and infrastructural development in telecommunications and broadcasting, and is a brief representation of the current digital ecosystem.

At this juncture, it is important to take stock of the development in these two sectors, which have become key pillars in socio-economic advancement globally, evaluate the effectiveness of these technologies and their impact as tools for sustainable development, as well as undertake the necessary strategic planning for continued growth of this critical industry.

Although modern technology is, by its very nature, characterised as disruptive, the ongoing global COVID-19 pandemic has challenged the status quo even more and has highlighted the sheer power and importance of what is now known as information and communications technology (ICT). For over 25 years, ICTs have enabled billions worldwide to share information, work, study, communicate and do business online, on a transformative scale. Conversely, the pandemic has also brought to the fore the plight of many sections of society who find themselves on the disadvantaged end of the digital divide. The digital divide is defined as the gap that exists between those who have access to ICTs and those who do not.

In accordance with the Telecommunications Act, Chap. 47:31 (the Act), the Authority recognises the importance of assessing the current state of ICT development and continuously monitoring the scale of the digital divide. This helps the Authority to determine universal service projects and

other initiatives to help diminish the gaps, promote the reach of ICTs and improve the lives of citizens through technology. In keeping with this commitment, the Authority previously conducted two national digital divide surveys, in 2007 and 2013.

Recognising the imperative to identify the underserved communities and population groups, to rectify a paucity of ICT indicators and collect data to monitor and measure the targets set within the National ICT Plan 2018– 2022 (the ICT Blueprint), the Authority decided to expand the scope of the traditional survey to now measure digital inclusion. The goal of digital inclusion is to enable all citizens to access and use digital technologies effectively and this goes beyond merely having Internet access or a smart phone.

The results of the Digital Inclusion Survey 2021 (DIS 2021) provide the Authority and its stakeholders with an updated and comprehensive repository of telecommunications and broadcasting data to enhance ICT policy development, facilitate benchmarking, and improve the regulation of the telecommunications and broadcasting sectors.

Furthermore, the recommendations proposed in this report will assist the Authority in achieving its strategic objectives of bridging the digital divide, fostering digital inclusion and fulfilling its statutory mandate for continued ICT development within Trinidad and Tobago.

Acknowledgements

The Authority wishes to extend profound appreciation to all respondents for their time, cooperation and active participation in the Digital Inclusion Survey 2021 (DIS 2021). The information shared at both the household and individual levels will enable the Authority and all stakeholders to have a better understanding of the nation's progress in ICT development since the last survey was conducted in 2013.

The Central Statistical Office (CSO), a division of the Ministry of Planning and Development, is also acknowledged for their invaluable contribution as a project partner in the design and implementation of DIS 2021. The CSO provided technical expertise and support for the questionnaire design and sampling methodology, and supplied mapping materials to facilitate the data collection throughout Trinidad and Tobago.

Special thanks are extended to the Ministry of Planning and Development as well as the Ministry of Digital Transformation for their support, especially with the communications campaign for the survey.

The Authority gratefully acknowledges Kairi Consultants Ltd. for its dedication and professionalism in successfully coordinating and executing DIS 2021. Kairi's field interviewers must also be commended for their pivotal role in the management of the data collection exercise in spite of the COVID-19 restrictions and for the wealth of experience they brought to the project.

Sincere appreciation is also extended to all telecommunications and broadcasting concessionaires who routinely provide market data to the Authority, some of which have been utilised in this report, and all other stakeholders who contributed to this important project.

Executive Summary

In accordance with the Telecommunications Act, Chap. 47:31 (the Act), the Telecommunications Authority of Trinidad and Tobago (the Authority) monitors and assesses ICT development in Trinidad and Tobago. The Digital Inclusion Survey 2021 (DIS 2021), a national probability sample survey, is the third survey of its kind, undertaken by the Authority, designed to measure the state of the digital divide and to inform universal service projects and other initiatives to diminish the gaps, promote the reach of ICTs and improve the lives of all citizens through technology. DIS 2021 builds on the previous surveys, conducted in 2007 and 2013, by extending the frame of reference to include, for the first time, the concept of digital inclusion.

A key finding of the survey reveals the ICT Development Index (IDI) for Trinidad and Tobago in 2021 was 7.86. In 2017, the IDI for Trinidad and Tobago, compiled by the International Telecommunication Union (ITU), was estimated to be 6.04. Further, the 2013 Digital Divide Survey produced an IDI result of 5.55. DIS 2021 therefore shows that Trinidad and Tobago made positive steps with respect to bridging the digital divide over the past decade.

The DII for Trinidad and Tobago was computed to be 4.24. This index reflects a more expansive definition of digital inclusion, which goes beyond the 11 individual indicators identified in the IDI to include additional indicators, such as, using online digital government services and level of trust with respect to information obtained via social media.

While access to ICT continues to improve, and subscriptions to ICT services, including mobile subscriptions and fixed Internet subscriptions, are on the increase, the data from DIS 2021 suggest that priority should be given to the following:

1. Communities with the 10 lowest IDI scores, namely, Gran Curucaye, Laventille, Arena, Preysal, San Raphael/Brazil, Guaico, Tabaquite, Tortuga, Gonzales, Port of Spain Port Area, Port of Spain Proper and Sealots

2. Parishes in Tobago with the lowest DII scores, namely, St. Paul, St. George, St. David, St. Mary and St. John which need to be brought up to the national level

3. Persons with disabilities (PWDs), due to reported lower rates of adoption and use of ICTs. For example, DIS 2021 findings indicate that only 1% of PWDs used digital government services, while just 57.3% owned a mobile phone.

4. The elderly, many of whom are unable to adapt to new technologies and participate in a fully digital society.

5. Improving intermediate and advanced ICT skills among the population. DIS 2021 reveals that 30% of individuals have standard ICT skills, while only 4% possess advanced ICT skills.

6. Promoting uptake of digital government services

7. Increasing opportunities for proper e-waste disposal

While the survey data show the expansion of services to almost all parts of the country, Trinidad and Tobago continues to record low performance rates with respect to ICT skills and ICT participation. The low score on ICT skills suggests a deficiency in the population's human capital and demonstrates the need for targeted investment, to further develop a labour force capable of competing in the evolving global economy.

The Authority will focus on ICT skills in delivering on its mandate. This may involve collaboration on educational opportunities with the ministries responsible for ICTs, education, and social and community development.

The following four high-level recommendations derived from the findings of the survey are well aligned with the thematic strategies of the ITU's Digital Regulation Handbook[1], the ICT Blueprint, and the Authority's Strategic Plan (2019–2022), and are in sync with the country's National Development Strategy (Vision 2030), and with its commitments to achieving the 17 UN Sustainable Development Goals (SDGs):

1. Continued development and deployment of modern, resilient and sustainable telecommunications and broadcasting infrastructure, with focus on underserved areas at the community level

2. Adoption of digital literacy to ensure trust in the use of new and emerging technologies, applications and services, especially among vulnerable populations[2]

[1] ITU/The World Bank Digital Regulation Handbook (2020): https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-TRH.1-2020-PDF-E.pdf

[2] Women and girls, persons with disabilities and specific needs, youth, marginalised communities and indigenous people

3. Enhancement of the digital transformation ecosystem through connectivity projects, promoting active engagement amongst the Government of the Republic of Trinidad and Tobago (GORTT), service providers, industry partners and other relevant stakeholders

4. Contribution to the development of a modern and enabling policy and regulatory environment, to connect the underserved through available, affordable and accessible ICTs that support the achievement of the UN SDGs, ITU's Connect 2030[3] Agenda, and Vision 2030 of GORTT.

These recommendations embrace the principles of universal service, digital inclusion, economic development, equity and sustainability, within the context of digital transformation in Trinidad and Tobago.

The COVID-19 pandemic has afforded GORTT the opportunity to accelerate the institutionalising of digital government in many of the services provided to the public, with the establishment of the Ministry of Digital Transformation. The government has also made Wi-Fi available to citizens in public libraries, transport hubs, schools and health institutions across the country.

The Authority's advocacy and promotion of the use of ICTs among the population is characterised by the engagement of key government institutions. The Ministries of Digital Transformation, Health, Education, Social Development and Community Development are important partners with the Authority. Community centres, well equipped with IT equipment and other hardware, should be accessible to all citizens who desire access to the Internet. Free Internet access to citizens at these centres will enable the Ministry of Education to provide self-tutoring and adult education programmes, as well as secondary school courses in subjects like English, Mathematics, Social Studies and Science. The Authority will play a strong supporting role in such initiatives to foster the development of the human capital for a diversified economy.

In promoting ICT usage, the Authority will partner with the service providers, other agencies and academia, to engage in programmes among students in primary, secondary and tertiary institutions. This will ensure that many of the young people of the country will be at the forefront of the Fourth Industrial Revolution (4IR), and that their innate creativity can be tapped for the benefit of the country and the world. Additionally, focus will continue to be placed on marginalized groups such as persons with disabilities (PWDs) and the elderly.

The Authority had success over the first two decades of its existence in fostering the enhanced reach of telecommunications infrastructure to communities across the country. However, despite the existence of 17 authorised fixed telecommunications providers as at the end of 2021, there are

[3] ITU Connect 2030 Agenda: https://www.itu.int/en/mediacentre/backgrounders/Pages/connect-2030-agenda.aspx

still geographic areas and population groups in need, to meet the targets for universal and equitable coverage.

Over the next few years, the Authority will continue to engage and be proactive among its clients and stakeholders, to ensure that the capacity being built is fully utilised in ways that redound to the public's interest. The Authority's efforts, together with GORTT and other related state agencies over the next three years, will help determine how quickly the country improves its ranking on major international indicators on ICTs as well as on human resource development, innovativeness, competitiveness and citizen security.

1. Introduction

The National Digital Inclusion Survey 2021 (DIS 2021) was conducted by the Telecommunications Authority of Trinidad and Tobago (the Authority) at a most timely juncture in the development of Trinidad and Tobago, since this initiative fell squarely within the context of the advances made in the country in the face of the continuing technological advancements and innovation in the global telecommunications and broadcasting sectors.

This current technological era, which many consider as the Fourth Industrial Revolution (4IR)[4], is characterised by the emergence of the Internet of Things (IoT), augmented reality (AR), artificial intelligence (AI), 5G, robotics, cobots, and the continued convergence of information and communications technology (ICT). The COVID-19 pandemic has also triggered radical change in the functioning of many areas of economic and social life, leading to heavy focus on ICT connectivity, access and uptake. The combination of all these factors may now ultimately affect the way ICTs will evolve.

Countries that have gone furthest in adopting connectivity agendas and enabling ICT policies and ubiquitous access for their populations have proven themselves more adept in adjusting to the new realities of this era. Finland and Estonia, for example, placed access to the Internet as a human right in the same way as access to water and electricity. Other countries, such as Denmark, Sweden and Singapore, have already embarked on 4IR, with ICT infrastructure being a necessary component of the enabling platform for ICT services and applications.

Since the Authority's survey in 2013, the Government of the Republic of Trinidad and Tobago (GORTT) developed its macro-economic plan, Vision 2030 – The National Development Strategy[5], which aims to facilitate trade, improve productivity, strengthen governance, promote service excellence and put people first, thereby embracing the systematic changes needed to propel Trinidad and Tobago to developed country status. In 2021, a Ministry of Digital Transformation was established and the Minister of Digital Transformation announced the following strategic mandate:

> The mandate is to facilitate the development of a digital T&T – one where the population has access to, and the skills to use, ICT in their everyday lives; where the ICT infrastructure is of high quality – it's robust, it's secure; where more businesses are using ICT to become

[4] MIT Technology Review (2020): Fourth Industrial Revolution (4IR): https://www.technologyreview.com/2020/10/15/1010365/the-fourth-industrial-revolution-has-begun-nows-the-time-to-join/

[5] Vision 2030 – The National Developmental Strategy of Trinidad and Tobago: https://www.planning.gov.tt/sites/default/files/Vision%202030-%20The%20National%20Development%20Strategy%20of%20Trinidad%20and%20Tobago%202016-2030.pdf

> more globally competitive, [and] where the ICT sector is an increasing contributor to national gross domestic product (GDP).

DIS 2021 takes the necessary steps to assess Trinidad and Tobago's level of technological development, implement relevant initiatives to meet the demands of 4IR and bolster the country's ICT readiness to support Vision 2030.

The rest of this section provides the backdrop to recent developments within the telecommunications and broadcasting sectors, from both historical and current state perspectives within international and local parameters, which have shaped the overall strategic and policy direction in Trinidad and Tobago.

1.1 Background: The International Telecommunication Union's Maitland Commission – *The Missing Link* and the Digital Divide

Despite the opportunities and the potentials created by technology, there have been many disparities relating to connectivity, access and uptake over the decades. The ITU[6] Plenipotentiary Conference held in Kenya in 1982 was the pivotal moment that provided the first insight into the problems created by the growing disparity between those who had access to basic telecommunications services (BTS) and those who did not. Consequently, an Independent Commission for World-Wide Telecommunications Development, chaired by Donald Maitland, was mandated by ITU to identify the obstacles hindering communications infrastructure development.

The Commission's final report in 1985 – *The Missing Link*[7] – recommended ways in which the expansion of telecommunications across the world could be stimulated. The report provided the first international exposure about the growing imbalance in telephone access between developed and developing countries and concluded that this imbalance was intolerable going forward. It underlined the direct correlation between the availability of, and access to, telecommunications infrastructure and a country's economic growth, and it proposed concrete solutions to fix "the missing link".

[6] The International Telecommunication Union (ITU) is the United Nations' specialised agency for information and communications technology: https://www.itu.int/en/about/Pages/default.aspx

[7] ITU Maitland Commission – *The Missing Link* (1985): http://search.itu.int/history/HistoryDigitalCollectionDocLibrary/12.6.71.en.100.pdf

In the 20 years following the Maitland Commission , the gap between those who had access to technology and those who did not evolved into what is now known as "the digital divide"[8]. ITU recognises that:

1. the digital divide, as a dynamic concept, has evolved over time.

2. older technologies tend to be more evenly diffused than newer technologies.

3. there is not a single divide but multiple divides, for instance, within countries, between sexes, amongst demographic groups, etc.

4. various underlying factors, such as wealth, connectivity, access and opportunities, have created the divide.

As the 40th anniversary of the establishment of the Maitland Commission approaches, it is important to reflect on the original findings, underlying themes and general recommendations related to technology access and uptake, including the disparities these factors have created at the national and international levels. Furthermore, it is necessary to take stock of Trinidad and Tobago's state of technological readiness and inclusiveness in order to implement the most effective policies, plans and projects going forward.

1.2 National Information and Communications Technology Plans and Telecommunications Sector Reform

Recognising the convergence of telecommunications, broadcasting and various aspects of information technology into what is now known as ICT, the opportunities and impact of ICT as a socio-economic tool and an economic enabler have been viewed by GORTT over the past 25 years as critical to national development. With this in mind, GORTT undertook significant sector reform to initiate the transformation of the local economy into one that promotes ICT connectivity, access and uptake, which would bridge the digital divide. The following three National ICT Plans were finalised and approved over the period 2003 to 2022:

[8] ITU *Bridging the Digital Divide*: https://www.itu.int/osg/spu/publications/worldinformationsociety/2007/WISR07-chapter2.pdf

1. The National ICT Plan (2003) – Fastforward[9]. This plan focused on infrastructural upgrade and ICT connectivity, as well as legislative reform and market development.

2. The National ICT Plan (2007) – smarTT[10]. This plan focused on ICT uptake and enabling programmes.

3. The National ICT Plan (2018) – the ICT Blueprint[11]. This plan focused on ICT modernisation and inclusiveness.

These plans were aimed at sector reform, ICT connectivity and access, and ICT uptake initiatives, and were supported by inclusive policies and projects focused on bridging the digital divide.

As part of the initial efforts to transform the local economy and liberalise the domestic ICT market, GORTT enacted the Telecommunications Act, Chap. 47:31 (the Act)[12]. The Act was closely aligned to the developmental areas and recommendations identified by ITU at that time, as well as other factors promoted by the World Trade Organization[13] that facilitated international trade and harmonisation and basic access to services. Some of the main objects of the Act are:

1. an open market for telecommunications services, including conditions for fair competition, at the national and international levels.

2. facilitating the orderly development of a telecommunications system that serves to safeguard, enrich and strengthen the national, social, cultural and economic well-being of the society.

3. protecting and promoting the interests of the public.

4. ensuring universal access to telecommunications services for all persons in Trinidad and Tobago, to the extent that it is reasonably practicable to provide such access.

[9] The National ICT Plan (2003) – *Fastforward*
https://mpadt.gov.tt/sites/default/files/file_upload/publications/Fast%20Forward%20I.pdf

[10] The National ICT Plan (2007) – *smarTT*:
https://mpadt.gov.tt/sites/default/files/file_upload/docs/smarTTNationalICTPlan2014-2018.pdf

[11] The National ICT Plan (2018) – *The ICT Blueprint*

[12] Telecommunications Act, Chap. 47:31:
https://tatt.org.tt/Portals/0/ConsultativeDocuments/Telecommunications%20Act.pdf?ver=2014-05-14-112232-840

[13] WTO BTS: https://www.wto.org/english/news_e/pres97_e/summary.htm

5. facilitating the achievement of the objects referred to in items (1) and (2) in a manner consistent with Trinidad and Tobago's international commitments in relation to the liberalisation of the telecommunications sector.

6. promoting the advancement of telecommunications in Trinidad and Tobago by encouraging investment in, and the use of, infrastructure to provide telecommunications services.

7. regulating broadcasting services consistently with the existing constitutional rights and freedoms contained in sections 4 and 5 of the Constitution.

After the proclamation of the Act, the Authority commenced operations in 2004, with the statutory mandate to regulate the local telecommunications and broadcasting sectors. Pursuant to the conditions outlined in the Act, the Authority's goals over the past 18 years centred around the liberalisation of the markets and the related interconnection agreements, spectrum management, licences and concessions, universal service obligations, management of number resources, consumer complaints resolutions and many other areas that are aligned to the Authority's overall statutory function. To date, these regulatory efforts have resulted in a strong, dynamic and growing ICT market which generated an estimated TT$4.73 billion in revenue in 2020[14], with several concessionaires operating in the various market segments from an ICT supply-side perspective.

1.3 Universal Service Obligations and the National Digital Divide Surveys (2007 and 2013)

The underlying concept of universal service is to ensure that ICT services are readily accessible to the widest number of people and communities. As such, ITU identifies the following three fundamental principles that define universal service[15]:

1. **Availability**: the level of service is the same for all users in their place of work or residence, at all times and without geographical discrimination.

[14] TATT Annual Market Report (2020): https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1520&PortalId=0&TabId=222

[15] ITU Universal Service Fund and Digital Inclusion for All: https://www.itu.int/en/ITU-D/Regulatory-Market/Documents/USF_final-en.pdf

2. **Affordability**: for all users, the price of the service should not be a factor that limits service access.

3. **Accessibility**: all telephone subscribers should be treated in a non-discriminatory manner with respect to price, service and quality of service (QoS), in all places, without distinction of race, sex, religion, etc.

From a legislative perspective, the Act defines universal service as follows:

> The provision of telecommunications services throughout Trinidad and Tobago, taking into account the needs of the public, affordability of the service and advances in technologies.

Furthermore, pursuant to section 28 of the Act, the Authority is responsible for promoting and ensuring universal service in Trinidad and Tobago. With this in mind, the Authority is guided by the conditions identified in the Act, the supporting Universal Service Regulations[16] and the Universal Service Framework[17]. These regulatory instruments govern universal service obligations in Trinidad and Tobago.

Based on the concept of universal service and the Authority's statutory mandate, three main considerations arise:

1. Identification of the digital divide in Trinidad and Tobago

2. Accurately measuring and monitoring the digital divide

3. Implementing the most appropriate and inclusive policies, programmes and projects to bridge the divide

To this end, the Authority previously undertook the following two digital divide surveys:

1. **The Digital Divide Survey 2007**[18]. This survey generated a collection of data to allow for the calculation, at the level of identifiable geographical areas or communities in Trinidad and Tobago, and for the country as a whole, of the Digital Access Index (DAI) and the

[16] Universal Service Regulations (USR): https://tatt.org.tt/UniversalService/UniversalServiceRegulations.aspx

[17] Universal Service Framework: https://tatt.org.tt/Portals/0/ConsultativeDocuments/Universality%20Framework/Universal%20Service%20Framework%20June%202012.pdf

[18] Digital Divide Survey Report (2007): https://tatt.org.tt/Portals/0/Documents/Digital%20Divide%20Report%202007.pdf?ver=2013-02-23-083437-203

Digital Opportunity Index (DOI). It also built on previous trends and findings from ITU relating to digital divide gaps and tele-density calculations.

2. **The Digital Divide Survey 2013**[19]. This survey followed the trends and the methodology of the 2007 survey and further sought to provide benchmarking figures on the ICT scale for Trinidad and Tobago's comparison with other international countries; identify the telecommunications needs of persons with disabilities; and assess the ability of those persons to afford assistive technologies (equipment and services).

DIS 2021 provides the Authority and its stakeholders with an updated and comprehensive repository of ICT data which shall serve as the foundation for efficient policy development and regulation of the telecommunications and broadcasting sectors. Furthermore, the recommendations proposed in this report shall be taken into account to guide actions for achieving the Authority's strategic objectives of bridging the digital divide, fostering digital inclusion and promoting continued ICT development within Trinidad and Tobago.

[19] Digital Divide Survey Report (2013): https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=340&PortalId=0&TabId=222

NATIONAL DIGITAL INCLUSION SURVEY 2021

OVERVIEW

2. **Overview: The National Digital Inclusion Survey 2021**

ITU recognises that, in this century, ICT is as vital to social and economic advancement globally as transportation networks and infrastructural development were in the 20th century. However, in 2021, half of the world's population remained unconnected and is therefore unable to participate in, and derive the benefits of ICTs. According to the ITU, 87% of people are using the Internet in developed countries, compared with 44% in developing countries. While virtually all urban areas in the world are covered by a mobile-broadband network, the ITU notes that gaps in connectivity and Internet access persist in rural areas. Globally, 72% of households in urban areas has access to the Internet at home, almost twice as much as in rural areas (38%)[20]. Furthermore, over one billion people in the world are living with some form of disability, with consequent challenges for digital inclusion and ICT engagement[21].

DIS 2021 is one of the projects outlined in the ICT Blueprint for accelerating digital inclusion. The survey builds on the two previous digital divide surveys conducted by the Authority in 2007 and 2013. There has been considerable expansion of telecommunications networks, development of technologies, proliferation of ICT services and applications, and growth with respect to consumer access to, and use of, ICTs. The last two surveys showed that this growth continues to be relatively uneven, and this has resulted in gaps between some population groups and geographic areas within Trinidad and Tobago.

For the purposes of this survey, the Authority utilised ITU's ICT Development Index (IDI)[22]. Although the IDI is being revised by ITU, the current version remains a conceptual framework and robust methodology which comprises a composite index that combines 11 indicators into one benchmark measure. It is used to monitor and compare developments in ICTs among countries and over time. The main objectives of the IDI are to measure:

1. the level and evolution over time of ICT developments within countries, and the experience of those countries relative to others.

2. progress in ICT development in both developed and developing countries.

[20] ITU Digital Inclusion of All: https://www.itu.int/en/mediacentre/backgrounders/Pages/digital-inclusion-of-all.aspx

[21] ITU*: Connect2Include: Making Digital Accessibility a Reality for All*: https://www.itu.int/en/myitu/News/2021/03/29/09/39/Connect2Include-digital-accessibility-reality

[22] ITU *IDI Conceptual Framework and Methodology*: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis/methodology.aspx

3. the digital divide, meaning the differences among and within countries in terms of the levels of ICT advancement and development from a geographic and socio-economic perspective.

4. the potential of ICTs and the extent to which countries can make use of them to enhance growth and development in the context of available capabilities and skills.

Notably, the theme that was adopted for this survey and the final report is "Accelerating Digital Transformation", which links directly to ITU's Connect 2030 Agenda[23]. In this regard, it should be noted that DIS 2021 corresponds to all five goals outlined in this international agenda:

- Goal 1: Growth
- Goal 2: Inclusiveness
- Goal 3: Sustainability
- Goal 4: Innovation
- Goal 5: Partnership

The Authority aims to expand on the concept of digital inclusion, which goes a step beyond the traditional assessment of the digital divide, by considering the factors necessary for the citizens of this country to use ICTs effectively, such as their skills, motivation and trust. Digital inclusion also aligns with the stated vision of Trinidad and Tobago's ICT Blueprint, which is "Empowered People, Competitive Businesses, Transformational Government through ICTs".

Strategy 3 of the ICT Blueprint focuses primarily on digital inclusion and aims to further bridge the digital divide in Trinidad and Tobago by ensuring all members of society have equal access to ICT infrastructure, content and services, with increasing opportunities to leverage ICT innovations to address national challenges. The ICT Blueprint, through its five strategic thrusts, therefore, recognises the imperative of assessing the digital divide and promoting digital inclusion to those vulnerable groups in the society.

Furthermore, this national survey is one of the critical components in the Authority's Strategic Plan 2019–2022[24], which is aligned to the strategic theme "Universal Service, Connectivity and Digital Inclusion".

[23] *ITU Connect 2030 Agenda:* https://www.itu.int/en/mediacentre/backgrounders/Pages/connect-2030-agenda.aspx

[24] TATT Strategic Plan (2019-2022) Summary: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1464&PortalId=0&TabId=222

To execute this strategic objective, the Authority aims to measure the digital divide and identify those geographical areas and population groups that are unserved or underserved vis-à-vis accessing and affording BTS.

DIS 2021 expands on the two previous digital divide surveys by collecting and analysing additional indicators, as guided by ITU, to determine the factors necessary for facilitating digital inclusion. A vital outcome of this survey is the identification of specific population groups and geographic areas most at risk of being digitally excluded within Trinidad and Tobago. Furthermore, since DIS 2021 was fully endorsed by the CSO[25], the survey findings shall be embraced as official statistics of Trinidad and Tobago.

Considering ITU's IDI conceptual framework and methodology, as well as the concept of digital inclusion adopted for the purposes of this survey, the primary data collection areas focused on:

1. ITU's model ICT questionnaire.
2. the ICT Blueprint and the five Strategic Themes outlined in this national plan.
3. the United Nations E-Government Index and E-Participation sub-index.
4. the World Economic Forum Global Information Technology Report – Network Readiness Index (NRI)[26].
5. ITU's Global Cybersecurity Index (GCI).
6. ITU Study Groups.
7. target areas identified by the Authority which centre around broadcasting, QoS, end-user perception and other related areas.
8. the adoption and the impact of disruptive technologies locally.
9. the identification of vulnerable groups and their engagement with ICTs.

[25] MOU Between TATT and the CSO: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1444&PortalId=0&TabId=222

[26] NRI: https://networkreadinessindex.org/

The ICT Blueprint is benchmarked against both the IDI and the NRI, with programmes and projects geared towards improving Trinidad and Tobago's international rankings for both indicators. As such, although DIS 2021 is centred around the IDI, the NRI also plays a critical role in strategic planning and development of the local industry. The NRI is based on the following four pillars and sub-indices:

1. Technology pillar
    a. Access
    b. Content
    c. Future technologies

2. People pillar
    a. Individuals
    b. Businesses
    c. Government

3. Governance pillar
    a. Trust
    b. Regulation
    c. Inclusion

4. Impact pillar
    a. Economy
    b. Quality of life
    c. Contribution to SDGs

Based on a comparative analysis of the NRI 2020[27] and the NRI 2021[28], Trinidad and Tobago's overall NRI ranking fell 4 places, from 81 out of 134 countries in 2020 to 85 out of 130 countries in 2021. This was primarily due to a decline in the technology pillar which fell from a rank of 78 in 2020 to 88 in 2021. The people pillar, however, improved, from a rank of 88 in 2020 to 82 in 2021. The governance pillar remained constant, with a rank of 79 for both 2020 and 2021. There was, however, a decline of the impact pillar, from a rank of 83 in 2020 to 90 in 2021, largely due to macro-economic reasons. Although there was an overall decline in Trinidad and Tobago's NRI

[27] NRI 2020: https://networkreadinessindex.org/2020/wp-content/uploads/2020/11/NRI-2020-V8_28-11-2020.pdf

[28] NRI 2021: https://networkreadinessindex.org/countries/

2021 ranking, there were some notable characteristics at the sub-indices level. This included Trinidad and Tobago's relative strength in ICT skills, mobile network coverage, regulatory stability, e-commerce legislation and use of digital payments. The NRI demonstrates the need for relevant and accurate ICT data to regulate the local industry while improving Trinidad and Tobago's overall performance on the global stage.

The results of DIS 2021 are therefore intended, inter alia, to provide the ICT data and supporting recommendations that are necessary for international reporting and benchmarking; guiding ICT policy formulation and regulation of the local sector; and informing the choice of universal service[29] and digital transformation initiatives to be implemented in Trinidad and Tobago. The longer-term intention will be to support the country's Vision 2030[30] macro-economic goals and ITU's Connect 2030 Agenda by building the knowledge society, thereby facilitating the digital revolution and ultimately propelling the country further into the digital era.

[29] TATT Universal Service Initiatives: https://tatt.org.tt/UniversalService/UniversalServiceFundInitiatives.aspx

NATIONAL DIGITAL INCLUSION SURVEY 2021

METHODOLOGY

3. Methodology

3.1 Study Design

DIS 2021 was developed as a cross-sectional survey, using a stratified random probability sample methodology to produce estimates at the national and sub-national levels. Data collection for DIS 2021 was executed via face-to-face interviews of respondents, using a structured questionnaire.

3.2 Sample Design and Selection

The original Master Sample Frame (MSF) for Trinidad and Tobago supports the CSO's Continuous Sample Survey of Population (CSSP) and is derived from the Population and Housing Census of 2011. The sample frame from which this DIS 2021 was designed contained updates to the original census sample frame of 2011. Those updates were based on the relisting of dwelling units and households in 2019, for enumeration districts (ED) selected for the conduct of the Multiple Indicator Cluster Survey (MICS) and the Household Budget Survey (HBS).

The first, explicit level of stratification was geographic and was based on the country's administrative structure, which comprises the 14 municipalities in Trinidad and the island of Tobago. Trinidad's 14 municipalities consist of two cities (Port of Spain and San Fernando), three boroughs (Arima, Chaguanas, and Point Fortin), and nine administrative areas. Similarly, Tobago is divided into seven independent regions called parishes. The sample was drawn from the 585 EDs throughout the 14 municipalities in Trinidad, and the 7 parishes in Tobago.

DIS 2021 was based on a stratified random sample of clusters of dwelling units, systematically selected in two stages. In the first stage, the sample was stratified by municipalities, and the EDs or Primary Sampling Units (PSUs) were selected. In the second stage, the Ultimate Sampling Units (USUs) of dwellings within the ED clusters were selected.

EDs were ranked within each municipality and the parishes in Tobago using a Multidimensional Poverty Index (MPI) developed from the 2011 Population and Housing Census database. Systematic random sampling of these ranked PSUs ensured non-biased representation of PSUs in the sample for the municipality.

Relatively larger samples were selected in smaller municipalities based on population size. This was driven by the commitment to report statistically significant indicators at the municipality level. This would not have been possible had smaller municipalities been represented in the national sample solely on their share in the national population. For example, using the fourth root allocation method applied in the design of this two-stage stratified random sample, Tobago, which

makes up 4.6% of the population of Trinidad and Tobago, represents 6.1% of the sample selected. Likewise, the Borough of Point Fortin, which makes up 1.5% of the population of Trinidad and Tobago, represents 5.2% of the sample selected. This approach also improved the quality of the indicators derived at the community level, which was an essential goal of the selected sample.

The targeted sample size was 6,000 successfully administered (completed or partially completed) household interviews. To achieve this target, the sample methodology was designed to systematically replace households that could not be contacted or refused to be interviewed. Table 3.1 presents information on household interviews attempted by visit status and municipality. This resulted in a total of 7,119 households being visited to obtain the 6,215 interviews received (5,913 completed and 302 partially completed[31] interviews). These two categories were considered legitimate survey responses.

Two hundred and fifty-seven (257) households declined to be interviewed, resulting in a refusal rate of 3.6%. Nine per cent (9.1%) of households could not be contacted after several visits, for a variety of reasons. Consequently, the overall response rate for DIS 2021 was 87.3%.

The highest response rate was recorded in Princes Town, at 99.4%, with zero refusals, followed by Penal/Debe with a response rate of 98.6% (four refusals). The lowest response rate was recorded in Diego Martin, at 75.2%, with 28 refusals. In two EDs in Diego Martin, all households refused to participate in the survey. The penultimate lowest response rate was from San Juan/Laventille, at 77.6%, with 25 refusals.

One full ED within San Juan/Laventille could not be interviewed due to crime concerns. Given that a similar situation existed in fence-line communities, it was not feasible to substitute this particular ED. Appropriate non-response weights were applied to the data as required.

[31] A partially completed interview results when a respondent provides answers for some of the questions on the survey questionnaire but is unable or unwilling to respond to the entire questionnaire. Additionally, in-scope household members may not present themselves to be interviewed – deliberately or otherwise – or may not be allowed to participate if parental consent is required for participation.

Table 3.1: Visitation status of households selected by municipality

Reference Columns	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Name of Municipality	Completed Household Interviews	Partially Completed Household Interviews	Households - No Contact	Households - Refusals	Total Households Attempted	No. of Valid Household Interviews (1) + (2)	Response Rate (%) (6) / (5)	Refusal Rate (%) (4) / (5)
Port of Spain	301	2	46	24	373	303	81.2	6.4
Mayaro/Rio Claro	370	7	7	16	400	377	94.3	4.0
Sangre Grande	426	0	52	3	481	426	88.6	0.6
Princes Town	514	2	3	0	519	516	99.4	0.0
Penal/Debe	476	0	3	4	483	476	98.6	0.8
Siparia	462	1	47	6	516	463	89.7	1.2
Chaguanas	362	30	53	11	456	392	86.0	2.4
Arima	278	47	19	21	365	325	89.0	5.8
San Fernando	331	6	36	18	391	337	86.2	4.6
Point Fortin	317	2	49	22	390	319	81.8	5.6
Diego Martin	314	22	83	28	447	336	75.2	6.3
San Juan/Laventille	396	13	93	25	527	409	77.6	4.7
Tunapuna/Piarco	529	116	90	26	761	645	84.8	3.4
Couva/Tabaquite/Talparo	429	32	57	48	566	461	81.4	8.5
Tobago	408	22	9	5	444	430	96.8	1.1
Total	**5,913**	**302**	**647**	**257**	**7,119**	**6,215**	**87.3**	**3.6**

Based on further interrogation of the data set of 6,215 households, 44 household records had insufficient data for analysis. These records were removed from the database, resulting in a final data set of 6,174 households. These households form the base for computing the required indices and developing all further analyses.

Table 3.2 presents data on the estimated number and distribution of households and persons in the population, based on the Population and Housing Census of 2011. Similar details were provided for the DIS 2021 sample. The fieldwork conducted for DIS 2021 produced a primary data set of 6,174 randomly selected households comprising 16,960 persons. These 16,960 persons represent 1.24% of the population of Trinidad and Tobago, which was estimated by the CSO to be 1,367,558 as of June 2021.

Table 3.2: Census 2011 distribution of households, population and sample by municipality

Municipality	Census 2011			DIS Sample 2021		
	Households (N)	Population (N)	Percentage of Total Population (%)	Unweighted Sample (N)	Percentage of Sample (%)	Survey Response Rate (%)
Trinidad	381,257	1,267,163	95	5,799	93.9%	86.7
City of Port of Spain	12,333	37,074	2.8	299	4.8	81.2
Mayaro/Rio Claro	10,351	35,650	2.7	372	6.0	94.3
Sangre Grande	22,706	75,766	5.7	425	6.9	88.6
Princes Town	29,661	102,375	7.7	518	8.4	99.4
Penal Debe	26,067	89,392	6.7	474	7.7	98.6
Siparia	26,125	86,949	6.5	467	7.6	89.7
City of San Fernando	15,110	48,838	3.7	375	6.1	86.0
Borough of Arima	9,779	33,606	2.5	333	5.4	89.0
Borough of Chaguanas	24,644	83,516	6.3	377	6.1	86.2
Borough of Point Fortin	6,680	20,253	1.5	323	5.2	81.8
Diego Martin	32,404	102,957	7.8	334	5.4	75.2
San Juan/ Laventille	49,404	157,258	11.8	412	6.7	77.6
Tunapuna/ Piarco	64,176	215,119	16.2	644	10.4	84.8
Couva/Tabaquite/Talparo	51,817	178,410	13.4	446	7.2	81.4
Tobago	20,125	60,874	4.6	375	6.1	96.8
Trinidad and Tobago	**401,382**	**1,328,037**	**100**	**6,174**	**100.0**	**87.3**

Table 3.2 also shows the distribution of households in the weighted sample. The weights developed for this sample at the ED/PSU level were applied to the sample of households to obtain the total population estimated by the CSO. The following are the main steps taken in obtaining the weights[32]:

1. The planned sample of households from the updated Census 2011 frame was compared with the sample of households obtained in 2021. This difference produced a weight that adjusted the sample obtained to the sample planned, by accounting for no contact with households, refusals and closed households[33].

2. The planned sample obtained from item 1 above was then compared to the Census 2011 population for each municipality. This is the inverse of the sample fraction[34], and a weight adjustment to account for the application of the fourth root allocation was applied in the distribution of the sample to the municipalities.

3. A post-stratification weight was applied to update the weight from the Census 2011 population total to the 2021 population estimated by the CSO. This weight is computed based on the increase in the population from 2011 to 2021 when DIS 2021 was conducted.

The above three elements were applied to the sample data to obtain municipality and national population-level estimates of totals, proportions and indicators for the population and sub-populations.

3.3 Questionnaire Design

The questionnaire used for DIS 2021 was developed using an iterative and stakeholder-driven approach, with contributions from the Authority, consultants, the CSO and field personnel.

The ITU model questionnaire provided the base for the development of the questionnaire used to conduct the survey. In addition to the base questionnaire, special emphasis was placed on ensuring that the design facilitated:

[32] Cochran, W. G. (1977) Sampling Techniques, New York: John Wiley.

[33] Households whose residents are away for more than six months

[34] Kish, L. (1965) Survey Sampling. New York: John Wiley.

1. meeting all the defined objectives of the survey.

2. producing the required IDI and DII indices and sub-indices.

3. computing the core ICT indicators set out in the *Manual for Measuring ICT Access and Use by Households and Individuals*, 2020 Edition.

4. compiling the relevant ICT SDG indicators.

5. producing any other relevant national indicators based on the literature reviewed.

6. where possible, the collection of additional data that are of strategic importance to the Authority.

The questionnaire was developed using the World Bank's Computer-Assisted Personal Interviews (CAPI) system (Survey Solutions), which facilitated the use of tablets for field interviewing. This method achieved the following:

1. **Reduced data collection time:** Once the interview was completed and uploaded to the server, supervisors and headquarter users reviewed and approved/rejected interviews. There was no need for interviewers and supervisors to meet physically to exchange information.

2. **Improved data quality:** The questionnaire was designed with several enabling conditions, validation rules and option filters – all key features of Survey Solutions – to simplify the interviewing process and automatically prompt interviewers to correct any invalid data. These features eliminated the need to return to the field to correct interviewing errors and the need to develop complex computer editing and imputation routines for data validation and cleaning.

3. **Facilitated real-time monitoring:** The survey team monitored field activities in real time, including the validation of interview locations on Google Maps, allowing for better management of field operations.

Additionally, quality controls, validation checks and filter options were incorporated into the design of the questionnaire to flag logical errors and inconsistent responses, allowing the interviewers to correct errors at the source. This ensured that the data collected were of a high quality and eliminated the need for extensive data cleaning and validation procedures at the data processing stage.

3.4 Pilot Survey

A pilot survey was conducted over a period of nine days (29th March to 6th April 2021) to test the DIS 2021 questionnaire prior to the training of field personnel.

The main objectives of the pilot survey were to:

1. gauge the level of response/non-response to the survey, including reasons for refusal, to assist in fine-tuning the communication strategy and the sample methodology.

2. estimate the time taken to complete an interview.

3. test the structure and wording of questions to ensure validity (accuracy of measure).

4. determine whether the questions were logically sequenced.

5. identify any additional/new response options

6. ensure that all interviewer instructions and definitions were clear to interviewers and respondents.

7. test all enabling conditions (skip logics) and data validation rules as well as identify new validation requirements.

8. provide an opportunity for field personnel to become familiar with the questionnaire and the defined protocols for conducting the field interviews.

Forty-four EDs were selected from 11 municipalities/strata. These EDs were chosen based on their diversity as it relates to socio-economic profiles, demographic composition, urban/rural location[35] and primary economic activities.

From a target pilot sample of 50 households, 37 interviews were completed during the allotted timeframe. Using the data obtained from the 37 completed interviews, and qualitative data obtained from field personnel, the questionnaire was finalised to be used in the training of field personnel.

[35] Urban/rural status of EDs is based on a CSO classification.

3.5 Training of Field Personnel

Training of field personnel was conducted via a virtual session because of restrictions imposed during the COVID-19 pandemic. Considering that the field personnel were relatively familiar with the questionnaire – having been given online access to the instrument during its development and having conducted the pilot survey – the virtual training did not present any unique challenges.

Topics covered during the training session included:

1. the goals and objectives of DIS 2021.
2. interviewing techniques.
3. COVID-19 interviewing protocols.
4. navigating the Survey Solutions interviewer application.
5. a detailed review of the questionnaire.

On account of the suspension of field activities for 134 days (from 9th May to 14th September 2021), field personnel were retrained prior to the restart of the field interviewing exercise in September 2021. The retraining activity provided the opportunity to reinforce specific instructions, based on the analysis of the data collected prior to the suspension of fieldwork, and facilitated the training of newly recruited field personnel.

3.6 Conducting Fieldwork

Field interviews were conducted between April and November 2021, inclusive of the suspension of fieldwork from mid-April to mid-September. The administrative structure used to execute the fieldwork is presented in Figure 3.1.

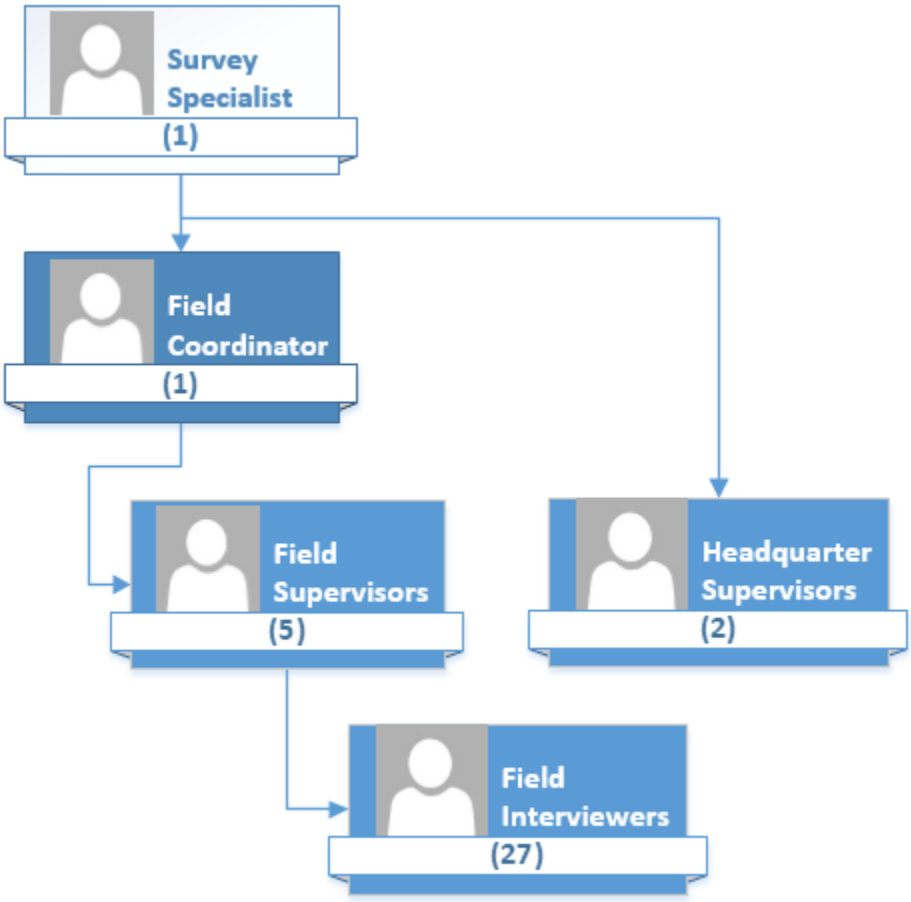


Figure 3.1: Organisation of field personnel

The interviews were administered using a formally documented COVID-19 health protocol that included a self-assessment questionnaire which was completed daily by each interviewer. Field personnel were supplied with personal protective equipment (PPE) inclusive of face masks, face shields, hand sanitisers and a temperature gun.

Despite the adverse impact of the suspension of field activities on the project work plan, the overall administration of questionnaires to households was executed without major challenges, resulting in high response rates (87.3% overall). As has become customary for national surveys, there were some challenges accessing gated communities. However, the communication campaign executed by the Authority and supported by the CSO assisted greatly in impacting the overall rate of participation obtained nationally.

3.7 Data Processing

Data processing activities were performed using both STATA and SPSS. The former was the main program used to restructure the raw data generated from Survey Solutions and to compute the required variables, indices and sub-indices. SPSS facilitated table generation and execution of basic non-structural edits to individual variables during analysis.

3.8 Computing the IDI and DII

This section presents details with respect to the indicators that were used to compute the IDI and the DII indices included in this report. A detailed example of the calculation procedures presented in this section, using actual survey data, is presented in Appendix III.

3.8.1 The ICT Development Index (IDI)

Definition of Digital Divide

The Organisation for Economic Co-operation and Development (OECD) in its 2001 publication, *Understanding the Digital Divide,* defines the digital divide as "the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access ICTs and to their use of the Internet for a wide variety of activities."

In practice, the operationalisation of the concept and its measurement emphasise differences in the availability of, and access to, equipment and infrastructure between countries as they attempt to transform themselves through opportunities offered by telecommunications technologies. Therefore, closing the digital divide implies, at its core, progress towards the goal of universal access[36] to ICT services in a society.

Method of Computing the IDI

Although the IDI is being revised by ITU, the current version remains a conceptual framework and robust methodology which comprises a composite index that combines 11 indicators into one benchmark measure. It is used to monitor and compare developments in ICT between countries and over time. It is global in its scope and reflects changes within and across countries at different stages of their ICT development.

[36] ITU (2012) defines universal access as a situation where everyone can access service somewhere at a public place, also called public, community or shared access.

The methodology used to compute the IDI was used in previous digital divide surveys conducted by the Authority. This allowed for direct comparisons with the findings from previous surveys as well as for comparative benchmarking with other developed and developing countries.

Sub-Indices and Indicators

The IDI comprises 11 indicators which are categorised into three sub-indices, as follows:

1. **Access Sub-Index**: this sub-index captures ICT readiness and includes five infrastructure and access indicators.

2. **Use Sub-Index:** this sub-index captures ICT intensity and includes three intensity and usage indicators.

3. **Skills Sub-Index:** this sub-index captures capabilities or skills which are important for ICTs and includes three indicators.

Tables 3.3 to 3.5 provide details on the operational definitions used to compute each of the 11 indicators comprising the IDI. Most of the data used were primary data obtained from DIS 2021. However, secondary data were used to compute the following indicators:

1. Fixed-telephone subscriptions/100 inhabitants

2. Mobile cellular telephone subscriptions per 100 inhabitants

3. International Internet bandwidth (bit/s) per Internet user[37]

4. Mean years of schooling[38]

5. Secondary gross enrolment ratio[39]

[37] Secondary data for items 1 to 3 were obtained from the Authority's market data.

[38] https://hdr.undp.org/sites/default/files/Country-Profiles/TTO.pdf

[39] Ministry of Education 2018/2019 estimates

Table 3.3: Indicators used in measuring digital divide (IDI) – ICT Access sub-index

Indicators	Definition
ICT Access Sub-Index	**The indicators included in this group provide an indication of the available ICT infrastructure and individuals' access to basic ICTs.**
1. Fixed-telephone subscriptions/100 inhabitants	"Fixed-telephone subscriptions" refers to the sum of active analogue fixed-telephone lines, voice over Internet Protocol (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, integrated services digital network (ISDN) voice-channel equivalents and fixed public payphones. It includes all access over fixed infrastructure supporting voice telephony using copper wire, voice services using IP delivered over fixed (wired)-broadband infrastructure, e.g., digital subscriber line (DSL) and fibre optic, and voice services provided over coaxial-cable television networks (cable modem). It also includes fixed WLL connections, defined as services provided by licensed fixed-line telephone operators that provide last-mile access to the subscriber via radio technology, where the call is then routed over a fixed-line telephone network (not a mobile-cellular network). In the case of VoIP, it refers to subscriptions that offer the ability to place and receive calls at any time and do not require a computer. VoIP is also known as voice over broadband (VoB), and includes subscriptions through fixed-wireless, DSL, cable, fibre-optic and other fixed-broadband platforms that provide fixed telephony using IP.
2. Mobile-cellular telephone subscriptions per 100 inhabitants	"Mobile-cellular telephone subscriptions" refers to the number of subscriptions to a public mobile telephone service providing access to the public switched telephone network (PSTN) using cellular technology. It includes both the number of postpaid subscriptions and the number of active prepaid accounts (i.e., that have been active during the last three months). It includes all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or universal serial bus (USB) modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services.
3. International Internet bandwidth (bit/s) per Internet user	"International Internet bandwidth" refers to the total used capacity of international Internet bandwidth, in megabits per second (Mbit/s). "Used international Internet bandwidth" refers to the average traffic load of international fibre-optic cables and radio links for carrying Internet traffic. The average is calculated over the 12-month period of the reference year and takes into consideration the traffic of all international Internet links. If the traffic is asymmetric, i.e., if there is more incoming (downlink) than outgoing (uplink) traffic, the average incoming (downlink) traffic load is used. The combined average traffic load of different international Internet links can be reported as the sum of the average traffic loads of the individual links. International Internet bandwidth (bit/s) per Internet user is calculated by converting to bits per second and dividing by the total number of Internet users.
4. Proportion of households with a computer	"Computer" refers to a desktop computer, laptop (portable) computer, tablet or similar handheld computer. It does not include equipment with some embedded computing abilities, such as smart TV sets, or devices with telephony as a main function, such as mobile phones or smartphones. Households with a computer means that the computer is available for use by all members of the household at any time. The computer may or may not be owned by the household but should be considered a household asset.
5. Proportion of households with Internet access (%)	"Household with Internet access" means that the Internet is available for use by all members of the household at any time. The Internet is a worldwide public computer network. It provides access to a number of communication services, including the World Wide Web, and carries email, news, financial transactions, entertainment and data files, irrespective of the device used. (Not assumed to be only a computer; it may also be a mobile telephone, tablet, PDA, games machine, digital TV, and so on). Access can be via a fixed or mobile network.

Table 3.4: Indicators used in measuring digital divide (IDI) – ICT Usage sub-index

Indicators	Definition
ICT Usage Sub-Index	**The indicators included in this group capture ICT intensity and usage.**
6. Proportion of individuals using the Internet (%)	"Individuals using the Internet" refers to people who used the Internet from any location and for any purpose, irrespective of the device and network used in the last three months. It can be via a computer (i.e., desktop computer, laptop computer, tablet or similar handheld computer), mobile phone, games machine, digital TV, etc. Access can be via a fixed or mobile network.
7. Fixed broadband subscriptions per 100 inhabitants	"Fixed broadband subscriptions" refers to fixed subscriptions for high-speed access to the public Internet (a transmission control protocol) TCP/IP connection, at downstream speeds equal to or greater than 256 kbit/s. This includes cable modem, DSL, fibre-to-the-home/building, other fixed-broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It includes fixed WiMAX and any other fixed wireless technologies, and both residential subscriptions and subscriptions for organisations.
8. Active mobile broadband subscription per 100 inhabitants	"Active mobile-broadband subscriptions" refers to the sum of standard mobile-broadband subscriptions and dedicated mobile-broadband subscriptions. The subscriptions can be used through handset-based or computer-based (USB/dongle) devices. It covers actual subscribers, not potential subscribers, even though the latter may have broadband-enabled handsets. "Standard mobile-broadband subscriptions" refers to active mobile-cellular subscriptions with advertised data speeds of 256 kbit/s or greater, which allow access to the greater Internet via hypertext transfer protocol (HTTP) and which have been used to set up an Internet data connection using IP in the past three months. Standard short message service (SMS) and multimedia messaging service (MMS) messaging do not count as active Internet data connection, even if messages are delivered via IP. "Dedicated mobile-broadband data subscriptions" refers to subscriptions to dedicated data services (over a mobile network) that allow access to the greater Internet and are purchased separately from voice services, either as a stand-alone service (e.g., using a data card such as a USB modem/dongle) or as an add-on data package to voice services which requires an additional subscription. All dedicated mobile-broadband subscriptions with recurring subscription fees are included regardless of actual use. Prepaid mobile-broadband plans require use of the monthly data allowance where there is no monthly subscription. This indicator could also include mobile worldwide interoperability for microwave access (WiMAX) subscriptions.

Table 3.5: Indicators used in measuring digital divide (IDI) – ICT Skills sub-index

Indicators	Definition
ICT Skills Sub-Index	**The indicators included in this group capture capabilities or skills which are important for ICTs.**
9. Mean years of schooling	Average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating grades
10. Secondary gross enrolment ratio (%)	Number of students enrolled in secondary level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the secondary level of education
11. Tertiary gross enrolment ratio	Total enrolment in tertiary education, regardless of age, expressed as a percentage of the population in the 5-year age group immediately following upper secondary education. The population of the official age for tertiary education is estimated to be the 5-year age group immediately following upper secondary education. If the official entrance age to upper secondary is 15 years and the duration is 3 years, then the age group is 18-22 years.

Weighting and Aggregation of IDI

The indicators and sub-indices used to compute the IDI were weighted using the ITU methodology and are presented in Table 3.6. Each sub-index was computed by summing the weighted values of the indicators that comprise the respective sub-index. The values of the sub-indices were calculated by first normalising the indicators included in each sub-index in order to obtain the same unit of measurement. The reference values applied in the normalisation process are presented in Table 3.13. The sub-index value was calculated by taking the simple average (using equal weighting) of the normalised indicator values.

For computation of the composite IDI index, the ICT access and ICT use sub-indices were each assigned a 40% weighting, and the skills sub-index a 20% weighting. The final index value was computed by summing the weighted sub-indices.

Table 3.6: Weighting and normalisation procedure for computing the IDI

IDI Index	Weights (indicators)	Weights (sub-indices)
ICT Access		**0.40**
Fixed telephone subscriptions per 100 inhabitants	0.20	
Mobile-cellular telephone subscriptions per 100 inhabitants	0.20	
International Internet bandwidth per Internet user	0.20	
Proportion of households with a computer (%)	0.20	
Proportion of households with Internet access (%)	0.20	
Fixed telephone subscriptions per 100 inhabitants	0.20	
ICT Use		**0.40**
Proportion of individuals using the Internet (%)	0.33	
Fixed broadband Internet subscriptions per 100 inhabitants	0.33	
Active mobile broadband subscriptions per 100 inhabitants	0.33	
ICT Skills		**0.20**
Mean years of schooling	0.33	
Secondary gross enrolment ratio	0.33	
Tertiary gross enrolment ratio	0.33	

Source: ITU

3.8.2. Digital Inclusion Index (DII)

Definition of Digital Inclusion

Two definitions of the term "digital inclusion" are common within the literature and are provided below:

1. "Digital inclusion is whether a person can access, afford and have the digital ability to connect and use online technologies effectively[40]".

2. "Digital inclusion refers to the effective participation of individuals and communities in all dimensions of the knowledge-based society and economy, through their access to ICT,

[40] Thomas, J, Barraket, J, Wilson, C. K. Rennie, E, Ewing, S, MacDonald, T. "Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2019". RMIT University and Swinburne University of Technology, Melbourne, for Telstra. 2019.

made possible by the removal of access and accessibility barriers, and effectively enabled by the willingness and ability to reap social benefits from such access[41]".

Conceptually, if the "digital divide" is likened to the width of the chasm, then "digital inclusion" refers to its depth, and draws attention to the fact that the mere provision of infrastructure and access is insufficient to ensure that the full benefit of ICTs to society can be realised. Certain socio-economic variables and characteristics of groups within a society tend to increase the likelihood of their exclusion from the efforts of transformation, notwithstanding the overall advances in access to ICT services.

When measuring digital inclusion, several broad thematic areas are observed in index construction including the following:

1. **Access and availability of ICTs**: the quality and breadth of infrastructure and its availability

2. **Affordability**: the extent to which services are priced to promote access by all segments of the society

3. **Relevance**: the value of being connected to users in terms of the available content and services. This category may include the measure of the availability of content in the local language or of local relevance to the user, and the availability of services private and public

4. **Readiness and digital ability:** the predisposition capacity among users to take advantage of ICTs. The category looks at measures such as the level of literacy and educational attainment, privacy and protection regulations, and the level of trust in different sources of information.

Digital inclusion is more closely aligned with the concept of universal service – a situation where every individual or household can have service, using it privately, either at home or increasingly carried with the individual through wireless devices – and with constraints or barriers to the adoption and use of ICTs beyond simple access. Predisposition capacity is an intervening factor and depends on the demand by the individual for information that can be accessed from the services, or the information sensitivity of the individual. The embodiment of ICT skills is determined by individual behaviour which can be influenced.

[41] eEurope Advisory Group, 2005

The 2007 report, *FreshMinds* and UK *Online Centres*[42] defined four behavioural groups that were characterised by individual behaviour relative to the Internet, which serve as a typology for the concept of the "digitally included" versus the "digitally excluded". This typology is reproduced in Table 3.7.

Table 3.7: Digital behavioural typologies

Behavioural Group	Definition	DIS 2021 Estimates (%)
The Digitally Included	Persons who have easy access to the Internet at home, work or place of education, and make use of it	78.0
The Digitally Determined	Persons who use the Internet but do not have access at a convenient location (home, work or place of education)	8.0
The Connected Non-Users	Persons who live in a household which has Internet access but do not use it	7.0
The Disconnected Non-Users	Persons who do not have access at home and do not use the Internet	15.0

If the overall goal is to close the digital divide by making technology ubiquitous, and ICT policies do not address the needs of the disconnected non-users specifically, or stimulate their use of the Internet, the digital divide is likely to deepen even as physical access broadens.

DIS 2021 represents the first attempt to examine the phenomenon of digital inclusion which has evolved rapidly since the conduct of the last survey in 2013. While there is no formally defined methodology from the ITU or any other international organisation to reduce digital inclusion into a composite indicator measure, as was done with the IDI, a novel and similar approach has been adopted. The DII was specifically developed by the Authority for measurement of digital inclusion in Trinidad and Tobago at the levels of the community, municipality and nationally, and not for the purposes of global comparison.

Method of Computing the Digital Inclusion Index

Building on the concept of the sub-indices used to compute the IDI, the DII for Trinidad and Tobago was derived from the following sub-indices:

1. **Access sub-index:** this sub-index captures ICT readiness and includes five infrastructure and access indicators (also used in the IDI).

[42] Fresh Minds 2007, Digital inclusion: a discussion of the evidence base, prepared for UK Go Online Centres.

2. **Participation/usage sub-index:** this sub-index captures ICT participation and usage and includes four participation and usage indicators.
3. **Trust and confidence sub-index:** this sub-index capture ICT trust and confidence and includes four trust and confidence indicators.
4. **Readiness/digital literacy sub-index:** this sub-index captures capabilities or skills which are important for ICTs and includes five indicators.

Tables 3.8 to 3.11 provide details on the operational definitions that apply to the 18 indicators used to compute the DII.

Table 3.8: Indicators for measuring
DII – ICT Access sub-index

Indicators	Definition
ICT Access Sub-Index	**Indicators included in this group provide an indication of the available ICT infrastructure and individuals' access to basic ICTs.**
1. Fixed-telephone subscriptions/100 inhabitants	"Fixed-telephone subscriptions" refers to the sum of active analogue fixed-telephone lines, voice over Internet Protocol (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, integrated services digital network (ISDN) voice-channel equivalents and fixed public payphones. It includes all access over fixed infrastructure supporting voice telephony using copper wire, voice services using IP delivered over fixed (wired)-broadband infrastructure, e.g., digital subscriber line (DSL) and fibre optic, and voice services provided over coaxial-cable television networks (cable modem). It also includes fixed WLL connections, defined as services provided by licensed fixed-line telephone operators that provide last-mile access to the subscriber via radio technology, where the call is then routed over a fixed-line telephone network (not a mobile-cellular network). In the case of VoIP, it refers to subscriptions that offer the ability to place and receive calls at any time and do not require a computer. VoIP is also known as voice over broadband (VoB), and includes subscriptions through fixed-wireless, DSL, cable, fibre-optic and other fixed-broadband platforms that provide fixed telephony using IP.
2. Mobile-cellular telephone subscriptions per 100 inhabitants	"Mobile-cellular telephone subscriptions" refers to the number of subscriptions to a public mobile telephone service providing access to the public switched telephone network (PSTN) using cellular technology. It includes both the number of postpaid subscriptions and the number of active prepaid accounts (i.e., that have been active during the last three months). It includes all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or universal serial bus (USB) modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services.
3. International Internet bandwidth (bit/s) per Internet user	"International Internet bandwidth" refers to the total used capacity of international Internet bandwidth, in megabits per second (Mbit/s). "Used international Internet bandwidth" refers to the average traffic load of international fibre-optic cables and radio links for carrying Internet traffic. The average is calculated over the 12-month period of the reference year and takes into consideration the traffic of all international Internet links. If the traffic is asymmetric, i.e., if there is more incoming (downlink) than outgoing (uplink) traffic, the average incoming (downlink) traffic load is used. The combined average traffic load of different international Internet links can be

Indicators	Definition
ICT Access Sub-Index	**Indicators included in this group provide an indication of the available ICT infrastructure and individuals' access to basic ICTs.**
	reported as the sum of the average traffic loads of the individual links. International Internet bandwidth (bit/s) per Internet user is calculated by converting to bits per second and dividing by the total number of Internet users.
4. Proportion of households with a computer	"Computer" refers to a desktop computer, laptop (portable) computer, tablet or similar handheld computer. It does not include equipment with some embedded computing abilities, such as smart TV sets, or devices with telephony as a main function, such as mobile phones or smartphones. Households with a computer means that the computer is available for use by all members of the household at any time. The computer may or may not be owned by the household but should be considered a household asset.
5. Proportion of households with Internet access (%)	"Household with Internet access" means that the Internet is available for use by all members of the household at any time. The Internet is a worldwide public computer network. It provides access to a number of communication services, including the World Wide Web, and carries email, news, financial transactions, entertainment and data files, irrespective of the device used. (Not assumed to be only a computer; it may also be a mobile telephone, tablet, PDA, games machine, digital TV, and so on). Access can be via a fixed or mobile network.

Table 3.9: Indicators for measuring
DII – ICT Participation/Usage sub-index

Indicators	Definition
ICT Participation/ Usage Sub-Index	**The indicators included in this group capture ICT participation and usage.**
6. Proportion of individuals using the Internet (%)	"Individuals using the Internet" refers to persons 5 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used in the last three months. It can be via a computer (i.e., desktop computer, laptop computer, tablet or similar handheld computer), mobile phone, games machine, digital TV, etc. Access can be via a fixed or mobile network.
7. Proportion of individuals using online e-government services (%)	"Individuals using e-government services" refers to persons 15 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used in the last three months to access any of the following services: grant applications (NIB, MSDFS, UAP); TT Connect; TTBizLink; eTax; GATE; utility bill payments (T&TEC, WASA); applications for BIR, birth certificates, national IDs and marriage certificates; GovPay (e.g., courtPay) or any other e-government services.
8. Proportion of individuals using online services (%)	"Individuals using online services" refers to persons 15 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used in the last three months to access a service that is available online from either a government or private institution. The service can be provided by either a local or foreign agent. e-commerce transactions are not included.
9. Proportion of individuals using virtual social networks (%)	Refers to individuals 5 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months and reported being very uncomfortable or uncomfortable with respect to the reliability of data obtained via social media networks such as Facebook and WhatsApp

Table 3.10: Indicators for measuring
DII – Trust and Confidence sub-index

Indicators	Definition
Trust and Confidence Sub-Index	**The indicators included in this group capture ICT trust and confidence.**
10. Proportion of persons who will make payments online with a credit card (%)	"Individuals who will make payments online with a credit card" refers to persons 18 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months; who own a credit card and make payments online; or who do not own a credit card but will make payments online if/when they get one.
11. Proportion of persons who trust information obtained from social networking sites (%)	"Individuals who trust information obtained from social networking sites" refers to persons 5 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months, who fully trust information received via social media.
12. Proportion of persons who believe that personal information provided during online transaction is secure (%)	"Individuals who believe that personal information provided during online transactions is secure" refers to persons 5 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months, and who feel comfortable and very comfortable that information provided when conducting online transactions is secure.
13. Proportion of persons who feel comfortable using e-government online services (%)	"Individuals who feel comfortable using e-government online services" refers to persons 5 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months, who used e-government services and feel comfortable or very comfortable with the e-government services used.

Table 3.11: Indicators for measuring
DII – Readiness/Digital Literacy sub-index

Indicators	Definition
Sub-index – Readiness/Digital Literacy	**The indicators included in this group capture capabilities or skills which are important for ICTs.**
14. Mean years of schooling	Average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating individual grades
15. Proportion of population with secondary level education (%)	Individuals reporting secondary level education as their highest level of formal education, as a proportion of all persons who attended school
16. Proportion of household income spent on ICT (%)	Total ICT expenditure/total household expenditure x 100
17. Proportion of individuals with basic ICT skills (%)	Individuals 5 years and older who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months and who are capable of using copy and paste tools to duplicate or move data, information and content in digital environments (e.g., within a document, between devices, on the cloud) and send messages (e.g., email, messaging service, SMS) with attached files (e.g., documents, pictures and videos)
18. Proportion of individuals with intermediate skills (%)	Individuals using basic arithmetic formulas in a spreadsheet; connecting and installing new devices (e.g., a modem, camera, printer; finding, downloading, installing and configuring software; creating electronic presentations with presentation software (including text, images, sound, video or charts); and transferring files or applications between a computer and other devices

Weighting and Aggregation

Table 3.12 presents the weights that were applied to the indicators as well as the sub-indices to compute the DII. Unlike the IDI, each of the four sub-indices were assigned an equal weight of 0.25.

Table 3.12: Weighting and normalisation procedure for computing the DII

DII Index	Weights (indicators)	Weights (sub-indices)
ICT Access		**0.25**
Fixed telephone subscriptions per 100 inhabitants	0.20	
Mobile cellular telephone subscriptions per 100 inhabitants	0.20	
International Internet bandwidth per Internet user	0.20	
Percentage of households with a computer	0.20	
Percentage of households with Internet access	0.20	
Participation/Usage		**0.25**
Percentage of individuals using the Internet (%)	0.25	
Percentage of individuals using online e-government services (%)	0.25	
Percentage of individuals using online services (%)	0.25	
Proportion of individuals using virtual social networks (%)	0.25	
Trust and Confidence		**0.25**
Proportion of persons who will make payments online with a credit card (%)	0.25	
Proportion of persons who trust information obtained from social networking sites (%)	0.25	
Proportion of persons who believe that personal information provided during online transaction is secure (%)	0.25	
Proportion of persons who feel comfortable using e-government online services (%)	0.25	
Readiness/Digital Literacy		**0.25**
Mean years of schooling	0.20	
Proportion of population with secondary level education (%)	0.20	
Proportion of household income spent on ICT (%)	0.20	
Proportion of individuals with basic ICT skills (%)	0.20	
Proportion of individuals with intermediate/advanced ICT skills (%)	0.20	

Normalisation of Data

Since the values of the indicators used to compute the IDI and the DII were not expressed in the same unit of measurement, normalising the data is necessary before any aggregation can be performed[43].

For both the IDI and the DII, the distance to a reference measure was used as the normalisation method. The reference measure represents the ideal value that could be reached for each variable.

Tables 3.13 and 3.14 provide the reference values that will be used for the IDI and DII, respectively.

After normalising the data, the individual series were scaled to identical ranges, from 1 to 10 to facilitate comparison of the values of the indicators and the sub-indices.

Table 3.13: ICT Development Index: indicators and reference values

IDI Index	Reference Value
ICT Access	
Fixed telephone subscriptions per 100 inhabitants	60
Mobile cellular telephone subscriptions per 100 inhabitants	120
International Internet bandwidth per Internet user	2,158,212
Proportion of households with a computer (%)	100
Proportion of households with Internet access (%)	100
ICT Use	
Proportion of individuals using the Internet (%)	100
Fixed broadband Internet subscriptions per 100 inhabitants	60
Active mobile broadband subscriptions per 100 inhabitants	100
ICT Skills	
Mean years of schooling	15
Secondary gross enrolment ratio	100
Tertiary gross enrolment ratio	100

Source: ITU[44]

[43] Some values are expressed as a percentage of the population/total households, whereby the maximum value is 100, while other indicators can have values exceeding 100, such as mobile cellular and active mobile broadband penetration or international Internet bandwidth (expressed as bit/s per user).

[44] https://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2017/methodology.aspx

Table 3:14: Digital Inclusion Index: indicators and reference values

DII Index	Reference Value
ICT Access	
Fixed telephone subscriptions per 100 inhabitants	60
Mobile-cellular telephone subscriptions per 100 inhabitants	120
International Internet bandwidth per Internet user	2,158,212
Proportion of households with a computer (%)	100
Proportion of households with Internet access (%)	100
Participation/Usage	
Proportion of individuals using the Internet (%)	100
Proportion of individuals using online e-government services (%)	100
Proportion of individuals using online services (%)	100
Proportion of persons who feel comfortable using e-government online services (%)	100
Trust and Confidence	
Proportion of persons who will make payments online with a credit card (%)	100
Proportion of persons who trust information obtained from social networking sites (%)	100
Proportion of persons who believe that personal information provided during online transaction is secure (%)	100
Proportion of individuals using virtual social networks (%)	100
Readiness/Digital literacy	
Mean years of schooling	15
Proportion of population with secondary level education (%)	100
Proportion of household income spent on ICT (%)	100
Proportion of individuals with basic ICT skills (%)	100
Proportion of individuals with intermediate/advanced ICT skills (%)	100

Source: Reference values for indicators in IDI obtained from ITU. Reference values for other indicators not in IDI developed by TATT and consultants[45]

[45] https://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2017/methodology.aspx

NATIONAL DIGITAL INCLUSION SURVEY 2021
FINDINGS

4. Findings of the Study

The demographic composition of respondents is presented in Figure 4.1.

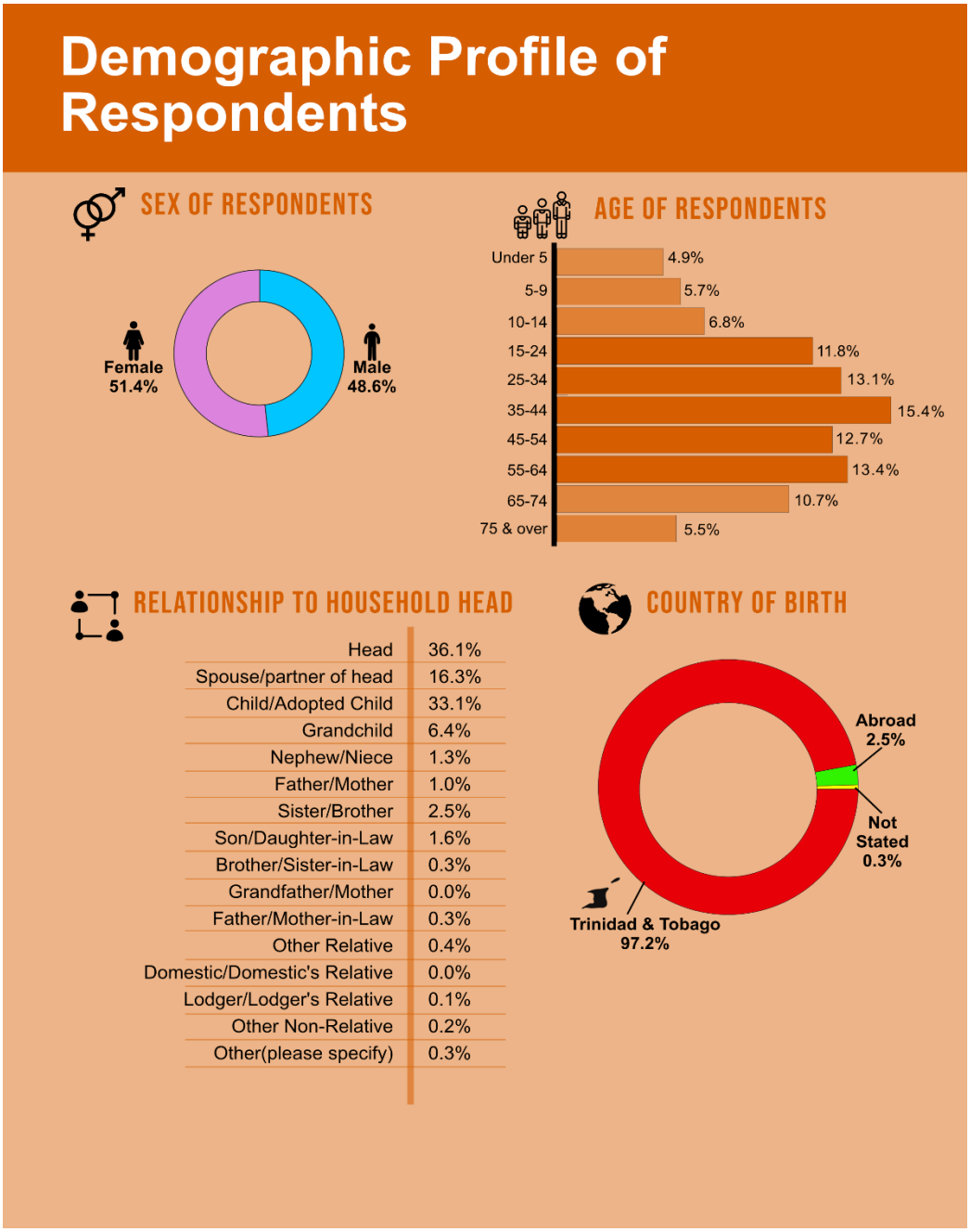


Figure 4.1: Demographic profile of respondents

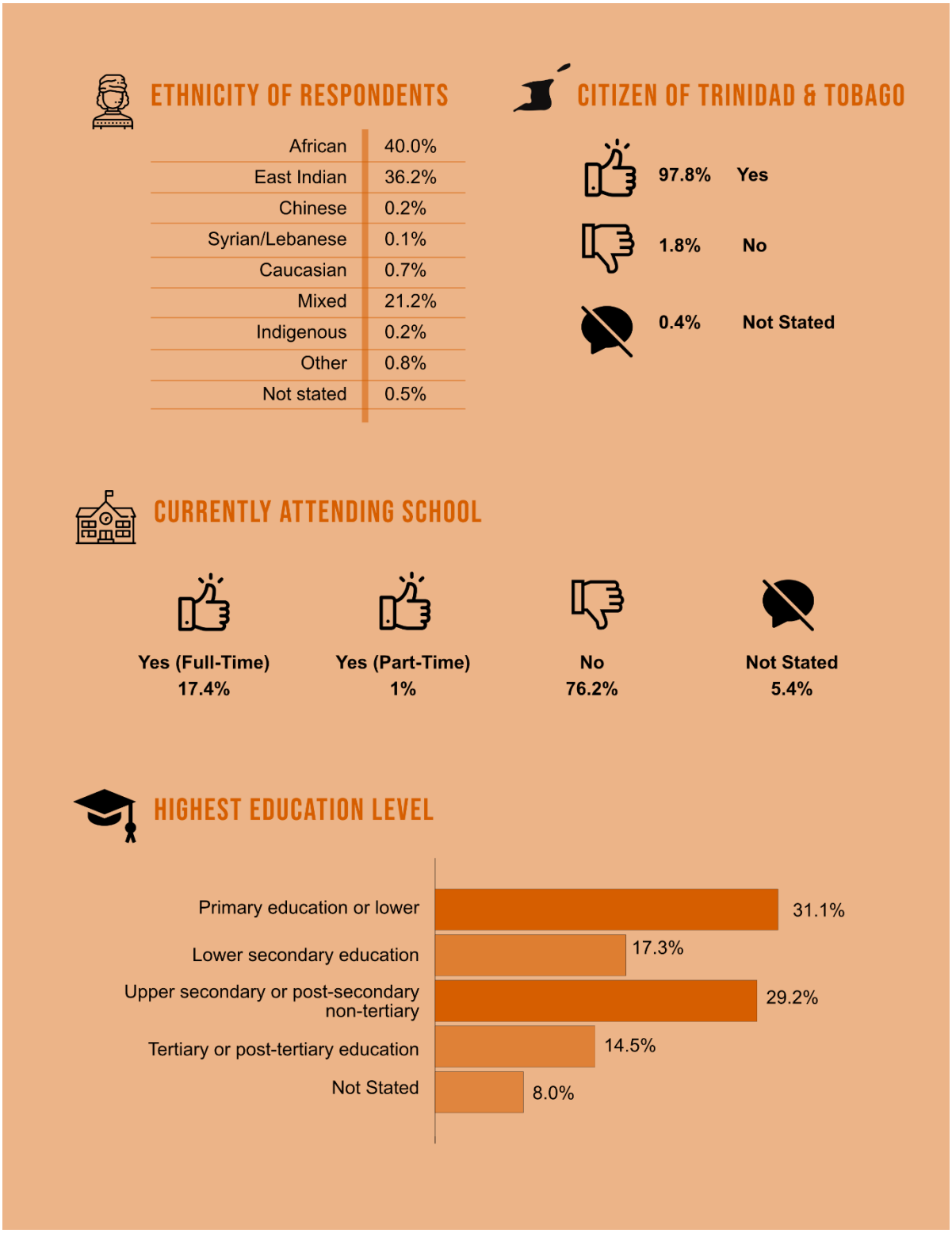


Figure 4.1: Demographic profile of respondents (cont'd)

4.1 Measuring the Digital Divide and Digital Inclusion

4.1.1 ICT Development Index

At the national level, the IDI for Trinidad and Tobago was 5.55 in 2013. Further, the IDI for Trinidad and Tobago, compiled by ITU in 2017, was estimated to be 6.04. The DIS produced an IDI result of 7.86 in 2021. As such, the country has made positive steps with respect to bridging the digital divide.

Figure 4.2 illustrates the 2017 IDI scores for Trinidad and Tobago and other selected countries.

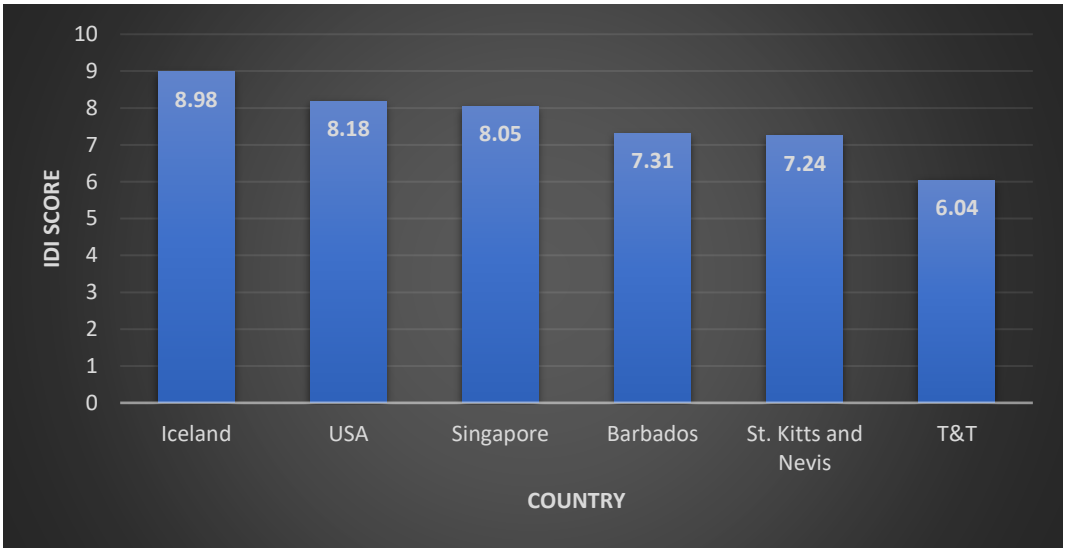


Figure 4.2: IDI for selected countries (2017)

To understand what factors contributed to the improvement in performance in the country's IDI, a closer examination of the IDI's three sub-indices is required. Figure 4.3 presents this data.

Between 2013 and 2021, the indicators for ICT access, use and skills increased by 11%, 31% and 78%, respectively. The data indicates that the 2021 IDI was more influenced by better performances in the ICT skills and usage sub-indices than ICT access.

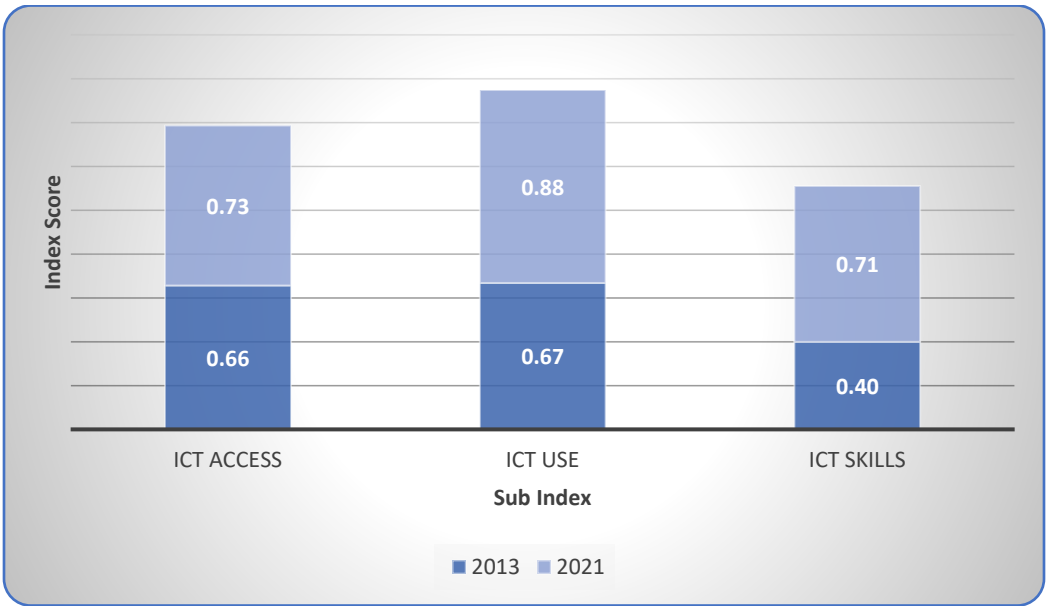


Figure 4.3: IDI sub-indices for 2013 and 2021

The IDI scores for all the municipalities in Trinidad and for Tobago are presented in Figure 4.4. The national estimate is also presented and serves as the goalpost in defining the municipalities that are categorised as underserved[46]. Eight of the fourteen municipalities are underserved (Port of Spain to Mayaro/Rio Claro) with Princes Town, Sangre Grande and Mayaro/Rio Claro having the lowest IDI scores. The latter two are predominantly rural municipalities. At the other end of the spectrum, Chaguanas, San Juan/Laventille and San Fernando, recorded the three highest IDI scores nationally.

[46] A municipality, parish or community is defined as underserved if its IDI score is below the 2021 national IDI score of 7.86.

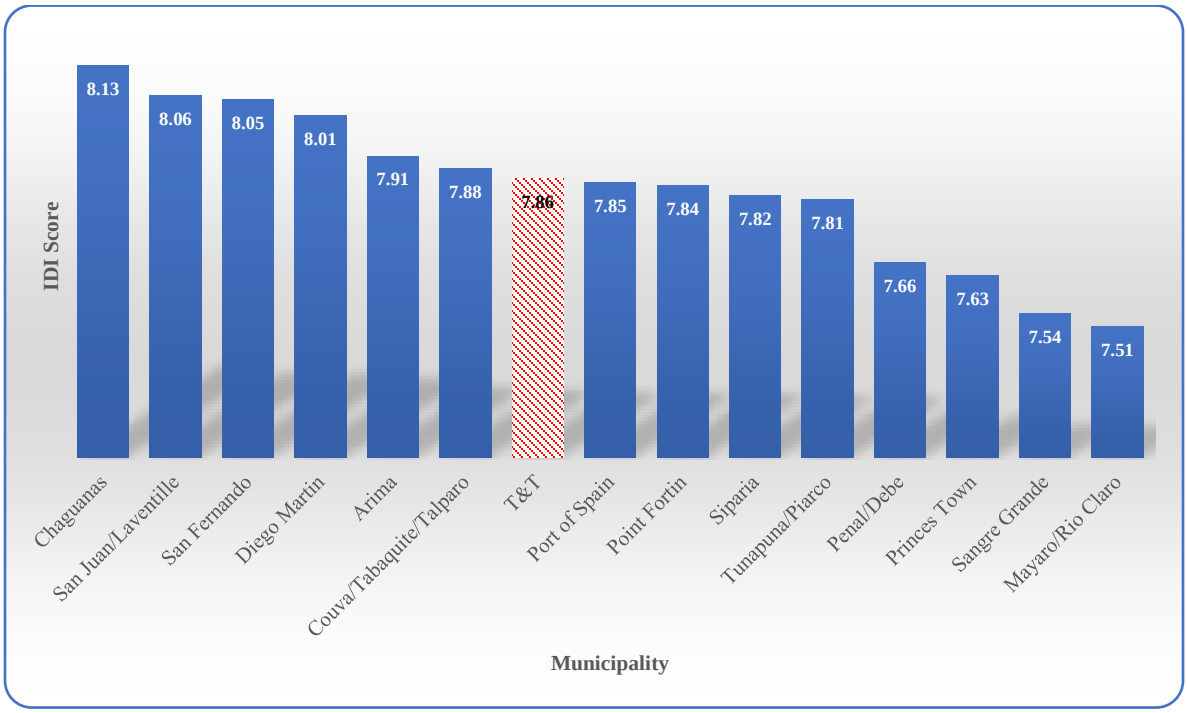


Figure 4.4: IDI by municipality and overall Trinidad and Tobago (2021)

The snapshot of the most digitally disadvantaged municipalities has not changed much between 2013 and 2021. While there has been some repositioning of municipalities, for example, Chaguanas displacing Port of Spain with the highest IDI ranking, municipalities like Sangre Grande and Mayaro/Rio Claro continue to be among the lowest ranked in 2021.

Figure 4.5 presents the IDI scores by parish and for Tobago overall. Four of the seven parishes in Tobago have IDI scores that are higher than the overall Tobago score of 7.94, which is higher than the Trinidad and Tobago score of 7.86. St Patrick, St David and St John have the lowest IDI scores and are underserved parishes based on the national IDI estimate.

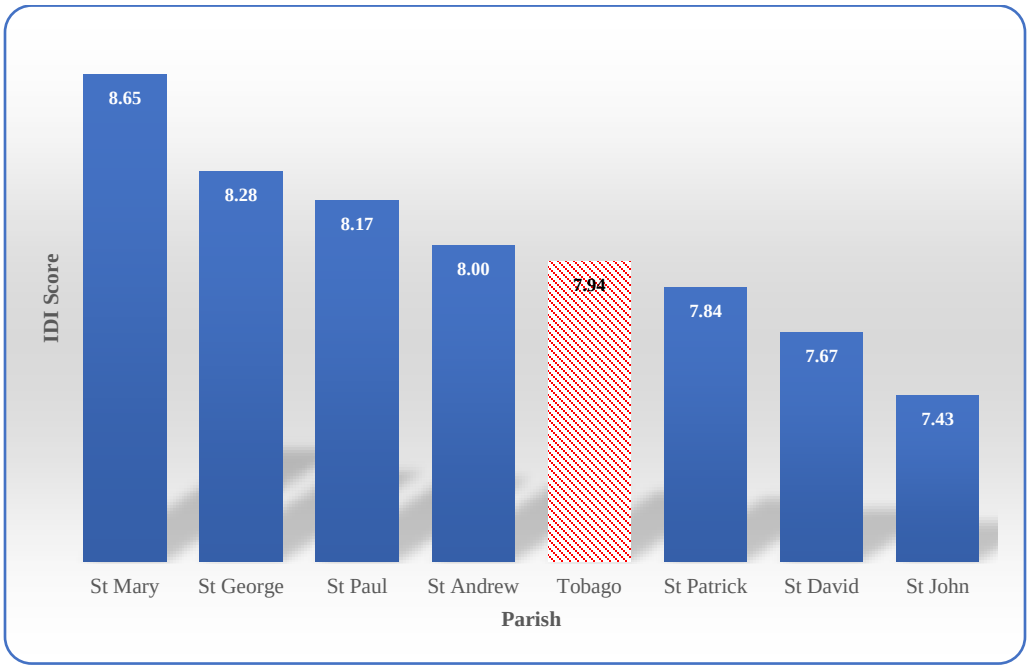


Figure 4.5: IDI by parish and overall Tobago (2021)

Table 4.1: Communities with the 10 lowest IDI scores in Trinidad and Tobago

Community	Municipality
Gran Curucaye	San Juan-Laventille
Laventille	San Juan-Laventille
Arena	Couva-Tabaquite-Talparo
Preysal	Couva-Tabaquite-Talparo
San Raphael/Brazil	Couva-Tabaquite-Talparo
Guaico	Sangre Grande
Tabaquite	Couva-Tabaquite-Talparo
Tortuga	Couva-Tabaquite-Talparo
Gonzales	Port of Spain
Port of Spain port area	Port of Spain
Port of Spain proper	Port of Spain
Sealots	Port of Spain

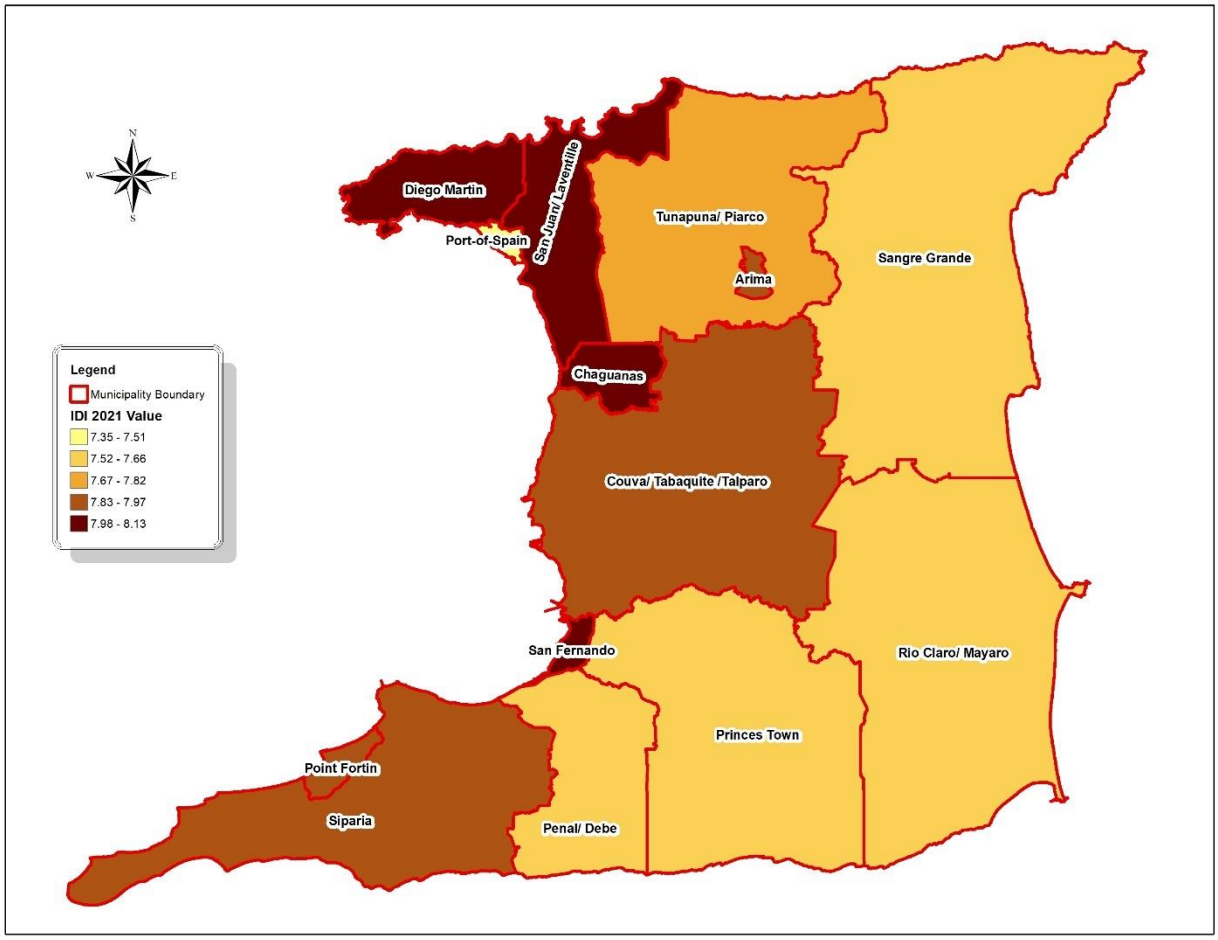


Figure 4.6: IDI by municipality – Trinidad (2021)

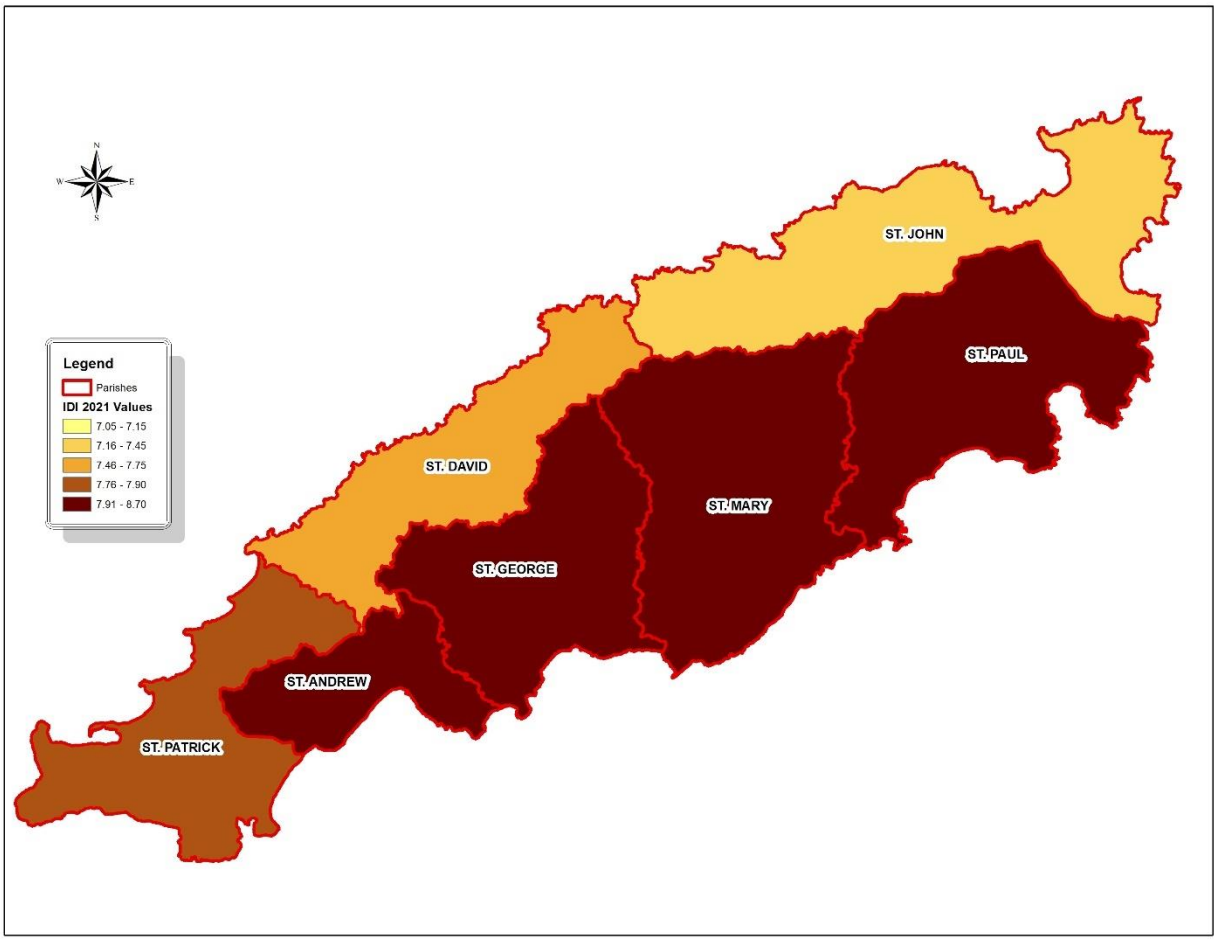


Figure 4.7: IDI by parish – Tobago (2021)

4.1.2 Digital Inclusion Index

The DII for Trinidad and Tobago was computed to be 4.24. This index reflects a more expansive definition of digital inclusion, which goes beyond the 11 individual indicators identified in the IDI to include additional indicators, such as, use of online e-government services and level of trust with respect to information obtained via social media.

Figure 4.8 shows a ranking of municipalities based on the DII scores. Chaguanas, San Fernando and Siparia respectively are the three top ranked municipalities and Penal/Debe, Princes Town and Mayaro/Rio Claro the three lowest ranked municipalities.

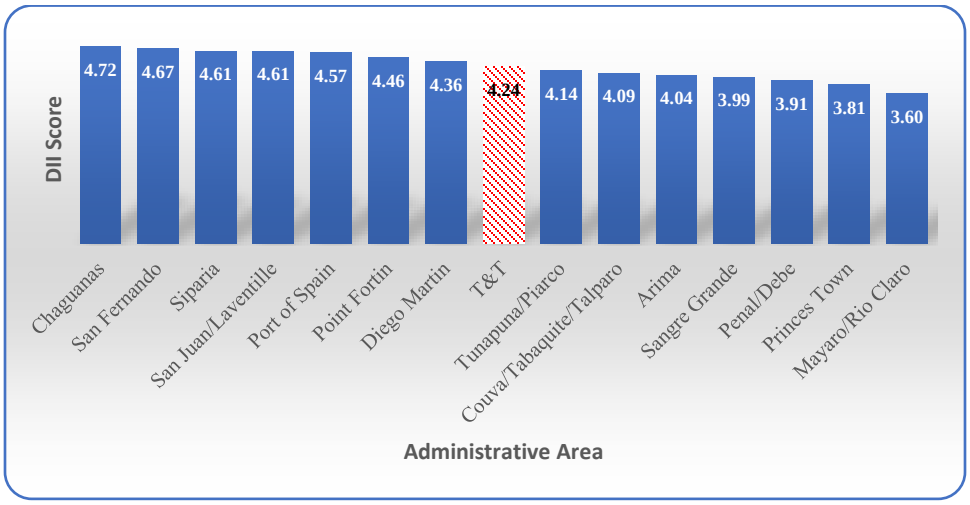


Figure 4.8: DII by municipality and overall Trinidad and Tobago (2021)

With respect to the DII by parishes in Tobago, St Patrick and St Andrew replace St Mary and St George (the two top ranked parishes based on the IDI). All of the other five parishes in Tobago have a lower DII score than the island estimate of 4.10 (Figure 4.9).

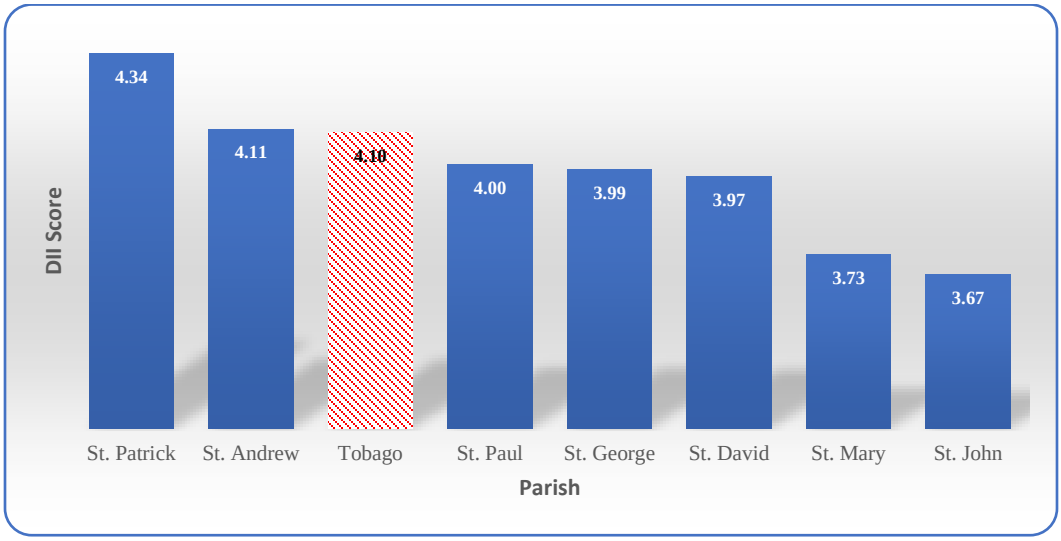


Figure 4.9: DII by parish and overall Tobago (2021)

Table 4.2: Communities with the 10 lowest DII scores in Trinidad and Tobago

Community	Administrative Area
Arena	Couva-Tabaquite-Talparo
Preysal	Couva-Tabaquite-Talparo
San Raphael/Brazil	Couva-Tabaquite-Talparo
Grand Lagoon	Mayaro-Rio Claro
Balmain	Couva-Tabaquite-Talparo
Chin Chin	Couva-Tabaquite-Talparo
Friendship	Couva-Tabaquite-Talparo
Caura	Tunapuna-Piarco
Cleaver Road	Tunapuna-Piarco
Macoya	Tunapuna-Piarco
St. Augustine	Tunapuna-Piarco

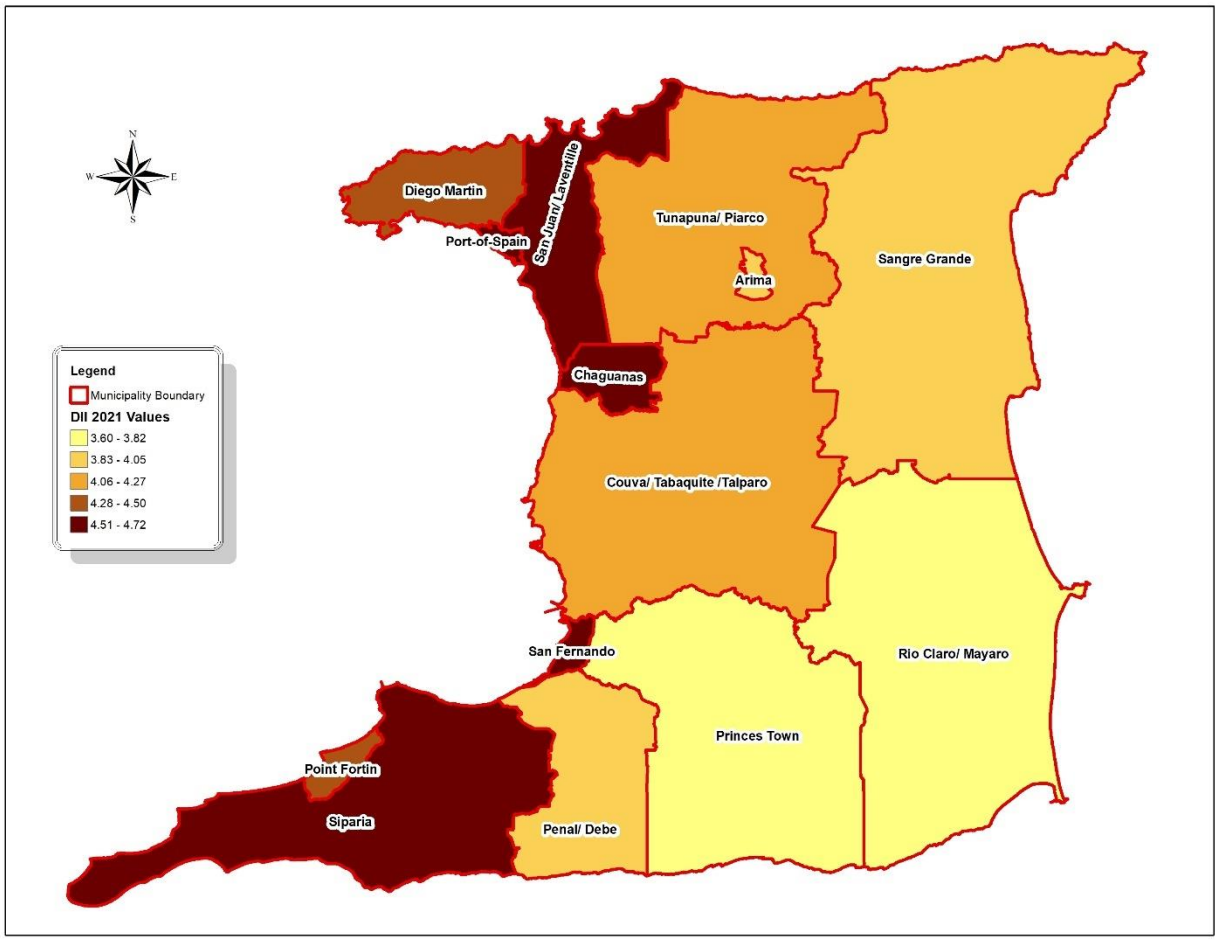


Figure 4.10: DII by municipality – Trinidad (2021)

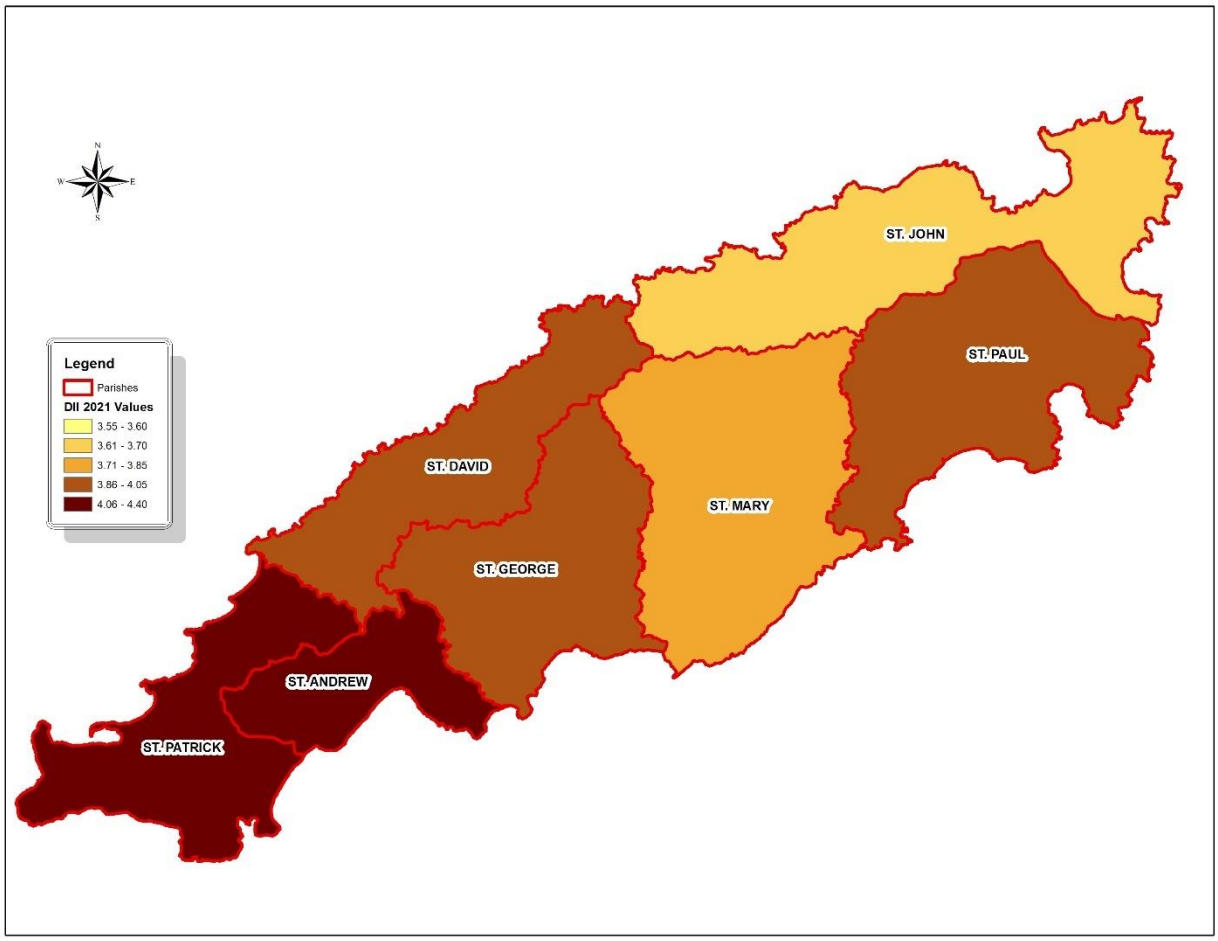


Figure 4.11: DII by parish – Tobago (2021)

4.2 ICT Characteristics of Households

4.2.1 Subscription Services

Figure 4.12 presents data on the proportion of households with working subscriptions to fixed Internet, pay TV and fixed voice services by urban/rural location.

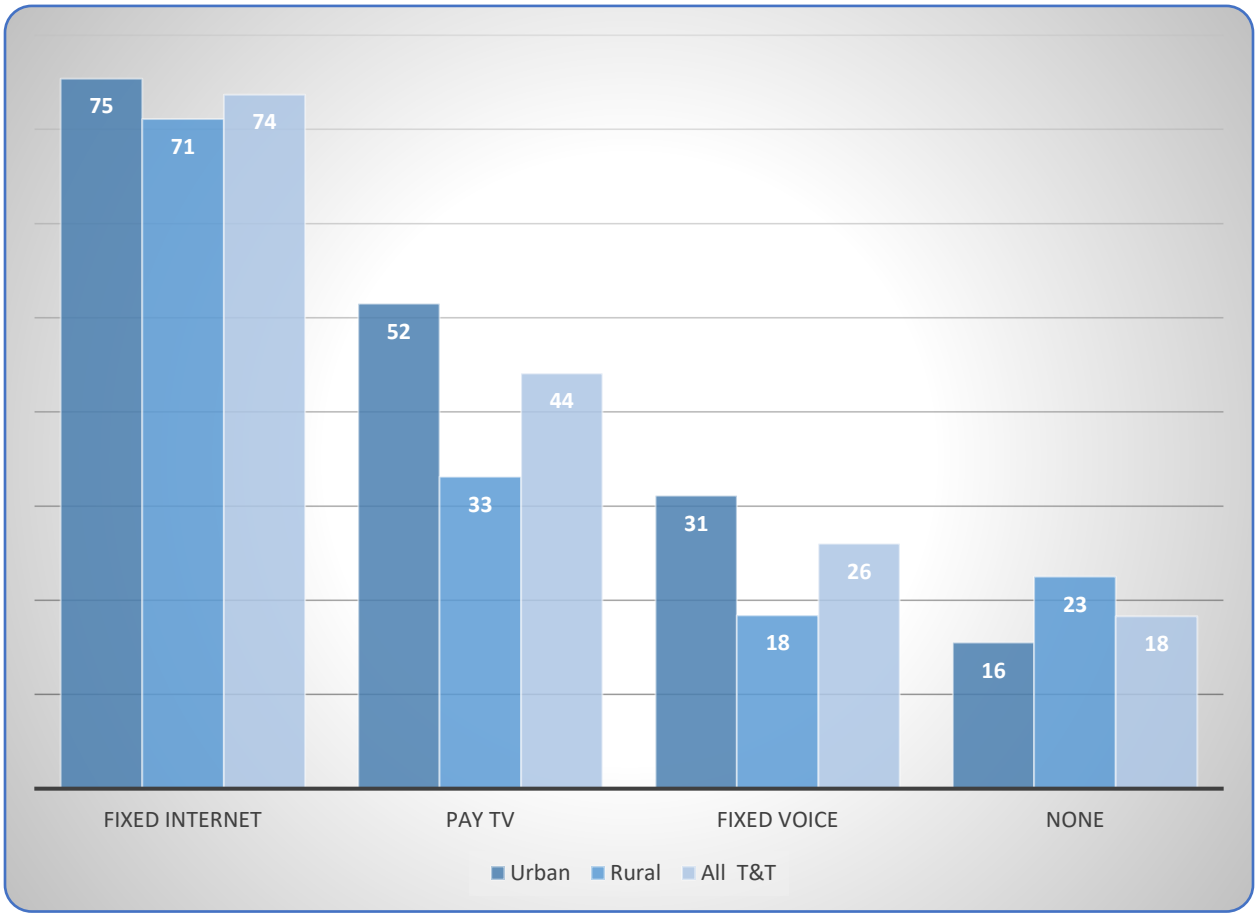


Figure 4.12: Working subscription services by urban/rural locality

Internet Services

Fixed Internet

Nationally, 74% of households reported having a working fixed broadband Internet service, i.e, three in every four households in Trinidad and Tobago have fixed Internet subscription. The estimate is 75% for urban locations and, slightly lower, 71% for rural locations.

The proportion of first installation Internet subscriptions was highest between 2015 and 2019, with a reported figure of 37%. Prior to this period, 39% of households reported having installed their fixed broadband service.

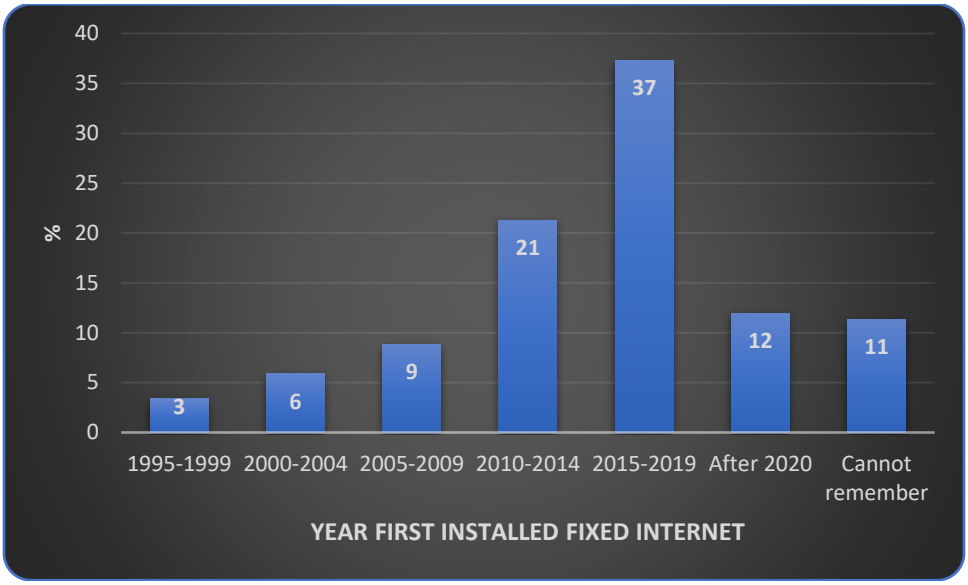


Figure 4.13: Year first subscribed to fixed Internet service

Type of Internet Subscription

With respect to type of Internet service subscribed to by households, approximately half (51%) of all subscriptions is fixed broadband. This service is more popular in urban districts (52%) compared to rural locations (48%).

The second most used Internet connection is wireless broadband service, which accounts for 46% of household Internet subscriptions nationally. This service includes data subscription for mobile phone services as well as subscriptions to dedicated hotspot devices (containing SIM cards). The differences in reported subscription to these services did not vary as notably by urban/rural locations compared to fixed broadband.

Households in rural communities were more likely to subscribe to terrestrial fixed wireless Internet services than urban households. Terrestrial fixed wireless technology facilitates wireless broadband access to a specific geographic location, using a spectrum that is shared among Internet service providers. Terrestrial fixed wireless subscription was reported at approximately 4% overall, and 2% and 7% for urban and rural households, respectively.

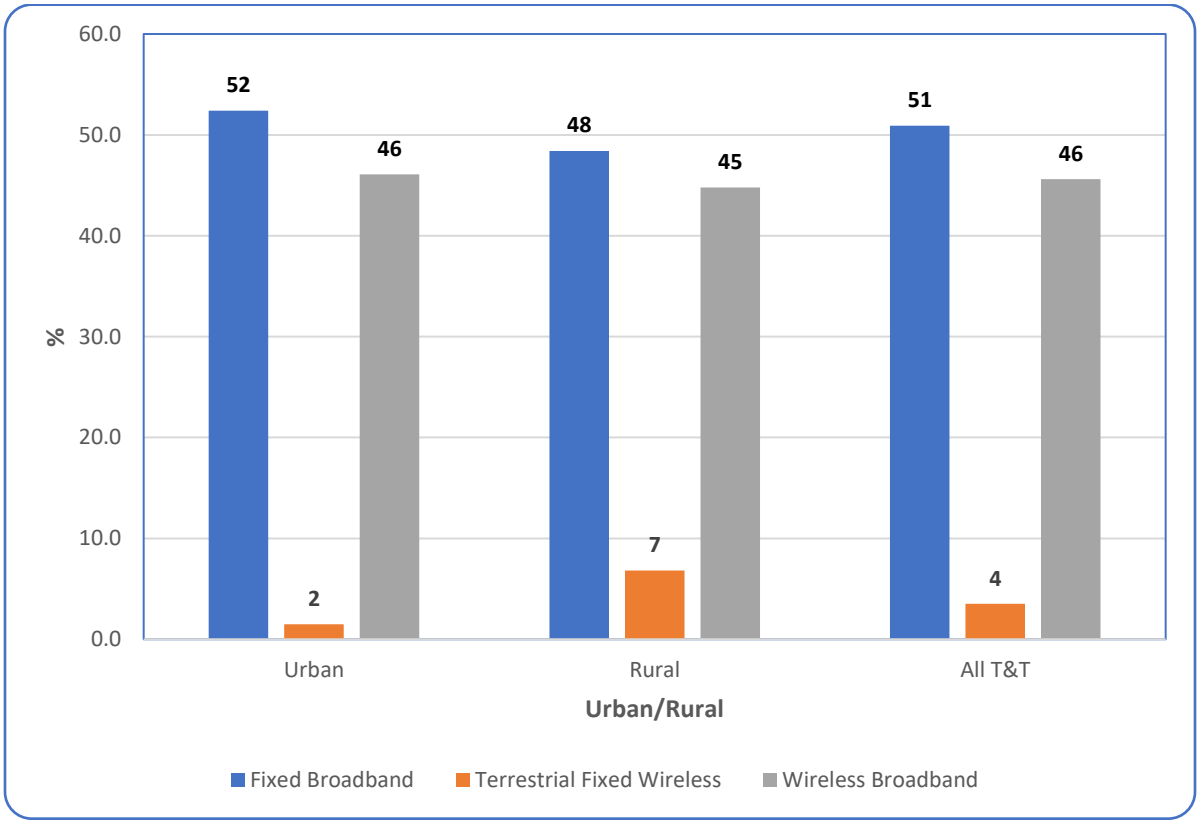


Figure 4.14: Type of Internet service available to households by urban/rural locality

Reasons for Households Not Having Internet

Reasons for households not having access to the Internet is one of the core indicators identified by ITU for production. Nationally, the three most common reasons for households not having Internet access were:

1) not having any need for the Internet (33%)
2) the cost of Internet service (28%)
3) households having access to the Internet elsewhere (24%)

Also, 11% of households reported that the cost of equipment was too high.

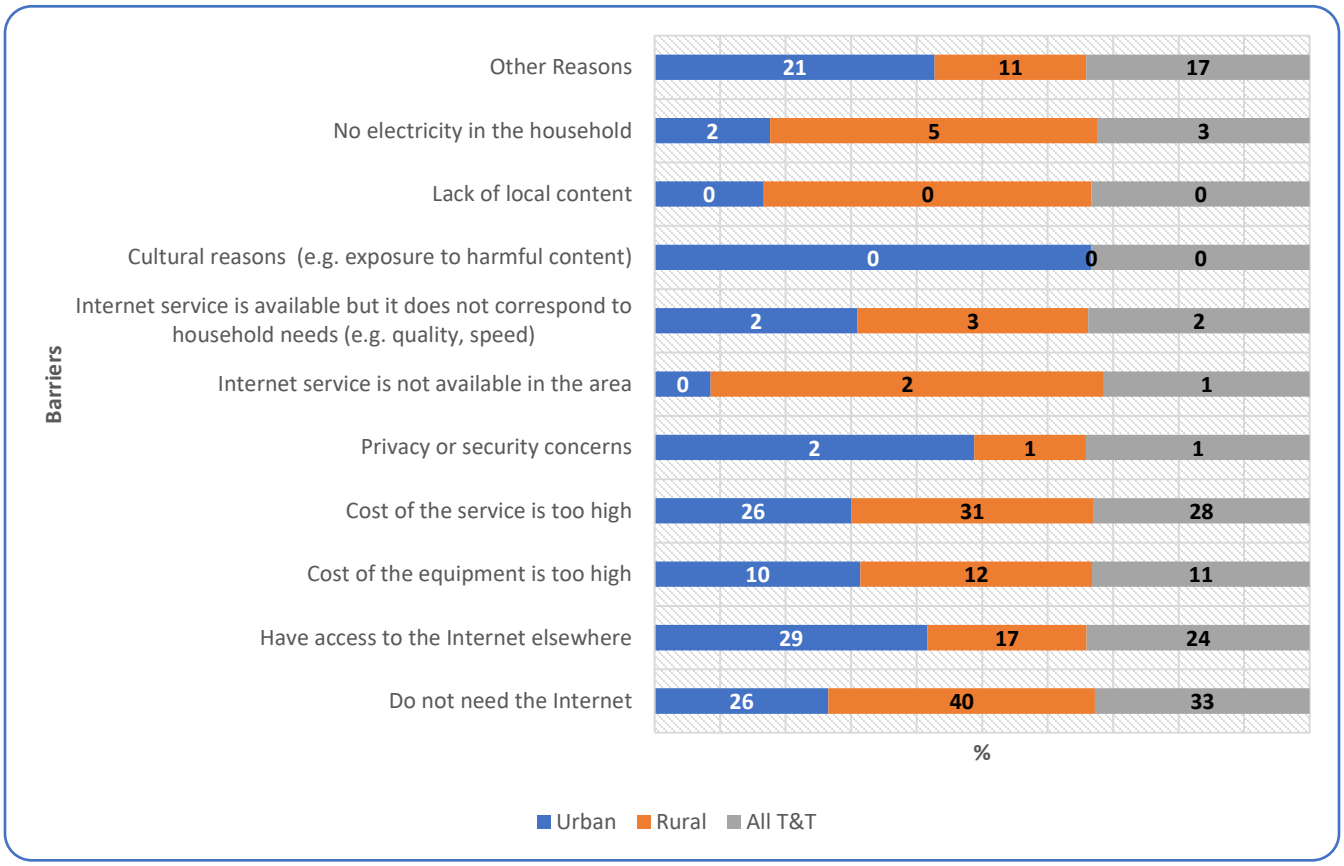


Figure 4.15: Reasons for households not having Internet, by urban/rural locality

Pay TV Services

Pay TV, also known as subscription TV or multichannel television, is accessed via a paid subscription. Figure 4.16 shows that over half (55%) of the households that reported having an active subscription, had first signed up for the service between 2010 and 2019.

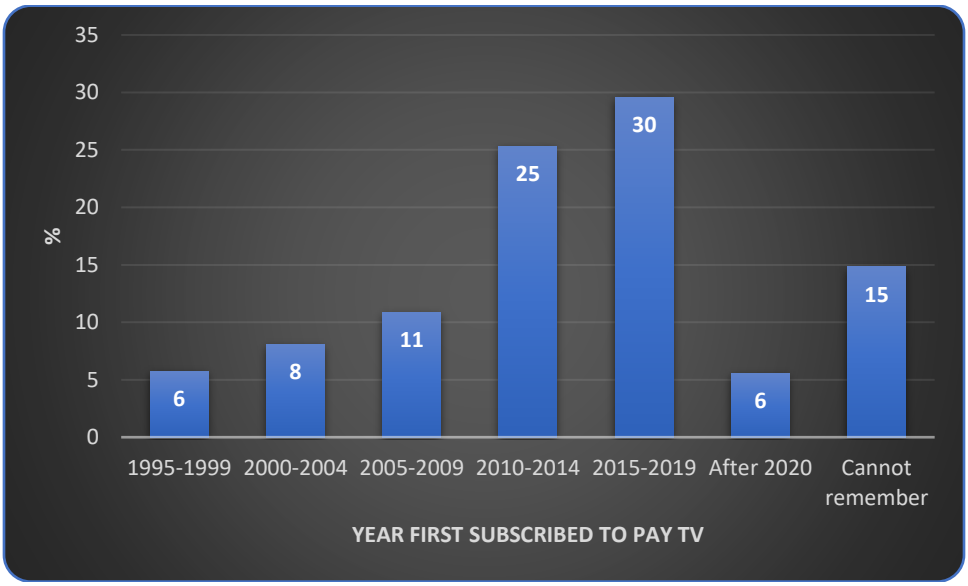


Figure 4.16: Year first subscribed to Pay TV

Nationally, 44% of households reported having an active pay TV subscription. Subscription to this service was higher in urban areas, where 52% of households accessed this service, compared to 33% of rural households (Figure 4.17).

Internet protocol television (IPTV) refers to TV delivered over an IP-based network. Cable-TV subscriptions refers to multichannel TV programming delivered over coaxial cable networks. Satellite subscriptions, i.e., pay TV received via a satellite dish capable of receiving satellite television broadcasts. Other TV subscriptions refers to pay TV subscriptions other than IPTV, satellite TV and cable TV.

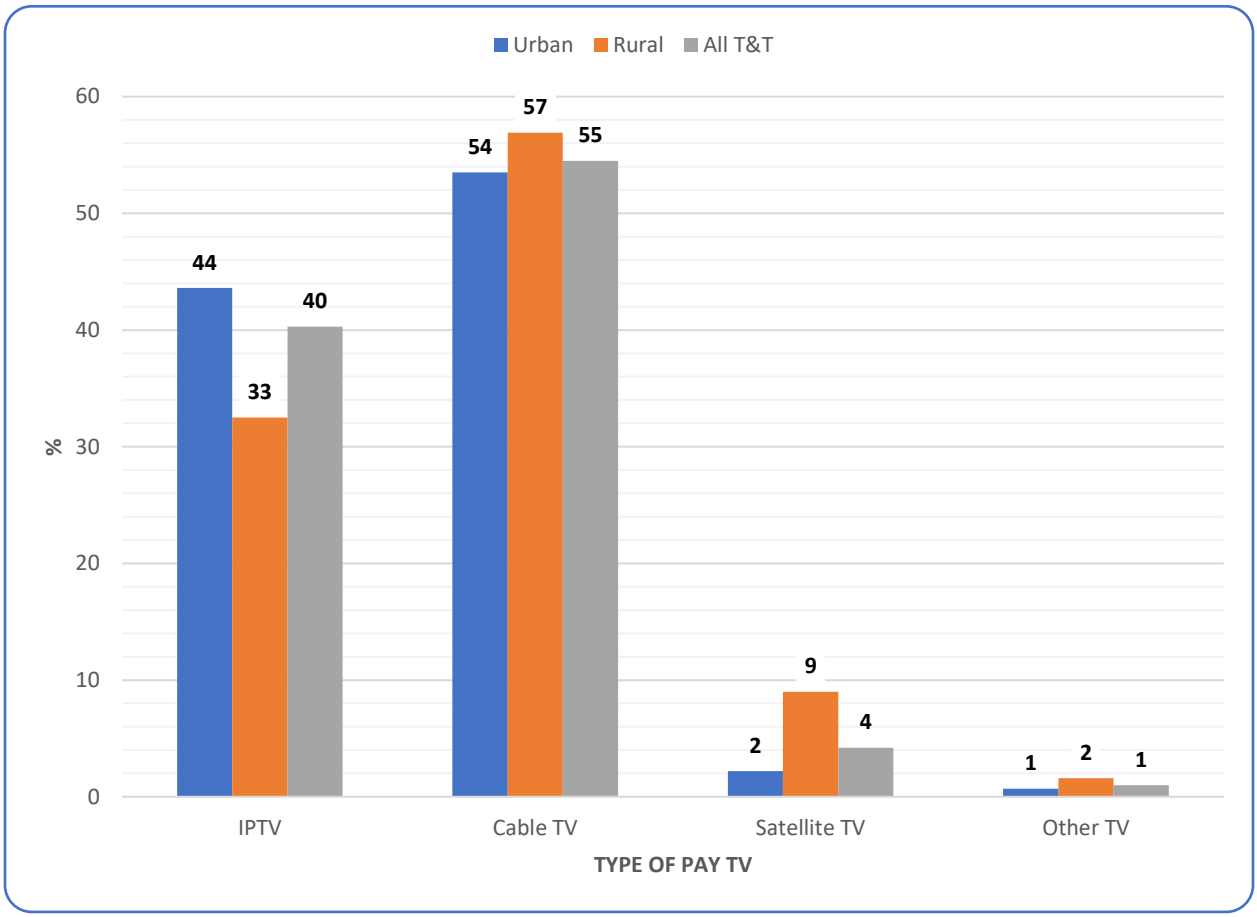


Figure 4.17: Type of pay TV subscription, by urban/rural locality

Fixed Voice Services

Subscription to fixed voice services was highest prior to 1990, after which it declined until 2004. Thereafter, reported subscriptions increased until 2019. The increases reported in the latter years may be a direct result of increasing demand for bundled service subscriptions which, though motivated primarily by fixed Internet or pay TV, includes fixed telephone services (Figure 4.18).

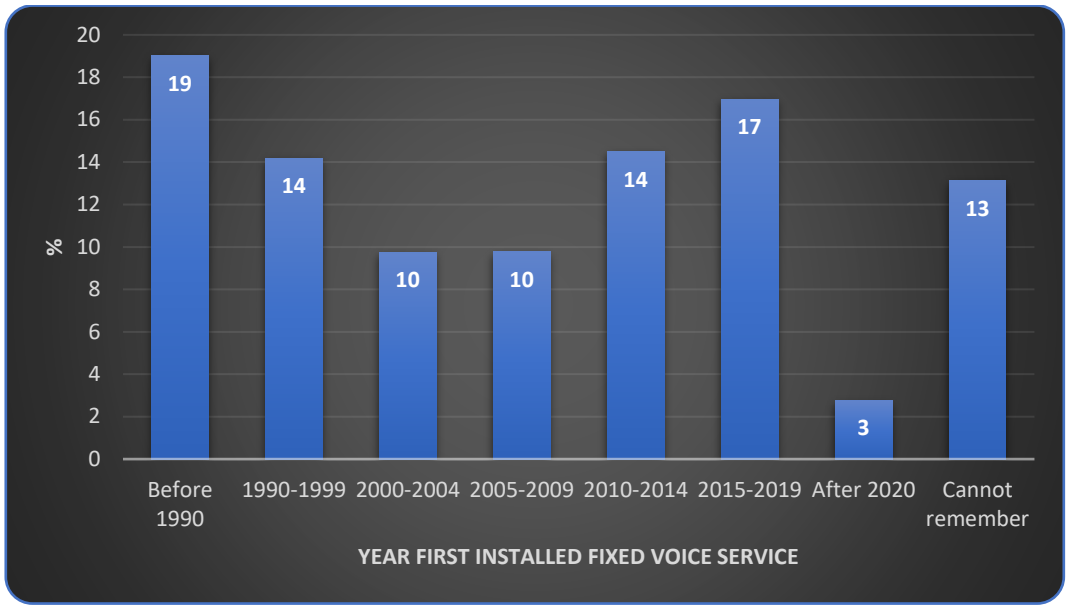


Figure 4.18: Year household first subscribed to fixed voice service

It should be noted that, globally, fixed line subscription has been on the decline since 2009, as demonstrated in Figure 4.19. The relationship between broadband Internet subscription and fixed voice subscription is more likely to be inverse.

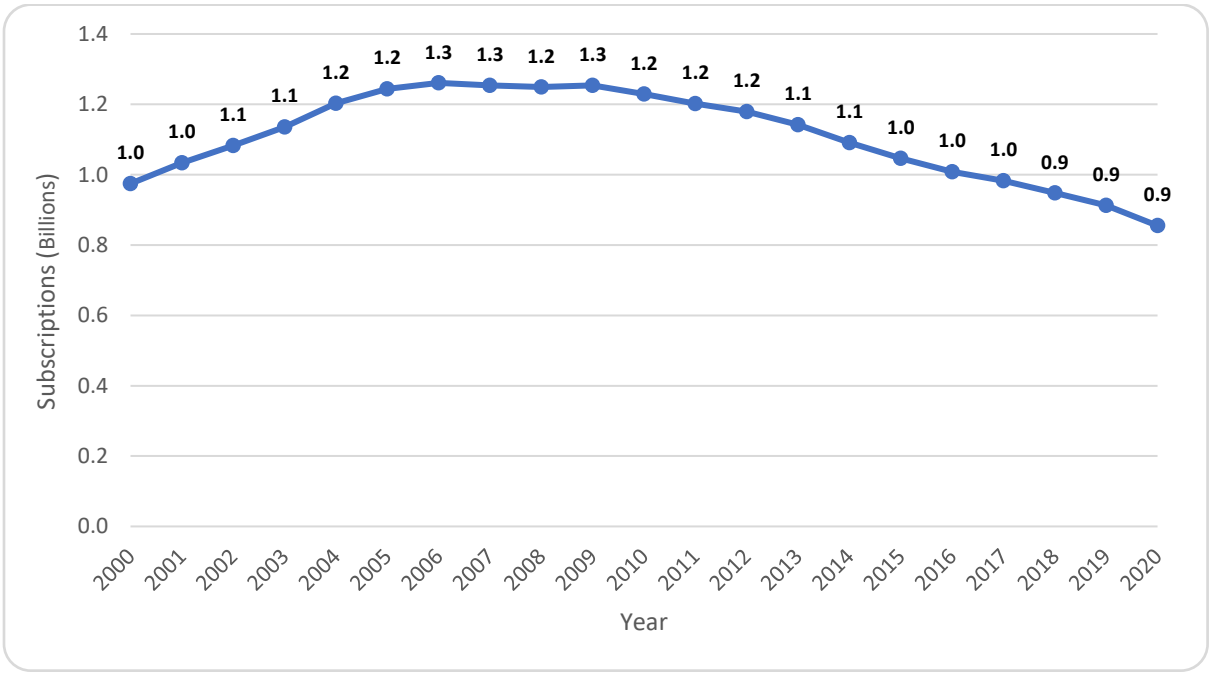


Figure 4.19: Trends in global fixed voice subscription 2000-2020

Source: The World Bank

Service Attributes and Quality of Service Parameters

It is widely recognised that the reliability and service quality of network providers play an essential role in the uptake of services by consumers. To this end, one of the objectives of the Act, as outlined in section 3(c), is the establishment of the conditions for:

> "promoting and protecting interests of the public by:
>
> i. promoting access to telecommunications services;
> ii. ensuring that services are provided to persons able to meet the financial and technical obligations in relation to those services;
> iii. providing for the protection of customers;
> iv. promoting the interests of customers, purchasers and other users in respect of the quality and variety of telecommunications services and equipment supplied;"

To support this statutory function, the Authority has developed the Consumer Rights and Obligations Policy (CROP)[47] and drafted supporting regulations, which recognise the following:

1. **Consumer empowerment:** the concept of the consumer as a proactive, well-informed and rational agent in the market
2. **Service provider responsibility:** the notion of conscientious service provision that recognises the value of upholding consumer rights
3. **Reducing information asymmetry:** transparency in the operations of authorised providers, while consumers are equipped with the information needed to make informed decisions
4. **Public welfare:** the maximisation of the socio-economic benefits to all stakeholders in the sector, while consumers' privacy is respected and guarded.
5. **Market efficiency:** the facilitation of a regulatory environment in which all stakeholders are able to adapt to changing market conditions

[47] Consumer Rights and Obligations Policy: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=668&PortalId=0&TabId=222

Based on these principles and the parameters established in CROP for service quality, DIS 2021 explores the following:

1. **Service activation/reactivation**: Upon selecting a service provider and agreeing to a contract on the provision of service, the consumer (now a customer) has a right to efficient service activation. This means that the customer should have functional access to the service within a reasonable timeframe. Service activation is therefore defined as the percentage of new subscriptions within an activation time (the time period between payment for service and when the service is actually activated less than or equal to the applicable standard). The installation of the service shall be completed within this time period, provided that internal wiring has been completed up to the point of demarcation. Further, service reactivation is defined as the time period between the confirmation of settlement of respective issue and when the service is actually re-activated.

2. **Disconnection/termination of service**: prohibits a customer from accessing the subscribed service. Disconnection of service usually arises from the inability of a customer to pay his/her bill or a request by the consumer to terminate his/her service. In all cases, disconnection of service is usually reserved for instances of serious and material breaches of the terms and conditions of service by the consumer.
3. **Consumer complaints:** A consumer complaint is an expressed dissatisfaction regarding the use of a service. The Act, in section 18(1)(m) and (q), provides for the protection of consumers of public telecommunications services as well as the investigation of consumer complaints. Consumer complaints resolution is defined as the percentage of the total number of consumer complaints received for a service offered, which have been resolved by an authorised provider before the applicable standard, within the given period.

   Although the first course of action is for customers to lodge their complaints directly with the service providers of any public telecommunications or broadcasting service, the Authority recognises that a customer may still be dissatisfied with the response or outcome of a complaint lodged that way, and has therefore facilitated the lodging of complaints with the Authority[48] for resolution.

Table 4.3 outlines the results of DIS 2021 for the areas identified above relating to fixed voice, fixed Internet and pay TV services.

[48] Guide to Submitting a Complaint to TATT: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1443&PortalId=0&TabId=222

Table 4.3: Selected service attributes for fixed voice, fixed Internet and Pay TV

Service Attributes	Fixed Voice	Fixed Internet	Pay TV
Activation wait time (mean days)	4 days	4 days	6 days
Service ever disconnected (%)	9.0%	7.2%	5.0%
Reconnection time (mean hours)	27 hours	15 hours	1 hour
Customers reporting complaint (in the last 5 years) (%)	15%	15%	12%
Complaint resolution rate (%) by the service provider	66%	76%	100%
Complaint resolution times (mean days)	10 days	4 days	1 day
Escalation of unresolved complaints to TATT (%)	7.0%	6.0%	0.0%

CROP specifies, as the ideal standard, that 100% of all new subscriptions to fixed telecommunications and pay TV should be activated within 7 and 3 days, respectively. DIS 2021 findings reveal that, on average, service activation to fixed voice, fixed Internet and pay TV took 4, 4 and 6 days, respectively.

Regarding service re-activation, CROP specifies, as the ideal standard, that 95% of suspended subscriptions to fixed telecommunications and pay TV should be re-activated within 48 and 24 hours, respectively. DIS 2021 reports that re-activation times for fixed voice, fixed Internet and pay TV took, on average, 27 hours, 15 hours and 1 hour, respectively.

4.2.2 Access to ICT Devices

Figure 4.20 shows that the total number of ICT devices owned by households is substantially lower than the number of persons residing in the household. It is likely that members of poor and vulnerable households are required to share devices, which may impact their ability to perform remote work activities as well as remote learning.

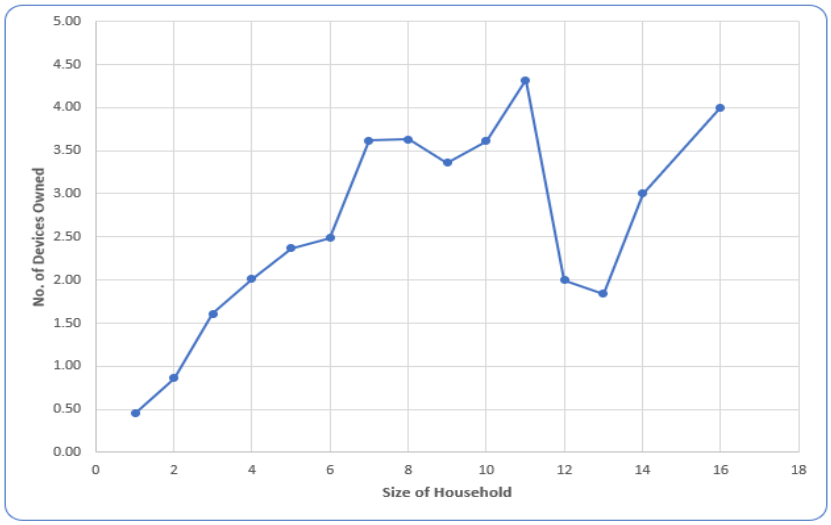


Figure: 4.20: Number of devices owned, by household size

4.2.3 Household Expenditure on ICT

Mean monthly expenditure on ICT overall and for selected services is provided in Figure 4.21. The subscription service with the lowest monthly spending is fixed voice. With the exception of bundled service subscriptions, a typical household spends, on average, TT$250 monthly per service subscription.

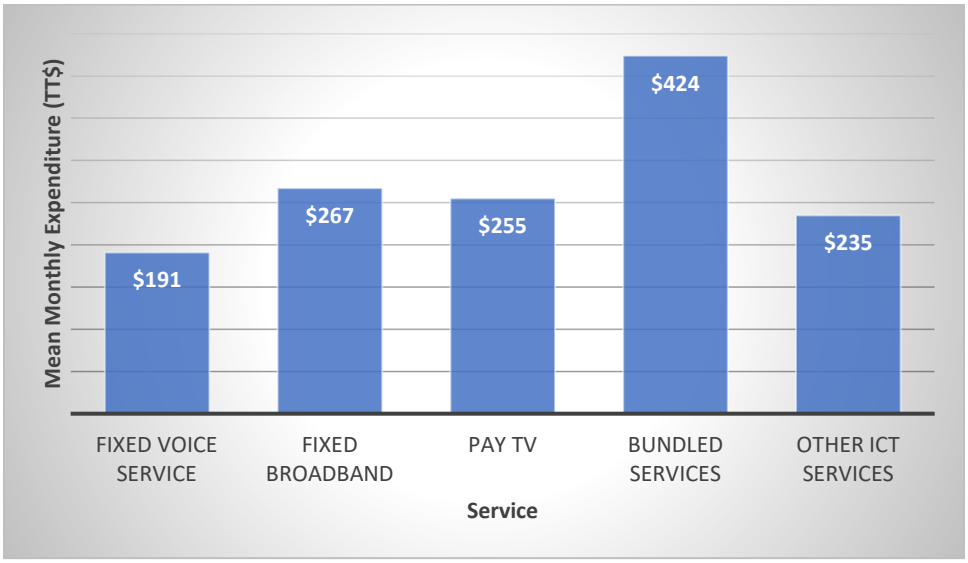


Figure 4.21: Mean monthly household expenditure on ICT services

4.2.4 Lost and Stolen Devices

Within recent times, ITU has embarked on various initiatives to develop an understanding of the problem of counterfeit and stolen ICT devices within its member states. To this end, the ITU Study Group – ITU-T SG11[49] – is a lead Study Group on developing standards related to combating, counterfeiting and the theft of ICT devices[50]. The main objective of ITU-T SG11 is addressing the growing problem of counterfeit telecommunications/ICT products and devices, which is adversely affecting all stakeholders in the ICT field (vendors, governments, operators and consumers).

To advance this initiative ITU-T SG11 has invited the ITU membership to provide feedback on their experiences in combatting counterfeit ICT and the stealing of mobile devices. The outcome of this is to enable enhanced engagement of ITU members with issues related to counterfeit ICT and stolen mobile devices, and to propose some preventive measures and possible solutions to deal with these issues.

DIS 2021 was therefore designed to collect this type of local data for reporting to ITU and other international bodies, as well as to provide an assessment and understanding of this problem for use by national security agencies and other law enforcement stakeholders.

[49] ITU-T SG 11: https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/counterfeit.aspx

[50] ITU-T SG 11: Q17: Combating counterfeit or tampered telecommunication/ICT software: https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q17.aspx

A very low proportion of respondents stated that their devices had either been lost or stolen, as can be seen in Figure 4.22. Approximately one in three persons (35%) reported either of these types of incidents to the police.

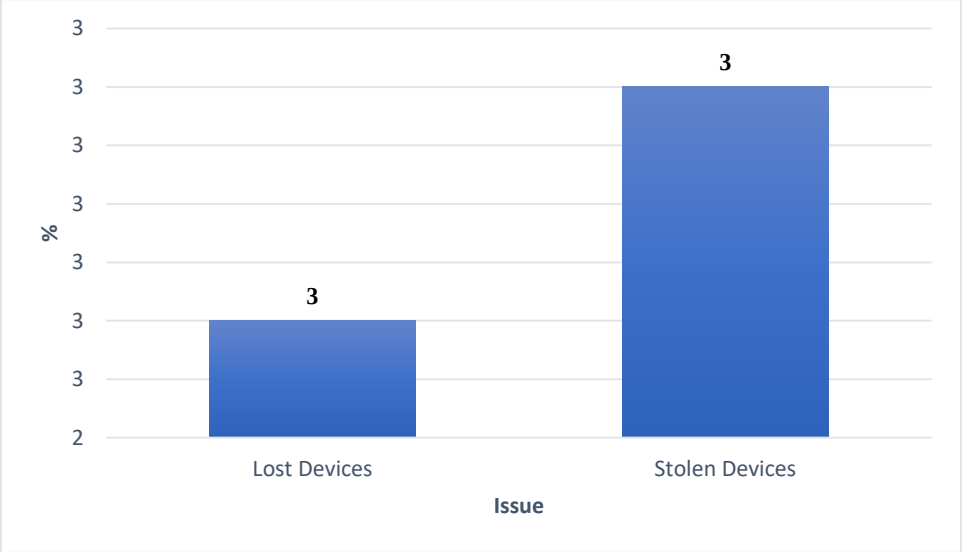


Figure 4.22: Proportion of lost and stolen devices and incidents reported

4.2.5 Electronic and Electrical waste (E-waste)

At the United Nations Climate Change Conference (COP26) Summit held in November 2021, Trinidad and Tobago renewed its commitment to combatting the threat of climate change. This commitment is consistent with the government's national development strategy, Vision 2030, which is also aligned to the UN's SDGs.

In addition to promoting the use of green economy renewable energy alternatives, priority is also being given to waste management and the efficient disposal of materials that contribute to global warming and the rise of unhealthy human hazards. Electronic and electrical waste (e-waste) is an emerging form of pollutant that requires special attention in waste management planning.

According to the United Nations Environment Program (UNEP)[51]:

> The world produces as much as 50 million tonnes of e-waste a year, weighing more than all of the commercial airliners ever made. Only 20% of this is formally recycled.

Strategic Thrust 5 of the ICT Blueprint focuses primarily on advancing environmental and societal benefits, by managing the use of ICT to minimise possible damage to the natural environment, as

[51] https://www.unep.org/news-and-stories/press-release/un-report-time-seize-opportunity-tackle-challenge-e-waste

well as to tackle key social challenges faced by the country. The desired outcomes are that ICTs are deployed in optimal ways to reduce environmental impact and are effectively used by citizens, businesses and government. Additionally, technology is utilised as an enabler to change the way government, industry and businesses operate in providing services and realising efficiency, while protecting the environment through compliance with standards, best available technology and best practices. Given the critical need for local data on e-waste, DIS 2021 was therefore designed to collect information on the number of ICT devices owned by the public and the manner in which these devices are disposed of or reused.

Overall, 25% of households reported that they did not dispose of any old electronic devices. Of those disposing, however, approximately 45% reported that old electronic devices were disposed of using general garbage collection. The use of this method was alarmingly high in the city of Port of Spain where general garbage collection was reported to be 80% among households and 55% in Tunapuna. The data suggest the need for more public education on this important issue as well as the need for appropriate disposal facilities to be made available to citizens.

Table 4.4: Method of disposal of e-waste by municipality

Municipality	Method of Disposal of e-Waste							
	General Garbage Collection	Special Collection by Municipality	A Specialised E-waste Company	Other Waste Disposal Company	Stored at Home	Dismantle and Sell Parts	Donate to Individual/ Institution	Other
	%							
Arima	44.9	5.4	0.4	1.5	45.2	4.9	7.1	2.9
Chaguanas	46.7	14.7	1.0	2.1	23.2	9.6	21.0	0.5
Couva/Tabaquite/Talparo	42.9	5.4	0.9	3.1	46.6	5.6	10.0	0.4
Diego Martin	43.3	2.7	8.8	2.6	31.1	14.0	29.2	0.8
Mayaro/Rio Claro	41.7	22.1	0.7	0.0	46.1	0.0	17.7	0.0
Penal/Debe	42.3	0.0	1.6	0.0	58.1	1.4	20.9	0.6
Point Fortin	24.9	3.7	0.7	0.9	39.0	3.5	10.5	21.1
Port of Spain	79.9	0.5	4.3	0.4	8.3	2.6	5.2	0.5
Princes Town	44.9	0.3	1.2	0.3	53.8	1.4	25.7	0.3
San Fernando	27.7	5.2	0.8	2.3	40.3	0.0	23.6	11.5
San Juan/Laventille	49.2	1.2	1.4	1.5	41.9	6.1	17.1	0.8
Sangre Grande	26.5	0.0	0.0	0.0	62.6	4.9	20.5	0.3
Siparia	34.9	0.9	0.0	0.6	43.3	0.0	18.8	12.9
Tunapuna/Piarco	55.1	8.7	0.8	3.0	38.7	5.5	18.3	1.5
Tobago	38.0	21.1	0.0	0.8	40.2	2.1	3.0	4.5
All T&T	**45.3**	**5.7**	**1.6**	**1.8**	**41.7**	**5.3**	**17.3**	**2.0**

4.2.6 Television Viewing Preference

Respondents ranked cable/satellite/IPTV as the main platform for viewing television. Local TV and paid OTT services (e.g., Netflix) were ranked second and third, respectively.

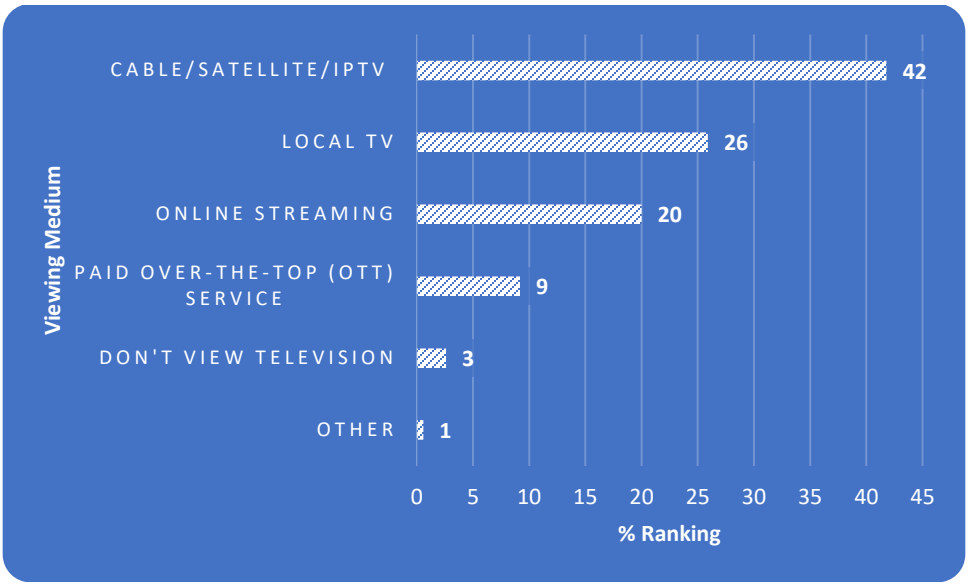


Figure 4.23: Ranking of television viewing preferences

4.2.7 Customer Satisfaction With Subscription Services

Customer satisfaction scores for fixed voice, fixed broadband Internet and pay TV services were assessed in relation to price, QoS and customer service, using a rating scale of one to five.

For all categories, customer service received the highest satisfaction score. Fixed broadband services received the lowest rating with respect to quality, emphasising the need for additional investments in infrastructure as the rate of Internet subscription increases (see Figure 4.24).

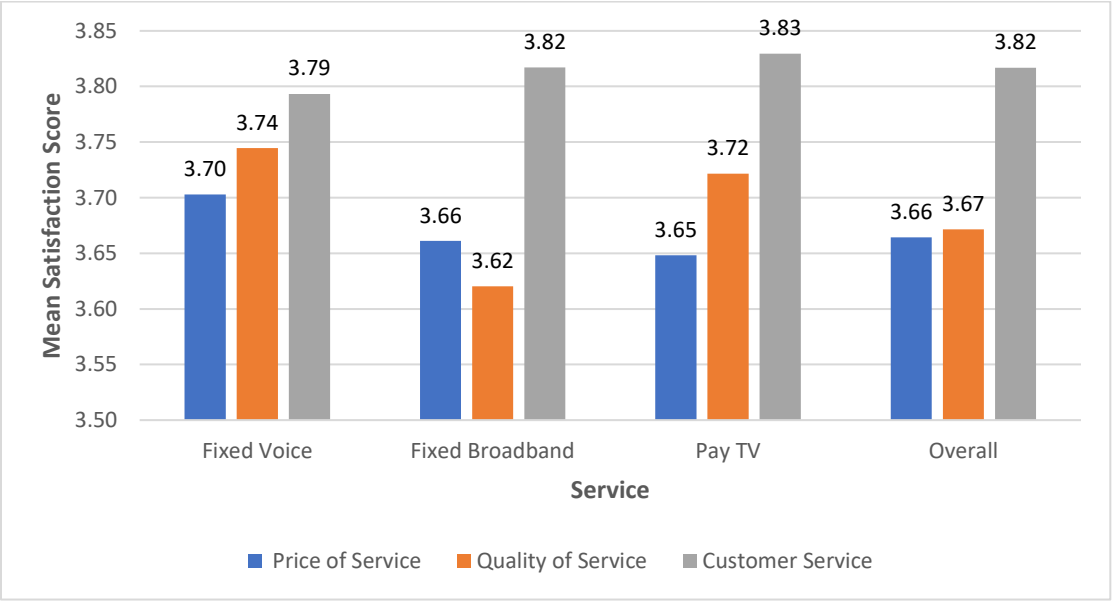
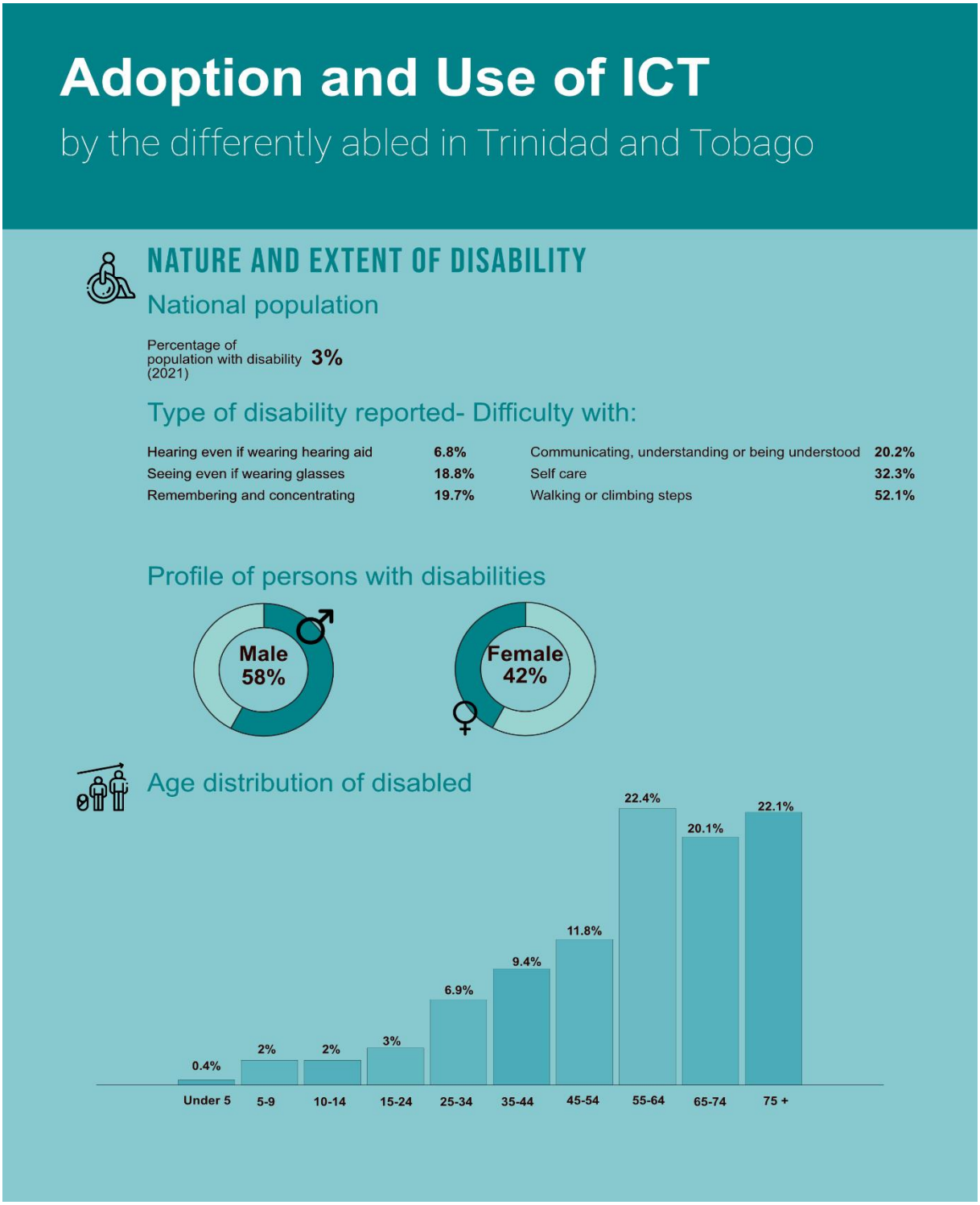


Figure 4.24: Mean customer satisfaction scores for fixed voice, fixed broadband and pay TV by service attributes

4.3 ICT and Persons with Disabilities (PWDs)

A snapshot of the state of ICT among PWDs is presented below.



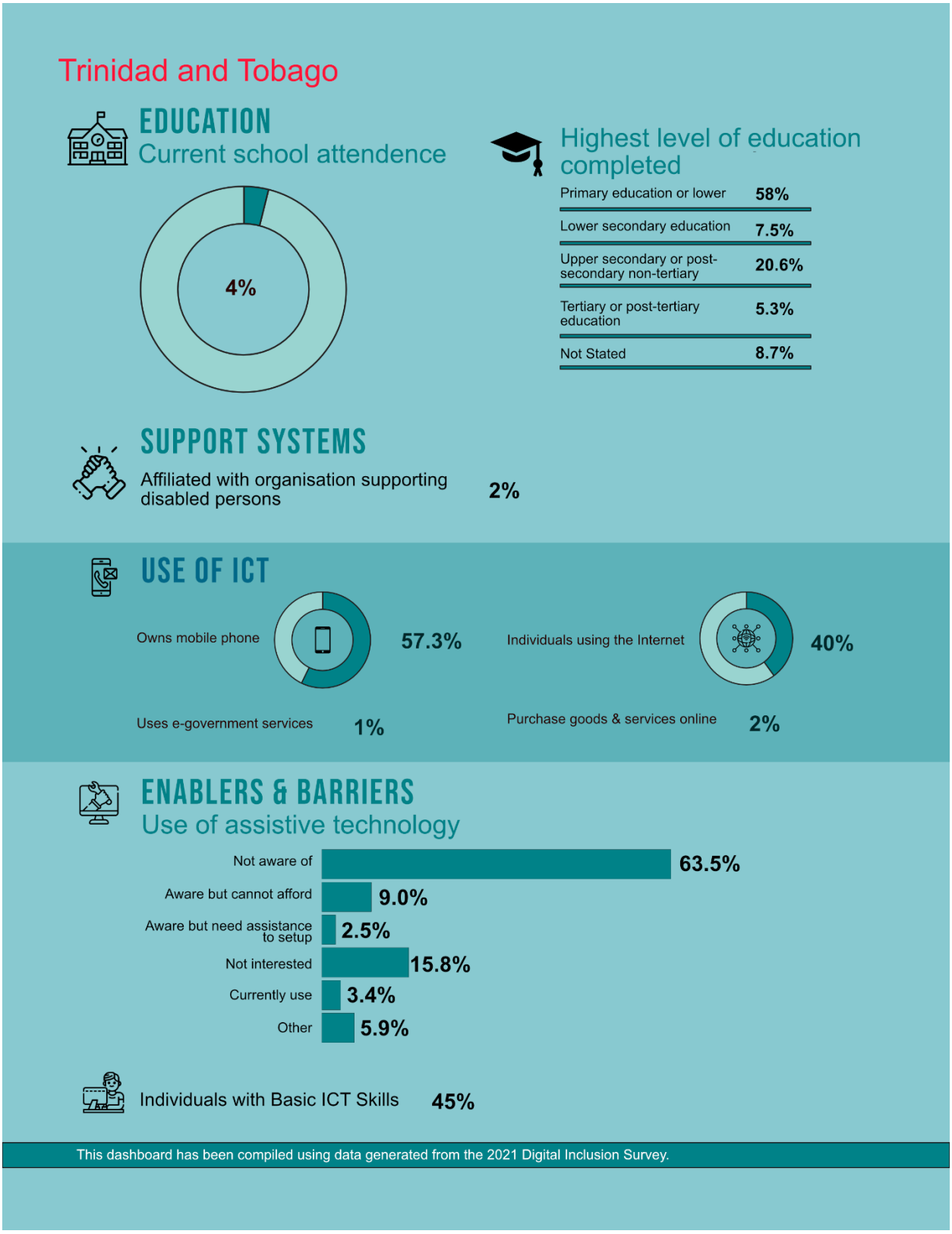


Figure 4.25: Adoption and use of ICT among PWDs

4.4 Use of ICT Devices and Mobile Phones

4.4.1 Internet Use

Reported Internet usage was high (upwards of 90%) across all age cohorts between 5 to 44 years. Decline in usage starts with the 45 to 54 age group and progresses to a low point of 36.9% among persons 75 years and older. Women reported higher levels of usage than men – 82% compared to 76%.

As the level of education increases, so too does the use of the Internet. Reported Internet usage ranged from 69% among lower primary level education to 97% among persons with tertiary and post-tertiary level education.

With respect to labour force status and Internet usage, employees reported the highest level of Internet usage (93.7%). The lowest level of usage was reported by persons who did not work (72%). Within occupational groups, national security (armed forces) occupations had the highest usage and skilled agricultural workers and unclassified workers the two lowest.

A significant disparity was also noted between Internet usage among PWDs and those without. Forty percent of all disabled persons used the Internet compared to persons reporting no disability (80%).

4.4.2 Mobile Phone Usage

Overall, 84% of the population reported owning a mobile phone[52]. Generally, levels of ownership were high across all analytical categories with the only notable decline in percentages recorded among persons five to nine years (52%) and PWDs (59%) (Table 4.5).

4.4.3 Computer Usage

Overall, 62% of respondents aged five to nine years reported using a computer. Use of tablets was highest among the five to nine age group.

[52] An individual owns a mobile cellular telephone if he/she has a mobile cellular phone device with at least one active SIM card for personal use. It includes mobile cellular phones supplied by employers that can be used for personal reasons (to make personal calls, access the Internet, etc.) and those who have a mobile phone for personal use that is not registered under his/her name. It excludes individuals who have only active SIM card(s) and not a mobile phone device.

Table 4.5: Reported use of ICTs by population characteristics

Category		Computer Use by type				Used the Internet	Used a Mobile Phone
		Any Device	Desktop	Laptop	Tablet		
		%					
	5-9	92.2	3.9	21.9	71.1	93.4	51.9
	10-14	89.5	5.8	39.3	54.8	94.3	70.9
	15-24	71.1	8.7	42.9	25.2	94.2	95.0
	25-34	69.0	11.0	35.7	21.2	94.5	97.6
	35-44	69.0	11.2	32.9	18.9	92.0	96.3
	45-54	56.1	9.9	29.9	14.9	86.5	96.4
	55-64	45.5	6.0	17.3	10.9	74.0	93.9
	65-74	40.8	4.0	12.9	11.2	62.2	89.7
	75 and over	29.6	1.7	5.6	6.8	36.9	71.8
Sex of Respondent	Male	58.8	7.4	25.9	19.1	75.9	84.2
	Female	65.0	8.2	29.8	25.6	81.9	85.7
Highest Education Level	Primary education or lower	52.0	2.7	15.2	25.5	68.6	77.9
	Lower secondary education	53.6	6.0	21.9	14.7	88.1	95.2
	Upper secondary or post-secondary non-tertiary	63.4	7.5	27.0	18.0	90.9	98.0
	Tertiary or post-tertiary education	87.4	22.2	66.7	31.1	97.4	99.0
	Not Stated	67.6	3.1	15.8	37.1	22.9	17.8
Labour Force Status	Employee	70.7	15.3	40.4	19.7	93.7	98.8
	Self employed	56.1	8.1	24.2	12.7	89.0	97.8
	Unpaid worker	60.4	16.6	28.9	6.1	75.2	100.0
	Learner/Apprentice	33.1	0.0	6.0	7.8	85.9	100.0
	Unclassified worker	100.0	0.0	0.0	0.0	0.0	0.0
	Did not work	59.0	4.3	22.7	25.0	71.6	77.6

Category		Used Computer				Internet	Mobile Phone
		Any Device	Desktop	Laptop	Tablet		
		%					
Major Occupation Group	Armed Forces Occupations	79.4	14.8	45.8	6.3	95.3	96.1
	Managers	83.1	21.3	53.7	23.7	88.9	89.4
	Professionals	87.2	24.0	70.6	29.3	95.0	93.4
	Technicians and Associate Professionals	81.1	17.1	49.0	28.8	91.9	92.2
	Clerical Support Workers	85.8	32.0	49.5	26.5	93.0	90.3
	Services and Sales Workers	62.6	7.5	26.6	21.7	86.0	86.4
	Skilled Agricultural, Forestry and Fishery Workers	41.9	6.0	16.7	13.2	67.5	88.2
	Craft and Related Trades Workers	55.9	6.7	21.8	16.8	88.2	92.3
	Plant and Machine Operators and Assemblers	51.3	4.6	19.7	16.2	85.8	89.0
	Elementary Occupations	47.7	3.0	13.0	16.5	78.2	87.8
	Not Stated	59.9	5.7	24.7	22.7	75.4	82.9
Has Disability	Yes	35.3	1.7	7.5	8.3	40.4	58.5
	No	62.7	8.0	28.5	22.9	80.1	85.7
T&T		**62.0**	**7.0**	**27.0**	**23.0**	**79.0**	**84.0**

4.5 Use of ICT Services and User Perceptions

4.5.1 Usage of Online Services

Online services[53] are used most frequently by persons between 25 to 54 years and persons with tertiary level education. Slightly more females used these services, as well as, professional workers, employees in national security, managers and clerical employees. Online services include e-government services and the use of virtual social networks, which is lowest among children aged five to nine and the elderly (see Table 4.6).

[53] Online services refer to any service that is available online from either a government or private institution. The service can be provided by either a local or foreign agent. However, e-Commerce transactions are not included.

4.5.2 Trust and Security

Levels of trust and confidence in using a credit card online, trusting the security of online transactions and information obtained on social media are highest among educated professionals and managerial workers as well as the 25 to 54 age cohort (Table 4.6).

Table 4.6: Use and perceptions of ICT services by population characteristics

Category		Used Online services	Used E-government services	Comfortable using e-government services	Will make payments online with credit card	Used Virtual social networks	Trust information obtained from social networking sites	Believe that personal information provided when conducting any online transaction is secure
		%						
	5-9	0.1	0.1	0.0	0.0	4.3	0.0	0.0
	10-14	0.3	0.0	0.0	0.0	25.0	0.0	0.0
	15-24	10.0	2.2	2.0	36.0	65.8	55.8	45.1
	25-34	27.9	7.2	5.6	52.6	71.2	58.0	48.1
	35-44	27.6	6.1	4.9	43.3	65.4	51.8	44.5
	45-54	22.9	5.5	4.9	35.3	55.4	42.9	36.1
	55-64	14.2	3.6	2.8	22.0	39.3	28.9	26.5
	65-74	7.7	1.5	1.2	13.9	27.5	17.8	19.0
	75 and over	3.5	0.6	0.6	9.0	12.9	8.8	10.5
Sex of Respondent	Male	13.6	2.9	2.4	24.6	42.9	31.7	27.2
	Female	16.2	4.1	3.3	29.7	47.1	35.9	31.1
Highest Education Level	Primary education or lower	1.6	0.1	0.1	5.9	22.7	13.5	9.8
	Lower secondary education	9.6	1.8	1.3	24.6	52.7	44.0	30.4
	Upper secondary or post-secondary non-tertiary	17.5	4.1	3.4	39.8	61.6	47.1	41.3
	Tertiary or post-tertiary education	52.0	13.5	11.1	65.1	73.0	56.1	59.8
	Not stated	1.9	0.5	0.4	1.6	4.5	3.0	2.7

Category		Used Online services	Used E-government services	Comfortable using e-government services	Will make payments online with credit card	Used Virtual social networks	Trust information obtained from social networking sites	Believe that personal information provided when conducting any online transaction is secure
		%						
Labour Force Status	Employee	36.4	8.9	7.4	50.5	69.2	55.0	47.8
	Self employed	17.1	2.6	2.1	36.8	62.3	47.8	37.4
	Unpaid worker	11.5	0.0	0.0	32.1	53.2	53.2	38.8
	Learner/apprentice	0.0	0.0	0.0	20.3	85.9	85.9	7.8
	Unclassified worker	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Did not work	5.6	1.4	1.1	16.2	32.8	23.2	20.4
Occupation	Managers	35.3	5.6	3.5	46.8	58.8	44.3	38.9
	Professionals	50.4	14.1	12.3	54.5	68.0	49.8	50.9
	Technicians and associate professionals	36.9	10.7	9.1	51.0	64.0	51.0	47.3
	Clerical support workers	42.1	6.6	4.7	51.0	64.6	51.5	47.9
	Services and sales workers	17.9	3.8	3.1	32.5	53.0	41.5	31.7
	Skilled agricultural, forestry and fishery workers	9.5	2.8	1.3	20.8	31.2	19.3	28.9
	Craft and related trades workers	14.1	1.9	1.7	28.4	54.8	43.3	30.1
	Plant and machine operators and assemblers	10.5	1.6	1.6	21.4	51.5	38.9	26.6
	Elementary occupations	10.3	3.9	3.5	25.9	51.2	39.2	26.5
	Armed forces occupations	50.2	3.5	3.5	61.3	67.2	25.5	54.2
	Not stated	10.5	2.5	2.0	22.8	39.9	29.6	26.1
Has Disability	Yes	2.2	1.0	1.0	10.1	18.8	15.6	9.9
	No	15.3	3.6	2.9	27.7	45.8	34.4	29.8
T&T		**15.0**	**3.5**	**3.0**	**27.0**	**45**	**34**	**29**

4.6 E-commerce

The National e-Commerce Strategy 2017–2021[54], published by the Ministry of Trade and Industry (MTI), defines e-commerce as:

> The sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organizations. To be included are orders made over the web, extranet or electronic interchange. The type is defined by the method of placing the order. To be excluded are orders made by telephone calls, facsimile or manually typed email.

This is the same definition used by the OECD and the UN Conference on Trade and Development's *Information Economy Report* (2015).

Levels of e-commerce activities reported in DIS 2021 are for individuals 15 years and older only and do not include transactions performed by businesses, governments and other public and private organisations.

Functions originally vested with the National e-Commerce Secretariat, operating under the Ministry of Public Administration, have been transferred to MTI whose goal is:

> to create an enabling environment that facilitates and promotes e-commerce for local businesses to serve domestic and international consumer markets.

The expected outcomes of the government's e-commerce strategy have been defined by MTI as follows:

1. The full proclamation of the relevant legislation required for the proliferation of e-commerce activity
2. A fully functional and operationalised EFT Framework
3. Increased collaboration between local and foreign businesses, and key supply chains

[54] The National e-Commerce Strategy of Trinidad and Tobago: https://tradeind.gov.tt/wp-content/uploads/2018/02/National-e-Commerce-Strategy2017-2021.pdf

4. Increased use of e-commerce by domestic businesses as a channel for selling goods and services to consumers locally, regionally and internationally
5. Informed and confident online consumers
6. Enhanced ICT infrastructure available for private homes and businesses

4.6.1 E-commerce Penetration

The proportion of persons 15 years and older reporting that they purchased goods or services online was 12%. Of these persons, 80% reported that their purchase was made from a foreign vendor. Only one in every five purchases made online was from a local supplier.

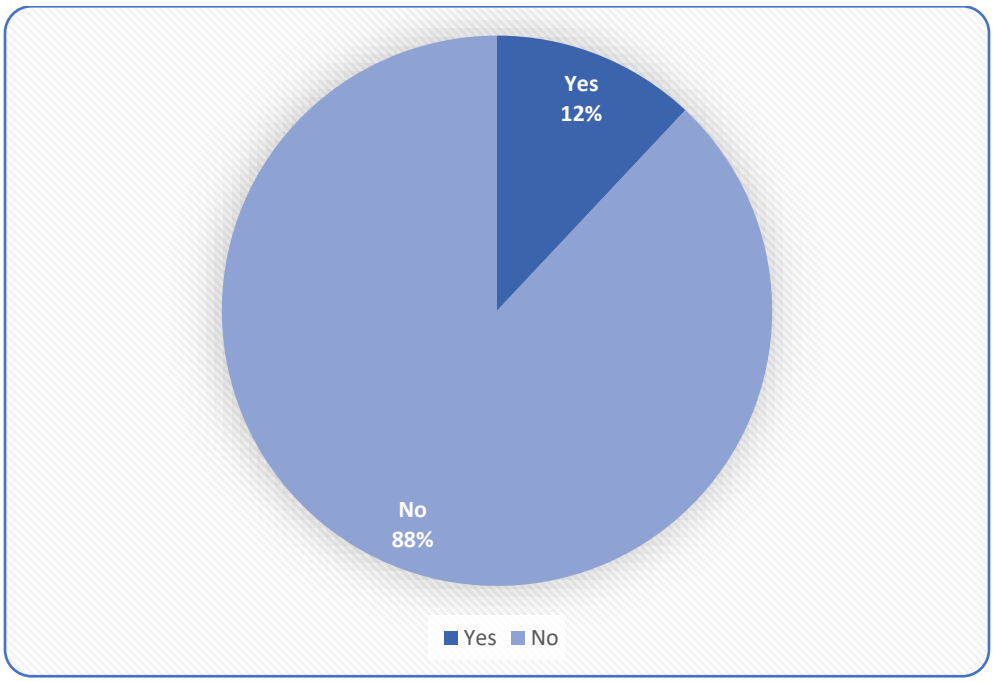


Figure 4.26: Proportion of persons 15 years and over making purchases online

4.6.2 Goods and Services Procured Online

The items reported to be purchased most online include clothing and apparel (79%), food/groceries/alcohol and tobacco related items (21%) and cosmetics (17%). Thirteen percent of respondents reported purchasing services online also.

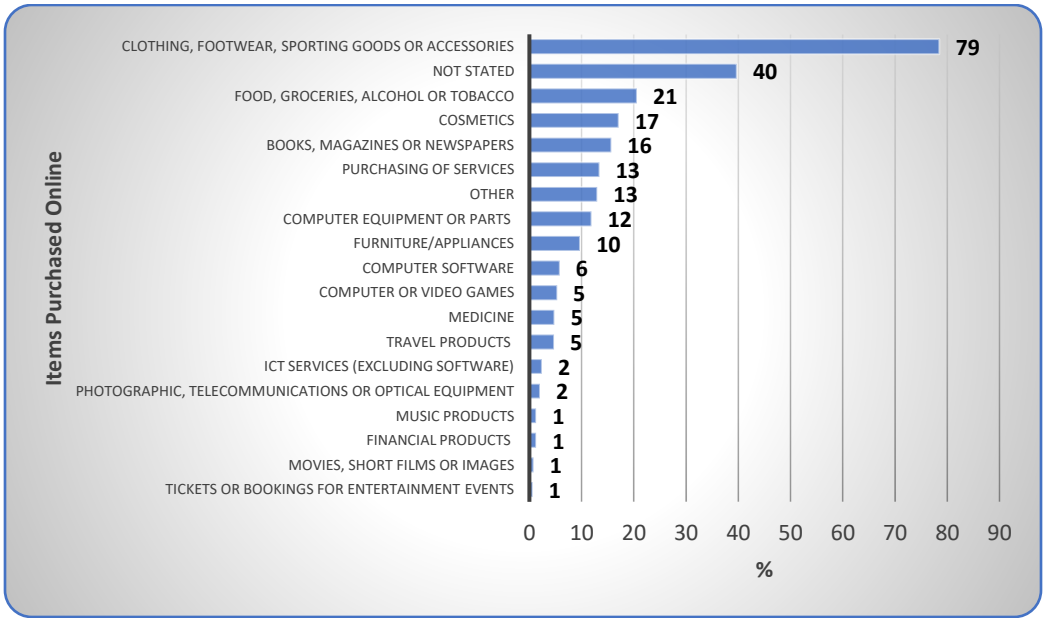


Figure 4.27: Type of items purchased online

4.6.3 Online Payment Methods

Generally, these purchases were paid for using credit cards (72%), cash on delivery (47%), which is now a common feature of local e-commerce activities, and debit cards or electronic transfers (25%) as shown in Figure 4.28.

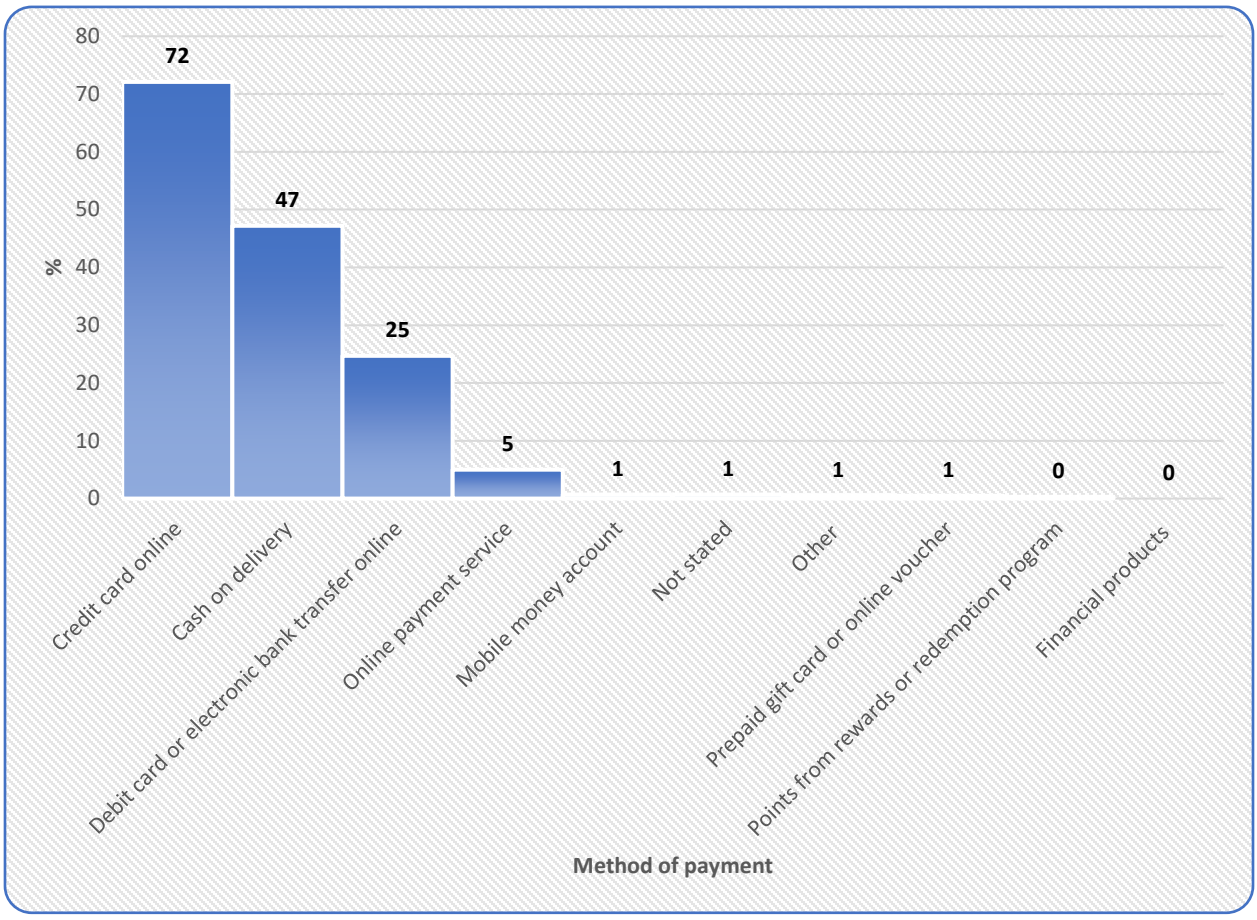


Figure 4.28: Method of payment used for purchases made online

4.6.4 Barriers to E-commerce

Equally important with respect to e-commerce activities in Trinidad and Tobago is understanding the factors that restrict its growth.

Table 4.7 provides data on persons who reported not procuring goods or services online, by reasons. Generally, the data suggest that individuals are not online primarily because of lack of interest (50%), preferring shopping in person (37%) or for other personal reasons (18%). This trend is observed across all age cohorts. Obstacles to business-to-consumer (B2C) e-commerce in Trinidad and Tobago are important to analyse and understand since further developments in e-

commerce infrastructure, payment gateways and improved access to credit and debit card facilities may not directly produce the desired outcomes.

Table 4.7: Reasons for not making online purchases by age groups

Barriers to E-commerce	Age Cohorts							
	15-24	25-34	35-44	45-54	55-64	65-74	75 +	Total
	%							
Not interested in online purchases	42.4	41.4	44.1	50.0	55.6	60.7	68.0	**50.4**
Prefer to shop in person	31.7	36.7	39.5	38.5	38.3	36.5	31.0	**36.5**
Personal reasons	25.6	21.8	20.2	16.2	13.2	11.8	11.5	**17.6**
Online Security concerns	4.1	7.0	6.3	6.7	6.2	5.6	3.2	**5.8**
Trust concerns	3.5	7.5	6.2	5.4	6.2	3.8	1.4	**5.2**
Lack of confidence, knowledge or skills	2.0	2.5	4.0	4.9	6.1	7.0	8.1	**4.7**
Not stated	7.5	4.4	4.9	4.6	3.2	3.5	4.7	**4.7**
Online Privacy concerns	3.2	6.0	4.8	6.7	4.8	2.8	2.1	**4.5**
Institutional barriers	2.0	3.2	4.5	3.2	2.2	1.4	0.2	**2.6**
Technical concerns	1.6	2.7	2.3	2.7	2.4	1.4	2.0	**2.2**

4.7 Digital Government

The concept of digital government incorporates e-government – the application of ICTs within government ministries, departments and agencies (MDAs) to improve internal efficiency and operational effectiveness, and the use of ICTs by these MDAs to improve their service offerings to the public.

The UN has recognised that e-government has been employed to mean everything from online government services to exchange of information and services electronically with citizens,

businesses, and other arms of government. E-government can thus be defined as the use of ICTs to deliver government services more effectively and efficiently to citizens and businesses[55].

The OECD notes that e-government aims at bringing greater sectoral efficiencies, through the adoption of digital technologies, making existing procedures and public services more cost and time-effective. However, digital government represents an evolution from e-government. It aims to help the public sector shift from an efficiency-oriented approach to digital technologies towards more open, collaborative and innovative government[56].

The ICT Blueprint is directly aligned to the OECD's definition and concept of digital government. Strategic Thrust 3 of the ICT Blueprint focuses primarily on digital government and recognises the need for digital technologies to create public value in an interconnected role in the government's modernisation policies and initiatives. It is dependent on the government's modernisation ecosystem, comprised of government actors, non-governmental organisations, businesses, citizens' associations and individuals supporting the production of, and access to, data, services and content through interactions with the government.

In order to support Strategic Thrust 3 of the ICT Blueprint, DIS 2021 adopts a multi-faceted approach that utilises the work done over the past two decades by the UN in the area of e-government, as well as the OECD's recognition of digital government and its intended benefits. DIS 2021 was therefore structured in such a manner as to collect data on e-government, the types of services which are usually accessed by the public, the level of awareness and uptake of these services, and general information related to citizens' online participation. The desired outcome is a dataset to drive public policy, decision making, and project implementation by MDAs, so that the programmes outlined in Strategic Thrust 3 can be implemented in an effective and sustainable manner.

The e-Government Development Index (EGDI) is a composite index produced by the UN to measure three dimensions of e-government, namely, the provision of online services, telecommunications connectivity and human capacity. Based on the latest data available for 2020, Trinidad and Tobago ranks 81st in the world. The country's global ranking has been on the decline since 2016.

[55] UN definition for e-government: https://publicadministration.un.org/egovkb/en-us/About/UNeGovDD-Framework

[56] OECD Digital Government Index: https://www.oecd-ilibrary.org/docserver/4de9f5bb-en.pdf?expires=1644840556&id=id&accname=guest&checksum=CB7A81DADDC26EA05816D4796FD1CB95

The online service index, which measured the evolution of e-government services, and is measured on a scale of 0 to 1, has been moving in a positive direction over the last decade and is likely to improve rapidly if the government's proposed digitisation strategy is implemented successfully.

Table 4.8: E-government indices for Trinidad and Tobago (2020)

Index	Year									
	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
E-Government Development Index rank	81	78	70	91	67	67	54	66	61	65
E-Government Development Index value	0.67850	0.64400	0.57801	0.49317	0.57309	0.48061	0.53070	0.47678	0.46695	0.42722
E-participation Index rank	85	99	101	107	109	86	60	73	69	48
E-participation Index value	0.61900	0.57870	0.44068	0.31372	0.07890	0.12857	0.20454	0.07936	0.08196	0.20690
Online Service Index value	0.61180	0.63890	0.52899	0.33070	0.48366	0.33968	0.44481	0.36346	0.32818	0.23580
Telecommunications Infrastructure Index value	0.68030	0.57350	0.49731	0.45429	0.45264	0.23036	0.27805	0.19690	0.19268	0.20586
Human Capital Index value	0.74340	0.71950	0.70772	0.69450	0.78298	0.87606	0.87196	0.87000	0.88000	0.84000

Source: United Nations, Department of Social and Economic Affairs[57]

Data from DIS 2021 show that approximately 5% of individuals, 15 years and over, reported using the Internet to access digital government services (see Figure 4.29). About half of all users of e-government services, disaggregated by age, are between 25 to 44 years. Beyond the 45 to 54 age cohort, there is a steady decline in usage among older individuals.

[57] https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/174-Trinidad-and-Tobago

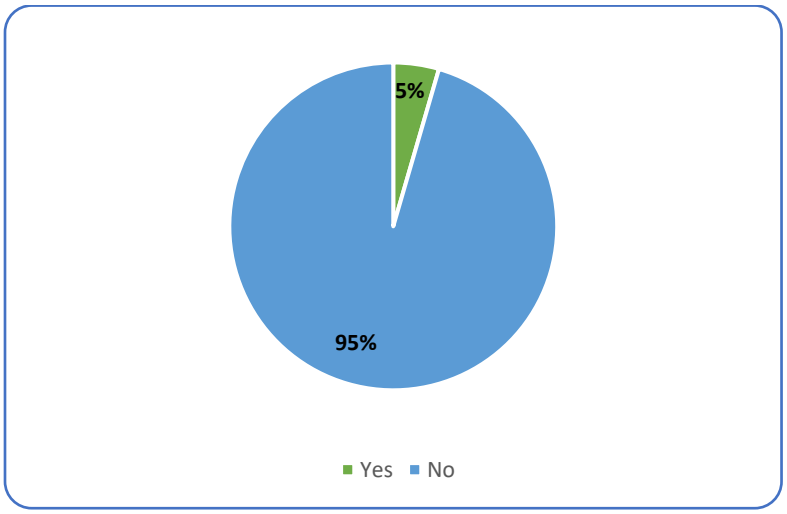


Figure 4.29: Proportion of individuals 15 years and over using online government services

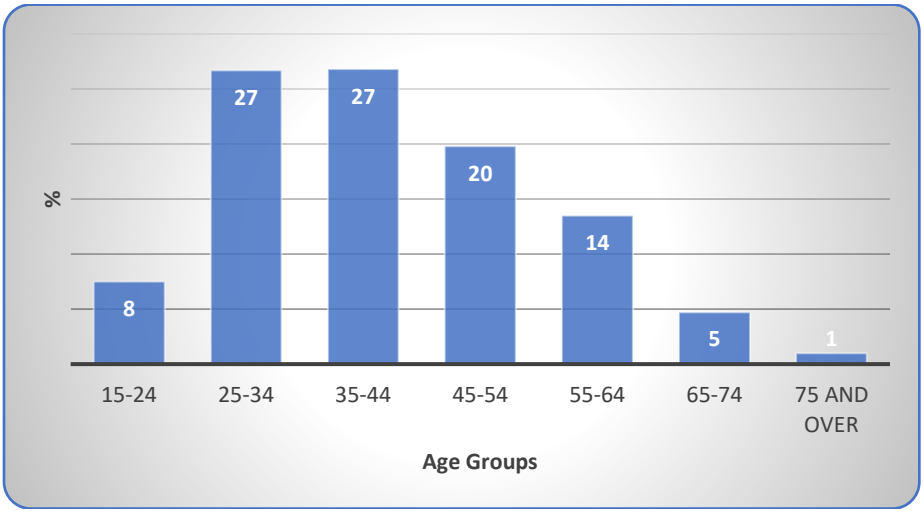


Figure 4.30: Distribution of individuals 15 years and over using online government services, by age groups

With respect to the online services accessed, the four most popular are: payment of bills online to state utility companies; TT Connect; eTax; and application services for birth, death and marriage certificates.

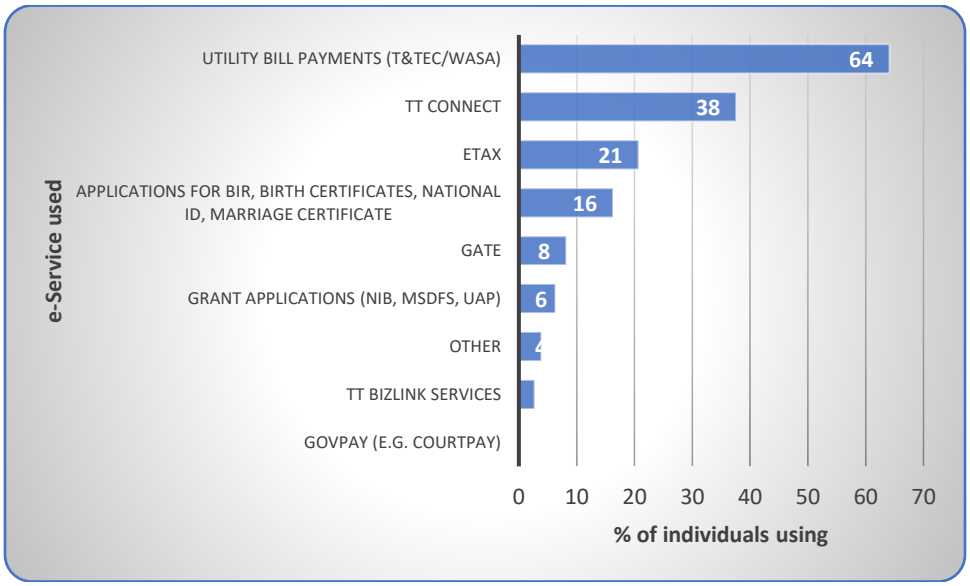


Figure 4.31: E-government services used by individuals 15 years and over

4.8 Over-the-Top (OTT) Telecommunications Technology

The growing popularity of OTT services has sparked interest and concern among regulators and market players within the telecommunications and broadcasting industry for over a decade. An OTT service is defined as:

> An application accessed and delivered over the public Internet that may be a direct technical/functional substitute for traditional international telecommunications services[58]

Adoption of OTTs is closely associated with mobile penetration and the growth in the availability of mobile broadband services.

One area requiring attention is the applicability of established regulatory frameworks to modern OTTs. With the advent of technological convergence, communications services have now expanded beyond those provided by traditional telecommunications service providers, thus now rapidly changing the scope of regulation.

ITU has acknowledged that OTTs are reshaping and expanding the entire communications ecosystem, while strengthening ubiquitous connectivity and providing social and economic benefits to consumers worldwide and the global economy. At the same time, the economic impact on the traditional model of the telecommunications industry and on operators is increasingly being analysed[59]. To this end, ITU has recommended that:

> Member States should foster enabling legal and regulatory environments, and develop policies that are fair, transparent, stable, predictable and non-discriminatory; and that promote competition, foster technological and service innovation and encourage private sector investment incentives, in order to ensure the continuing growth and adoption of OTTs[60].

[58] https://news.itu.int/new-itu-recommendation-provides-parameters-for-a-collaborative-framework-for-otts/

[59] ITU-T Rec D.262 Collaborative Framework for OTTs: https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-D.262-201905-I!!PDF-E&type=items

[60] ITU Emerging technologies, including cloud computing, m-services and OTTs: Challenges and opportunities, economic and policy impact for developing countries (2021): https://www.itu.int/dms_pub/itu-d/opb/stg/D-STG-SG01.03.2-2021-PDF-E.pdf

In 2018, the Authority published, for the first round of consultation, the *Discussion Paper on Net Neutrality and Over-the-Top (OTT) Services in Trinidad and Tobago*[61] (the Discussion Paper). Based on international best practice, as well as the previous feedback from stakeholders, this Discussion Paper initiated a dialogue with stakeholders and recommended guiding principles and regulatory approaches to treat with OTTs in Trinidad and Tobago.

At the completion of the discussion phase, the resulting feedback from the consultation process was used to develop the Authority's policy position on OTTs. Furthermore, DIS 2021 was designed to collect information related to the proliferation, uptake and perception of OTTs. It is envisaged that this data will be used to support the Authority's data-driven approach to policy formulation and to further refine the Authority's policy position on OTTs. Additionally, the data can be used to guide the operations of service providers and other market players as it relates to the rollout of their service offerings.

A significantly high proportion of the population (83%) reported that they used OTTs.

Table 4.9 provides data on OTTs used by age cohorts. Three of the top four services used by persons under 15 years – Zoom (69%), Google Meet (35%) and Microsoft Teams (26%) – are applications that are integral to the virtual learning environment.

Although the highest proportion of respondents not using OTTs was recorded in the 75 and over age cohort, 36% percent of persons in that age group reported using WhatsApp. Overall, WhatsApp was the most popular application used, according to 75% of respondents – followed by Facebook messenger (43%) and Zoom and Instagram (26%).

[61] TATT *Discussion Paper on Net Neutrality and Over-the-Top (OTT) Services in Trinidad and Tobago* (2018): https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1125&PortalId=0&TabId=222

Table 4.9: Telecommunications OTTs used, by age group

OTT Services	Under 15	15-24	25-74	75+	Total
	% of Persons Using OTT Application				
WhatsApp	39.4	91.2	82.3	35.6	**75.1**
Facebook Messenger	8.0	61	49.4	9.8	**43.1**
Zoom	68.7	40	17.4	4.1	**26.1**
Instagram	7.3	56.1	26.3	0.7	**26.0**
None	8.3	4.9	17.1	64.0	**17.2**
Google Meet	35.2	21.6	7.0	0.1	**12.1**
Microsoft Teams	25.7	20.2	8.4	0.5	**11.7**
Facetime	1.7	9.6	6.1	1.0	**5.7**
Other	7.1	9.2	3.5	1.2	**4.5**
iMessaging	0.7	5.7	5.2	0.8	**4.4**
Telegram	0.2	5.6	4.2	0.1	**3.6**
Google Voice	1.5	5.6	3.2	0.5	**3.1**
Skype	0.2	1.8	1.9	0.5	**1.6**
WeChat	0.2	1.9	0.9	0.1	**0.9**
Discord	0.3	2.0	0.3	0	**0.5**
Signal	0.1	0.0	0.3	0.0	**0.2**
Bluejeans	0.1	0.1	0.2	0.0	**0.2**

Persons not using OTTs cited unfamiliarity (56%) and personal preference (28%) as the two main reasons for not using these services (Figure 4.30).

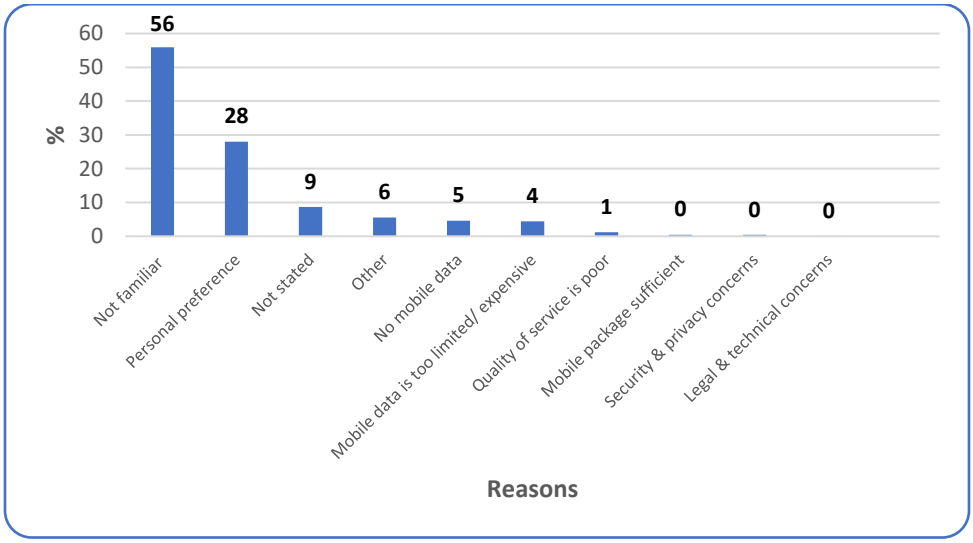


Figure 4.32: Reasons for not using OTTs

For persons using OTTs, 79% access the services on a daily basis. The median time in minutes spent calling and messaging using OTT applications generally, and on Wi-Fi specifically, were 30 and 45 minutes, respectively.

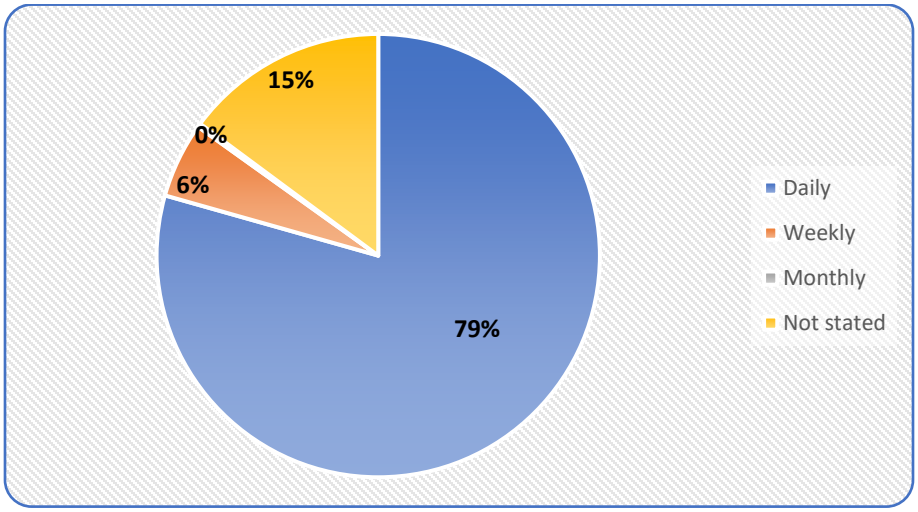


Figure 4.33: Frequency of use of OTTs

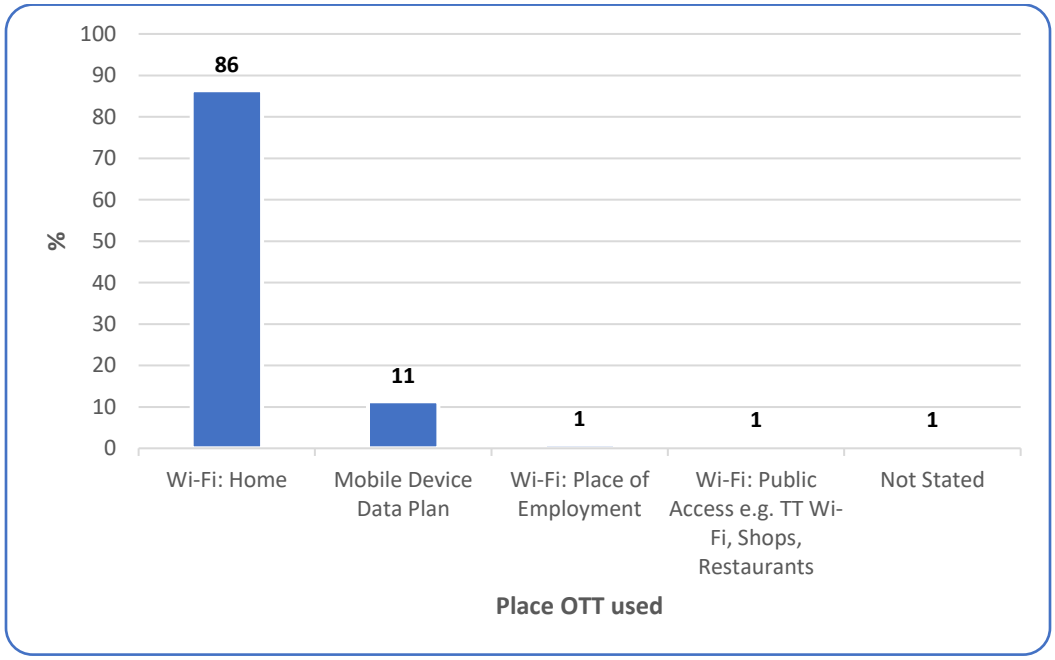


Figure 4.34: Locations OTTs are most used

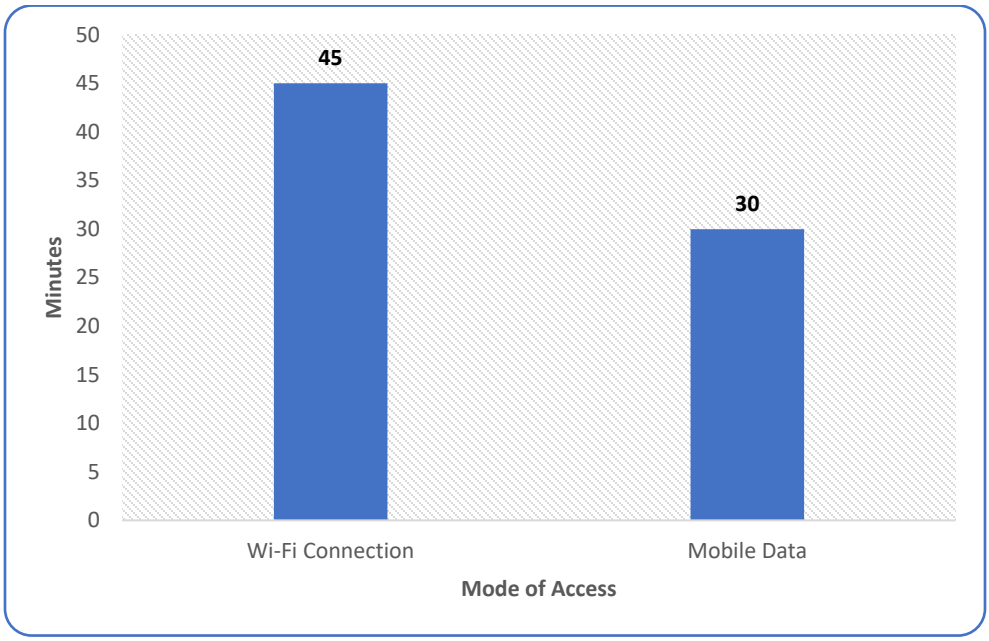


Figure 4.35: Median Minutes spent calling and messaging via OTT, using mobile data and Wi-Fi connections

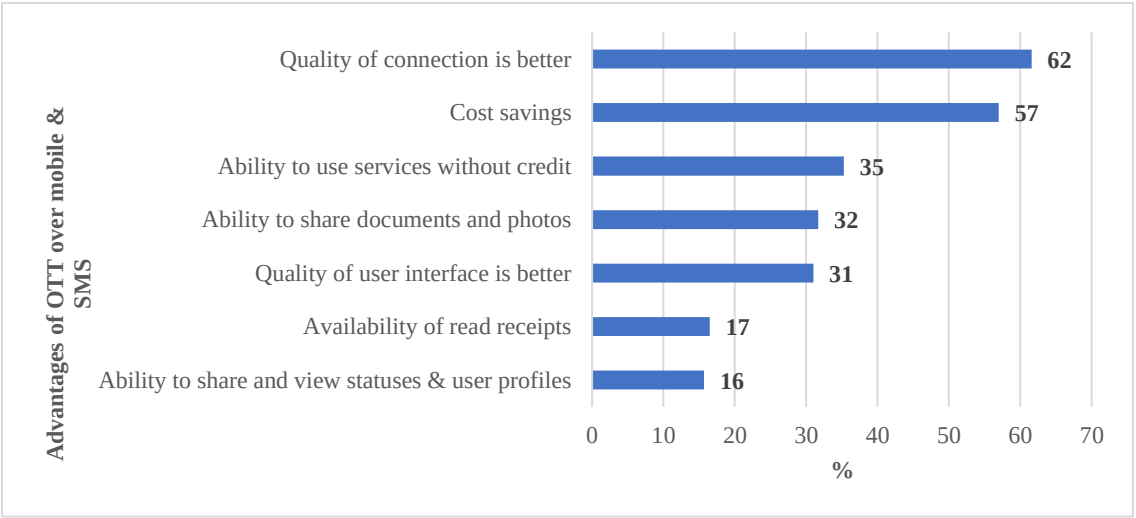


Figure 4.36: Reported advantages of OTTs over mobile and SMS services

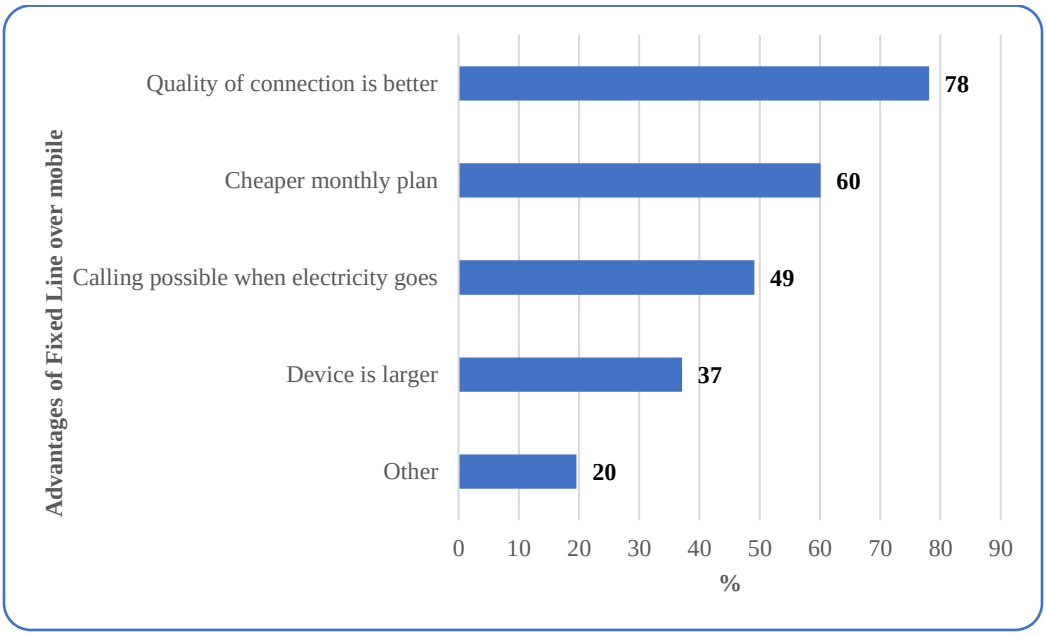


Figure 4.37: Reported advantages of fixed line over mobile

Figure 4.36 reveals that the highest reported advantage of OTTs over mobile and SMS services, was better quality of connection (62%). Aside from OTTs, 78% of persons also reported better quality of connection as the main advantage of fixed line over mobile (Figure 4.37).

4.9 Broadcasting Sector

As the Authority continues to focus on its statutory responsibilities in the broadcasting sector, there is the need for relevant and up-to-date information on the sector that can support initiatives, drive policy formulation and ultimately aid strategic decision making. To this end, DIS 2021 was designed to collect data from the public relating to areas such as broadcasting content, QoS parameters and consumer perception indicators, among many others. It is therefore envisaged that this data can be used by the Authority and its stakeholders to undertake the necessary strategic planning, fill underserved gaps and niche areas, forecast and overcome institutional and market challenges, support public policy areas, and implement the necessary measures to strengthen the broadcasting industry in Trinidad and Tobago.

Pursuant to section 3(g) of the Act, one of the main areas which falls under the purview of the Authority is the regulation of broadcasting services. This involves promoting and protecting the interests of the public and regulation of broadcasting services consistently with the Constitution[62].

[62] Constitution of the Republic of Trinidad and Tobago: https://rgd.legalaffairs.gov.tt/laws2/Constitution.pdf

The Act further defines a "broadcasting service" as:

> the offering of the transmission of programmes whether or not encrypted, by any means of telecommunications, for reception by the general public, including sound, radio, television and other types of transmissions, such as those on a point to multipoint basis.

Considering the dynamic and evolving nature of the broadcasting sector, the Authority has taken a multi-faceted approach to this regulatory function over the past 16 years.

Notably, some of the initiatives include:

1. **Development of the *Broadcasting Code for the Republic of Trinidad and Tobago***[63]: The Code prescribes and enforces a basic, clear set of rules or standards for the broadcasting industry; adopts a co-regulatory approach with the broadcasting sector to uphold standards which uplift and improve the society and which promote respect for the individual and for our institutions; and imposes a system of penalties that is proportionate to the breaches and develops a clear mechanism for the determination of a breach and the penalty to be applied.

a) **Formulation of *Broadcasting Technical QoS Standards: Subscription and Free-to-Air (FTA) Broadcasting Services in Trinidad and Tobago***[64]: These standards specify technical QoS standards for subscription television and non-subscription (FTA) television broadcasting services in Trinidad and Tobago. These standards are used in measuring and gathering data to address consumer complaints and ensuring compliance with QoS obligations by subscription and FTA television providers.

[63] *Broadcasting Code for the Republic of Trinidad and Tobago*: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=302&PortalId=0&TabId=222

[64] *Broadcasting Technical QoS Standards: Subscription and FTA Broadcasting Services in Trinidad and Tobago*: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1218&PortalId=0&TabId=222

2. **Regulation of Broadcasters**[65]: The Authority awards Type 5 Concessions to broadcasters and monitors their operations for compliance with the conditions outlined in these concessions. Statistical information from these concessionaires is also published in the Authority's Quarterly Market Update and Annual Market Reports.

3. **Resolution of Broadcasting Content Complaints from the Public**: As part of its statutory function, the Authority accepts broadcasting content complaints from members of the public. In seeking to resolve these complaints, the Authority developed, and is guided by, its *Procedures for Handling Broadcasting Complaints*[66]. Consumers of radio and television who are concerned about offensive content can, therefore, complain to the Authority, who will investigate the matter and administer legally enforceable sanctions against the broadcaster.

4. **The Annual Broadcasters Forum:** This forum brings together broadcasters, media practitioners and other stakeholders with the common aim of building capacity and sharing topical issues which impact the sector. Over the years, the focus has ranged from sensitisation on the Broadcasting Code to airing issues on broadcasting content. The overall intention is for broadcasters and all stakeholders to remain relevant and up to date on matters which affect the sector, and to approach these matters in a collaborative and harmonised manner.

5. **ICT Open Forum[67] and Consumer Awareness Campaigns:** The Authority routinely holds ICT Open Fora and also undertakes consumer awareness campaigns geared towards many topical matters that impact the telecommunications and broadcasting industry. Some of these initiatives focus primarily on the broadcasting sector and aim to build capacity and awareness among broadcasters, consumers of content, and other stakeholders. ICT Open Fora topics over the years have ranged from "radio and talk shows" to "should media ownership be regulated?". In addition to the ICT Open Fora, consumer awareness campaigns, such as the series *You Don't Know What You Don't Know*, seek to bring awareness to the public on many relevant issues ranging from intellectual property rights to pirated content on Android boxes.

[65] *Authorisation Framework for the Telecommunications and Broadcasting Sectors*: https://tatt.org.tt/Portals/0/Documents/2014%20Documents/Revised%20Authorisation%20Framework%20v2_FINAL.pdf

[66] *Procedures for Handling Broadcasting Complaints*: https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1471&PortalId=0&TabId=222

[67] TATT ICT Open Fora: https://tatt.org.tt/Media/ICTOpenFora.aspx

4.9.1 Television

Preferred Television and Online Streaming Content

Preferred television and online streaming content for households were news (44%) and movies (27%). Outside of these two categories, no other category of content was identified as significant.

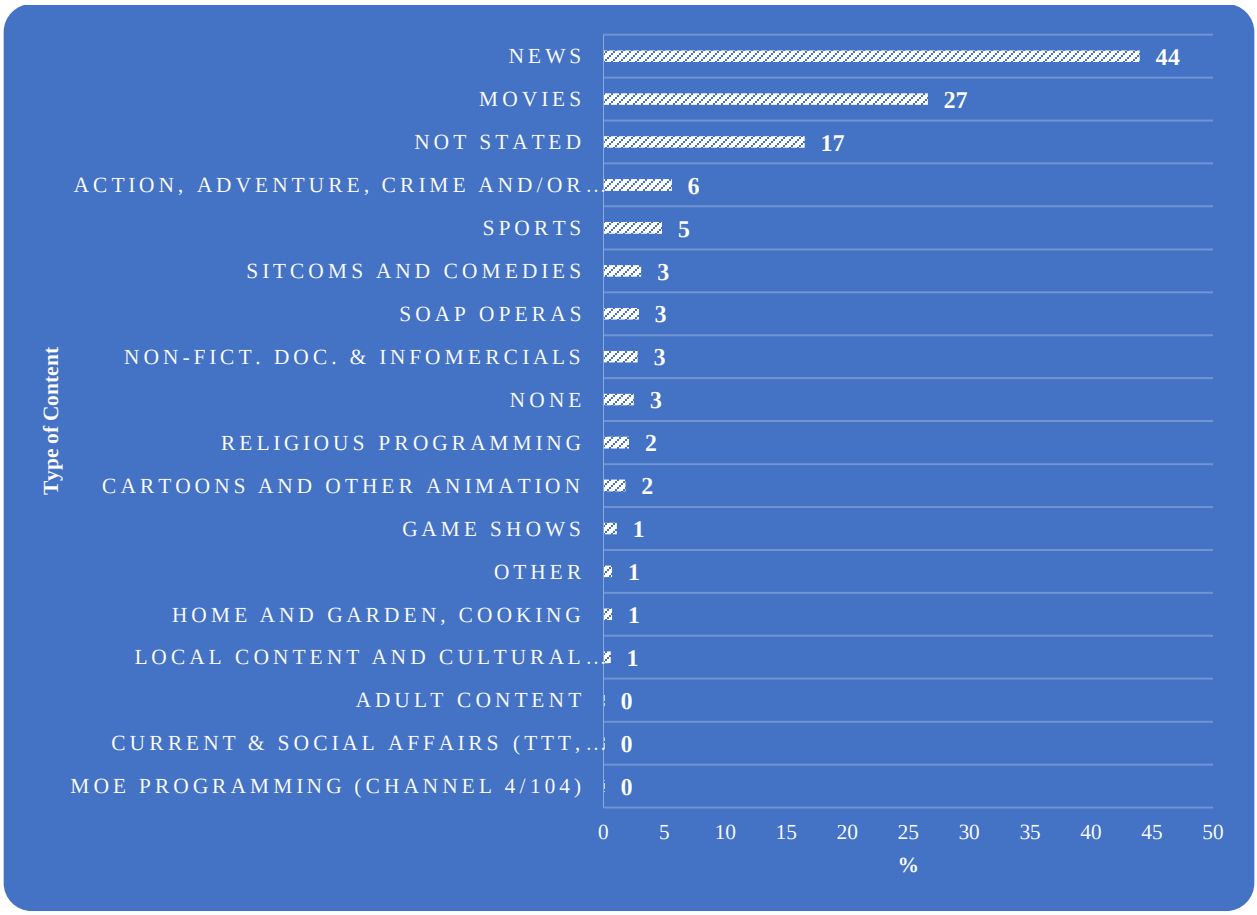


Figure 4.38: Preferred television and online streaming content

Preferred Viewing Days

Respondents reported marginal preference for viewing television and online content on weekends, compared to working days. However, 83% of respondents had no preferred day for viewing television and online content.

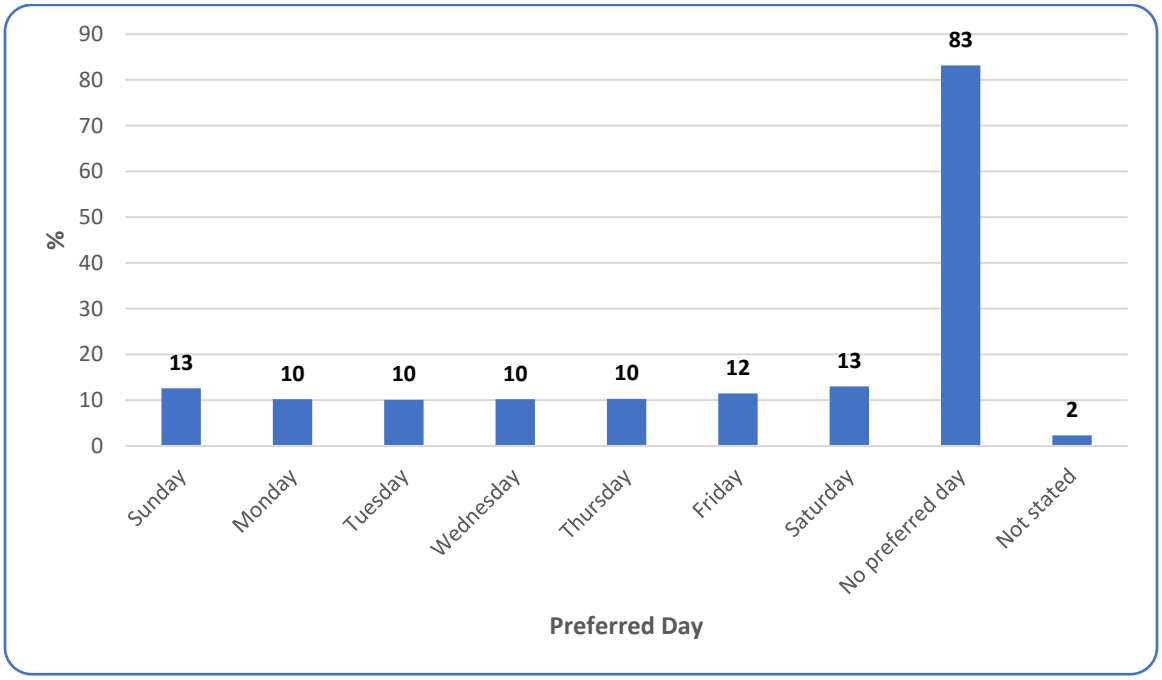


Figure 4.39: Preferred day for looking at television and online streaming content

Preferred Viewing Time

Seventy-three percent of respondents reported that they had no preferred viewing time. The majority of persons who reported having a preferred viewing time stated that prime time viewing (6 p.m. to 10 p.m.) was preferred.

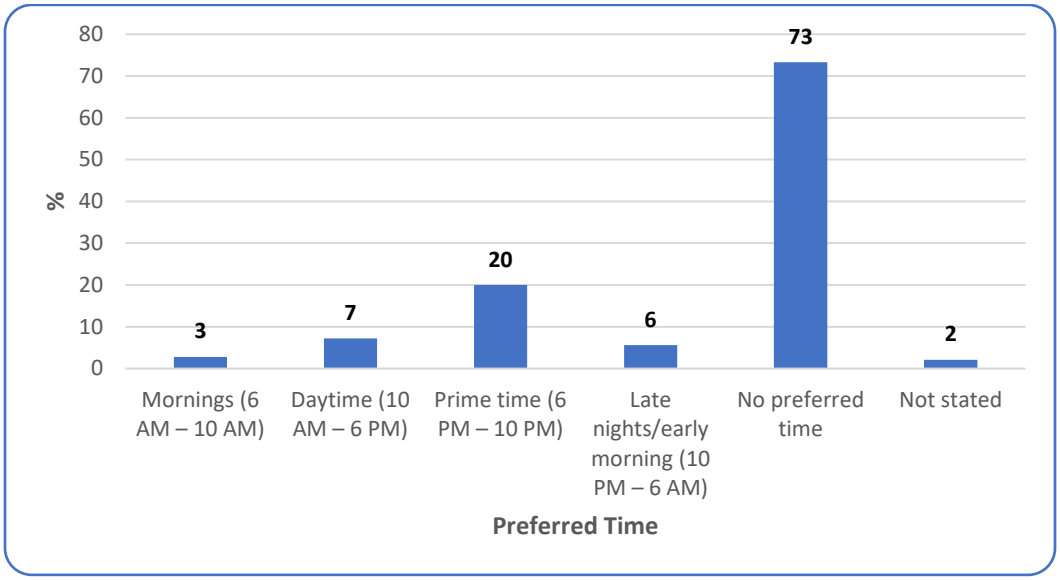


Figure 4.40: Preferred time for looking at television

Level of Satisfaction with Free-to-Air TV Reception

Mean satisfaction scores for free-to-air TV reception show that Penal/Debe, Princes Town and Mayaro/Rio Claro reported the highest levels of satisfaction with TV reception quality. At the other end of the spectrum were Diego Martin, Sangre Grande and Siparia. Given that all municipalities reported scores that were greater than 4, based on a maximum score of 5, TV reception is generally good.

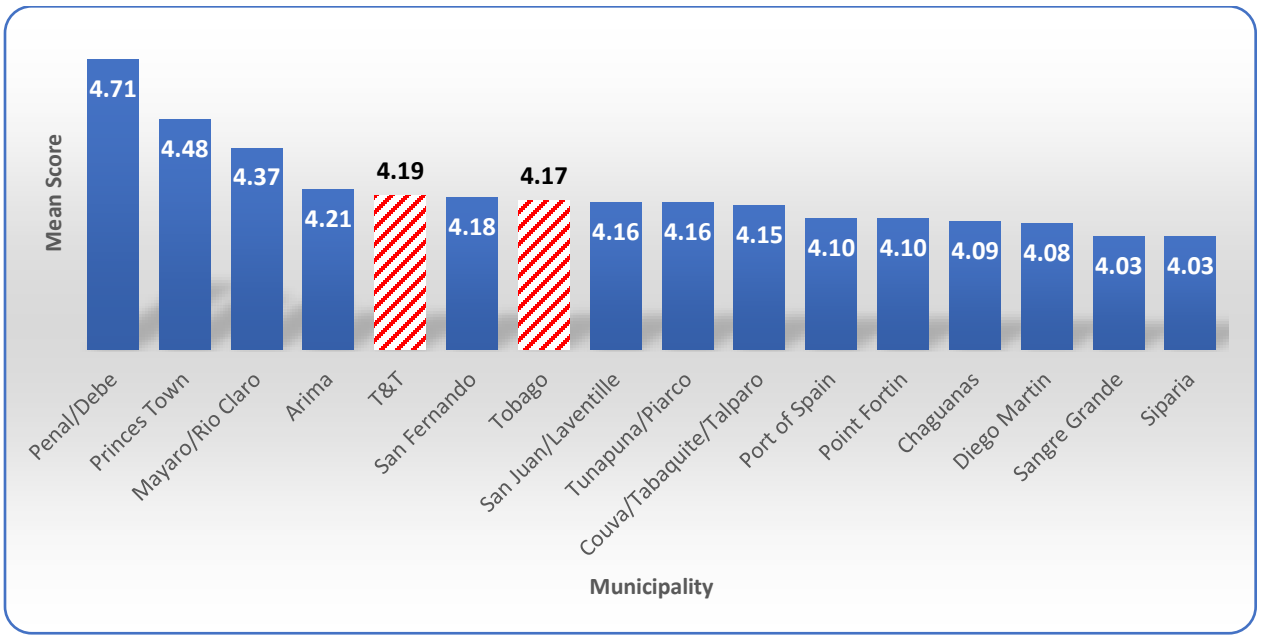


Figure 4.41: Mean satisfaction scores for free-to-air TV reception by municipality

4.9.2 Radio

Seventy-one percent of households interviewed reported that they owned a radio. However, just over half (53%) of respondents indicated that they listened to radio. The proportion of respondents listening to radio is low when compared to global estimates[68]. Listenership is particularly low among the lower age groups.

The age cohorts reporting the highest proportions of persons who listened to radio were 35 to 44, 55 to 64 and 45 to 54, in that order.

[68] https://www.statista.com/statistics/932839/radio-music-listeners-selected-countries-worldwide/

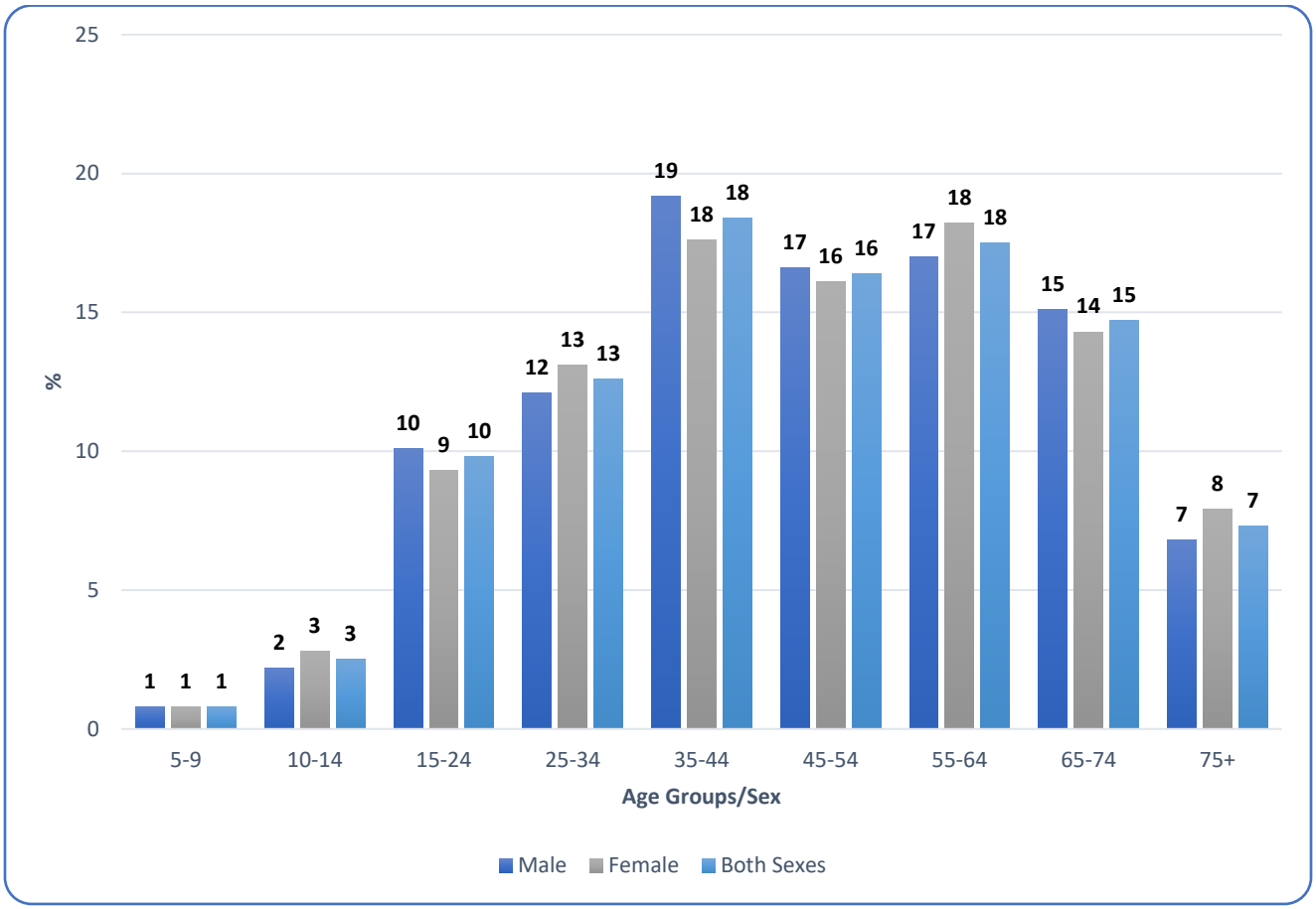


Figure 4.42: Proportion of persons who listen to free-to-air radio, by age group and sex

Preferred Radio Content

Talk and local radio was reported to be the content type listened to most by respondents. This was followed by urban/hip hop (34%) and Eurocentric[69] (30%). Urban/hip hop programming was preferred most by persons 24 years and younger, and talk and local programming by persons 15-44 years.

Table 4.10: Preferred radio content among persons 10+, by age group

Genre	10-14	15-24	25-34	35-44	45-54	55-64	65-74	75 +	Total
	%								
Local Content and Talk Radio	23.3	42.8	46.2	42.2	37.0	33.0	38.3	39.5	**39.0**
Urban/Hip Hop	45.0	59.2	50.2	43.9	32.4	23.1	17.8	11.9	**34.1**
Eurocentric	32.3	24.2	34.1	34.8	33.3	31.1	25.2	18.2	**30.0**
Religious (Christian and Inspirational)	13.4	11.2	13.1	14.7	17.3	24.1	25.0	35.1	**19.4**
Indo	4.7	5.2	9.6	10.9	15.4	22.2	22.2	19.7	**15.2**
Local Music	5.5	7.0	10.9	16.1	16.6	18.3	14.6	10.8	**14.1**
Religious and Indo	4.5	1.6	3.3	3.5	5.6	8.6	8.7	6.8	**5.6**
Not stated	2.9	1.6	2.1	1.3	1.2	0.7	1.9	0.7	**1.4**

Most respondents (77%) did not have a preferred day for listening to radio. Twelve percent of radio listeners tuned in to radio only while commuting. Similarly, most respondents (79%) did not have a preferred time for listening to radio (see Figures 4.43 and 4.44).

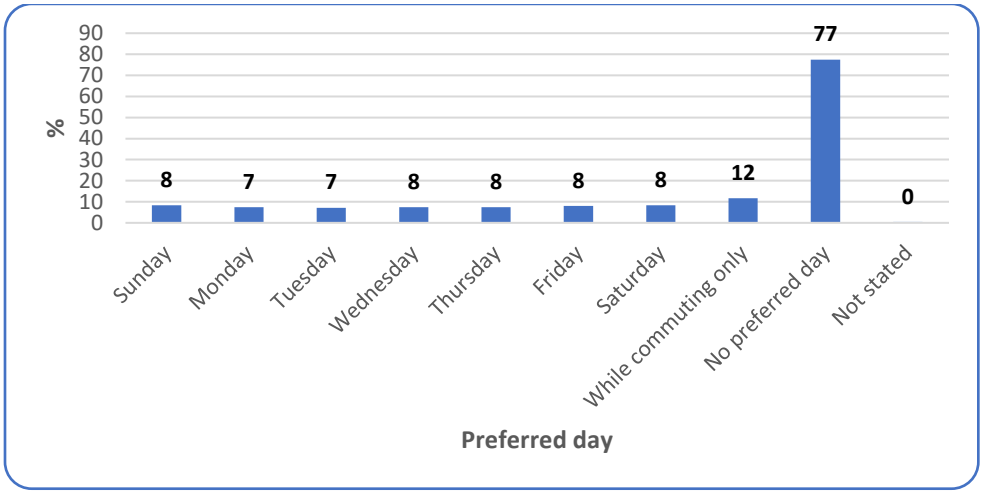


Figure 4.43: Preferred day for listening to free-to-air radio

[69] Eurocentric comprised the following music genres: alternative, classic, country, dance, jazz, pop, rock and Latin.

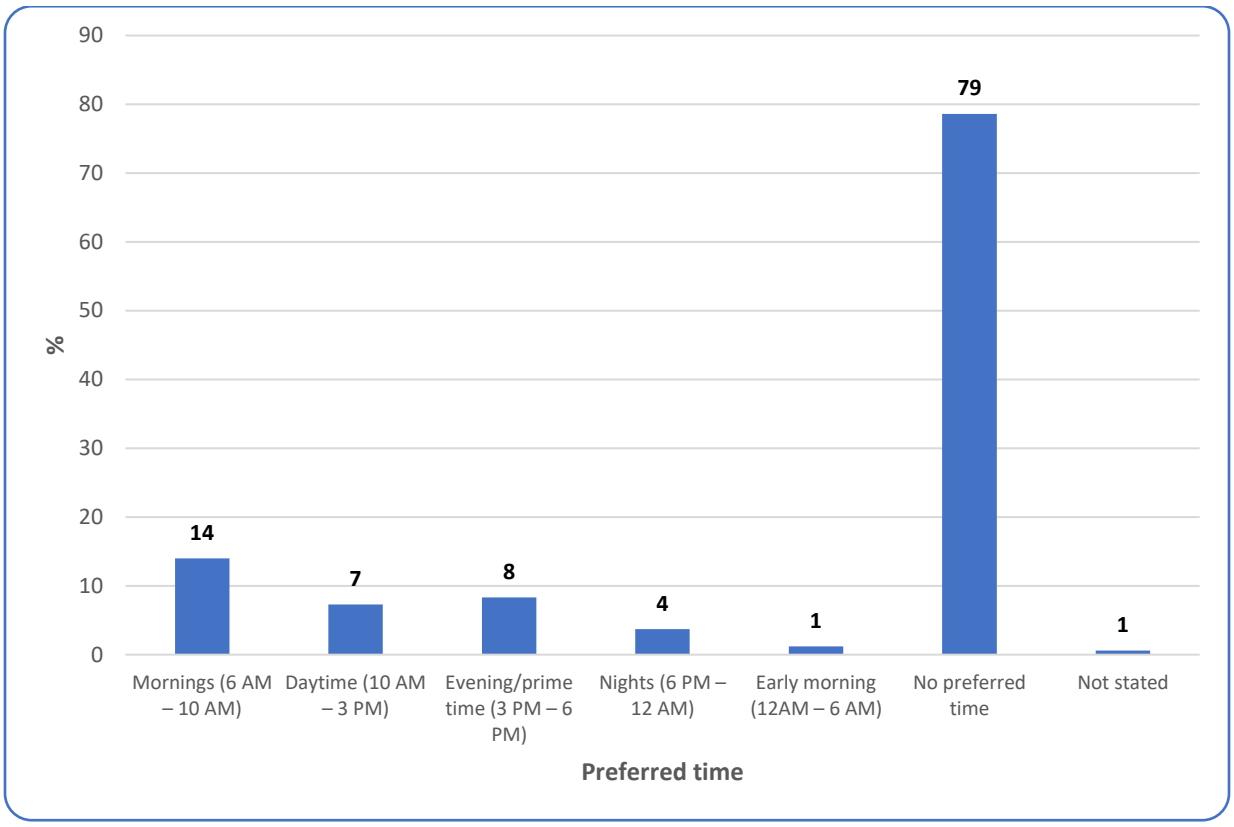


Figure 4.44: Preferred time for listening to free-to-air radio

Level of Satisfaction with Free-to-Air Radio Reception

Nationally, reported levels of satisfaction with radio reception were high (4.23 out of 5). The lowest levels of satisfaction with free-to-air radio reception were reported in Point Fortin and Sangre Grande.

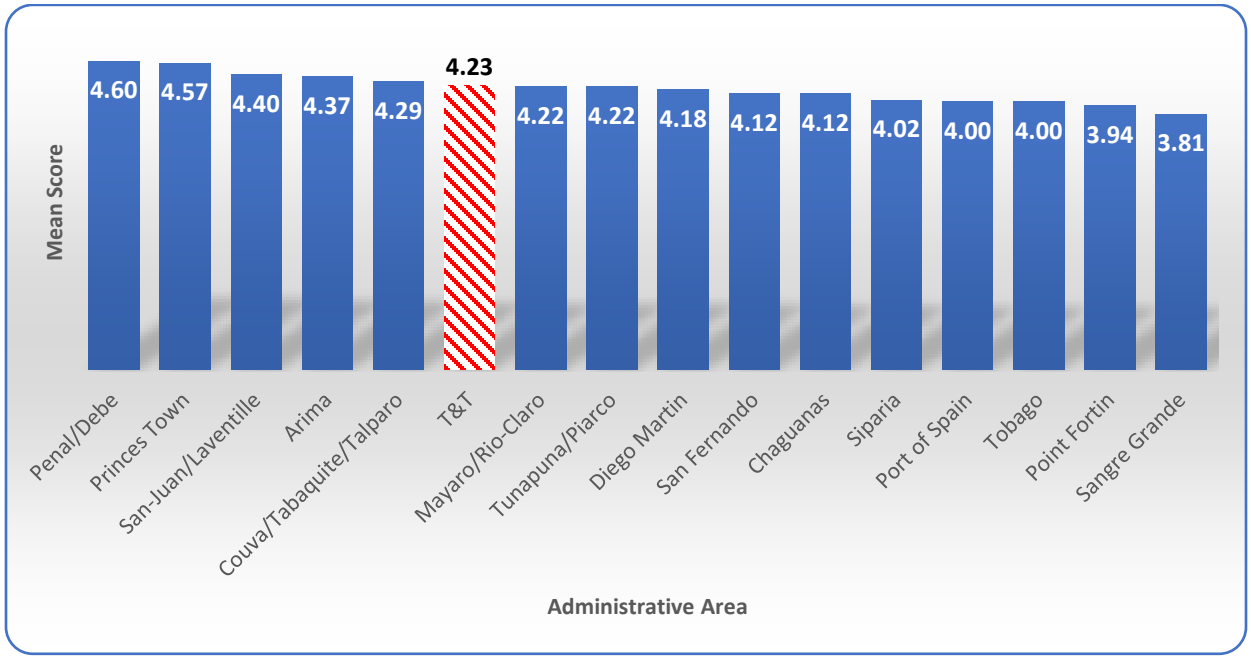


Figure 4.45: Mean satisfaction scores for radio reception

4.10 Core ICT Indicators

Core ICT indicators on household use and access to ICT are presented in Appendix I. Appendix I also contains ICT-specific SDG indicators, each of which is discussed briefly below. A summary of other key indicators on ICT is presented in the ICT dashboard, presented in subsection 4.10.2 below for Trinidad and Tobago.

4.10.1 Sustainable Development Goals ICT Indicators

SDG 9 aims to build resilient infrastructure, promote sustainable industrialisation and foster innovation. While ICT contributes to all the 17 SDGs, SDG Target 9.c, is considered of most direct relevance. The goals are inter-related. Sustainable industrialisation in the present context of Trinidad and Tobago is hardly achievable without quality education and life-long learning among most of the labour force (Goal 16). Inclusivity in society – which this survey seeks to measure - is

synonymous with low inequality (Goal 10). The contribution of ICT to all 17 SDG goals is illustrated in Figure 4.46.

Figure 4.46: ICT contribution to SDGs

Source: ITU

ITU is the custodian of five SDG indicators, each of which is discussed below.

Indicator 4.4.1: Proportion of Youth and Adults with ICT Skills, by Type of Skills

Developing ICT skill capabilities across the population is regarded as a critical component of developing a digitally included society. Data on the ICT skills[70] for youths and adults in Trinidad and Tobago show higher levels of ICT competencies among the 15 to 24 age cohort (youths) compared to the adult population. Basic skill levels among the youth and elderly are 86% and 73%, respectively; standard skills are 41% and 30%, respectively; and advanced skills 4% for both adults and youths. The level of advanced skills, particularly among the youth population, suggests the need for targeted intervention at all levels of education as well as in the workplace (Figure 4.47).

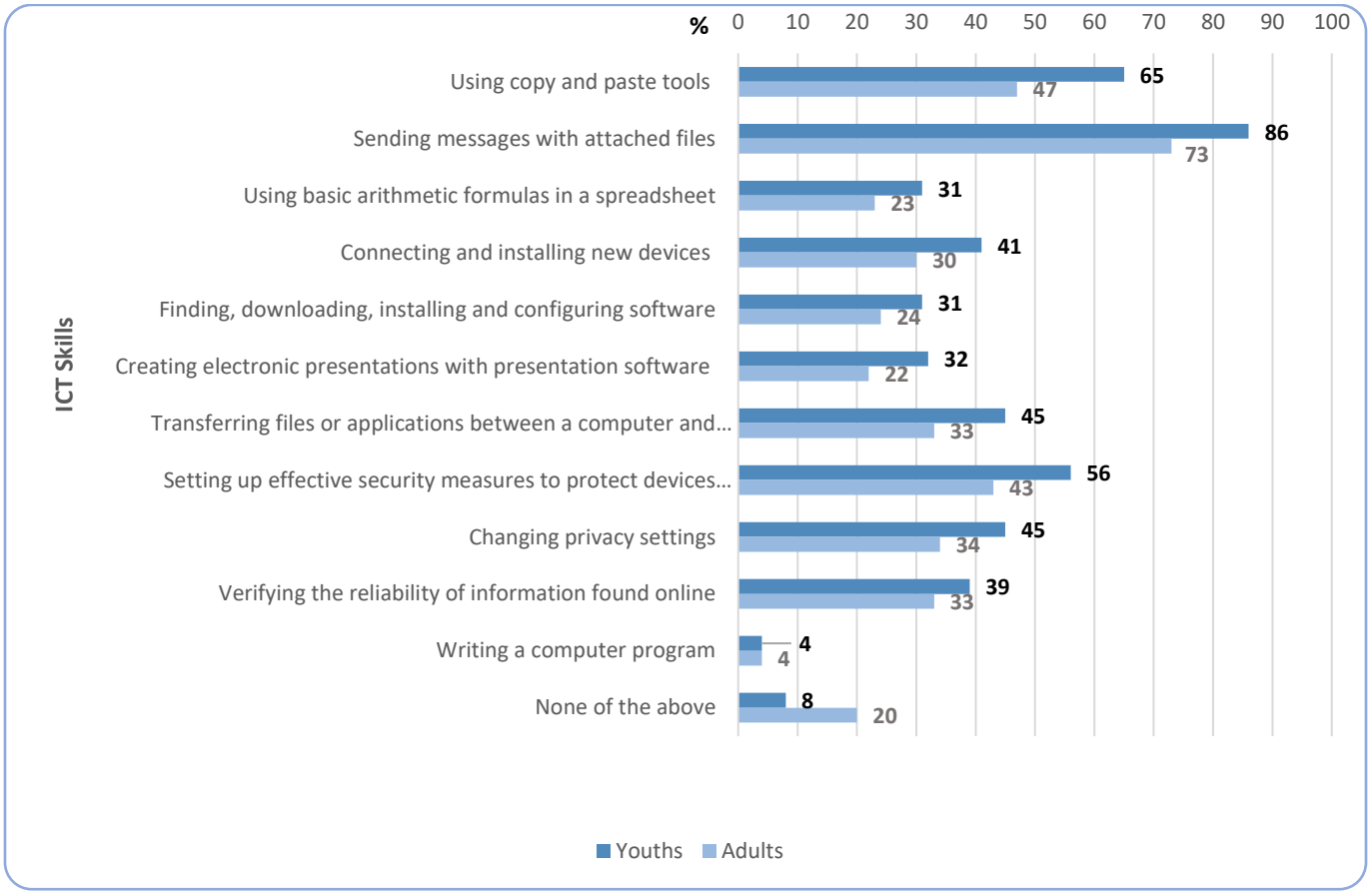


Figure 4.47: Proportion of youths and adults with ICT skills, by type of skills

[70] **Basic skills** are relatively simple tasks, such as moving a file or folder, or sending an email with an attachment. **Standard skills** include working with spreadsheets, creating electronic presentations or installing and configuring software. **Advanced skills** are being able to programme or code. The highest reported percentages among the activities in each of the three categories is selected as the indicator for the respective skill category.

Indicator 5.B.1: Proportion of Individuals Who Own a Mobile Telephone, by Sex

According to ITU, ownership of mobile phones is an important tool to reduce gender inequality. The gender parity ratio of 1.01, based on the data in Figure 4.46, shows that females are slightly ahead of males with respect to mobile phone ownership. Females account for 51% of the overall sample of respondents.

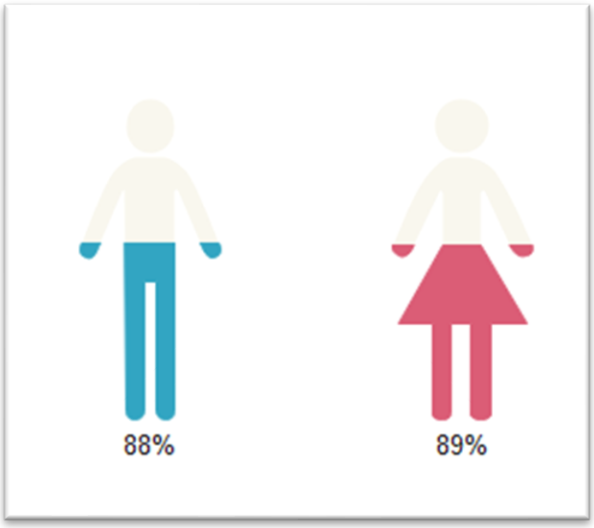


Figure 4.48: Proportion of males and females who own a mobile phone

Indicator 9.C.1: Proportion of Population Covered by a Mobile Network, by Technology

The population of Trinidad and Tobago is fully covered by a mobile network. Additionally, 100% of the population is fully covered by at least a 3G network and 75% of the population by at least a 4G network, according to data presented by mobile service providers.

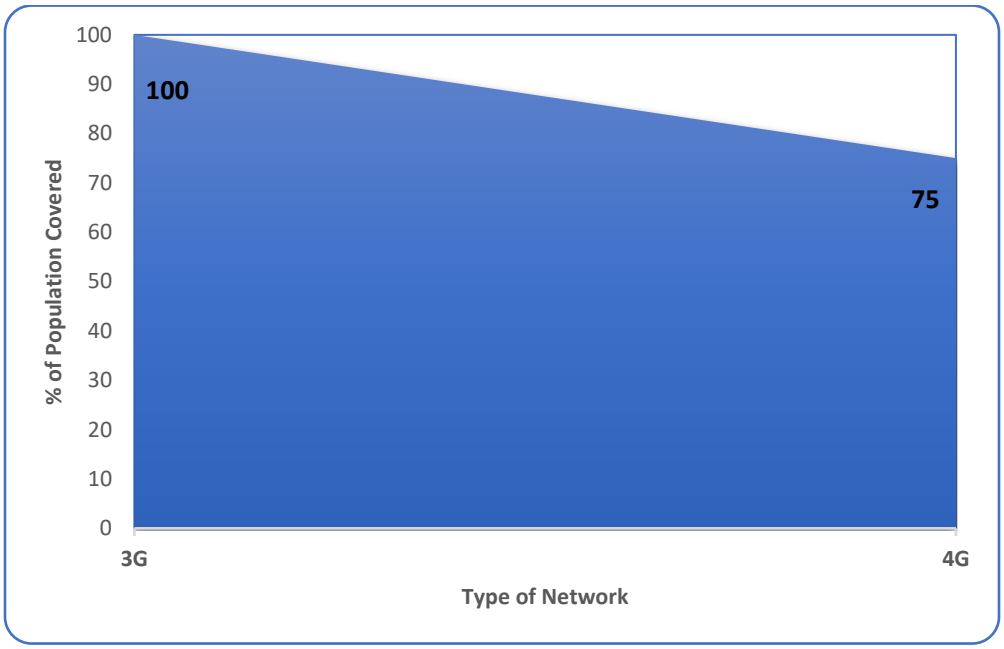


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Figure 4.49: Percentage of population covered by a mobile network, by type of network (2021)
Source: TATT

Indicator 17.6.1: Fixed Internet Broadband Subscriptions per 100 Inhabitants

In Trinidad and Tobago, fixed Internet broadband subscription per 100 inhabitants is estimated at 27 in 2021.[71] The global average published by ITU in 2021 is 17 subscribers per 100 inhabitants.

To analyse Trinidad and Tobago's performance with respect to this indicator, comparative data for two other Caribbean islands as well as for Singapore and the USA for the period 2010 to 2020 are presented with available data from the World Bank.

[71] Indicator obtained from TATT's 2021 market data and not DIS 2021.

Table 4.11: Fixed Internet broadband per 100 inhabitants for selected countries 2010 – 2020

Country	Year											Trend
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
T&T	21	22	21	22	21	20	20	19	23	24	23	
Barbados	49	50	51	52	48	52	49	42	45	45	–	
Jamaica	9	10	9	9	9	9	11	10	12	14	15	
Singapore	39	38	37	36	36	36	35	35	35	33	32	
USA	48	46	44	42	40	39	38	36	34	32	31	

Source: The World Bank

Indicator 17.8.1: Proportion of Individuals Using the Internet

Overall, 79% of the population of Trinidad and Tobago, five years and older, use the Internet. Internet usage among females as a percentage of the total female population is 85% compared to 83% among males.

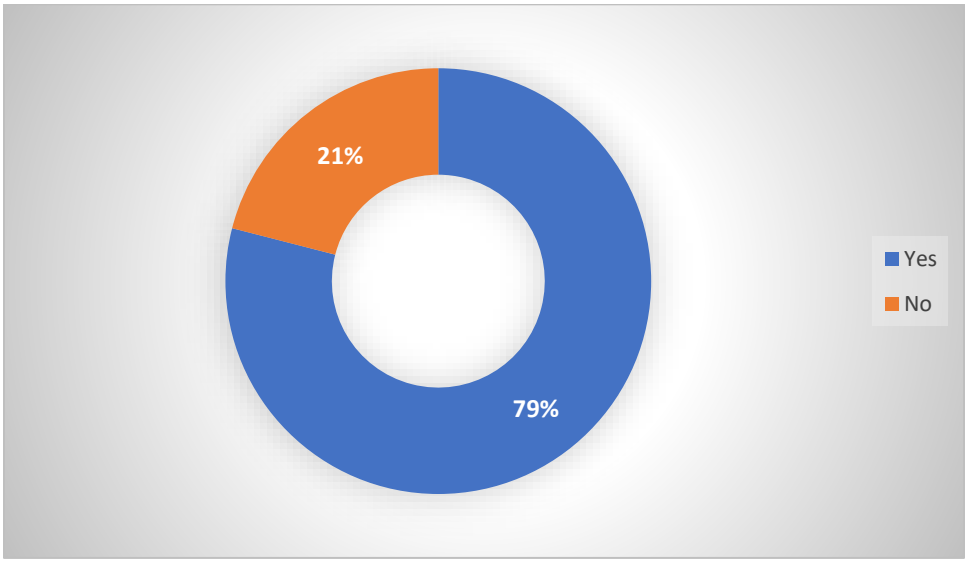


Figure 4.50: Proportion of individuals using the Internet (2021)

4.10.2 Digital Development Dashboard

DEFINITIONS

· **Individuals owning a mobile phone**: This is the proportion of individuals who own a mobile cellular telephone. An individual owns a mobile cellular telephone if he/she has a mobile cellular phone device with at least one active SIM card for personal use. It includes mobile cellular phones supplied by employers that can be used for personal reasons (to make personal calls, access the Internet, etc.) and those who have a mobile phone for personal use that is not registered under his/her name. It excludes individuals who have only active SIM card(s) and not a mobile phone device.) The indicator is calculated by dividing the total number of individuals owning a mobile phone by the population, and then multiplying the result by 100. Indicator obtained from DIS 2021.

· **Mobile cellular subscriptions per 100 inhabitants:** refers to the number of subscriptions to a public mobile-telephone service that provide access to the PSTN using cellular technology, divided by the population and multiplied by 100. Indicator obtained from TATT market data.

Note: If an individual owns at least one mobile phone with at least one active SIM card, he/she is counted once in the proportion of individuals owning a mobile phone. However, for the mobile cellular subscriptions per 100 inhabitants indicator, if an individual has at least one mobile cellular subscription, then each subscription is counted.

· **Households with Internet access at home:** This is the proportion of households with Internet access at home. The indicator is calculated by dividing the number of households with Internet by the total number of households, and then multiplying the result by 100. Indicator obtained from DIS 2021.

· **ICT - Basic skills:** the highest value among the following four computer-based activities: copying or moving a file or folder; using copy and paste tools to duplicate or move information within a document; sending e-mails with attached files; and transferring files between a computer and other devices. Indicator obtained from DIS 2021.

· **ICT - Standard skills:** the highest value among the following four computer-based activities: using basic arithmetic formula in a spreadsheet; connecting and installing new devices; creating electronic presentations with presentation software; and finding, downloading, installing and configuring software. Indicator obtained from DIS 2021.

· **ICT - Advanced skills:** the value for writing a computer programme using a specialized programming language. Indicator obtained from DIS 2021.

ABOUT THIS DASHBOARD

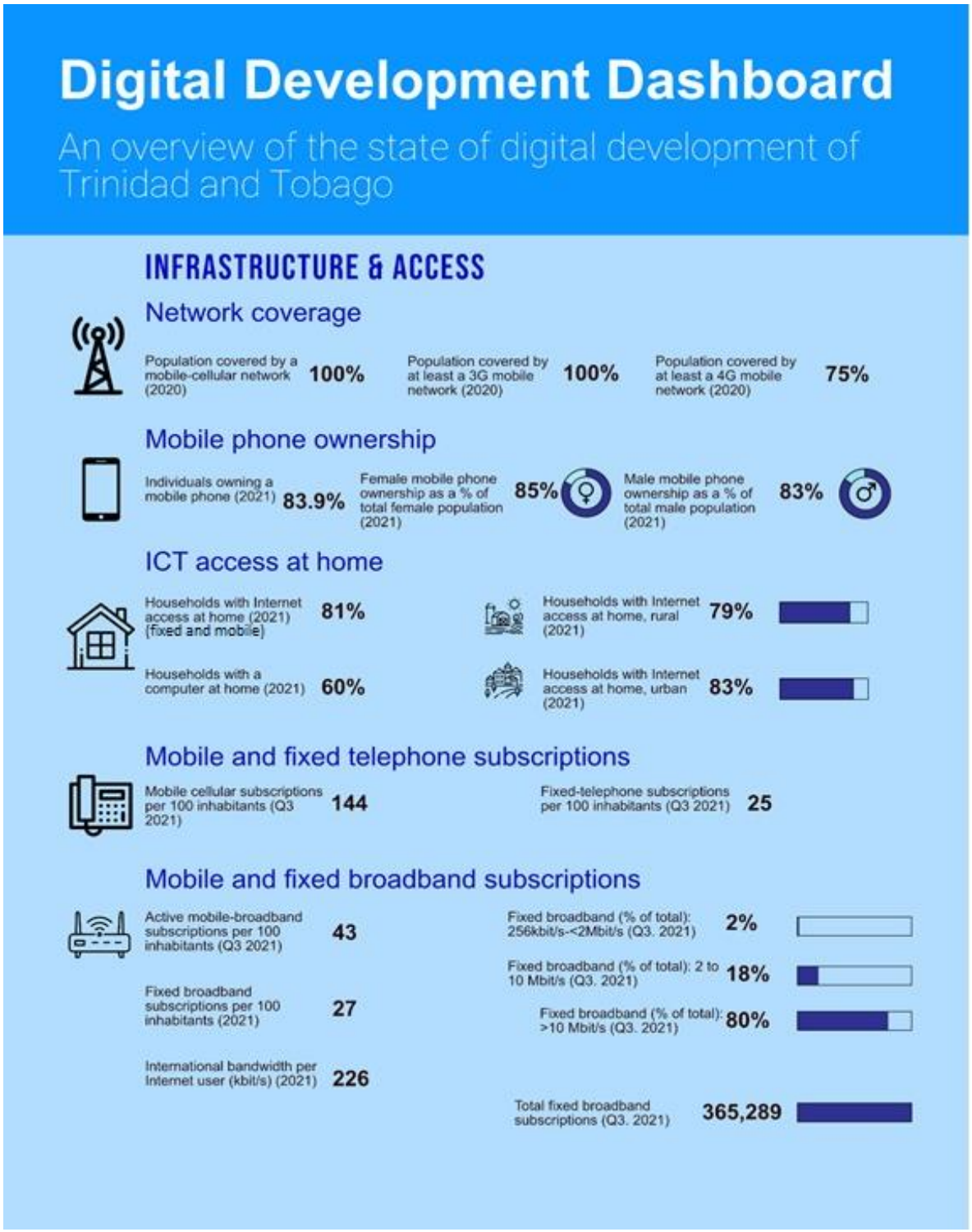
The Dashboard reports the latest values for selected indicators drawn from three data sources:

· **Telecommunication/ICT infrastructure and access data:** market data collected by TATT and reported to the ITU via annual questionnaires. These indicators are defined in the *ITU Handbook for the Collection of Administrative Data on Telecommunications/ICT*.

· **Price data,** collected through an annual ITU questionnaire. Price indicators are defined in the *ITU Handbook for the Collection of Administrative Data on Telecommunications/ICT*.

· **DIS 2021,** which provides data on access and use of ICTs by households and individuals. These indicators are defined in the *Manual for Measuring ICT Access and Use by Households and Individuals.*

Note: The weighted number of households within Trinidad and Tobago, used for calculating household proportion indicators was 494,043.


Digital Development Dashboard
An overview of the state of digital development of Trinidad and Tobago
INFRASTRUCTURE & ACCESS
Network coverage
Population covered by a mobile-cellular network (2020) 100%
Population covered by at least a 3G mobile network (2020) 100%
Population covered by at least a 4G mobile network (2020) 75%
Mobile phone ownership
Individuals owning a mobile phone (2021) 83.9%
Female mobile phone ownership as a % of total female population (2021) 85%
Male mobile phone ownership as a % of total male population (2021) 83%
ICT access at home
Households with Internet access at home (2021) (fixed and mobile) 81%
Households with a computer at home (2021) 60%
Households with Internet access at home, rural (2021) 79%
Households with Internet access at home, urban (2021) 83%
Mobile and fixed telephone subscriptions
Mobile cellular subscriptions per 100 inhabitants (Q3 2021) 144
Fixed-telephone subscriptions per 100 inhabitants (Q3 2021) 25
Mobile and fixed broadband subscriptions
Active mobile-broadband subscriptions per 100 inhabitants (Q3 2021) 43
Fixed broadband subscriptions per 100 inhabitants (2021) 27
International bandwidth per Internet user (kbit/s) (2021) 226
Fixed broadband (% of total): 256kbit/s-<2Mbit/s (Q3. 2021) 2%
Fixed broadband (% of total): 2 to 10 Mbit/s (Q3. 2021) 18%
Fixed broadband (% of total): >10 Mbit/s (Q3. 2021) 80%
Total fixed broadband subscriptions (Q3. 2021) 365,289

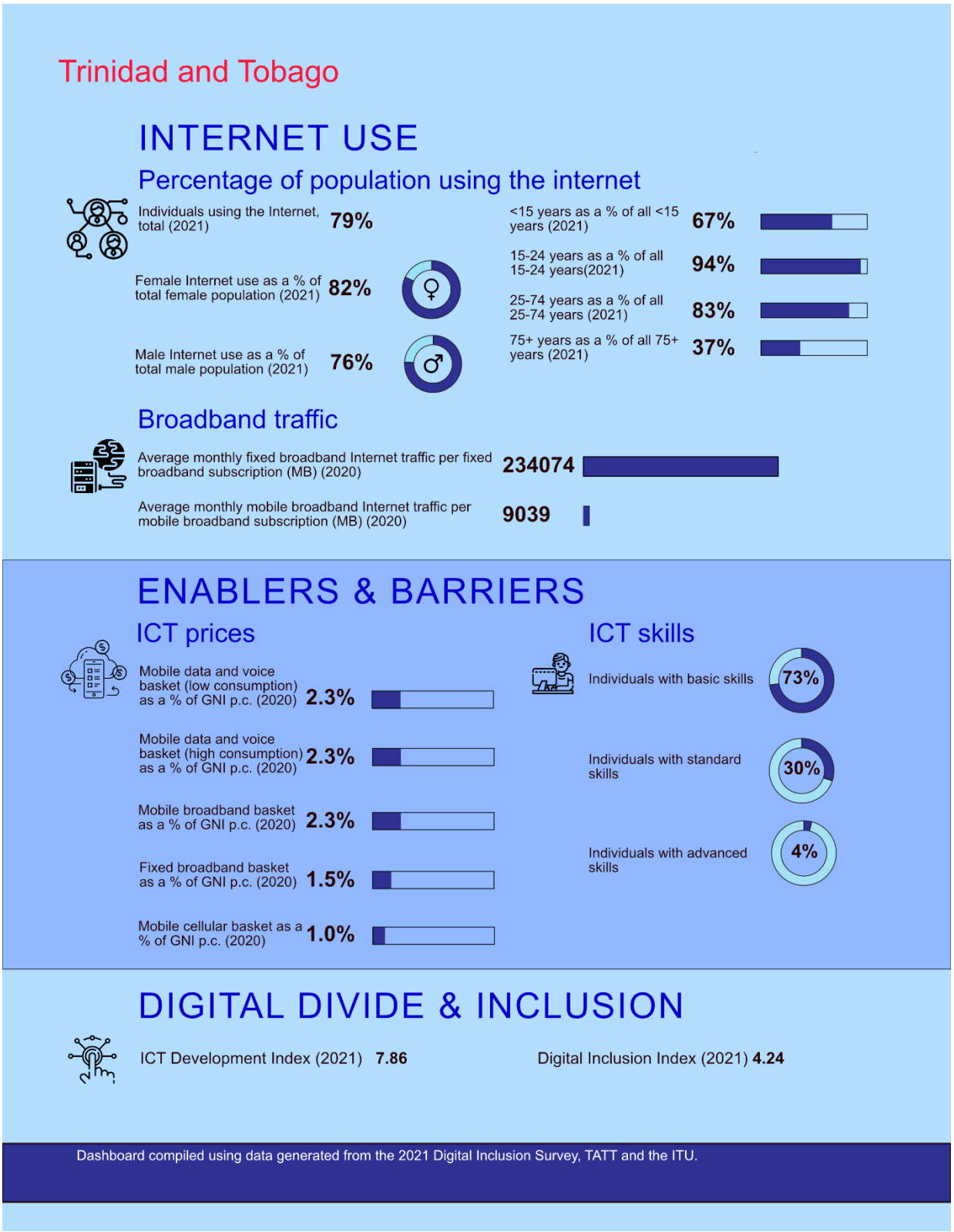


Figure 4.51: Digital development dashboard – Trinidad and Tobago

NATIONAL DIGITAL INCLUSION SURVEY 2021

CONCLUSION & RECOMMENDATIONS

5. Conclusion and Recommendations

Given the pervasive and dynamic nature of disruptive technology, as well as the regulatory best practice approaches recommended by ITU, the UN and the World Bank[72], it is important that everyone in Trinidad and Tobago has the support, trust, confidence, motivation, skills and devices to allow him/her to utilise ICT in a meaningful manner and thereby participate in the information society and the digital economy. Unless all citizens have available, affordable and accessible ICTs, many will be unable to make use of the online services, information and entertainment that are a feature of modern-day life.

DIS 2021 produced generally positive results across the various parameters in Trinidad and Tobago. The results show that the use, value and potential of physical infrastructure has been underutilised in terms of its availability in communities. The low score for Trinidad and Tobago on ICT skills is the outward visible evidence of the deficiency in its human capital stock and the challenge that remains in developing a labour force capable of competing in the evolving global economy.

The Authority's mandate, as outlined in the Act, entails, inter alia:

> .....the facilitation of the orderly development of a telecommunications system that serves to safeguard, enrich and strengthen the national, social, cultural and economic well-being of the society;..

The data in DIS 2021 show the expansion of infrastructure to almost every part of the country. However, in the face of the demands of the 4IR, and in promoting access to quality telecommunications services, the strengthening of the national, social, cultural and economic well-being of the society imposes a responsibility on the Authority to remain proactive in encouraging the use of telecommunications infrastructure across public, private and NGO sectors and the citizenry at large.

The recommendations in this section seek to take the next logical step to bridge the digital divide, promote digital inclusion, and improve the country's international ICT rankings, by combining the results of DIS 2021 with a connectivity agenda, which incorporates greater access and uptake of ICTs. Furthermore, the recommendations take into account best practices and incorporate the

[72] ITU/infeed Telecommunications Regulation Handbook (2020): https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-TRH.1-2011-PDF-E.pdf

relevant approaches reflected in the international trends attributed to the Americas region[73], inclusive of the priority areas identified for the Caribbean[74].

Having regard to the need for improvement in the ICT skills indicator, the Authority may focus on collaborative areas, which include promoting behavioural and cultural changes among the population and supporting the use of the telecommunications infrastructure.

Given the requirement to constantly upgrade the human capital for a diversifying and competitive economy, a robust ICT infrastructure is an imperative in making lifelong education and training easily accessible, in order to achieve and maintain competitiveness in the workforce. The overall focus should therefore be the participation of all individuals and communities in all aspects of the information society, thereby reducing access gaps in ICT usage and promoting the use of ICT to overcome exclusion, and improve economic performance, employment opportunities, quality of life, social participation and cohesion.

The foregoing is the basis for certain action areas to improve Trinidad and Tobago's DII in the first instance. There is need to:

1. improve digital literacy and competences.
2. reduce the digital divide.
3. promote inclusive digital government and e-commerce.
4. address the access and affordability needs of vulnerable population groups.
5. enhance e-accessibility and ICT usability for people of all abilities, gender and social standing.

By focusing on the above action items and putting citizens first, this enabling approach, supported by the most effective systems for constant monitoring and evaluation, will:

1. **highlight the needs of vulnerable groups:** different groups of people require different types of support to help them get connected and thereby access the Internet.

2. **identify gaps and overlaps in the current ICT provision:** there are many digital transformation projects and initiatives being delivered by many different entities across the country so some level of harmonisation may be required going forward.

[73] ITU Digital Trends in the Americas Region (2021): http://www.itu.int/md/D18-RPMAMS-C-0002/en

[74] ITU Information Regarding Caribbean Priorities for Developing Regional Priorities for the Americas (2022-2025): http://www.itu.int/md/D18-RPMAMS-C-0013/en

3. **target new ICT provision:** identifying the specific needs of different user groups and geographic gaps in current provision will enable new activity to be targeted in ways that help achieve the maximum impact with limited resources.

More detailed recommendations are presented below, using the four core indices that comprise the DII as a framework. These recommendations and DIS 2021 results will inform the Authority's initiatives for the next Strategic Plan period.

Recommendations for Improving ICT Access in Trinidad and Tobago		
Developmental Area	**High-Level Recommendations**	**Specific Recommendations**
1. Improvement in ICT access	1. Continued development and deployment of a modern, resilient and sustainable broadband telecommunications/ICT infrastructure, with focus on underserved areas at the community level 2. Enhancement of the digital transformation ecosystem through connectivity projects, promoting active engagement of service providers, industry partners and other relevant stakeholders 3. Address the access needs of vulnerable population groups	1. Create public access technology centres in underserved communities to facilitate both access to and training in ICT 2. Work with the relevant stakeholders to identify and promote low-cost options for procuring computers for home use 3. Target municipalities and communities with limited access (lowest IDI access scores) for deployment of free Wi-Fi hotspots 4. Expand broadband connectivity to rural communities lacking reliable high speed broadband service.

Recommendations for Improving ICT Use in Trinidad and Tobago		
Developmental Areas	**High-Level Recommendations**	**Specific Recommendations**
1. Promote usage of online services and e-government services. 2. Improve e-commerce penetration rate	1. Promote inclusive digital government and e-commerce 2. Address the access needs of vulnerable population groups	1. Develop advertising and awareness campaigns to promote available online services and the benefits of conducting business online 2. Provide training to targeted groups, including marginalised youth, the elderly and PWDs, that develops their capacity to access online government services 3. Develop community-based campaigns to encourage citizens to register for TTConnect and TTBizLink accounts 4. Develop strategies to promote greater use of ICT among PWDs, including pilot projects with institutions such as the Lady Hochoy Home 5. Promote the adoption of accessibility technologies and strategies for PWDs 6. Sensitise policymakers, the media and other relevant stakeholders about digital equity and digital inclusion initiatives 7. Engage with OTT providers on their contributing to funding digital inclusion initiatives 8. Minimise disincentives to conducting e-commerce transactions, such as online taxes and service/convenience charges, and provide mechanisms for local payment processing for persons who may not have a credit card

Recommendations for Improving Trust and Confidence in Trinidad and Tobago		
Developmental Area	**High-Level Recommendations**	**Specific Recommendations**
1. Improve the level of confidence using available online services	1. Give greater focus to cybersecurity programmes and initiatives 2. Improve capacity building and understanding of cybersecurity issues 3. Focus on the critical areas identified in the Global Competitive Index 4. Develop bilateral and multi-lateral arrangements to promote international cooperation in order to address cyber-security issues	1. Develop skilled base of security experts locally and, more specifically, within the public sector 2. Develop online training courses, toolkits and social media strategies to build awareness and confidence in ICT nationally 3. Ensure online platforms are reliable, stable and secure 4. Adopt the appropriate cyber-security policies and standards to address cybersecurity risks and threats 5. Develop an all-of-government approach with respect to user protection, privacy and ethical use of data collected via online platforms 6. Develop an appropriate framework for treating with cybersecurity that is interoperable at the national, regional and international levels 7. Create mechanisms for regular dialogue on cybersecurity that takes on board the contributions of industry experts, law enforcement, academia and other relevant stakeholders

Recommendations for Improving Digital Literacy/Readiness in Trinidad and Tobago		
Developmental Areas	**High-Level Recommendations**	**Specific Recommendations**
1. Expand competences beyond basic ICT skills 2. Enhance the levels of ICT certification 3. Improve the mean years of schooling	1. Promotion of digital literacy and competence to ensure inclusive and trusted use and implementation of new and emerging technologies, applications and services, especially among vulnerable populations	1. Digital literacy and other technology training in trusted and comfortable locations (libraries, community centres, churches, schools, recreation centres, senior centres) supported by trained computer instructors, librarians and lab monitors 2. Training that focuses on the outcome (such as job searching) instead of the technology 3. Continue to provide technology training opportunities for micro and small businesses 4. Develop applied learning/job-ready ICT training to youths (15-24 years) 5. Technology fairs focused on community members sharing and teaching each other 6. Civic engagement training that teaches community members how to engage online with government 7. Develop digital literacy training programmes that can be accessed in convenient spaces, such as libraries, community centres, ICT access centres, schools, churches and senior citizens organisations

Based on the action items and core issues identified for the DII, the following four recommendations are proposed to improve the country's IDI, while taking into consideration the findings of the survey, as well as the thematic strategies of the ITU Digital Regulation Handbook[75], Vision 2030 and the ICT Blueprint. These recommendations embrace the principles of universal service, digital inclusion, economic development, equity and sustainability within the context of digital transformation in Trinidad and Tobago:

1. Continued development and deployment of a modern, resilient and sustainable broadband telecommunications/ICT infrastructure, with focus on underserved areas at the community level

2. Adoption of digital literacy and competence to ensure inclusive and trusted use of new and emerging technologies, applications and services, especially among vulnerable populations[76]

3. Enhancement of the digital transformation ecosystem through connectivity projects, utilisation of scalable and secure enterprise architecture for digital government services[77], promotion of active engagement of service providers, industry partners and other relevant stakeholders

4. Development of a modern and enabling policy and regulatory environment to connect the underserved through available, affordable and accessible ICTs that support the achievement of the SDGs, the ITU Connect 2030[78] Agenda, and Trinidad and Tobago's Vision 2030

Apart from the IDI, the results of DIS 2021 can be applied in a systematic and coordinated manner to improve some of Trinidad and Tobago's other international ICT rankings, such as the country's NRI and GCI. These rankings play a critical role in economic performance, strategic planning and development of the local industry, as well as support the programmes and projects contained within the ICT Blueprint.

[75] ITU/The WB Digital Regulation Handbook (2020): https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-TRH.1-2020-PDF-E.pdf

[76] Women and girls, PWDs and specific needs, youth, marginalised communities and indigenous people

[77] ITU Digital Transformation and the Role of Enterprise Architecture: https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-DIG_TRANSF-2019-PDF-E.pdf

[78] ITU Connect 2030 agenda: https://www.itu.int/en/mediacentre/backgrounders/Pages/connect-2030-agenda.aspx

Considering the results of DIS 2021 and the developmental areas noted in the NRI 2021, the following initiatives can be considered to improve Trinidad and Tobago's NRI rankings going forward:

1. Adoption of emerging technologies
2. Investment in emerging technologies
3. Greater annual investment in telecommunications services
4. Increased emphasis on research and development
5. A greater focus on cybersecurity
6. Adaptability of the legal framework to emerging technologies
7. Promotion of the gig economy and ICT-centric growth[79]
8. A systematic and coordinated approach for reporting ICT data to international organisations

In terms of ICT trust and confidence, utilising the ITU GCI (2020)[80], DIS 2021 examines Trinidad and Tobago's legal and regulatory framework as it relates to ICTs, and more specifically, cybersecurity.

The GCI recognises that some work is needed in organisational measures and capacity building in Trinidad and Tobago. Furthermore, the ITU GCI (2020) recommends that the most critical area of focus for this country should be in the area of cooperative measures. This recommendation hinges on developing bilateral and multilateral agreements to promote international cooperation in order to extend reach and impact in dealing with transnational cybersecurity issues. ITU advises that the typical goals of cybersecurity cooperation may include harmonisation of minimum-security measures, information and good practice sharing, and codification of norms of behaviour.

If such holistic measures are undertaken, the ICT trust and confidence levels of certain population groups, which were found to be on the lower end of the scale in DIS 2021, can be increased, thereby boosting motivation, inclusiveness and further uptake of ICTs.

The COVID-19 pandemic has afforded GORTT the opportunity of integrating e-government in many of the services provided to the public, with the establishment of the Ministry of Digital

[79] ITU ICT-Centric Economic Growth, Innovation and Job Creation (2017): https://www.itu.int/dms_pub/itu-d/opb/gen/D-GEN-ICT_SDGS.01-2017-PDF-E.pdf

[80] ITU Global Cybersecurity Index (2020): https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-GCI.01-2021-PDF-E.pdf

Transformation. The government has already rolled out free Wi-Fi, which is available to citizens in public libraries, transport hubs, schools and health institutions across the country.

The survey has identified the need for further initiatives to be rolled out by the Authority. Following the achievement of facilitating access to services to the majority of the population, it is now time for the Authority to assume an advocacy role on behalf of citizens to facilitate their becoming digitally empowered and recognising their capacity to self-actualise and achieve their fullest potential through the use of ICT in all its dimensions in Trinidad and Tobago. Such initiative will be included in the Authority's next strategic plan (2022-2025).

Advocacy and the marketing of the use of ICTs among the population by the Authority is characterised by the engagement of key institutions in the government. The Ministries of Education and of Community Development are important partners with the Authority. In recent years, the Ministry of Community Development has invested in the upgrading of community centres. These can be the locus for the provision of desktops and other hardware that can be accessed by citizens lacking the means to purchase devices for use at home utilising the ICT access centre model. All community centres can have the relevant ICT equipment available for use by the community, with free Internet access to citizens.

Also available to citizens should be programmes for self-tutoring provided by the Ministry of Education. Adult education programmes, as well as the secondary school courses in such areas as English, Mathematics, Social studies and Science can be organised for online delivery in community centres. The Authority will play a strong supporting role in such initiatives aimed at the development of the human capital for a diversified economy.

The Authority has done well over the first two decades of its existence in ensuring the reach of telecommunications infrastructure to communities across the country. However, despite the existence of seventeen authorised fixed and mobile telecommunications providers as at the end of 2021, there are still geographic areas and population groups in need, to meet the targets for universal and equitable coverage.

Over the coming years, the Authority will continue to engage and be proactive among its clients and stakeholders to ensure that the capacity being built is fully utilised in ways that redound to the national interest of a modern Trinidad and Tobago. The Authority's efforts together with GORTT and other related state agencies over the next three years will determine how quickly the country improves its ranking on major international indicators on ICTs, as well as on human resource development, innovativeness, competitiveness and citizen security.

Appendix I

Core Indicators on Access to and Use of ICT by Households and Individuals

Table A1.1: Core indicators on access to and use of ICT by households and individuals

Indicator Number	Indicator Description	Indicator	Standard Error (%)	Lower Limit	Upper Limit
		%			
HH1	Proportion of households with a radio	70.6	0.9	68.9	72.3
HH2	Proportion of households with a television	93.6	0.4	92.8	94.3
HH3	Proportion of households with a telephone				
	Fixed land line only	26.0	0.9	24.2	27.9
	Mobile telephone only	92.3	0.4	91.5	93.1
	Smartphone	74.4	0.8	72.8	75.8
	Both fixed and mobile telephones	23.6	0.9	21.9	25.4
HH4	Proportion of households with computer	59.6	1.0	57.7	61.4
HH5	Proportion of persons using a computer	48.6	1.0	46.6	50.6
HH6	Proportion of households with Internet access	80.6	0.8	79.0	82.0
HH7	Proportion of individuals using the Internet	79.0	.05	78.0	80.0
HH8	Proportion of individuals using the Internet by location				
	Work	17.6	0.5	16.6	18.7
	Home	97.5	0.2	97.0	97.9
	Place of education	1.0	0.1	0.8	1.2
	Another person's home	7.5	0.7	6.3	9.0
	Facilities open to the public	1.0	0.1	0.7	1.3
	Public libraries	0.4	0.2	0.2	0.8
	Community Internet access facility	0.2	0.0	0.1	0.3
	While commuting, in transport or walking	3.0	0.3	2.4	3.7
	Other location	0.1	0.0	0.1	0.2

Indicator Number	Indicator Description	Indicator	Standard Error	Lower Limit	Upper Limit
		%			
HH9	Proportion of individuals using the Internet by type of activity				
	Getting information about goods or services	35.4	1.1	33.2	37.6
	Seeking health information	19.5	0.9	17.9	21.3
	Getting information from general government organizations	10.1	0.6	9.0	11.3
	Reading or downloading online newspapers or magazines, electronic books	11.1	0.5	10.2	12.1
	Making an appointment with a health practitioner via a website	2.5	0.2	2.1	3.0
	Using services related to travel or travel-related accommodation	1.6	0.2	1.3	1.9
	Interacting with general government organizations	3.7	0.3	3.2	4.3
	Using Government e-Services	4.5	0.3	3.9	5.1
	Internet banking	17.1	0.7	15.8	18.4
	Purchasing or ordering goods or services	11.9	0.6	10.8	13.2
	Selling goods or services	2.0	0.2	1.7	2.4
	Sending or receiving e-mail	38.1	1.0	36.2	40.1
	Making calls over the Internet/VoIP	58.8	1.6	55.5	61.9
	Participating in social networks	57.1	1.3	54.5	59.6
	Taking part in online consultations or voting to define civic or political issues	1.1	0.1	0.9	1.4
	Accessing or posting opinions on chat sites, blogs, newsgroups or online discussions	8.3	0.7	7.0	9.7
	Participating in online classes	24.2	0.6	23.0	25.3
	Doing a formal online course	4.0	0.3	3.4	4.7
	Conducting research for formal learning purposes	10.5	0.5	9.5	11.6
	Looking for a job or sending/submitting a job application	2.7	0.2	2.4	3.1
	Participating in professional networks	4.5	0.4	3.9	5.3
	Listening to web radio	5.1	0.4	4.4	5.8
	Watching web television	18.4	1.1	16.4	20.7
	Streaming or downloading images, movies, videos or music; playing or downloading games	41.8	1.4	39.1	44.6
	Downloading software or applications	8.8	0.6	7.7	10.0
	Uploading self/user-created content to a website to be shared	4.7	0.5	3.9	5.8
	Using storage space on the Internet to save documents, pictures, music, video or other files	12.7	0.6	11.5	13.9
	Other activities	0.6	0.1	0.4	0.8
	Not stated	2.7	0.5	1.9	3.8
HH10	Proportion of individuals using a mobile cellular telephone	92.6	0.4	91.7	93.4

Indicator Number	Indicator Description	Indicator	Standard Error	Lower Limit	Upper Limit
		%			
HH11	Proportion of households with Internet by type of service				
	Fixed Broadband	42.6	1.1	40.4	44.9
	Terrestrial Fixed Wireless	2.5	0.5	1.8	3.6
	Mobile Broadband	35.7	1.2	33.5	38.1
HH12	Proportion of households using the Internet by frequency				
	At least once a day	66.8	0.9	65.0	68.4
	At least once a week but not every day	5.9	0.4	5.1	6.8
	Less than once a week	0.7	0.1	0.5	1.1
	Not known	0.4	0.2	0.1	1.0
HH13	Proportion of households with multichannel television by type				
	IPTV	18.1	0.7	16.7	19.5
	Cable TV	23.7	0.8	22.1	25.4
	Satellite TV	1.9	0.3	1.4	2.5
	Other TV	0.4	0.1	0.2	0.7
HH14	Barriers to household Internet access				
	Do not need the Internet	32.5	1.6	29.4	35.7
	Have access to the Internet elsewhere	23.8	1.7	20.7	27.2
	Cost of the equipment is too high	11.0	1.1	9.0	13.3
	Cost of the service is too high	28.2	1.6	25.1	31.5
	Privacy or security concerns	1.4	0.4	0.9	2.3
	Internet service is not available in the area	1.1	0.3	0.6	1.9
	Internet service is available, but it does not correspond to household needs	2.4	0.6	1.5	3.8
	Cultural reasons	0.1	0.1	0.0	0.4
	Lack of local content	0.2	0.1	0.0	0.5
	No electricity in the household	3.3	0.6	2.3	4.6
	Other reason	16.5	1.6	13.7	19.8

Indicator Number	Indicator Description	Indicator	Standard Error	Lower Limit	Upper Limit
		%			
HH15	Proportion of individuals with ICT skills by type of skills				
	Using copy and paste tools to duplicate or move data, information and content in digital environments	47.2	1.1	45.2	49.3
	Sending messages with attached files	73.0	0.9	71.2	74.8
	Using basic arithmetic formulas in a spreadsheet	22.8	0.8	21.2	24.4
	Connecting and installing new devices	29.7	1.0	27.8	31.6
	Finding, downloading, installing and configuring software	24.1	1.1	22.1	26.3
	Creating electronic presentations with presentation software	21.8	0.8	20.2	23.5
	Transferring files or applications between a computer and other devices	33.2	1.1	31.1	35.3
	Setting up effective security measures to protect devices and online accounts	43.3	1.3	40.7	45.9
	Changing privacy settings on your device, account or app to limit the sharing of personal data and information	34.0	1.2	31.6	36.5
	Verifying the reliability of information found online	32.7	1.3	30.3	35.2
	Writing a computer program using a specialized programming language	3.8	0.3	3.3	4.4
	None of the above	19.5	0.8	17.9	21.2
HH16	Household monthly expenditure on ICT (mean monthly)	985.59	11.14	963.69	1007.48
HH17	Proportion of individuals using the Internet, by type of portable device and network used to access the Internet				
	A mobile phone via the cellular network	70.1	2.0	65.9	73.9
	A mobile phone via other wireless networks	93.2	0.5	92.2	94.1
	A tablet via the cellular network, using USB key or SIM card	6.1	0.7	4.8	7.6
	A tablet via other wireless networks	28.6	1.0	26.6	30.6
	A portable computer via the cellular network, using USB key or SIM card	7.8	0.8	6.4	9.5
	A portable computer via other wireless networks	37.5	1.2	35.2	39.8
	Other portable devices	3.1	0.5	2.2	4.2
	Not stated	0.7	.	.	.
HH18	Proportion of individuals who own a mobile phone	83.9	0.5	82.8	85.0

Indicator Number	Indicator Description	Indicator	Standard Error	Lower Limit	Upper Limit
HH19	Proportion of individuals not using the Internet by reason	**%**			
	Do not need the Internet	55.7	1.6	52.6	58.7
	Do not know how to use it	29.7	1.4	27.1	32.5
	Cost of Internet use is too high	16.4	1.2	14.1	18.9
	Privacy or security concerns	1.7	0.4	1.1	2.6
	Internet service is not available in the area	0.5	0.2	0.2	1.2
	Cultural reasons	0.1	0.0	0.0	0.3
	Don't know what Internet is	2.9	0.5	2.1	4.0
	Not allowed to use the Internet	0.4	0.2	0.2	0.9
	Lack of local content	0.2	0.1	0.1	0.5
	Other reason	8.0	0.9	6.4	9.9
	Not stated	4.4	0.5	3.4	5.5
HH20	Proportion of individuals who purchased goods or services online, by type of good and service purchased				
	Books, magazines or newspapers	15.7	1.4	13.1	18.6
	Clothing, footwear, sporting goods or accessories	78.5	1.8	74.8	81.8
	Computer equipment or parts and peripheral equipment	11.9	1.2	9.7	14.6
	Computer or video games	5.3	0.8	4.0	7.2
	Computer software	5.8	0.9	4.3	7.8
	Cosmetics	17.1	1.4	14.6	20.0
	Financial products	1.3	0.3	0.8	2.2
	Food, groceries, alcohol or tobacco	20.6	2.4	16.4	25.6
	ICT services, excluding software	2.4	0.4	1.7	3.4
	Medicine	4.8	0.7	3.6	6.4
	Movies, short films or images	0.8	0.2	0.5	1.4
	Music products	1.3	0.3	0.8	2.0
	Photographic, telecommunications or optical equipment	2.0	0.5	1.2	3.3
	Purchasing of services	13.4	1.5	10.7	16.6
	Tickets or bookings for entertainment events	0.6	0.2	0.2	1.3
	Travel products	4.7	0.7	3.5	6.2
	Furniture/Appliances	9.7	1.2	7.6	12.2
	Other	13.0	1.3	10.7	15.7
	Not stated	2.4	0.5	1.5	3.6

Indicator Number	Indicator Description	Indicator	Standard Error	Lower Limit	Upper Limit
HH21	Proportion of individuals who purchased goods or services online, by type of payment channel		**%**		
	Cash on delivery	47.2	2.8	41.8	52.7
	Credit card online	72.1	2.8	66.3	77.2
	Debit card or electronic bank transfer online	24.7	2.8	19.6	30.6
	Mobile money account	0.7	0.2	0.4	1.4
	Online payment service	5.0	0.8	3.5	6.9
	Prepaid gift card or online voucher	0.5	0.2	0.2	1.0
	Financial products	0.0	0.0	0.0	0.2
	Points from rewards or redemption program	0.3	0.1	0.1	0.8
	Other	0.6	0.2	0.3	1.1
	Not stated	0.7	0.2	0.4	1.4
HH22	Proportion of individuals who purchased goods or services online, by method of delivery	-	-	-	-
HH23	Proportion of individuals who did not purchase goods or services online, by reason				
	Not interested in online purchases	50.4	1.2	48.1	52.7
	Prefer to shop in person	36.5	1.1	34.3	38.7
	Security concerns	5.8	0.3	5.1	6.5
	Privacy concerns	4.5	0.3	3.9	5.2
	Technical concerns	2.2	0.2	1.8	2.7
	Trust concerns	5.2	0.4	4.5	5.9
	Lack of confidence, knowledge or skills	4.7	0.4	4.0	5.5
	Institutional barriers e.g., customs charges, taxes, duties	2.6	0.3	2.1	3.2
	Personal reasons	17.6	0.7	16.2	19.1
	Not stated	4.7	0.6	3.7	6.0

Source: TATT Digital Inclusion Survey 2021

Table A1.2: SDG ICT indicators

Indicator Number	Indicator Description	%
4.4.1(a)	Proportion of YOUTHS (15 to 24 years) with ICT skills by type of skills	
	Using copy and paste tools to duplicate or move data, information and content in digital environments	65.4
	Sending messages with attached files	86.2
	Using basic arithmetic formulas in a spreadsheet	31.2
	Connecting and installing new devices	41.2
	Finding, downloading, installing and configuring software	31.0
	Creating electronic presentations with presentation software	32.1
	Transferring files or applications between a computer and other devices	44.9
	Setting up effective security measures to protect devices and online accounts	55.5
	Changing privacy settings on your device, account or app to limit the sharing of personal data and information	45.1
	Verifying the reliability of information found online	38.7
	Writing a computer program using a specialized programming language	3.8
	None of the above	7.6
4.4.1(b)	Proportion of ADULTS (15 years and over) with ICT skills by type of skills	
	Using copy and paste tools to duplicate or move data, information and content in digital environments	47.2
	Sending messages with attached files	73.0
	Using basic arithmetic formulas in a spreadsheet	22.8
	Connecting and installing new devices	29.7
	Finding, downloading, installing and configuring software	24.1
	Creating electronic presentations with presentation software	21.8
	Transferring files or applications between a computer and other devices	33.2
	Setting up effective security measures to protect devices and online accounts	43.3
	Changing privacy settings on your device, account or app to limit the sharing of personal data and information	34.0
	Verifying the reliability of information found online	32.7
	Writing a computer program using a specialised programming language	3.8
	None of the above	19.5
5.b.1	Proportion of population who own a mobile telephone:	
	Male	83.1
	Female	84.7
	Both sexes	83.9
9.c.1	Proportion of population covered by a mobile cellular network (2020)	100.0
17.6.2	Fixed Internet broadband per 100 inhabitants	27
17.8	Proportion of individuals using the Internet	79.0

Appendix II

IDI and DII Indices

Municipality and Community Estimates

Table A2.1: IDI and DII indices by municipality – Trinidad

Municipality	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/14	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/14
Arima	0.74	0.88	0.72	7.91	5	5.97	↑	N	0.74	0.35	0.21	0.32	4.04	10
Chaguanas	0.76	0.90	0.74	8.13	1	5.83	↑	N	0.76	0.42	0.31	0.40	4.72	1
Couva/Tabaquite/Talparo	0.72	0.87	0.75	7.88	6	5.54	↑	N	0.72	0.33	0.21	0.37	4.09	9
Diego Martin	0.77	0.87	0.73	8.01	4	5.83	↑	N	0.77	0.35	0.23	0.40	4.36	7
Mayaro/Rio Claro	0.68	0.86	0.67	7.51	14	5.34	↑	Y	0.68	0.26	0.14	0.36	3.60	14
Penal/Debe	0.72	0.86	0.67	7.66	11	5.50	↑	Y	0.72	0.32	0.16	0.37	3.91	12
Point Fortin	0.71	0.89	0.72	7.84	8	5.62	↑	Y	0.71	0.37	0.27	0.43	4.46	6
Port Of Spain	0.72	0.88	0.72	7.85	7	6.04	↑	Y	0.72	0.42	0.33	0.36	4.57	5
Princes Town	0.70	0.86	0.71	7.63	12	5.51	↑	Y	0.70	0.30	0.16	0.36	3.81	13
San Fernando	0.75	0.92	0.67	8.05	3	5.78	↑	N	0.75	0.39	0.32	0.40	4.67	2
San Juan/Laventille	0.77	0.88	0.73	8.06	2	5.79	↑	N	0.77	0.43	0.27	0.38	4.61	3
Sangre Grande	0.69	0.86	0.69	7.54	13	5.40	↑	Y	0.69	0.34	0.20	0.37	3.89	11
Siparia	0.73	0.90	0.66	7.82	9	5.54	↑	Y	0.73	0.36	0.34	0.42	4.61	3
Tunapuna/Piarco	0.73	0.87	0.71	7.81	10	5.95	↑	Y	0.73	0.35	0.23	0.35	4.14	8
Trinidad	0.73	0.88	0.71	7.86	—	5.69	↑	8 of 14	0.73	0.36	0.23	0.37	4.24	—

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.2: IDI and DII indices by community - City of Port of Spain

Communities	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/14	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/14
Belmont	0.78	0.91	0.71	8.20	1	6.34	↑	N	0.78	0.42	0.35	0.36	4.79	6
Coconte	0.63	0.62	0.90	6.80	10	5.50	↑	Y	0.63	0.40	0.27	0.34	4.12	10
East Port Of Spain	0.68	0.79	0.73	7.35	9	5.88	↑	Y	0.68	0.37	0.27	0.35	4.20	9
Elleshie Park	0.82	0.94	0.57	8.18	2	-	—	N	0.82	0.53	0.47	0.48	5.76	1
Federation Park*	0.82	0.94	0.57	8.18	2	-	—	N	0.82	0.53	0.47	0.48	5.76	1
Gonzales	0.63	0.65	0.72	6.55	11	4.39	↑	Y	0.63	0.43	0.22	0.36	4.11	11
Long Circular*	0.82	0.94	0.57	8.18	2	5.19	↑	N	0.82	0.53	0.47	0.48	5.76	1
Newtown*	0.73	0.90	0.68	7.88	5	5.41	↑	N	0.73	0.47	0.39	0.35	4.88	4
Port Of Spain Port Area*	0.63	0.65	0.72	6.55	11	-	—	Y	0.63	0.43	0.22	0.36	4.11	11
Port Of Spain Proper*	0.63	0.65	0.72	6.55	11	6.79	↓	Y	0.63	0.43	0.22	0.36	4.11	11
Sealots*	0.63	0.65	0.72	6.55	11	5.64	↑	Y	0.63	0.43	0.22	0.36	4.11	11
St. Clair*	0.76	0.78	0.70	7.55	7	-	—	Y	0.76	0.41	0.35	0.36	4.67	7
St. James	0.73	0.90	0.68	7.88	5	6.44	↑	N	0.73	0.47	0.39	0.35	4.88	4
Woodbrook	0.76	0.78	0.70	7.55	7	5.96	↑	Y	0.76	0.41	0.35	0.36	4.67	7
City of Port of Spain	0.72	0.88	0.72	7.85	—	6.04	↑	8 of 14	0.72	0.42	0.33	0.36	4.57	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.3: IDI and DII indices by community - City of San Fernando

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /21	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/21
Broadway*	0.72	0.92	0.58	7.72	14	5.99	↑	Y	0.72	0.38	0.36	0.39	4.63	12
Cocoyea Village	0.62	0.80	0.57	6.79	21	6.79	↓	Y	0.62	0.33	0.28	0.37	3.99	21
Embacadere*	0.72	0.92	0.58	7.72	14	6.66	↑	Y	0.72	0.38	0.36	0.39	4.63	12
Green Acres*	0.74	0.92	0.68	7.98	10	5.19	↑	N	0.74	0.45	0.42	0.43	5.09	1
Gulf View	0.83	0.96	0.75	8.67	4	-	—	N	0.83	0.45	0.25	0.43	4.89	7
Les Efforts East	0.81	0.92	0.90	8.72	2	-	—	N	0.81	0.39	0.26	0.40	4.65	9
Les Efforts West	0.77	0.90	0.57	7.81	13	5.19	↑	Y	0.77	0.34	0.31	0.38	4.51	18
Lower Hill Side	0.77	0.95	0.63	8.13	7	5.19	↑	N	0.77	0.41	0.39	0.38	4.86	8
Mainbella	0.72	0.92	0.58	7.72	14	-	—	Y	0.72	0.38	0.36	0.39	4.63	12
Mainj Lands	0.74	0.90	0.90	8.35	6	-	—	N	0.74	0.42	0.41	0.44	5.03	4
Mon Repos	0.79	0.87	0.90	8.46	5	5.91	↑	N	0.79	0.35	0.20	0.36	4.26	20
Navet Village	0.79	0.95	0.90	8.76	1	5.78	↑	N	0.79	0.36	0.26	0.45	4.64	11
Paradise	0.74	0.91	0.57	7.72	14	5.88	↑	Y	0.74	0.41	0.44	0.39	4.96	6
Pleasantville	0.78	0.94	0.61	8.12	8	4.17	↑	N	0.78	0.38	0.26	0.41	4.59	17
San Fernando Proper*	0.72	0.92	0.58	7.72	14	-	—	Y	0.72	0.38	0.36	0.39	4.63	12
St. Joseph Village*	0.74	0.92	0.68	7.98	10	4.81	↑	N	0.74	0.45	0.42	0.43	5.09	1
Tarouba	0.69	0.87	0.66	7.58	20	6.18	↑	Y	0.69	0.35	0.32	0.41	4.43	19
Union Park	0.74	0.92	0.68	7.98	10	-	—	N	0.74	0.45	0.42	0.43	5.09	1
Union Village*	0.72	0.92	0.58	7.72	14	5.88	↑	Y	0.72	0.38	0.36	0.39	4.63	12
Victoria Village	0.79	0.95	0.57	8.06	9	3.95	↑	N	0.79	0.39	0.47	0.37	5.03	4
Vistabella*	0.81	0.92	0.90	8.72	2	6.23	↑	N	0.81	0.39	0.26	0.40	4.65	9
City of San Fernando	0.75	0.92	0.67	8.05	—	5.78	↑	9 of 21	0.75	0.39	0.32	0.40	4.67	—

* Denotes imputed score

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.4: IDI and DII indices by community - Borough of Arima

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/8	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/8
Arima Proper	0.69	0.85	0.72	**7.62**	**5**	4.84	⬆	**Y**	0.69	0.36	0.24	0.36	**4.15**	**2**
Calvary Hill*	0.69	0.81	0.57	**7.10**	**6**	5.19	⬆	**Y**	0.69	0.28	0.21	0.32	**3.75**	**6**
Canb Homes	0.76	0.93	0.90	**8.58**	**1**	5.99	⬆	**N**	0.76	0.40	0.37	0.37	**4.77**	**1**
Malabar	0.76	0.90	0.70	**8.05**	**3**	6.25	⬆	**N**	0.76	0.33	0.16	0.30	**3.89**	**5**
Matanta[b]	0.69	0.81	0.57	**7.10**	**6**	5.19	⬆	**Y**	0.69	0.28	0.21	0.32	**3.75**	**6**
Mount Pleasant	0.69	0.81	0.57	**7.10**	**6**	5.59	⬆	**Y**	0.69	0.28	0.21	0.32	**3.75**	**6**
O'Meara Road	0.71	0.86	0.79	**7.84**	**4**	5.03	⬆	**Y**	0.71	0.34	0.22	0.31	**3.94**	**4**
Tumpuna Road	0.75	0.91	0.73	**8.08**	**2**	6.47	⬆	**N**	0.75	0.36	0.22	0.30	**4.07**	**3**
Borough of Arima	**0.74**	**0.88**	**0.72**	7.91	—	5.96	⬆	**5 of 8**	**0.74**	**0.35**	**0.21**	**0.32**	4.04	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

⬆ Improved

⬇ Declined

➖ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.5: IDI and DII indices by community - Borough of Chaguanas

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/20	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/20
Chaguanas Proper*	0.77	0.89	0.63	7.90	11	5.57	↑	N	0.77	0.48	0.35	0.39	4.98	10
Charleville	0.77	0.89	0.63	7.90	11	6.30	↑	N	0.77	0.48	0.35	0.39	4.98	10
Cunupia[b]	0.73	0.82	0.57	7.33	18	5.84	↑	Y	0.73	0.23	0.06	0.33	3.37	20
Edinburgh 500	0.82	0.96	0.75	8.61	7	5.95	↑	N	0.82	0.58	0.42	0.46	5.70	3
Edinburgh 501	0.79	0.90	0.57	7.87	13	-	—	N	0.79	0.52	0.27	0.44	5.04	9
Edinburgh Gardens*	0.74	0.90	0.65	7.86	14	6.79	↑	N	0.74	0.37	0.36	0.36	4.58	13
Endeavour Village	0.75	0.89	0.90	8.38	8	5.23	↑	N	0.75	0.41	0.33	0.38	4.68	12
Enterprise	0.70	0.85	0.57	7.30	19	5.79	↑	Y	0.70	0.25	0.14	0.36	3.61	18
Esmeralda	0.85	0.91	0.57	8.18	10	4.79	↑	N	0.85	0.51	0.38	0.43	5.43	4
Felicity	0.64	0.96	0.57	7.54	17	5.89	↑	Y	0.64	0.22	0.20	0.49	3.88	16
Homeland Gardens	0.84	0.97	0.79	8.82	1	5.00	↑	N	0.84	0.56	0.43	0.48	5.77	1
Jerningham Junction	0.80	0.87	0.84	8.37	9	4.17	↑	N	0.80	0.30	0.19	0.37	4.16	15
Lange Park*	0.84	0.97	0.79	8.82	1	6.31	↑	N	0.84	0.56	0.43	0.48	5.77	1
Lendore Village*	0.70	0.85	0.57	7.30	19	5.96	↑	Y	0.70	0.25	0.14	0.36	3.61	18
Longdenville[b]	0.70	0.85	0.73	7.68	16	5.70	↑	Y	0.70	0.27	0.15	0.35	3.66	17
Montrose Village	0.80	0.92	0.90	8.64	3	5.85	↑	N	0.80	0.50	0.43	0.42	5.37	5
Munroe Settlement*	0.80	0.92	0.90	8.64	3	4.84	↑	N	0.80	0.50	0.43	0.42	5.37	5
Petersfield*	0.80	0.92	0.90	8.64	3	6.79	↑	N	0.80	0.50	0.43	0.42	5.37	5
St. Charles Village	0.74	0.90	0.65	7.86	14	5.86	↑	N	0.74	0.37	0.36	0.36	4.58	13
St. Thomas Village*	0.80	0.92	0.90	8.64	3	6.66	↑	N	0.80	0.50	0.43	0.42	5.37	5
Borough of Chaguanas	0.76	0.90	0.74	8.13	—	5.83	↑	5 of 20	0.76	0.42	0.31	0.40	4.72	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.6: IDI and DII indices by community - Borough of Point Fortin

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /12	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank /12
Cap-De-Ville[b]	0.77	0.90	0.75	**8.18**	**5**	**5.71**	↑	**N**	0.77	0.39	0.31	0.43	**4.75**	**3**
Clifton Hill	0.80	0.81	0.57	**7.55**	**8**	**4.79**	↑	**Y**	0.80	0.34	0.16	0.41	**4.26**	**9**
Cochrane*[b]	0.77	0.90	0.90	**8.49**	**6**	**4.39**	↑	**N**	0.77	0.44	0.17	0.45	**4.58**	**4**
Egypt Village	0.65	0.81	0.57	**7.00**	**12**	**6.66**	↑	**Y**	0.65	0.29	0.25	0.40	**4.01**	**11**
Fanny Village	0.65	0.88	0.61	**7.37**	**10**	**5.31**	↑	**Y**	0.65	0.36	0.33	0.44	**4.45**	**5**
Gonzales (Point Fortin)[b]	0.63	0.88	0.57	**7.19**	**11**	-	—	**Y**	0.63	0.35	0.34	0.44	**4.40**	**6**
Hollywood	0.74	0.87	0.57	**7.57**	**7**	-	—	**Y**	0.74	0.35	0.20	0.39	**4.19**	**10**
New Village	0.76	0.89	0.90	**8.42**	**3**	**5.97**	↑	**N**	0.76	0.32	0.21	0.44	**4.31**	**7**
Newlands*	0.79	0.93	0.86	**8.60**	**1**	**4.39**	↑	**N**	0.79	0.44	0.24	0.45	**4.83**	**1**
Point Fortin Proper	0.79	0.93	0.86	**8.60**	**1**	**5.95**	↑	**N**	0.79	0.44	0.24	0.45	**4.83**	**1**
Point Ligoure*	0.76	0.89	0.90	**8.42**	**3**	**6.79**	↑	**N**	0.76	0.32	0.21	0.44	**4.31**	**7**
Techier Village	0.62	0.79	0.90	**7.44**	**9**	**6.66**	↑	**Y**	0.62	0.27	0.26	0.41	**3.89**	**12**
Borough of Point Fortin	**0.71**	**0.89**	**0.72**	**7.84**	**—**	**5.62**	↑	**6 of 12**	**0.71**	**0.37**	**0.27**	**0.43**	**4.46**	**—**

*Denotes imputed score.

[b]Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.7: IDI and DII indices by community - Diego Martin

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /45	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank /45
Alyce Glen*	0.85	1.00	0.57	**8.54**	**5**	6.79	↑	**N**	0.85	0.44	0.19	0.52	**5.03**	**3**
Bagatelle	0.71	0.84	0.68	**7.53**	**30**	5.17	↑	**Y**	0.71	0.20	0.12	0.38	**3.50**	**43**
Bayshore*	0.85	0.80	0.90	**8.42**	**7**	-	—	**N**	0.85	0.29	0.25	0.38	**4.45**	**11**
Beau Pres*	0.79	0.92	0.63	**8.12**	**19**	-	—	**N**	0.79	0.29	0.22	0.43	**4.34**	**19**
Big Yard*	0.74	0.89	0.57	**7.63**	**27**	-	—	**Y**	0.74	0.26	0.20	0.41	**4.02**	**26**
Blue Basin	0.81	0.88	0.90	**8.58**	**3**	5.60	↑	**N**	0.81	0.29	0.19	0.39	**4.21**	**24**
Blue Range*	0.85	0.80	0.90	**8.42**	**7**	6.05	↑	**N**	0.85	0.29	0.25	0.38	**4.45**	**11**
Boissiere	0.69	0.88	0.68	**7.63**	**27**	-	—	**Y**	0.69	0.40	0.25	0.42	**4.40**	**18**
Cameron Road*	0.71	0.84	0.68	**7.53**	**30**	5.99	↑	**Y**	0.71	0.20	0.12	0.38	**3.50**	**43**
Carenage*	0.81	0.88	0.90	**8.58**	**3**	5.49	↑	**N**	0.81	0.29	0.19	0.39	**4.21**	**24**
Chaguaramas*	0.68	0.84	0.57	**7.21**	**33**	-	—	**Y**	0.68	0.20	0.16	0.37	**3.52**	**36**
Champ Elysees*	0.85	0.80	0.90	**8.42**	**7**	-	—	**N**	0.85	0.29	0.25	0.38	**4.45**	**11**
Covigne	0.77	0.95	0.57	**8.02**	**22**	5.84	↑	**N**	0.77	0.26	0.10	0.45	**3.97**	**28**
Diamond Vale	0.84	0.89	0.90	**8.73**	**1**	6.19	↑	**N**	0.84	0.48	0.34	0.44	**5.28**	**1**
Dibe/Belle Vue	0.74	0.89	0.57	**7.63**	**27**	4.39	↑	**Y**	0.74	0.26	0.20	0.41	**4.02**	**26**
Diego Martin Proper	0.82	0.85	0.79	**8.25**	**16**	5.62	↑	**N**	0.82	0.50	0.28	0.39	**4.98**	**7**
Fairways	0.85	1.00	0.57	**8.54**	**5**	6.12	↑	**N**	0.85	0.44	0.19	0.52	**5.03**	**3**
Fort George*	0.82	0.89	0.57	**8.00**	**24**	4.39	↑	**N**	0.82	0.41	0.14	0.36	**4.33**	**22**
Four Roads*	0.79	0.92	0.63	**8.12**	**19**	5.61	↑	**N**	0.79	0.29	0.22	0.43	**4.34**	**19**
Glencoe*	0.85	0.80	0.90	**8.42**	**7**	6.79	↑	**N**	0.85	0.29	0.25	0.38	**4.45**	**11**
Goodwood Gardens*	0.85	0.80	0.90	**8.42**	**7**	6.79	↑	**N**	0.85	0.29	0.25	0.38	**4.45**	**11**
Green Hill Village	0.71	0.79	0.57	**7.14**	**43**	6.52	↑	**Y**	0.71	0.20	0.08	0.40	**3.47**	**45**
Haleland Park/Moka*	0.85	0.80	0.90	**8.42**	**7**	-	—	**N**	0.85	0.29	0.25	0.38	**4.45**	**11**
Industrial Estate*	0.68	0.84	0.57	**7.21**	**33**	5.06	↑	**Y**	0.68	0.20	0.16	0.37	**3.52**	**36**
La Horquette*	0.79	0.91	0.73	**8.26**	**14**	-	—	**N**	0.79	0.45	0.21	0.40	**4.61**	**9**
La Puenta*	0.77	0.92	0.73	**8.21**	**17**	6.28	↑	**N**	0.77	0.47	0.39	0.38	**5.00**	**5**
La Seiva	0.71	0.78	0.57	**7.09**	**44**	6.79	↑	**Y**	0.71	0.33	0.15	0.39	**3.95**	**30**
L'anse Mitan*	0.68	0.84	0.57	**7.21**	**33**	4.39	↑	**Y**	0.68	0.20	0.16	0.37	**3.52**	**36**
Le Platte	0.66	0.77	0.73	**7.20**	**40**	4.39	↑	**Y**	0.66	0.26	0.24	0.30	**3.68**	**34**
Maraval Proper	0.79	0.92	0.63	**8.12**	**19**	6.32	↑	**N**	0.79	0.29	0.22	0.43	**4.34**	**19**

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /45	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank /45
North Post*	0.68	0.84	0.57	**7.21**	**33**	-	▬	Y	0.68	0.20	0.16	0.37	**3.52**	**36**
Paramin*	0.68	0.84	0.57	**7.21**	**33**	5.50	⬆	Y	0.68	0.20	0.16	0.37	**3.52**	**36**
Patna Village*	0.68	0.84	0.57	**7.21**	**33**	6.12	⬆	Y	0.68	0.20	0.16	0.37	**3.52**	**36**
Petit Valley	0.77	0.84	0.70	**7.86**	**26**	6.06	⬆	N	0.77	0.40	0.30	0.43	**4.77**	**8**
Point Cumana	0.82	0.89	0.57	**8.00**	**24**	6.66	⬆	N	0.82	0.41	0.14	0.36	**4.33**	**22**
Powder Magazine	0.77	0.92	0.73	**8.21**	**17**	5.55	⬆	N	0.77	0.47	0.39	0.38	**5.00**	**5**
Rich Plain*	0.66	0.77	0.73	**7.20**	**40**	5.71	⬆	Y	0.66	0.26	0.24	0.30	**3.68**	**34**
River Estate	0.79	0.91	0.73	**8.26**	**14**	5.24	⬆	N	0.79	0.45	0.21	0.40	**4.61**	**9**
Saut Deau*	0.77	0.95	0.57	**8.02**	**22**	-	▬	N	0.77	0.26	0.10	0.45	**3.97**	**28**
Simeon Road	0.71	0.80	0.57	**7.20**	**40**	4.62	⬆	Y	0.71	0.24	0.16	0.37	**3.71**	**33**
St. Lucien Road*	0.71	0.78	0.57	**7.09**	**44**	6.79	⬆	Y	0.71	0.33	0.15	0.39	**3.96**	**30**
Upper St. James	0.72	0.86	0.57	**7.46**	**32**	-	▬	Y	0.72	0.28	0.19	0.38	**3.93**	**32**
Victoria Gardens*	0.84	0.89	0.90	**8.73**	**1**	6.04	⬆	N	0.84	0.48	0.34	0.44	**5.28**	**1**
Water Hole	0.68	0.84	0.57	**7.21**	**33**	4.92	⬆	Y	0.68	0.20	0.16	0.37	**3.52**	**36**
West Moorings	0.85	0.80	0.90	**8.42**	**7**	6.71	⬆	N	0.85	0.29	0.25	0.38	**4.45**	**11**
Diego Martin	**0.77**	**0.87**	**0.73**	**8.01**	**—**	**5.83**	⬆	**19 of 45**	**0.77**	**0.35**	**0.23**	**0.40**	**4.36**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

⬆ Improved

⬇ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.8: IDI and DII indices by community - San Juan/Laventille

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/41	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/41
Aranguez	0.81	0.94	0.90	8.77	1	5.96	↑	N	0.81	0.44	0.33	0.36	4.85	6
Bamboo Grove*[a]	0.69	0.80	0.57	7.13	39	6.79	↓	Y	0.69	0.28	0.25	0.35	3.92	41
Barataria	0.85	0.95	0.57	8.34	12	5.86	↑	N	0.85	0.52	0.30	0.46	5.32	2
Beetham Estate*	0.77	0.88	0.90	8.38	6	5.39	↑	N	0.77	0.47	0.23	0.39	4.63	12
Bejucal[b]	0.64	0.88	0.41	6.87	35	5.19	↑	Y	0.64	0.27	0.33	0.36	3.98	37
Blanchisseuse*[b]	0.77	0.88	0.90	8.38	6	-	—	N	0.77	0.47	0.23	0.39	4.63	12
Cantaro Village*	0.74	0.92	0.70	8.03	15	6.07	↑	N	0.74	0.43	0.25	0.38	4.50	24
Cascade	0.78	0.80	0.57	7.43	32	3.86	↑	Y	0.78	0.36	0.18	0.35	4.15	35
Champ Fleurs*[b]	0.67	0.91	0.57	7.46	34	5.63	↑	Y	0.67	0.36	0.36	0.38	4.46	31
El Socorro	0.77	0.85	0.65	7.78	25	5.85	↑	Y	0.77	0.42	0.20	0.42	4.51	22
El Socorro Extension*	0.81	0.89	0.90	8.61	2	5.59	↑	N	0.81	0.39	0.36	0.34	4.75	9
Eastern Quarry*	0.75	0.84	0.63	7.59	29	5.86	↑	Y	0.75	0.40	0.24	0.32	4.26	32
Febeau Village	0.77	0.88	0.90	8.38	6	5.89	↑	N	0.77	0.47	0.23	0.39	4.63	12
Gran Cunucaye*	0.64	0.54	0.73	6.15	40	-	—	Y	0.64	0.45	0.31	0.35	4.35	29
La Canon	0.74	0.91	0.68	7.92	18	5.05	↑	N	0.74	0.42	0.22	0.42	4.48	26
La Pastora	0.81	0.89	0.90	8.61	2	5.99	↑	N	0.81	0.39	0.36	0.34	4.75	9
Las Cuevas*	0.77	0.88	0.90	8.38	6	5.86	↑	N	0.77	0.47	0.23	0.39	4.63	12
Lady Chancellor*	0.78	0.80	0.57	7.43	32	-	—	Y	0.78	0.36	0.18	0.35	4.15	35
Laventille	0.64	0.54	0.73	6.15	40	5.43	↑	Y	0.64	0.45	0.31	0.35	4.35	29
Lower Santa Cruz*	0.79	0.90	0.57	7.90	21	0.92	↑	N	0.79	0.51	0.32	0.41	5.07	3
Malick	0.74	0.92	0.70	8.03	15	4.99	↑	N	0.74	0.43	0.25	0.38	4.50	24
Maracas*	0.77	0.88	0.90	8.38	6	5.52	↑	N	0.77	0.47	0.23	0.39	4.63	12
Maracas Bay*	0.77	0.88	0.90	8.38	6	-	—	N	0.77	0.47	0.23	0.39	4.63	12
Marie Road*	0.74	0.91	0.68	7.92	18	5.36	↑	N	0.74	0.42	0.22	0.42	4.48	26
Mon Repos*	0.74	0.91	0.68	7.92	18	5.91	↑	N	0.74	0.42	0.22	0.42	4.48	26
Morvant	0.78	0.85	0.62	7.77	27	5.76	↑	Y	0.78	0.40	0.29	0.35	4.56	19
Mount D'Or	0.75	0.84	0.63	7.59	29	5.69	↑	Y	0.75	0.40	0.24	0.32	4.26	32
Mt. Hope*	0.79	0.90	0.57	7.90	21	5.84	↑	N	0.79	0.51	0.32	0.41	5.07	3
Mt. Lambert	0.79	0.90	0.57	7.90	21	6.03	↑	N	0.79	0.51	0.32	0.41	5.07	3
Never Dirty*	0.75	0.84	0.63	7.59	29	5.84	↑	Y	0.75	0.40	0.24	0.32	4.26	32

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/41	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/41
Petit Bourg	0.78	0.92	0.77	**8.33**	**13**	**6.26**	↑	**N**	0.78	0.45	0.28	0.41	**4.78**	**8**
Petit Curucaye	0.80	0.87	0.63	**7.96**	**17**	5.72	↑	**N**	0.80	0.46	0.28	0.38	**4.81**	7
Pictou*	0.63	0.69	0.73	**6.72**	**36**	-	—	**Y**	0.63	0.39	0.19	0.36	**3.93**	**38**
Romain Lands*	0.63	0.69	0.73	**6.72**	**36**	**6.39**	↓	**Y**	0.63	0.39	0.19	0.36	**3.93**	**38**
Sam Boucaud	0.85	0.97	0.57	**8.43**	5	**5.06**	↑	**N**	0.85	0.56	0.60	0.47	**6.23**	**1**
San Juan	0.79	0.87	0.90	**8.46**	4	**5.92**	↑	**N**	0.79	0.39	0.24	0.39	**4.52**	**21**
Santa Cruz*	0.77	0.85	0.65	**7.78**	**25**	**5.89**	—	**Y**	0.77	0.42	0.20	0.42	**4.51**	**22**
Socomusco*	0.78	0.85	0.62	**7.77**	**27**	-	—	**Y**	0.78	0.40	0.29	0.35	**4.56**	**19**
St. Anns	0.81	0.87	0.57	**7.86**	**24**	-	—	**N**	0.81	0.38	0.26	0.38	**4.58**	**18**
St. Barbs	0.63	0.69	0.73	**6.72**	**36**	**5.19**	↑	**Y**	0.63	0.39	0.19	0.36	**3.93**	**38**
Upper Belmont	0.79	0.92	0.68	**8.18**	**14**	**6.79**	↑	**N**	0.79	0.46	0.21	0.42	**4.70**	**11**
San Juan/Laventille	0.77	0.88	0.73	8.06	—	5.79	↑	17 of 41	0.77	0.43	0.27	0.38	4.61	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.9: IDI and DII indices by community - Tunapuna/Piarco

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /70	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/70
Acono Village*	0.67	0.69	0.90	7.26	53	6.36	↑	Y	0.67	0.23	0.26	0.35	3.79	49
Arima Heights/Temple Village*	0.67	0.69	0.90	7.26	53	-	—	Y	0.67	0.23	0.26	0.35	3.79	49
Arouca	0.69	0.82	0.90	7.82	23	6.35	↑	Y	0.69	0.35	0.35	0.43	4.55	15
Bamboo Grove[b]	0.69	0.80	0.57	7.13	61	6.79	↓	Y	0.69	0.28	0.25	0.35	3.92	48
Bejucal[b]	0.70	0.88	0.57	7.41	50	5.19	↑	Y	0.70	0.41	0.19	0.39	4.22	28
Blanchisseuse*[b]	0.77	0.88	0.90	8.38	7	-	—	N	0.77	0.47	0.23	0.39	4.63	11
Bon Air Development	0.74	0.85	0.68	7.72	28	-	—	Y	0.74	0.36	0.21	0.36	4.19	36
Bon Air West Development	0.80	0.88	0.90	8.52	4	-	—	N	0.80	0.34	0.19	0.36	4.21	29
Brasso Seco Village*	0.67	0.69	0.90	7.26	53	4.52	↑	Y	0.67	0.23	0.26	0.35	3.79	49
Cane Farm	0.67	0.79	0.90	7.65	37	6.06	↑	Y	0.67	0.32	0.34	0.36	4.24	25
Campo	0.71	0.88	0.70	7.75	26	4.82	↑	Y	0.71	0.36	0.16	0.36	3.95	44
Caroni Village*	0.73	0.75	0.79	7.49	40	6.28	↑	Y	0.73	0.29	0.31	0.35	4.20	32
Caura*	0.68	0.76	0.63	7.05	62	4.39	↑	Y	0.68	0.25	0.03	0.32	3.21	67
Centeno*	0.65	0.94	0.90	8.17	10	-	—	N	0.65	0.44	0.51	0.52	5.33	5
Champ Fleurs[b]	0.67	0.91	0.57	7.46	49	5.63	↑	Y	0.67	0.36	0.36	0.38	4.46	16
Cleaver Road*	0.68	0.76	0.63	7.05	62	6.04	↑	Y	0.68	0.25	0.03	0.32	3.21	67
Cumana*[b]	0.73	0.82	0.57	7.33	52	5.84	↑	Y	0.73	0.23	0.06	0.33	3.37	65
Cutepe	0.70	0.78	0.57	7.04	66	5.72	↑	Y	0.70	0.30	0.32	0.40	4.28	24
D'Abadie	0.72	0.84	0.57	7.40	51	6.37	↑	Y	0.72	0.39	0.16	0.36	4.10	37
Dinsley*	0.74	0.85	0.67	7.67	35	-	—	Y	0.74	0.33	0.16	0.34	3.93	46
Dinsley/Trincity	0.81	0.87	0.68	8.09	18	6.79	↑	N	0.81	0.32	0.13	0.33	3.98	40
El Dorado	0.68	0.82	0.90	7.78	24	-	—	Y	0.68	0.30	0.10	0.32	3.49	59
Eric Williams Medical Sciences Complex*	0.80	0.88	0.90	8.52	4	-	—	N	0.80	0.34	0.19	0.36	4.21	29
Five Rivers	0.74	0.86	0.66	7.72	28	6.17	↑	Y	0.74	0.38	0.15	0.35	4.05	38
Frederick Settlement*	0.73	0.75	0.79	7.49	40	4.39	↑	Y	0.73	0.29	0.31	0.35	4.20	32
Heights Of Guanapo*	0.67	0.69	0.90	7.26	53	-	—	Y	0.67	0.23	0.26	0.35	3.79	49
Kandahar*	0.73	0.75	0.79	7.49	40	5.64	↑	Y	0.73	0.29	0.31	0.35	4.20	32
Kelly Village	0.65	0.94	0.90	8.17	10	5.34	↑	N	0.65	0.44	0.51	0.52	5.33	5
La Baja	0.85	1.00	0.57	8.54	2	5.19	↑	N	0.85	0.58	0.64	0.41	6.21	1

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /70	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/70
La Florisante*	0.80	0.88	0.90	8.52	4	5.19	↑	N	0.80	0.34	0.19	0.36	4.21	29
La Horquetta	0.73	0.95	0.73	8.20	8	-	—	N	0.73	0.32	0.12	0.34	3.79	49
La Laja*	0.67	0.69	0.90	7.26	53	4.39	↑	Y	0.67	0.23	0.26	0.35	3.79	49
La Mango Village*	0.78	0.81	0.57	7.49	40	4.39	↑	Y	0.78	0.34	0.25	0.36	4.30	18
La Paille Village*	0.78	0.81	0.57	7.49	40	-	—	Y	0.78	0.34	0.25	0.36	4.30	18
La Resource*	0.68	0.82	0.90	7.78	24	-	—	Y	0.68	0.30	0.10	0.32	3.49	59
La Seiva Village	0.73	0.75	0.79	7.49	40	4.72	↑	Y	0.73	0.29	0.31	0.35	4.20	32
Lopinot Village*	0.67	0.69	0.90	7.26	53	5.74	↑	Y	0.67	0.23	0.26	0.35	3.79	49
Macoya	0.68	0.76	0.63	7.05	62	6.12	↑	Y	0.68	0.25	0.03	0.32	3.21	67
Maloney Gardens	0.74	0.95	0.60	7.95	20	5.79	↑	N	0.74	0.46	0.42	0.42	5.08	8
Maracas/St. Joseph	0.67	0.70	0.57	6.60	69	5.77	↑	Y	0.67	0.27	0.28	0.37	3.98	40
Maturita*^	0.74	0.91	0.57	7.72	28	5.19	↑	Y	0.74	0.29	0.05	0.29	3.43	61
Maussica*	0.74	0.91	0.57	7.72	28	5.19	↑	Y	0.74	0.29	0.05	0.29	3.43	61
Mount St. Benedict*	0.67	0.69	0.90	7.26	53	4.39	↑	Y	0.67	0.23	0.26	0.35	3.79	49
Olton Road*	0.74	0.95	0.60	7.95	20	5.71	↑	N	0.74	0.46	0.42	0.42	5.08	8
Oropuna Village/Piarco*	0.74	0.95	0.60	7.95	20	6.21	↑	N	0.74	0.46	0.42	0.42	5.08	8
Paradise Gardens*	0.74	0.91	0.57	7.72	28	6.12	↑	Y	0.74	0.29	0.05	0.29	3.43	61
Pasea Extension*	0.74	0.86	0.66	7.72	28	-	—	Y	0.74	0.38	0.15	0.35	4.05	38
Peytonville	0.67	0.69	0.90	7.26	53	5.99	↑	Y	0.67	0.23	0.26	0.35	3.79	49
Pinto Road	0.70	0.89	0.57	7.47	48	4.12	↑	Y	0.70	0.22	0.09	0.31	3.29	66
Real Springs*	0.77	0.91	0.70	8.14	13	6.79	↑	N	0.77	0.46	0.22	0.40	4.60	12
Red Hill	0.75	0.92	0.73	8.14	13	4.68	↑	N	0.75	0.56	0.63	0.38	5.81	3
Samaroo Village	0.69	0.74	0.57	6.83	67	5.59	↑	Y	0.69	0.28	0.35	0.39	4.29	22
Santa Margarita*	0.73	0.95	0.73	8.20	8	5.19	↑	N	0.73	0.32	0.12	0.34	3.79	49
Santa Rosa Heights	0.81	0.92	0.90	8.70	1	5.72	↑	N	0.81	0.37	0.25	0.31	4.32	17
Sherwood Park*	0.65	0.94	0.90	8.17	10	6.66	↑	N	0.65	0.44	0.51	0.52	5.33	5
Spring Village*	0.85	1.00	0.57	8.54	2	5.56	↑	N	0.85	0.58	0.64	0.41	6.21	1
St. Augustine*	0.68	0.76	0.63	7.05	62	6.12	↑	Y	0.68	0.25	0.03	0.32	3.21	67
St. Augustine South*	0.78	0.81	0.57	7.49	40	-	—	Y	0.78	0.34	0.25	0.36	4.30	18
St. Helena Village*	0.69	0.74	0.57	6.83	67	4.39	↑	Y	0.69	0.28	0.35	0.39	4.29	22
St. John's Village*	0.67	0.79	0.90	7.65	37	-	—	Y	0.67	0.32	0.34	0.36	4.24	25

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /70	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/70
St. Joseph	0.78	0.81	0.57	7.49	40	5.92	↑	Y	0.78	0.34	0.25	0.36	4.30	18
Surrey Village*	0.67	0.79	0.90	7.65	37	6.23	↑	Y	0.67	0.32	0.34	0.36	4.24	25
Tacarigua	0.74	0.91	0.57	7.72	28	6.43	↑	Y	0.74	0.29	0.05	0.29	3.43	61
Trincity*	0.81	0.87	0.68	8.09	18	6.38	↑	N	0.81	0.32	0.13	0.33	3.98	40
Tumpuna Road*	0.67	0.70	0.57	6.60	69	6.47	↑	Y	0.67	0.27	0.28	0.37	3.98	40
Tunapuna	0.74	0.85	0.67	7.67	35	6.08	↑	Y	0.74	0.33	0.16	0.34	3.93	46
Valley View	0.77	0.91	0.70	8.14	13	5.19	↑	N	0.77	0.46	0.22	0.40	4.60	12
Valsayn*	0.77	0.91	0.70	8.14	13	-	—	N	0.77	0.46	0.22	0.40	4.60	12
Wallerfield*	0.71	0.88	0.70	7.75	26	5.19	↑	Y	0.71	0.36	0.16	0.36	3.95	44
Warren Village*	0.75	0.92	0.73	8.14	13	6.79	↑	N	0.75	0.56	0.63	0.38	5.81	3
Tunapuna/Piarco	**0.73**	**0.87**	**0.71**	7.81	—	5.95	↑	48 of 70	**0.73**	**0.35**	**0.23**	**0.35**	4.14	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Table A2.10: IDI and DII indices by community - Couva/Tabaquite/Talparo

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/94	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/94
Agostini Village*	0.71	0.79	0.73	7.47	62	5.99	↑	Y	0.71	0.30	0.26	0.34	4.03	54
Arena*	0.67	0.62	0.57	6.30	92	4.92	↑	Y	0.67	0.18	0.02	0.30	2.93	92
Balmain*	0.69	0.84	0.57	7.24	75	5.86	↑	Y	0.69	0.23	0.06	0.31	3.20	89
Basta Hall	0.75	0.93	0.57	7.88	39	5.78	↑	N	0.75	0.38	0.24	0.37	4.33	26
Bonne Aventure*	0.70	0.74	0.90	7.53	54	5.19	↑	Y	0.70	0.21	0.09	0.30	3.22	83
Brasso Caparo Village*	0.67	0.89	0.57	7.41	65	5.00	↑	Y	0.67	0.17	0.17	0.44	3.64	58
Brasso Manuel Junction*	0.68	0.92	0.41	7.23	78	4.39	↑	Y	0.68	0.22	0.43	0.38	4.30	28
Brasso Tamana*	0.67	0.89	0.57	7.41	65	5.19	↑	Y	0.67	0.17	0.17	0.44	3.64	58
Brasso Venado*	0.68	0.92	0.41	7.23	78	3.72	↑	Y	0.68	0.22	0.43	0.38	4.30	28
Brechin Castle*	0.73	0.84	0.68	7.63	52	-	—	Y	0.73	0.37	0.30	0.36	4.38	24
Brickfield*	0.75	0.93	0.66	8.05	18	3.06	↑	N	0.75	0.37	0.13	0.41	4.16	45
Brickfield/Navet*	0.67	0.89	0.57	7.41	65	4.17	↑	Y	0.67	0.17	0.17	0.44	3.64	58
Brothers Road	0.67	0.89	0.57	7.41	65	6.31	↑	Y	0.67	0.17	0.17	0.44	3.64	58
Bucarro	0.77	0.84	0.68	7.80	42	4.39	↑	Y	0.77	0.35	0.31	0.37	4.50	17
Butler Village*	0.80	0.94	0.90	8.75	1	6.04	↑	N	0.80	0.39	0.23	0.41	4.57	14
Calcutta Road No.2*	0.83	0.91	0.57	8.09	14	-	—	N	0.83	0.58	0.37	0.38	5.39	1
Calcutta Settlement No.2*	0.80	0.94	0.90	8.75	1	-	—	N	0.80	0.39	0.23	0.41	4.57	14
California	0.72	1.00	0.57	8.01	30	5.14	↑	N	0.72	0.46	0.25	0.53	4.90	6
Caparo	0.69	0.87	0.90	8.04	27	4.92	↑	N	0.69	0.24	0.12	0.35	3.50	73
Campichaima	0.80	0.94	0.90	8.75	1	5.92	↑	N	0.80	0.39	0.23	0.41	4.57	14
Cantal*	0.65	0.78	0.57	6.85	88	5.19	↑	Y	0.65	0.28	0.25	0.39	3.94	56
Carlsen Field	0.83	0.91	0.57	8.09	14	5.91	↑	N	0.83	0.58	0.37	0.38	5.39	1
Cedar Hill*	0.75	0.93	0.66	8.05	18	3.06	↑	N	0.75	0.37	0.13	0.41	4.16	45
Chandernagore*	0.83	0.91	0.57	8.09	14	5.99	↑	N	0.83	0.58	0.37	0.38	5.39	1
Chase Village	0.71	0.79	0.73	7.47	62	5.65	↑	Y	0.71	0.30	0.26	0.34	4.03	54
Chickland	0.75	0.93	0.66	8.05	18	5.19	↑	N	0.75	0.37	0.13	0.41	4.16	45

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/94	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/94
Chin Chin	0.69	0.84	0.57	7.24	75	-	▬	Y	0.69	0.23	0.06	0.31	3.20	89
Claxton Bay	0.73	0.92	0.73	8.05	18	5.60	↑	N	0.73	0.37	0.16	0.41	4.17	42
Coalmine*	0.70	0.89	0.90	8.13	6	-	▬	N	0.70	0.18	0.17	0.37	3.55	64
Corosal	0.70	0.89	0.90	8.13	6	-	▬	N	0.70	0.18	0.17	0.37	3.55	64
Couva Central*	0.77	0.84	0.68	7.80	42	6.32	↑	Y	0.77	0.35	0.31	0.37	4.50	17
Cunupia*[b]	0.73	0.82	0.57	7.33	71	5.84	↑	Y	0.73	0.23	0.06	0.33	3.37	80
Diamond*	0.70	0.74	0.90	7.53	54	4.39	↑	Y	0.70	0.21	0.09	0.30	3.22	83
Dow Village*	0.67	0.87	0.68	7.53	54	5.45	↑	Y	0.67	0.31	0.12	0.32	3.54	68
Eccles Village[b]	0.72	0.96	0.57	7.84	41	5.19	↑	Y	0.72	0.42	0.28	0.45	4.69	9
Edinburgh Village	0.79	0.91	0.65	8.11	10	5.99	↑	N	0.79	0.48	0.41	0.44	5.27	4
Esperanza*	0.75	0.93	0.66	8.05	18	4.39	↑	N	0.75	0.37	0.13	0.41	4.16	45
Fairview*	0.77	0.84	0.68	7.80	42	-	▬	Y	0.77	0.35	0.31	0.37	4.50	17
Farnum Village*	0.73	0.92	0.73	8.05	18	-	▬	N	0.73	0.37	0.16	0.41	4.17	42
Felicity Hall*	0.73	0.92	0.73	8.05	18	-	▬	N	0.73	0.37	0.16	0.41	4.17	42
Flanagin Town*	0.70	0.74	0.90	7.53	54	3.95	↑	Y	0.70	0.21	0.09	0.30	3.22	83
Fores Park*	0.68	0.92	0.41	7.23	78	5.06	↑	Y	0.68	0.22	0.43	0.38	4.30	28
Freeport	0.67	0.87	0.68	7.53	54	6.15	↑	Y	0.67	0.31	0.12	0.32	3.54	68
Friendship*	0.69	0.84	0.57	7.24	75	-	▬	Y	0.69	0.23	0.06	0.31	3.20	89
Gaspar Rio	0.77	0.85	0.77	8.01	30	6.16	↑	N	0.77	0.36	0.20	0.36	4.22	38
Gran Couva*	0.70	0.89	0.90	8.13	6	5.13	↑	N	0.70	0.18	0.17	0.37	3.55	64
Guaracara	0.65	0.78	0.57	6.85	88	5.46	↑	Y	0.65	0.28	0.25	0.39	3.94	56
Hermitage*	0.68	0.92	0.41	7.23	78	-	▬	Y	0.68	0.22	0.43	0.38	4.30	28
Indian Trail*	0.75	0.93	0.57	7.88	39	5.08	↑	N	0.75	0.38	0.24	0.37	4.33	26
Las Lomas (Nos. 1 & 2)*	0.70	0.80	0.90	7.80	42	-	▬	Y	0.70	0.32	0.28	0.34	4.10	52
Longdenville[b]	0.75	0.82	0.57	7.42	64	5.70	↑	Y	0.75	0.30	0.26	0.33	4.14	51
Macaulay*	0.79	0.92	0.73	8.31	4	5.06	↑	N	0.79	0.37	0.29	0.39	4.59	12

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/94	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank /94
Madras Settlement	0.70	0.80	0.84	7.72	47	5.06	↑	Y	0.70	0.22	0.13	0.32	3.44	76
Mamoral No.2	0.63	0.90	0.57	7.26	72	-	—	Y	0.63	0.20	0.13	0.44	3.52	70
Mayo*	0.70	0.74	0.90	7.53	54	5.69	↑	Y	0.70	0.21	0.09	0.30	3.22	83
Mc Bean	0.72	0.91	0.57	7.65	51	6.05	↑	Y	0.72	0.37	0.19	0.40	4.22	38
Mount Pleasant*	0.69	0.87	0.90	8.04	27	5.59	↑	N	0.69	0.24	0.12	0.35	3.50	73
Mundo Nuevo*	0.68	0.92	0.41	7.23	78	5.33	↑	Y	0.68	0.22	0.43	0.38	4.30	28
Nancoo Village*	0.77	0.85	0.77	8.01	30	4.39	↑	N	0.77	0.36	0.20	0.36	4.22	38
Orange Valley*	0.70	0.80	0.84	7.72	47	5.61	↑	Y	0.70	0.22	0.13	0.32	3.44	76
Ouplay Village*	0.70	0.89	0.90	8.13	6	3.72	↑	N	0.70	0.18	0.17	0.37	3.55	64
Palmiste*	0.77	0.85	0.77	8.01	30	5.99	↑	N	0.77	0.36	0.20	0.36	4.22	38
Parfoce	0.70	0.74	0.90	7.53	54	-	—	Y	0.70	0.21	0.09	0.30	3.22	83
Pepper Village*	0.68	0.92	0.41	7.23	78	4.59	↑	Y	0.68	0.22	0.43	0.38	4.30	28
Phoenix Park*	0.75	0.93	0.66	8.05	18	5.06	↑	N	0.75	0.37	0.13	0.41	4.16	45
Pipaio*[b]	0.67	0.89	0.57	7.41	65	5.32	↑	Y	0.67	0.17	0.17	0.44	3.64	58
Plaisance Park*	0.79	0.91	0.65	8.11	10	6.66	↑	N	0.79	0.48	0.41	0.44	5.27	4
Point Lisas Industrial Estate*	0.70	0.80	0.84	7.72	47	-	—	Y	0.70	0.22	0.13	0.32	3.44	76
Point Lisas (NHA)*	0.75	0.86	0.76	7.96	36	6.44	↑	N	0.75	0.35	0.30	0.36	4.39	21
Poonah*	0.70	0.74	0.90	7.53	54	-	—	Y	0.70	0.21	0.09	0.30	3.22	83
Preysal*	0.67	0.62	0.57	6.30	92	5.99	↑	Y	0.67	0.18	0.02	0.30	2.93	92
Ravine Sable	0.75	0.86	0.76	7.96	36	6.79	↑	N	0.75	0.35	0.30	0.36	4.39	21
Riversdale*	0.69	0.87	0.90	8.04	27	-	—	N	0.69	0.24	0.12	0.35	3.50	73
San Pedro*[b]	0.67	0.89	0.57	7.41	65	6.26	↑	Y	0.67	0.17	0.17	0.44	3.64	58

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/94	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/94
San Raphael/Brazil	0.67	0.62	0.57	**6.30**	**92**	**4.18**	↑	Y	0.67	0.18	0.02	0.30	**2.93**	**92**
Spring Village (North)	0.73	0.92	0.73	**8.07**	**17**	-	—	N	0.73	0.41	0.24	0.38	**4.42**	**20**
Spring Village (South)	0.68	0.92	0.41	**7.23**	**78**	-	—	Y	0.68	0.22	0.43	0.38	**4.30**	**28**
Springland/San Fabian*	0.63	0.90	0.57	**7.26**	**72**	**5.19**	↑	Y	0.63	0.20	0.13	0.44	**3.52**	**70**
St. Andrew/S Village	0.83	0.91	0.57	**8.10**	**12**	-	—	N	0.83	0.41	0.23	0.40	**4.66**	**10**
St. Margaret	0.79	0.92	0.73	**8.31**	**4**	**5.99**	↑	N	0.79	0.37	0.29	0.39	**4.59**	**12**
St. Mary/S Village	0.73	0.84	0.68	**7.63**	**52**	**5.19**	↑	Y	0.73	0.37	0.30	0.36	**4.38**	**24**
Sum Sum Hill*	0.72	1.00	0.57	**8.01**	**30**	**5.99**	↑	N	0.72	0.46	0.25	0.53	**4.90**	**6**
Tabaquite*	0.61	0.73	0.57	**6.49**	**90**	**5.06**	↑	Y	0.61	0.18	0.14	0.37	**3.26**	**81**
Talparo*	0.63	0.90	0.57	**7.26**	**72**	**5.39**	↑	Y	0.63	0.20	0.13	0.44	**3.52**	**70**
Tamana Road*	0.68	0.92	0.41	**7.23**	**78**	**4.12**	↑	Y	0.68	0.22	0.43	0.38	**4.30**	**28**
Todd's Road	0.70	0.80	0.90	**7.80**	**42**	**5.20**	↑	Y	0.70	0.32	0.28	0.34	**4.10**	**52**
Todd's Station	0.68	0.92	0.41	**7.23**	**78**	**6.66**	↑	Y	0.68	0.22	0.43	0.38	**4.30**	**28**
Tortuga	0.61	0.73	0.57	**6.49**	**90**	**6.21**	↑	Y	0.61	0.18	0.14	0.37	**3.26**	**81**
Trintoc (Pointe-A-Pierre)*	0.68	0.92	0.41	**7.23**	**78**	-	—	Y	0.68	0.22	0.43	0.38	**4.30**	**28**
Union Village*	0.75	0.93	0.66	**8.05**	**18**	**5.88**	↑	N	0.75	0.37	0.13	0.41	**4.16**	**45**
Warren Village*	0.83	0.91	0.57	**8.10**	**12**	**6.79**	↑	N	0.83	0.41	0.23	0.40	**4.66**	**10**
Waterloo*	0.75	0.86	0.76	**7.96**	**36**	**5.29**	↑	N	0.75	0.35	0.30	0.36	**4.39**	**21**
Welcome*	0.70	0.80	0.84	**7.72**	**47**	-	—	Y	0.70	0.22	0.13	0.32	**3.44**	**76**
White Land*	0.72	1.00	0.57	**8.01**	**30**	**5.66**	↑	N	0.72	0.46	0.25	0.53	**4.90**	**6**
Couva/Tabaquite/Talparo	**0.72**	**0.87**	**0.75**	**7.88**	**—**	**5.54**	↑	**54 of 94**	**0.72**	**0.33**	**0.21**	**0.37**	**4.09**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.11: IDI and DII indices by community - Mayaro/Rio Claro

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/27	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/27
Abyssinia Village (Oilfield Area)*	0.68	0.85	0.57	7.25	14	5.19	↑	Y	0.68	0.17	0.13	0.40	345	13
Agostini Village	0.62	0.87	0.90	7.76	5	5.99	↑	Y	0.62	0.27	0.12	0.34	337	24
Biche[b]	0.72	0.83	0.57	7.35	12	5.18	↑	Y	0.72	0.32	0.10	0.38	381	4
Canque*	0.68	0.85	0.57	7.25	14	-	—	Y	0.68	0.17	0.13	0.40	345	13
Charuma Village*	0.68	0.85	0.57	7.25	14	5.43	↑	Y	0.68	0.17	0.13	0.40	345	13
Cocal Estate/Mayaro*	0.68	0.85	0.57	7.25	14	-	—	Y	0.68	0.17	0.13	0.40	345	13
Cushe/Navet*	0.69	0.83	0.57	7.20	22	3.06	↑	Y	0.69	0.30	0.10	0.33	354	10
Deep Ravine/Clear Water*	0.67	0.79	0.68	7.17	24	5.50	↑	Y	0.67	0.27	0.10	0.32	340	22
Ecclesville	0.63	0.86	0.79	7.51	9	4.76	↑	Y	0.63	0.27	0.14	0.30	338	25
Fonrose Village	0.72	0.92	0.57	7.68	6	-	—	Y	0.72	0.20	0.18	0.45	384	3
Grand Lagoon	0.61	0.84	0.57	6.83	26	4.72	↑	Y	0.61	0.25	0.07	0.31	310	27
Guayaguayare	0.70	0.85	0.65	7.49	10	5.37	↑	Y	0.70	0.28	0.11	0.31	350	12
La Savanne*	0.68	0.85	0.57	7.25	14	4.39	↑	Y	0.68	0.17	0.13	0.40	345	13
Libertville	0.69	0.91	0.57	7.54	8	5.41	↑	Y	0.69	0.21	0.17	0.44	378	5
Mafeking	0.69	0.83	0.57	7.20	22	5.59	↑	Y	0.69	0.30	0.10	0.33	354	10
Mainfield*	0.68	0.85	0.57	7.25	14	-	—	Y	0.68	0.17	0.13	0.40	345	13
Mayaro	0.67	0.79	0.68	7.17	24	4.66	↑	Y	0.67	0.27	0.10	0.32	340	22
Mora Settlement	0.67	0.76	0.57	6.85	27	4.75	↑	Y	0.67	0.24	0.11	0.34	341	21
Navet Village*	0.68	0.91	0.73	7.81	3	5.78	↑	Y	0.68	0.26	0.19	0.43	391	1
Ortoire*	0.68	0.85	0.57	7.25	14	4.12	↑	Y	0.68	0.17	0.13	0.40	345	13
Plaisance	0.67	0.86	0.73	7.59	7	3.72	↑	Y	0.67	0.26	0.06	0.31	325	26
Poole	0.68	0.85	0.57	7.25	14	-	—	Y	0.68	0.17	0.13	0.40	345	13
Radix	0.70	0.82	0.63	7.35	12	6.26	↑	Y	0.70	0.31	0.17	0.29	368	8
Rio Claro	0.68	0.91	0.73	7.81	3	4.30	↑	Y	0.68	0.26	0.19	0.43	391	1
San Pedro*[b]	0.67	0.89	0.57	7.41	11	6.26	↑	Y	0.67	0.17	0.17	0.44	364	9
St. Joseph Village*	0.71	0.90	0.77	7.97	1	4.81	↑	N	0.71	0.31	0.13	0.36	376	6
Union Village	0.71	0.90	0.77	7.97	1	5.88	↑	N	0.71	0.31	0.13	0.36	376	6
Mayaro/Rio Claro	0.68	0.86	0.67	7.51	—	5.37	↑	25 of 27	0.68	0.26	0.14	0.36	3.60	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.12: IDI and DII indices by community - Sangre Grande

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/41	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/41
Anglais Settlement*	0.78	0.89	0.82	8.28	2	5.55	↑	N	0.78	0.37	0.19	0.42	4.37	7
Balandra*	0.62	0.81	0.57	6.88	30	5.19	↑	Y	0.62	0.34	0.19	0.32	3.69	26
Biche[b]	0.72	0.83	0.57	7.35	23	5.18	↑	Y	0.72	0.32	0.10	0.38	3.81	23
Brooklyn Settlement*	0.75	0.91	0.61	7.90	11	6.44	↑	N	0.75	0.39	0.19	0.43	4.41	2
Caigual*	0.68	0.80	0.57	7.04	26	6.66	↑	Y	0.68	0.28	0.15	0.32	3.56	37
Carmichael*	0.63	0.81	0.90	7.56	18	4.39	↑	Y	0.63	0.37	0.19	0.39	3.97	18
Coal Mine	0.75	0.87	0.68	7.83	15	5.70	↑	Y	0.75	0.42	0.29	0.45	4.79	1
Coryal*	0.62	0.81	0.57	6.88	30	5.15	↑	Y	0.62	0.34	0.19	0.32	3.69	26
Cumaca*	0.62	0.81	0.57	6.88	30	4.39	↑	Y	0.62	0.34	0.19	0.32	3.69	26
Cumana	0.78	0.89	0.82	8.28	2	5.39	↑	N	0.78	0.37	0.19	0.42	4.37	7
Cumuto	0.70	0.88	0.65	7.62	16	5.85	↑	Y	0.70	0.39	0.21	0.36	4.15	12
Cunaripo*	0.64	0.83	0.65	7.22	24	5.52	↑	Y	0.64	0.31	0.22	0.32	3.74	24
Fishing Pond	0.64	0.81	0.57	6.94	28	4.91	↑	Y	0.64	0.24	0.14	0.31	3.33	40
Four Roads - Tamana*	0.78	0.89	0.82	8.28	2	-	—	N	0.78	0.37	0.19	0.42	4.37	7
Grand Riviere*	0.63	0.81	0.90	7.56	18	6.44	↑	Y	0.63	0.37	0.19	0.39	3.97	18
Guaico	0.62	0.69	0.57	6.37	41	5.20	↑	Y	0.62	0.26	0.25	0.30	3.56	37
Guatopajaro	0.62	0.81	0.57	6.88	30	-	—	Y	0.62	0.34	0.19	0.32	3.69	26
Howsen Village*	0.78	0.89	0.82	8.28	2	5.41	↑	N	0.78	0.37	0.19	0.42	4.37	7
L'Anse Noir	0.63	0.81	0.90	7.56	18	3.72	↑	Y	0.63	0.37	0.19	0.39	3.97	18
Mahoe*	0.63	0.81	0.90	7.56	18	-	—	Y	0.63	0.37	0.19	0.39	3.97	18
Manzanilla*	0.75	0.91	0.61	7.90	11	4.84	↑	N	0.75	0.39	0.19	0.43	4.41	2
Maraj Hill*	0.70	0.88	0.65	7.62	16	5.76	↑	Y	0.70	0.39	0.21	0.36	4.15	12
Matelot*	0.62	0.81	0.57	6.88	30	5.99	↑	Y	0.62	0.34	0.19	0.32	3.69	26
Matura	0.75	0.91	0.61	7.90	11	4.88	↑	N	0.75	0.39	0.19	0.43	4.41	2
Melajo*	0.62	0.81	0.57	6.88	30	-	—	Y	0.62	0.34	0.19	0.32	3.69	26
Mission	0.80	0.88	0.90	8.52	1	4.39	↑	N	0.80	0.39	0.15	0.42	4.40	6
Monte Video*	0.63	0.81	0.90	7.56	18	4.39	↑	Y	0.63	0.37	0.19	0.39	3.97	18
Morin Bay*	0.62	0.81	0.57	6.88	30	-	—	Y	0.62	0.34	0.19	0.32	3.69	26
North Manzanilla*	0.62	0.81	0.57	6.88	30	5.15	↑	Y	0.62	0.34	0.19	0.32	3.69	26
Oropouche*	0.73	0.90	0.76	8.02	9	-	—	N	0.73	0.33	0.18	0.41	4.12	14

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/41	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/41
Plum Mitan*	0.72	0.88	0.90	**8.20**	**7**	**4.52**	↑	**N**	0.72	0.37	0.15	0.40	**4.11**	**16**
Rampanalgas*	0.62	0.81	0.57	**6.88**	**30**	-	—	**Y**	0.62	0.34	0.19	0.32	**3.69**	**26**
Salybia Village*	0.75	0.91	0.61	**7.90**	**11**	**5.35**	↑	**N**	0.75	0.39	0.19	0.43	**4.41**	**2**
San Souci*	0.62	0.81	0.57	**6.88**	**30**	-	—	**Y**	0.62	0.34	0.19	0.32	**3.69**	**26**
Sangre Chiquito	0.68	0.80	0.57	**7.04**	**26**	**5.37**	↑	**Y**	0.68	0.28	0.15	0.32	**3.56**	**37**
Sangre Grande	0.64	0.83	0.65	**7.22**	**24**	**5.41**	↑	**Y**	0.64	0.31	0.22	0.32	**3.74**	**24**
Tamana*	0.78	0.89	0.82	**8.28**	**2**	**5.44**	↑	**N**	0.78	0.37	0.19	0.42	**4.37**	**7**
Toco	0.72	0.88	0.90	**8.20**	**7**	**4.68**	↑	**N**	0.72	0.37	0.15	0.40	**4.11**	**16**
Tompire*	0.62	0.81	0.57	**6.88**	**30**	-	—	**Y**	0.62	0.34	0.19	0.32	**3.69**	**26**
Turure*	0.64	0.81	0.57	**6.94**	**28**	**4.39**	↑	**Y**	0.64	0.24	0.14	0.31	**3.33**	**40**
Valencia	0.73	0.90	0.76	**8.02**	**9**	**5.00**	↑	**N**	0.73	0.33	0.18	0.41	**4.12**	**14**
Sangre Grande	**0.69**	**0.86**	**0.69**	7.54	—	5.40	↑	**27 of 41**	**0.69**	**0.34**	**0.20**	**0.37**	**3.99**	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.13: IDI and DII indices by community – Princes Town

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/54	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/54
Barrackpore[b]	0.68	0.80	0.66	7.26	49	5.47	↑	Y	0.68	0.29	0.13	0.34	3.62	44
Basse Terre*	0.66	0.84	0.79	7.57	34	4.39	↑	Y	0.66	0.30	0.15	0.34	3.64	32
Ben Lomond	0.68	0.89	0.73	7.76	20	3.86	↑	Y	0.68	0.27	0.13	0.40	3.70	26
Bon Jean*	0.77	0.86	0.57	7.64	30	4.39	↑	Y	0.77	0.29	0.12	0.35	3.83	22
Bonne Nanve[b]	0.77	0.93	0.57	7.94	9	5.19	↑	N	0.77	0.45	0.29	0.39	4.73	1
Broomage*	0.75	0.89	0.63	7.82	14	4.39	↑	Y	0.75	0.40	0.28	0.37	4.49	3
Brothers Settlement*	0.61	0.82	0.57	6.88	51	-	—	Y	0.61	0.27	0.13	0.32	3.32	51
Buen Intento*	0.73	0.87	0.80	8.02	3	6.32	↑	N	0.73	0.31	0.15	0.37	3.90	16
Cedar Hill*	0.65	0.84	0.86	7.68	26	3.06	↑	Y	0.65	0.29	0.15	0.36	3.63	40
Cleghorn And Mt. Pleasant	0.65	0.93	0.90	8.11	1	-	—	N	0.65	0.40	0.22	0.37	4.09	9
Corinth*	0.70	0.85	0.73	7.64	30	-	—	Y	0.70	0.26	0.17	0.35	3.67	28
Coryal Village	0.67	0.89	0.61	7.47	41	5.15	↑	Y	0.67	0.27	0.12	0.38	3.61	46
Dyers Village*	0.77	0.81	0.79	7.87	10	3.86	↑	N	0.77	0.27	0.18	0.35	3.94	14
Eccles Village*[b]	0.72	0.96	0.57	7.84	13	5.19	↑	Y	0.72	0.42	0.28	0.45	4.69	2
Fifth Company	0.66	0.84	0.79	7.57	34	5.36	↑	Y	0.66	0.30	0.15	0.34	3.64	32
Friendship[b]	0.70	0.85	0.73	7.64	30	-	—	Y	0.70	0.26	0.17	0.35	3.67	28
George Village	0.64	0.84	0.73	7.37	46	6.46	↑	Y	0.64	0.25	0.10	0.38	3.42	50
Golconda*[b]	0.68	0.89	0.73	7.76	20	6.79	↑	Y	0.68	0.27	0.13	0.40	3.70	26
Hard Bargain	0.65	0.75	0.57	6.75	54	4.66	↑	Y	0.65	0.23	0.16	0.25	3.24	54
Harmony Hall	0.75	0.89	0.63	7.82	14	5.99	↑	Y	0.75	0.40	0.28	0.37	4.49	3
Hindustan*	0.67	0.89	0.61	7.47	41	5.86	↑	Y	0.67	0.27	0.12	0.38	3.61	46
Iere Village*	0.75	0.91	0.57	7.80	17	5.46	↑	Y	0.75	0.37	0.17	0.44	4.33	6
Indian Walk	0.61	0.82	0.57	6.88	51	5.33	↑	Y	0.61	0.27	0.13	0.32	3.32	51
Jordan Village*	0.73	0.87	0.80	8.02	3	5.38	↑	N	0.73	0.31	0.15	0.37	3.90	16
Kumar Village*	0.65	0.84	0.86	7.68	26	6.49	↑	Y	0.65	0.29	0.15	0.36	3.63	40
La Lure*	0.66	0.84	0.79	7.57	34	5.86	↑	Y	0.66	0.30	0.15	0.34	3.64	32
La Ruffin*	0.66	0.84	0.79	7.57	34	4.39	↑	Y	0.66	0.30	0.15	0.34	3.64	32
La Savanne*	0.66	0.84	0.79	7.57	34	4.39	↑	Y	0.66	0.30	0.15	0.34	3.64	32
Lengua Village/Barrackpore	0.77	0.81	0.79	7.87	10	4.39	↑	N	0.77	0.27	0.18	0.35	3.94	14
Lothian	0.65	0.84	0.86	7.68	26	5.47	↑	Y	0.65	0.29	0.15	0.36	3.63	40

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/54	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/54
Malgretoute	0.73	0.87	0.80	**8.02**	**3**	**5.46**	↑	**N**	0.73	0.31	0.15	0.37	**3.90**	**16**
Marac*	0.66	0.84	0.79	**7.57**	**34**	**6.44**	↑	**Y**	0.66	0.30	0.15	0.34	**3.64**	**32**
Matilda	0.71	0.88	0.68	**7.72**	**22**	**5.57**	↑	**Y**	0.71	0.32	0.16	0.33	**3.80**	**24**
Moruga Village*	0.66	0.84	0.79	**7.57**	**34**	**5.55**	↑	**Y**	0.66	0.30	0.15	0.34	**3.64**	**32**
New Grant*	0.67	0.84	0.63	**7.29**	**47**	**-**	—	**Y**	0.67	0.21	0.23	0.36	**3.67**	**28**
Palmyra*	0.71	0.88	0.68	**7.72**	**22**	**4.39**	↑	**Y**	0.71	0.32	0.16	0.33	**3.80**	**24**
Palmyra Village/Mt. Stewart*	0.65	0.84	0.86	**7.68**	**26**	**-**	—	**Y**	0.65	0.29	0.15	0.36	**3.63**	**40**
Petit Café	0.71	0.93	0.62	**7.80**	**17**	**-**	—	**Y**	0.71	0.35	0.20	0.41	**4.18**	**8**
Petit Morne*	0.75	0.89	0.63	**7.82**	**14**	**-**	—	**Y**	0.75	0.40	0.28	0.37	**4.49**	**3**
Piparo*[b]	0.67	0.89	0.57	**7.41**	**45**	**5.32**	↓	**Y**	0.67	0.17	0.17	0.44	**3.64**	**32**
Princes Town Proper	0.72	0.90	0.60	**7.69**	**24**	**5.35**	↑	**Y**	0.72	0.31	0.18	0.39	**4.01**	**11**
Reform Village	0.72	0.83	0.90	**7.97**	**8**	**5.86**	↑	**N**	0.72	0.32	0.21	0.35	**3.97**	**13**
Robert Village*	0.65	0.93	0.90	**8.11**	**1**	**4.52**	↑	**N**	0.65	0.40	0.22	0.37	**4.09**	**9**
Sisters Village*	0.73	0.87	0.80	**8.02**	**3**	**-**	—	**N**	0.73	0.31	0.15	0.37	**3.90**	**16**
Sixth Company*	0.68	0.80	0.66	**7.26**	**49**	**4.96**	↑	**Y**	0.68	0.29	0.13	0.34	**3.62**	**44**
St. Charles Village*	0.73	0.87	0.80	**8.02**	**3**	**5.86**	↑	**N**	0.73	0.31	0.15	0.37	**3.90**	**16**
St. Clements*	0.72	0.90	0.60	**7.69**	**24**	**4.06**	↑	**Y**	0.72	0.31	0.18	0.39	**4.01**	**11**
St. Croix Village*[b]	0.67	0.89	0.61	**7.47**	**41**	**-**	—	**Y**	0.67	0.27	0.12	0.38	**3.61**	**46**
St. John'S Village[b]	0.75	0.91	0.57	**7.80**	**17**	**-**	—	**Y**	0.75	0.37	0.17	0.44	**4.33**	**6**
St. Julien*	0.67	0.89	0.61	**7.47**	**41**	**5.39**	↑	**Y**	0.67	0.27	0.12	0.38	**3.61**	**46**
Ste. Madeleine	0.67	0.84	0.63	**7.29**	**47**	**5.99**	↑	**Y**	0.67	0.21	0.23	0.36	**3.67**	**28**
St. Mary's Village	0.77	0.86	0.57	**7.64**	**30**	**5.19**	↑	**Y**	0.77	0.29	0.12	0.35	**3.83**	**22**
Tableland*	0.61	0.82	0.57	**6.88**	**51**	**5.64**	↑	**Y**	0.61	0.27	0.13	0.32	**3.32**	**51**
Usine Ste. Madeleine*	0.74	0.84	0.79	**7.87**	**10**	**-**	—	**N**	0.74	0.30	0.14	0.36	**3.84**	**21**
Princes Town	**0.70**	**0.86**	**0.71**	**7.63**	**—**	**5.51**	↑	**42 of 54**	**0.70**	**0.30**	**0.16**	**0.36**	**3.81**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.14: IDI and DII indices by community – Penal/Debe

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/32	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/32
Barrackpore[b]	0.69	0.85	0.69	7.57	19	5.47	↑	Y	0.69	0.31	0.18	0.36	3.86	13
Butchyia Village	0.75	0.88	0.65	7.82	8	6.66	↑	Y	0.75	0.30	0.12	0.41	3.98	10
Bonde Narve*[b]	0.77	0.93	0.57	7.94	7	5.19	↑	N	0.77	0.45	0.29	0.39	4.73	3
Canaan Village/Palmiste*	0.71	0.92	0.65	7.82	8	-	—	Y	0.71	0.40	0.24	0.34	4.26	5
Charlo Village*	0.68	0.84	0.69	7.47	22	5.79	↑	Y	0.68	0.30	0.12	0.37	3.66	28
Debe Proper	0.70	0.85	0.65	7.50	20	-	—	Y	0.70	0.29	0.12	0.35	3.63	30
Diamond*	0.75	0.88	0.65	7.82	8	4.39	↑	Y	0.75	0.30	0.12	0.41	3.98	10
Duncan Village	0.71	0.92	0.65	7.82	8	5.06	↑	Y	0.71	0.40	0.24	0.34	4.26	5
Esperance Village*	0.68	0.87	0.90	8.01	2	5.32	↑	N	0.68	0.32	0.14	0.35	3.72	18
Friendship*[b]	0.70	0.85	0.73	7.64	18	-	—	Y	0.70	0.26	0.17	0.35	3.67	27
Golconda*[b]	0.68	0.89	0.73	7.76	17	6.79	↑	Y	0.68	0.27	0.13	0.40	3.70	21
Hermitage Village	0.75	0.86	0.69	7.79	15	-	—	Y	0.75	0.25	0.17	0.36	3.80	14
La Fortune*	0.73	0.88	0.77	7.95	5	4.66	↑	N	0.73	0.35	0.21	0.35	4.10	8
La Romain	0.73	0.88	0.77	7.95	5	5.19	↑	N	0.73	0.35	0.21	0.35	4.10	8
Lengua Village*	0.67	0.86	0.57	7.27	26	-	—	Y	0.67	0.32	0.12	0.37	3.69	22
Mendez Village*	0.67	0.86	0.57	7.27	26	5.19	↑	Y	0.67	0.32	0.12	0.37	3.69	22
Monkey Town*	0.67	0.86	0.57	7.27	26	5.19	↑	Y	0.67	0.32	0.12	0.37	3.69	22
Mome Diablo*	0.67	0.86	0.57	7.27	26	6.00	↑	Y	0.67	0.32	0.12	0.37	3.69	22
Palmiste	0.82	0.94	0.79	8.60	1	5.99	↑	N	0.82	0.41	0.25	0.45	4.80	2
Penal	0.68	0.84	0.69	7.47	22	5.42	↑	Y	0.68	0.30	0.12	0.37	3.66	28
Penal Rock Road	0.67	0.86	0.57	7.27	26	4.88	↑	Y	0.67	0.32	0.12	0.37	3.69	22
Phillipine*	0.68	0.87	0.90	8.01	2	4.39	↑	N	0.68	0.32	0.14	0.35	3.72	18

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/32	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/32
Picton*	0.75	0.88	0.65	**7.82**	**8**	-	—	Y	0.75	0.30	0.12	0.41	**3.98**	**10**
Rambert Village*	0.71	0.92	0.65	**7.82**	**8**	**3.06**	↑	Y	0.71	0.40	0.24	0.34	**4.26**	**5**
Rochard Road	0.70	0.80	0.57	**7.13**	**31**	**5.42**	↑	Y	0.70	0.30	0.14	0.36	**3.76**	**16**
San Francique*[b]	0.70	0.85	0.65	**7.50**	**20**	**5.09**	↑	Y	0.70	0.29	0.12	0.35	**3.63**	**30**
Scott Road Village*	0.70	0.80	0.57	**7.13**	**31**	**3.72**	↑	Y	0.70	0.30	0.14	0.36	**3.76**	**16**
St. Croix Village*[b]	0.67	0.89	0.61	**7.47**	**22**	-	—	Y	0.67	0.27	0.12	0.38	**3.61**	**32**
St. John's Village[b]	0.75	0.91	0.57	**7.80**	**14**	-	—	Y	0.75	0.37	0.17	0.44	**4.33**	**4**
Syne Village*[b]	0.74	0.95	0.57	**7.90**	**25**	**4.58**	↑	N	0.74	0.39	0.42	0.44	**4.99**	**1**
Tulsa Village*[b]	0.75	0.86	0.69	**7.79**	**15**	**6.66**	↑	Y	0.75	0.25	0.17	0.36	**3.80**	**14**
Wellington	0.68	0.87	0.90	**8.01**	**2**	**4.72**	↑	N	0.68	0.32	0.14	0.35	**3.72**	**18**
Penal/Debe	**0.72**	**0.86**	**0.67**	**7.66**	**—**	**5.50**	↑	**24 of 32**	**0.72**	**0.32**	**0.16**	**0.37**	**3.91**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.15: IDI and DII indices by community – Siparia

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /63	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/63
Apex Oil Field*	0.80	0.93	0.57	8.07	17	-	▬	N	0.80	0.44	0.47	0.45	5.42	1
Aripero Village	0.80	0.95	0.61	8.21	10	4.52	↑	N	0.80	0.34	0.41	0.45	4.99	7
Avocat Village*	0.80	0.89	0.68	8.11	13	4.92	↑	N	0.80	0.35	0.40	0.42	4.94	9
Bamboo Village*	0.72	0.88	0.57	7.51	38	-	▬	Y	0.72	0.43	0.28	0.35	4.43	35
Beach Camp*	0.80	0.91	0.73	8.32	7	4.39	↑	N	0.80	0.37	0.47	0.43	5.16	4
Bennet Village*	0.80	0.91	0.57	7.99	20	6.05	↑	N	0.80	0.32	0.36	0.46	4.83	13
Bois Bough*	0.80	0.89	0.68	8.11	13	-	▬	N	0.80	0.35	0.40	0.42	4.94	9
Bonasse Village*	0.80	0.93	0.57	8.07	17	5.19	↑	N	0.80	0.44	0.47	0.45	5.42	1
Brighton*	0.67	0.86	0.57	7.24	51	-	▬	Y	0.67	0.35	0.28	0.37	4.17	52
Cap-De-Ville[b]	0.77	0.91	0.77	8.24	9	5.71	↑	N	0.77	0.37	0.15	0.45	4.34	50
Caroni*	0.72	0.88	0.57	7.51	38	-	▬	Y	0.72	0.43	0.28	0.35	4.43	35
Cedros*	0.80	0.91	0.57	7.99	20	-	▬	N	0.80	0.32	0.36	0.46	4.83	13
Chatham	0.77	0.90	0.90	8.49	1	4.85	↑	N	0.77	0.44	0.17	0.45	4.58	24
Chinese Village*	0.62	0.88	0.57	7.12	57	-	▬	Y	0.62	0.36	0.37	0.45	4.48	30
Cochrane*[b]	0.77	0.90	0.90	8.49	1	4.39	↑	N	0.77	0.44	0.17	0.45	4.58	24
Coromandel*	0.77	0.90	0.90	8.49	1	5.32	↑	N	0.77	0.44	0.17	0.45	4.58	24
Danny Village	0.82	0.88	0.57	7.94	28	5.01	↑	N	0.82	0.35	0.39	0.38	4.83	13
De Gannes Village*	0.68	0.90	0.63	7.60	35	-	▬	Y	0.68	0.33	0.33	0.40	4.39	45
Delhi Settlement	0.66	0.90	0.57	7.38	48	5.99	↑	Y	0.66	0.28	0.34	0.43	4.28	51
Dow Village*	0.57	0.81	0.57	6.64	62	5.45	↑	Y	0.57	0.25	0.28	0.42	3.78	61
Erin Proper	0.76	0.92	0.73	8.20	11	-	▬	N	0.76	0.32	0.38	0.44	4.74	20
Erin/Buenos Ayres*	0.80	0.91	0.57	7.99	20	5.99	↑	N	0.80	0.32	0.36	0.46	4.83	13
Forest Reserve*	0.67	0.86	0.57	7.24	51	-	▬	Y	0.67	0.35	0.28	0.37	4.17	52
Fullerton*	0.68	0.90	0.63	7.60	35	-	▬	Y	0.68	0.33	0.33	0.40	4.39	45
Fyzabad	0.57	0.81	0.57	6.64	62	6.09	↑	Y	0.57	0.25	0.28	0.42	3.78	61
Gheerahoo*	0.72	0.88	0.57	7.51	38	-	▬	Y	0.72	0.43	0.28	0.35	4.43	35

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /63	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/63
Gonzales (Point Fortin)*[b]	0.63	0.88	0.57	7.19	56	-	▬	Y	0.63	0.35	0.34	0.44	4.40	44
Granville*	0.67	0.86	0.57	7.24	51	-	▬	Y	0.67	0.35	0.28	0.37	4.17	52
Guapo Lot 10*	0.62	0.88	0.57	7.12	57	-	▬	Y	0.62	0.36	0.37	0.45	4.48	30
Harris Village	0.80	0.93	0.57	8.07	17	5.59	↑	N	0.80	0.44	0.47	0.45	5.42	1
Icacos	0.65	0.89	0.57	7.30	49	-	▬	Y	0.65	0.35	0.33	0.43	4.39	45
Jacob Village*	0.61	0.88	0.90	7.77	32	6.79	↑	Y	0.61	0.30	0.32	0.42	4.14	57
La Brea*	0.77	0.90	0.90	8.49	1	4.92	↑	N	0.77	0.44	0.17	0.45	4.58	24
La Fortune/Pluck*	0.80	0.91	0.57	7.99	20	-	▬	N	0.80	0.32	0.36	0.46	4.83	13
Lorensotte	0.72	0.88	0.57	7.51	38	-	▬	Y	0.72	0.43	0.28	0.35	4.43	35
Los Bajos*	0.72	0.88	0.57	7.51	38	4.66	↑	Y	0.72	0.43	0.28	0.35	4.43	35
Los Charos*	0.76	0.92	0.73	8.20	11	4.79	↑	N	0.76	0.32	0.38	0.44	4.74	20
Los Iros/Erin*	0.72	0.88	0.57	7.51	38	-	▬	Y	0.72	0.43	0.28	0.35	4.43	35
Mon Desir	0.67	0.86	0.57	7.24	51	3.95	↑	Y	0.67	0.35	0.28	0.37	4.17	52
Mon Desir/Silver Stream	0.78	0.92	0.57	7.93	29	-	▬	N	0.78	0.37	0.44	0.43	5.04	6
Oropouche	0.68	0.90	0.63	7.60	35	-	▬	Y	0.68	0.33	0.33	0.40	4.39	45
Palo Seco	0.61	0.88	0.90	7.77	32	5.28	↑	Y	0.61	0.30	0.32	0.42	4.14	57
Pantry Lands South*	0.77	0.90	0.90	8.49	1	-	▬	N	0.77	0.44	0.17	0.45	4.58	24
Pepper Village	0.80	0.89	0.68	8.11	13	4.59	↑	N	0.80	0.35	0.40	0.42	4.94	9
Point D'or*	0.80	0.89	0.68	8.11	13	-	▬	N	0.80	0.35	0.40	0.42	4.94	9
Quarry Village	0.62	0.88	0.57	7.12	57	5.45	↑	Y	0.62	0.36	0.37	0.45	4.48	30
Rancho Quemado*	0.62	0.88	0.57	7.12	57	4.75	↑	Y	0.62	0.36	0.37	0.45	4.48	30
Robert Hill/Siparia*	0.72	0.88	0.57	7.51	38	5.31	↑	Y	0.72	0.43	0.28	0.35	4.43	35
Rousillac*	0.67	0.86	0.57	7.24	51	6.06	↑	Y	0.67	0.35	0.28	0.37	4.17	52
Salazar Village*	0.72	0.88	0.57	7.51	38	5.99	↑	Y	0.72	0.43	0.28	0.35	4.43	35
San Francique*[b]	0.70	0.85	0.65	7.50	47	5.07	↑	Y	0.70	0.29	0.12	0.35	3.63	63
Santa Flora*	0.72	0.88	0.57	7.51	38	5.78	↑	Y	0.72	0.43	0.28	0.35	4.43	35
Sipana	0.80	0.91	0.73	8.32	7	-	▬	N	0.80	0.37	0.47	0.43	5.16	4

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /63	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/63
Sobo Village*	0.65	0.89	0.57	**7.30**	**49**	**4.84**	↑	**Y**	0.65	0.35	0.33	0.43	**4.39**	**45**
St. John*	0.80	0.91	0.57	**7.99**	**20**	-	—	**N**	0.80	0.32	0.36	0.46	**4.83**	**13**
St. Mary's Village	0.73	0.93	0.68	**7.97**	**26**	**5.19**	↑	**N**	0.73	0.35	0.35	0.42	**4.61**	**22**
Sudama Village*	0.77	0.90	0.90	**8.49**	**1**	**5.35**	↑	**N**	0.77	0.44	0.17	0.45	**4.58**	**24**
Syne Village[b]	0.74	0.95	0.57	**7.90**	**30**	**4.58**	↑	**N**	0.74	0.39	0.42	0.44	**4.99**	**7**
Thick Village*	0.73	0.93	0.68	**7.97**	**26**	**4.91**	↑	**N**	0.73	0.35	0.35	0.42	**4.61**	**22**
Tulsa Village*[b]	0.75	0.86	0.69	**7.79**	**31**	**6.66**	↑	**Y**	0.75	0.25	0.17	0.36	**3.80**	**60**
Vance River*	0.61	0.88	0.90	**7.77**	**32**	**3.72**	↑	**Y**	0.61	0.30	0.32	0.42	**4.14**	**57**
Vessigny*	0.62	0.88	0.57	**7.12**	**57**	-	—	**Y**	0.62	0.36	0.37	0.45	**4.48**	**30**
Waddle Village	0.80	0.91	0.57	**7.99**	**20**	**4.39**	↑	**N**	0.80	0.32	0.36	0.46	**4.83**	**13**
Siparia	**0.73**	**0.90**	**0.66**	**7.82**	**—**	**5.54**	↑	**33 of 63**	**0.73**	**0.36**	**0.34**	**0.42**	**4.61**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

— Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.16: IDI and DII indices by parish – Tobago

Parish	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /7	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/7
St. Andrew	0.76	0.92	0.65	8.00	4	5.41	↑	N	0.76	0.36	0.20	0.33	4.11	2
St. David	0.73	0.88	0.61	7.67	6	5.54	↑	Y	0.73	0.36	0.20	0.30	3.97	5
St. George	0.80	0.95	0.64	8.28	2	5.33	↑	N	0.80	0.29	0.12	0.39	3.99	4
St. John	0.65	0.92	0.57	7.43	7	4.99	↑	Y	0.65	0.31	0.11	0.39	3.67	7
St. Mary	0.80	0.97	0.79	8.65	1	5.31	↑	N	0.80	0.23	0.11	0.36	3.73	6
St. Patrick	0.73	0.87	0.72	7.84	5	5.56	↑	Y	0.73	0.43	0.27	0.30	4.34	1
St. Paul	0.79	0.94	0.63	8.17	3	4.94	↑	N	0.79	0.29	0.15	0.38	4.00	3
Tobago	0.75	0.91	0.66	7.94	–	5.30	–	3 of 7	0.75	0.36	0.20	0.33	4.10	–

↑ Improved

↓ Declined

– Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.17: IDI and DII indices by community – St. George

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/7	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/7
Belmont*	0.79	0.97	0.69	**8.45**	**1**	-	▬	**N**	0.79	0.28	0.13	0.36	**3.90**	3
Concordia	0.79	0.97	0.69	**8.45**	**1**	-	▬	**N**	0.79	0.28	0.13	0.36	**3.90**	**3**
Easterfield	0.78	0.91	0.61	**7.97**	**7**	-	▬	**N**	0.78	0.27	0.14	0.38	**3.93**	**2**
Hope/Blenheim	0.82	0.97	0.63	**8.42**	**4**	-	▬	**N**	0.82	0.23	0.03	0.40	**3.71**	**6**
Hope Farm/John Dial*	0.82	0.97	0.63	**8.42**	**4**	-	▬	**N**	0.82	0.23	0.03	0.40	**3.71**	6
Mason Hall*	0.79	0.97	0.69	**8.45**	**1**	-	▬	**N**	0.79	0.28	0.13	0.36	**3.90**	3
Mount St. George	0.80	0.94	0.63	**8.23**	**6**	-	▬	**N**	0.80	0.32	0.17	0.43	**4.29**	**1**
Parish of St George	**0.80**	**0.95**	**0.64**	**8.28**	—	**5.33**	**↑**	**0 of 7**	**0.80**	**0.29**	**0.12**	**0.39**	**3.99**	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.18: IDI and DII indices by community – St. Mary

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /3	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank /3
Glamorgan	0.80	0.97	0.79	**8.65**	**1**	-	▬	**N**	0.80	0.23	0.11	0.36	**3.73**	**1**
Goodwood*	0.80	0.97	0.79	**8.65**	**1**	-	▬	**N**	0.80	0.23	0.11	0.36	**3.73**	**1**
Pembroke*	0.80	0.97	0.79	**8.65**	**1**	-	▬	**N**	0.80	0.23	0.11	0.36	**3.73**	**1**
Parish of St. Mary	**0.80**	**0.97**	**0.79**	**8.65**	—	5.31	▮	**0 of 3**	**0.80**	**0.23**	**0.11**	**0.36**	**3.73**	—

*Denotes imputed score.

[b]Denotes community crosses Municipal Corporation boundaries.

▮ Improved

▮ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.19: IDI and DII indices by community – St. Andrew

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/17	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/17
Bacolet	0.82	0.98	0.57	**8.35**	**3**	-	–	**N**	0.82	0.24	0.06	0.36	**3.71**	**9**
Bagatelle	0.68	0.74	0.57	**6.82**	**12**	-	–	**Y**	0.68	0.28	0.16	0.32	**3.61**	**12**
Bethel/Mt. Gomery*	0.76	0.90	0.63	**7.90**	**6**	-	–	**N**	0.76	0.44	0.28	0.30	**4.45**	**1**
Calder Hall/Friendsfield*	0.76	0.86	0.57	**7.60**	**8**	-	–	**Y**	0.76	0.42	0.25	0.28	**4.29**	**5**
Cambee/Patience Hill*	0.68	0.74	0.57	**6.82**	**12**	-	–	**Y**	0.68	0.28	0.16	0.32	**3.61**	**12**
Cinnamon Hall (Gov'T House)	0.77	0.92	0.90	**8.55**	**1**	-	–	**N**	0.77	0.25	0.11	0.36	**3.71**	**9**
Darrel Spring*	0.68	0.74	0.57	**6.82**	**12**	-	–	**Y**	0.68	0.28	0.16	0.32	**3.61**	**12**
Idlewild/Whim*	0.68	0.74	0.57	**6.82**	**12**	-	–	**Y**	0.68	0.28	0.16	0.32	**3.61**	**12**
Lambeau*	0.77	0.92	0.90	**8.55**	**1**	-	–	**N**	0.77	0.25	0.11	0.36	**3.71**	**9**
Mount Grace*	0.76	0.86	0.57	**7.60**	**8**	-	–	**Y**	0.76	0.42	0.25	0.28	**4.29**	**5**
Mount Marie*	0.68	0.74	0.57	**6.82**	**12**	-	–	**Y**	0.68	0.28	0.16	0.32	**3.61**	**12**
Patience Hill*	0.68	0.74	0.57	**6.82**	**12**	-	–	**Y**	0.68	0.28	0.16	0.32	**3.61**	**12**
Sargeant Cain	0.74	0.96	0.68	**8.15**	**4**	-	–	**N**	0.74	0.39	0.18	0.42	**4.31**	**3**
Scarborough*	0.76	0.86	0.57	**7.60**	**8**	-	–	**Y**	0.76	0.42	0.25	0.28	**4.29**	**5**
Sherwood Park	0.76	0.86	0.57	**7.60**	**8**	-	–	**Y**	0.76	0.42	0.25	0.28	**4.29**	**5**
Signal Hill/Patience Hill	0.76	0.90	0.63	**7.90**	**6**	-	–	**N**	0.76	0.44	0.28	0.30	**4.45**	**1**
Spring Garden/Signal Hill*	0.74	0.96	0.68	**8.15**	**4**	-	–	**N**	0.74	0.39	0.18	0.42	**4.31**	**3**
Parish of St. Andrew	**0.76**	**0.92**	**0.65**	**8.00**	**–**	**5.41**	**↑**	**10 of 17**	**0.76**	**0.36**	**0.20**	**0.33**	**4.11**	**–**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

↑ Improved

↓ Declined

– Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.20: IDI and DII indices by community – St. Patrick

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /14	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/14
Bethel*	0.65	0.80	0.57	**6.94**	**12**	-	▬	Y	0.65	0.38	0.26	0.30	**3.98**	**12**
Bethlehem*	0.65	0.80	0.57	**6.94**	**12**	-	▬	Y	0.65	0.38	0.26	0.30	**3.98**	**12**
Black Rock	0.65	0.80	0.57	**6.94**	**12**	-	▬	Y	0.65	0.38	0.26	0.30	**3.98**	**12**
Bon Accord*	0.67	0.87	0.57	**7.31**	**9**	-	▬	Y	0.67	0.48	0.34	0.28	**4.43**	**2**
Buccoo/Coral Gardens	0.67	0.87	0.57	**7.31**	**9**	-	▬	Y	0.67	0.48	0.34	0.28	**4.43**	**2**
Canaan	0.75	0.87	0.73	**7.97**	**2**	-	▬	N	0.75	0.43	0.28	0.30	**4.39**	**5**
Cambee/All Field Trace*	0.75	0.87	0.73	**7.97**	**2**	-	▬	N	0.75	0.43	0.28	0.30	**4.39**	**5**
Crown Point*	0.67	0.87	0.57	**7.31**	**9**	-	▬	Y	0.67	0.48	0.34	0.28	**4.43**	**2**
Lowlands	0.71	0.94	0.57	**7.73**	**7**	-	▬	Y	0.71	0.45	0.24	0.32	**4.33**	**9**
Milford Court/Pigeon Point	0.80	0.84	0.68	**7.90**	**6**	-	▬	N	0.80	0.44	0.27	0.27	**4.45**	**1**
Mt. Irvine/Black Rock*	0.75	0.87	0.73	**7.97**	**2**	-	▬	N	0.75	0.43	0.28	0.30	**4.39**	**5**
Mt. Pleasant	0.74	0.85	0.90	**8.13**	**1**	-	▬	N	0.74	0.41	0.26	0.33	**4.33**	**9**
Old Grance/Sou Sou Lands*	0.71	0.94	0.57	**7.73**	**7**	-	▬	Y	0.71	0.45	0.24	0.32	**4.33**	**9**
Orange Hill*	0.75	0.87	0.73	**7.97**	**2**	-	▬	N	0.75	0.43	0.28	0.30	**4.39**	**5**
Parish of St Patrick	**0.73**	**0.87**	**0.72**	**7.84**	**—**	**5.56**	**⬆**	**8 of 14**	**0.73**	**0.43**	**0.27**	**0.30**	**4.34**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

⬆ Improved

⬇ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.21: IDI and DII indices by community – St. David

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank /10	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/10
Arnos Vale*	0.70	0.85	0.61	**7.41**	**4**	-	▬	**Y**	0.70	0.40	0.26	0.27	**4.08**	**1**
Bethseda*	0.70	0.85	0.61	**7.41**	**4**	-	▬	**Y**	0.70	0.40	0.26	0.27	**4.08**	**1**
Castara	0.69	0.97	0.57	**7.75**	**2**	-	▬	**Y**	0.69	0.34	0.13	0.37	**3.80**	**5**
Culloden*	0.69	0.97	0.57	**7.75**	**2**	-	▬	**Y**	0.69	0.34	0.13	0.37	**3.80**	**5**
Golden Lane	0.73	0.79	0.57	**7.20**	**8**	-	▬	**Y**	0.73	0.35	0.18	0.23	**3.72**	**7**
Les Coteaux*	0.73	0.79	0.57	**7.20**	**8**	-	▬	**Y**	0.73	0.35	0.18	0.23	**3.72**	**7**
Mary's Hill*	0.70	0.85	0.61	**7.41**	**4**	-	▬	**Y**	0.70	0.40	0.26	0.27	**4.08**	**1**
Moriah*	0.73	0.79	0.57	**7.20**	**8**	-	▬	**Y**	0.73	0.35	0.18	0.23	**3.72**	**7**
Plymouth	0.70	0.85	0.61	**7.41**	**4**	-	▬	**Y**	0.70	0.40	0.26	0.27	**4.08**	**1**
Whim	0.81	0.95	0.57	**8.14**	**1**	-	▬	**N**	0.81	0.21	0.07	0.36	**3.61**	**10**
Parish of St. David	**0.73**	**0.88**	**0.61**	**7.67**	**—**	**5.54**	**⬆**	**9 of 10**	**0.73**	**0.36**	**0.20**	**0.30**	**3.97**	**—**

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

⬆ Improved

⬇ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.22: IDI and DII indices by community – St. Paul

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/8	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/8
Argyle/Kendal*	0.82	0.93	0.68	**8.35**	**1**	-	▬	**N**	0.77	0.27	0.23	0.35	**4.04**	**3**
Belle Gardens	0.82	0.93	0.68	**8.35**	**1**	-	▬	**N**	0.82	0.33	0.17	0.35	**4.16**	**1**
Betsy Hope*	0.82	0.93	0.68	**8.35**	**1**	-	▬	**N**	0.82	0.33	0.17	0.35	**4.16**	**1**
Delaford*	0.76	0.94	0.57	**7.96**	**4**	-	▬	**N**	0.76	0.25	0.12	0.41	**3.84**	**4**
Delaford/Louis D'Or/Lands Sett.	0.76	0.94	0.57	**7.96**	**4**	-	▬	**N**	0.76	0.25	0.12	0.41	**3.84**	**4**
King's Bay*	0.76	0.94	0.57	**7.96**	**4**	-	▬	**N**	0.76	0.25	0.12	0.41	**3.84**	**4**
Roxborough*	0.76	0.94	0.57	**7.96**	**4**	-	▬	**N**	0.76	0.25	0.12	0.41	**3.84**	**4**
Zion Hill*	0.76	0.94	0.57	**7.96**	**4**	-	▬	**N**	0.76	0.25	0.12	0.41	**3.84**	**4**
Parish of St. Paul	**0.79**	**0.94**	**0.63**	**8.17**	—	**4.94**	⬆	**0 of 8**	**0.79**	**0.29**	**0.15**	**0.38**	**4.00**	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

⬆ Improved

⬇ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.23: IDI and DII indices by community – St. John

Community	ICT Development Index (IDI)								Digital Inclusion Index (DII)					
	ICT Access	ICT Use	ICT Skills	IDI 2021 Value	IDI 2021 Rank/8	IDI 2013 Value	Recent Trend	Underserved (Y/N)	ICT Access	ICT Usage	Trust and Confidence	Readiness	DII 2021 Value	DII 2021 Rank/8
Bloody Bay*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Cambleton/Charlotteville*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Charlotteville	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
L'anse Fourmi*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Lucy Vale*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Parlatuvier*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Speyside*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Top Hill*	0.65	0.92	0.57	**7.43**	**1**	-	▬	**Y**	0.65	0.31	0.11	0.39	**3.67**	**1**
Parish of St. John	**0.65**	**0.92**	**0.57**	**7.43**	—	**4.99**	⬆	**8 of 8**	**0.65**	**0.31**	**0.11**	**0.39**	**3.67**	—

* Denotes imputed score.

[b] Denotes community crosses Municipal Corporation boundaries.

⬆ Improved

⬇ Declined

▬ Unchanged/No comparable data available.

"-" Data not available.

Underserved communities have IDI score less than national IDI score (7.86)

Table A2.24: IDI and DII indices by community – Trinidad and Tobago

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Gran Curucaye*	6.15	608	4.35	215	San Juan-Laventille
Laventille	6.15	608	4.35	215	San Juan-Laventille
Arena*	6.30	605	2.93	607	Couva-Tabaquite-Talparo
Preysal*	6.30	605	2.93	607	Couva-Tabaquite-Talparo
San Raphael/Brazil	6.30	605	2.93	607	Couva-Tabaquite-Talparo
Guaico	6.37	604	3.56	528	Sangre Grande
Tabaquite*	6.49	602	3.26	589	Couva-Tabaquite-Talparo
Tortuga	6.49	602	3.26	589	Couva-Tabaquite-Talparo
Gonzales	6.55	598	4.11	317	Port of Spain
Port Of Spain Port Area*	6.55	598	4.11	317	Port of Spain
Port Of Spain Proper*	6.55	598	4.11	317	Port of Spain
Sealots*	6.55	598	4.11	317	Port of Spain
Maracas/St. Joseph	6.60	596	3.98	346	Tunapuna-Piarco
Tumpuna Road*	6.60	596	3.98	346	Tunapuna-Piarco
Dow Village*	6.64	594	3.78	425	Siparia
Fyzabad	6.64	594	3.78	425	Siparia
Picton*	6.72	591	3.93	374	San Juan-Laventille
Romain Lands*	6.72	591	3.93	374	San Juan-Laventille
St. Barbs	6.72	591	3.93	374	San Juan-Laventille
Hard Bargain	6.75	590	3.24	592	Princes Town
Cocoyea Village	6.79	589	3.99	345	San Fernando
Cocorite	6.80	588	4.12	314	Port of Spain
Bagatelle	6.82	582	3.61	514	St Andrew
Carnbee/Patience Hill*	6.82	582	3.61	514	St Andrew
Darrel Spring*	6.82	582	3.61	514	St Andrew
Idlewild/Whim*	6.82	582	3.61	514	St Andrew
Mount Marie*	6.82	582	3.61	514	St Andrew
Patience Hill*	6.82	582	3.61	514	St Andrew
Samaroo Village	6.83	580	4.29	250	Tunapuna-Piarco
St. Helena Village*	6.83	580	4.29	250	Tunapuna-Piarco
Mora Settlement	6.85	577	3.41	575	Mayaro-Rio Claro
Caratal*	6.85	577	3.94	369	Couva-Tabaquite-Talparo
Guaracara	6.85	577	3.94	369	Couva-Tabaquite-Talparo
Bejucalb	6.87	576	3.98	346	San Juan-Laventille
Brothers Settlement*	6.88	562	3.32	585	Princes Town
Indian Walk	6.88	562	3.32	585	Princes Town

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Tableland*	6.88	562	3.32	585	Princes Town
Balandra*	6.88	562	3.69	455	Sangre Grande
Coryal*	6.88	562	3.69	455	Sangre Grande
Cumaca*	6.88	562	3.69	455	Sangre Grande
Guatopajaro	6.88	562	3.69	455	Sangre Grande
Matelot*	6.88	562	3.69	455	Sangre Grande
Melajo*	6.88	562	3.69	455	Sangre Grande
Morin Bay*	6.88	562	3.69	455	Sangre Grande
North Manzanilla*	6.88	562	3.69	455	Sangre Grande
Rampanalgas*	6.88	562	3.69	455	Sangre Grande
San Souci*	6.88	562	3.69	455	Sangre Grande
Tompire*	6.88	562	3.69	455	Sangre Grande
Grand Lagoon	6.93	561	3.10	606	Mayaro-Rio Claro
Fishing Pond	6.94	556	3.33	583	Sangre Grande
Turure*	6.94	556	3.33	583	Sangre Grande
Bethel*	6.94	556	3.98	346	St Patrick
Bethlehem*	6.94	556	3.98	346	St Patrick
Black Rock	6.94	556	3.98	346	St Patrick
Egypt Village	7.00	555	4.01	342	Point Fortin
Caigual*	7.04	552	3.56	528	Sangre Grande
Sangre Chiquito	7.04	552	3.56	528	Sangre Grande
Curepe	7.04	552	4.28	257	Tunapuna-Piarco
Caura*	7.05	548	3.21	599	Tunapuna-Piarco
Cleaver Road*	7.05	548	3.21	599	Tunapuna-Piarco
Macoya	7.05	548	3.21	599	Tunapuna-Piarco
St. Augustine*	7.05	548	3.21	599	Tunapuna-Piarco
La Seiva	7.09	546	3.96	365	Diego Martin
St. Lucien Road*	7.09	546	3.96	365	Diego Martin
Calvary Hill*	7.10	543	3.75	432	Arima
Maturita*b	7.10	543	3.75	432	Arima
Mount Pleasant	7.10	543	3.75	432	Arima
Chinese Village*	7.12	538	4.48	153	Siparia
Guapo Lot 10*	7.12	538	4.48	153	Siparia
Quarry Village	7.12	538	4.48	153	Siparia
Rancho Quemado*	7.12	538	4.48	153	Siparia
Vessigny*	7.12	538	4.48	153	Siparia
Rochard Road	7.13	534	3.76	428	Penal-Debe
Scott Road Village*	7.13	534	3.76	428	Penal-Debe

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Bamboo Grove*b	7.13	534	3.92	381	San Juan-Laventille
Bamboo Groveb	7.13	534	3.92	381	Tunapuna-Piarco
Green Hill Village	7.14	533	3.47	557	Diego Martin
Deep Ravine/Clear Water*	7.17	531	3.40	576	Mayaro-Rio Claro
Mayaro	7.17	531	3.40	576	Mayaro-Rio Claro
Gonzales (Point Fortin)b	7.19	529	4.40	192	Point Fortin
Gonzales (Point Fortin)*b	7.19	529	4.40	192	Siparia
Cushe/Navet*	7.20	521	3.54	535	Mayaro-Rio Claro
Mafeking	7.20	521	3.54	535	Mayaro-Rio Claro
Le Platte	7.20	521	3.68	471	Diego Martin
Rich Plain*	7.20	521	3.68	471	Diego Martin
Simeon Road	7.20	521	3.71	446	Diego Martin
Golden Lane	7.20	521	3.72	440	St David
Les Coteaux*	7.20	521	3.72	440	St David
Moriah*	7.20	521	3.72	440	St David
Chaguaramas*	7.21	514	3.52	539	Diego Martin
Industrial Estate*	7.21	514	3.52	539	Diego Martin
L'anse Mitan*	7.21	514	3.52	539	Diego Martin
North Post*	7.21	514	3.52	539	Diego Martin
Paramin*	7.21	514	3.52	539	Diego Martin
Patna Village*	7.21	514	3.52	539	Diego Martin
Water Hole	7.21	514	3.52	539	Diego Martin
Cunaripo*	7.22	512	3.74	435	Sangre Grande
Sangre Grande	7.22	512	3.74	435	Sangre Grande
Brasso Manuel Junction*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Brasso Venado*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Forres Park*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Hermitage*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Mundo Nuevo*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Pepper Village*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Spring Village (South)	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Tamana Road*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Todd's Station	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Trintoc (Pointe-A-Pierre)*	7.23	502	4.30	236	Couva-Tabaquite-Talparo
Balmain*	7.24	494	3.20	603	Couva-Tabaquite-Talparo
Chin Chin	7.24	494	3.20	603	Couva-Tabaquite-Talparo
Friendship*	7.24	494	3.20	603	Couva-Tabaquite-Talparo
Brighton*	7.24	494	4.17	288	Siparia

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Forest Reserve*	7.24	494	4.17	288	Siparia
Granville*	7.24	494	4.17	288	Siparia
Mon Desir	7.24	494	4.17	288	Siparia
Rousillac*	7.24	494	4.17	288	Siparia
Abysinia Village (Oilfield Area)*	7.25	486	3.45	558	Mayaro-Rio Claro
Canque*	7.25	486	3.45	558	Mayaro-Rio Claro
Charuma Village*	7.25	486	3.45	558	Mayaro-Rio Claro
Cocal Estate/Mayaro*	7.25	486	3.45	558	Mayaro-Rio Claro
La Savanne*	7.25	486	3.45	558	Mayaro-Rio Claro
Mainfield*	7.25	486	3.45	558	Mayaro-Rio Claro
Ortoire*	7.25	486	3.45	558	Mayaro-Rio Claro
Poole	7.25	486	3.45	558	Mayaro-Rio Claro
Mamoral No.2	7.26	473	3.52	539	Couva-Tabaquite-Talparo
Springland/San Fabian*	7.26	473	3.52	539	Couva-Tabaquite-Talparo
Talparo*	7.26	473	3.52	539	Couva-Tabaquite-Talparo
Barrackporeb	7.26	473	3.62	512	Princes Town
Sixth Company*	7.26	473	3.62	512	Princes Town
Acono Village*	7.26	473	3.79	415	Tunapuna-Piarco
Arima Heights/Temple Village*	7.26	473	3.79	415	Tunapuna-Piarco
Brasso Seco Village*	7.26	473	3.79	415	Tunapuna-Piarco
Heights Of Guanapo*	7.26	473	3.79	415	Tunapuna-Piarco
La Laja*	7.26	473	3.79	415	Tunapuna-Piarco
Lopinot Village*	7.26	473	3.79	415	Tunapuna-Piarco
Mount St. Benedict*	7.26	473	3.79	415	Tunapuna-Piarco
Peytonville	7.26	473	3.79	415	Tunapuna-Piarco
Lengua Village*	7.27	468	3.69	455	Penal-Debe
Mendez Village*	7.27	468	3.69	455	Penal-Debe
Monkey Town*	7.27	468	3.69	455	Penal-Debe
Morne Diablo*	7.27	468	3.69	455	Penal-Debe
Penal Rock Road	7.27	468	3.69	455	Penal-Debe
New Grant*	7.29	466	3.67	474	Princes Town
Ste. Madeleine	7.29	466	3.67	474	Princes Town
Enterprise	7.30	462	3.61	514	Chaguanas
Lendore Village*	7.30	462	3.61	514	Chaguanas
Icacos	7.30	462	4.39	196	Siparia
Sobo Village*	7.30	462	4.39	196	Siparia
Bon Accord*	7.31	459	4.43	174	St Patrick
Buccoo/Coral Gardens	7.31	459	4.43	174	St Patrick

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Crown Point*	7.31	459	4.43	174	St Patrick
Cunupiab	7.33	456	3.37	578	Chaguanas
Cunupia*b	7.33	456	3.37	578	Tunapuna-Piarco
Cunupia*b	7.33	456	3.37	578	Couva-Tabaquite-Talparo
Radix	7.35	452	3.68	471	Mayaro-Rio Claro
Bicheb	7.35	452	3.81	406	Mayaro-Rio Claro
Bicheb	7.35	452	3.81	406	Sangre Grande
East Port Of Spain	7.35	452	4.20	280	Port of Spain
George Village	7.37	450	3.42	574	Princes Town
Fanny Village	7.37	450	4.45	163	Point Fortin
Delhi Settlement	7.38	449	4.28	257	Siparia
D'Abadie	7.40	448	4.10	323	Tunapuna-Piarco
Brasso Caparo Village*	7.41	435	3.64	490	Couva-Tabaquite-Talparo
Brasso Tamana*	7.41	435	3.64	490	Couva-Tabaquite-Talparo
Brickfield/Navet*	7.41	435	3.64	490	Couva-Tabaquite-Talparo
Brothers Road	7.41	435	3.64	490	Couva-Tabaquite-Talparo
Piparo*b	7.41	435	3.64	490	Couva-Tabaquite-Talparo
San Pedro*b	7.41	435	3.64	490	Couva-Tabaquite-Talparo
San Pedro*b	7.41	435	3.64	490	Mayaro-Rio Claro
Piparo*b	7.41	435	3.64	490	Princes Town
Arnos Vale*	7.41	435	4.08	330	St David
Bethseda*	7.41	435	4.08	330	St David
Mary's Hill*	7.41	435	4.08	330	St David
Plymouth	7.41	435	4.08	330	St David
Bejucalb	7.41	435	4.22	270	Tunapuna-Piarco
Longdenvilleb	7.42	434	4.14	310	Couva-Tabaquite-Talparo
Bloody Bay*	7.43	424	3.67	474	St John
Cambleton/Charlotteville*	7.43	424	3.67	474	St John
Charlotteville	7.43	424	3.67	474	St John
L'anse Formi*	7.43	424	3.67	474	St John
Lucy Vale*	7.43	424	3.67	474	St John
Parlatuvier*	7.43	424	3.67	474	St John
Speyside*	7.43	424	3.67	474	St John
Top Hill*	7.43	424	3.67	474	St John
Cascade	7.43	424	4.15	305	San Juan-Laventille
Lady Chancellor*	7.43	424	4.15	305	San Juan-Laventille
Techier Village	7.44	423	3.89	393	Point Fortin
Upper St. James	7.46	420	3.93	374	Diego Martin

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Champ Fleurs*b	7.46	420	4.46	161	San Juan-Laventille
Champ Fleursb	7.46	420	4.46	161	Tunapuna-Piarco
Pinto Road	7.47	410	3.29	588	Tunapuna-Piarco
Coryal Village	7.47	410	3.61	514	Princes Town
Hindustan*	7.47	410	3.61	514	Princes Town
St. Croix Village*b	7.47	410	3.61	514	Princes Town
St. Julien*	7.47	410	3.61	514	Princes Town
St. Croix Village*b	7.47	410	3.61	514	Penal-Debe
Charlo Village*	7.47	410	3.66	487	Penal-Debe
Penal	7.47	410	3.66	487	Penal-Debe
Agostini Village*	7.47	410	4.03	338	Couva-Tabaquite-Talparo
Chase Village	7.47	410	4.03	338	Couva-Tabaquite-Talparo
Guayaguayare	7.49	401	3.50	549	Mayaro-Rio Claro
Caroni Village*	7.49	401	4.20	280	Tunapuna-Piarco
Frederick Settlement*	7.49	401	4.20	280	Tunapuna-Piarco
Kandahar*	7.49	401	4.20	280	Tunapuna-Piarco
La Seiva Village	7.49	401	4.20	280	Tunapuna-Piarco
La Mango Village*	7.49	401	4.30	236	Tunapuna-Piarco
La Paille Village*	7.49	401	4.30	236	Tunapuna-Piarco
St. Augustine South*	7.49	401	4.30	236	Tunapuna-Piarco
St. Joseph	7.49	401	4.30	236	Tunapuna-Piarco
Debe Proper	7.50	398	3.63	505	Penal-Debe
San Francique*b	7.50	398	3.63	505	Penal-Debe
San Francique*b	7.50	398	3.63	505	Siparia
Ecclesville	7.51	388	3.34	582	Mayaro-Rio Claro
Bamboo Village*	7.51	388	4.43	174	Siparia
Carapal*	7.51	388	4.43	174	Siparia
Gheerahoo*	7.51	388	4.43	174	Siparia
Lorensotte	7.51	388	4.43	174	Siparia
Los Bajos*	7.51	388	4.43	174	Siparia
Los Iros/Erin*	7.51	388	4.43	174	Siparia
Robert Hill/Siparia*	7.51	388	4.43	174	Siparia
Salazar Village*	7.51	388	4.43	174	Siparia
Santa Flora*	7.51	388	4.43	174	Siparia
Bonne Aventure*	7.53	378	3.22	593	Couva-Tabaquite-Talparo
Diamond*	7.53	378	3.22	593	Couva-Tabaquite-Talparo
Flanagin Town*	7.53	378	3.22	593	Couva-Tabaquite-Talparo
Mayo*	7.53	378	3.22	593	Couva-Tabaquite-Talparo

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Parforce	7.53	378	3.22	593	Couva-Tabaquite-Talparo
Poonah*	7.53	378	3.22	593	Couva-Tabaquite-Talparo
Bagatelle	7.53	378	3.50	549	Diego Martin
Cameron Road*	7.53	378	3.50	549	Diego Martin
Dow Village*	7.53	378	3.54	535	Couva-Tabaquite-Talparo
Freeport	7.53	378	3.54	535	Couva-Tabaquite-Talparo
Libertville	7.54	376	3.78	425	Mayaro-Rio Claro
Felicity	7.54	376	3.88	395	Chaguanas
Clifton Hill	7.55	373	4.26	259	Point Fortin
St. Clair*	7.55	373	4.67	96	Port of Spain
Woodbrook	7.55	373	4.67	96	Port of Spain
Carmichael*	7.56	368	3.97	357	Sangre Grande
Grand Riviere*	7.56	368	3.97	357	Sangre Grande
L'Anse Noir	7.56	368	3.97	357	Sangre Grande
Mahoe*	7.56	368	3.97	357	Sangre Grande
Monte Video*	7.56	368	3.97	357	Sangre Grande
Basse Terre*	7.57	359	3.64	490	Princes Town
Fifth Company	7.57	359	3.64	490	Princes Town
La Lune*	7.57	359	3.64	490	Princes Town
La Ruffin*	7.57	359	3.64	490	Princes Town
La Savanne*	7.57	359	3.64	490	Princes Town
Marac*	7.57	359	3.64	490	Princes Town
Moruga Village*	7.57	359	3.64	490	Princes Town
Barrackporeb	7.57	359	3.86	396	Penal-Debe
Hollywood	7.57	359	4.19	285	Point Fortin
Tarouba	7.58	358	4.43	174	San Fernando
Plaisance	7.59	354	3.25	591	Mayaro-Rio Claro
Eastern Quarry*	7.59	354	4.26	259	San Juan-Laventille
Mount D'Or	7.59	354	4.26	259	San Juan-Laventille
Never Dirty*	7.59	354	4.26	259	San Juan-Laventille
Calder Hall/Friendsfield*	7.60	347	4.29	250	St Andrew
Mount Grace*	7.60	347	4.29	250	St Andrew
Scarborough*	7.60	347	4.29	250	St Andrew
Sherwood Park	7.60	347	4.29	250	St Andrew
De Gannes Village*	7.60	347	4.39	196	Siparia
Fullerton*	7.60	347	4.39	196	Siparia
Oropouche	7.60	347	4.39	196	Siparia
Arima Proper	7.62	344	4.15	305	Arima

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Cumuto	7.62	344	4.15	305	Sangre Grande
Maraj Hill*	7.62	344	4.15	305	Sangre Grande
Big Yard*	7.63	339	4.02	340	Diego Martin
Dibe/Belle Vue	7.63	339	4.02	340	Diego Martin
Brechin Castle*	7.63	339	4.38	208	Couva-Tabaquite-Talparo
St. Mary'S Village	7.63	339	4.38	208	Couva-Tabaquite-Talparo
Boissiere	7.63	339	4.40	192	Diego Martin
Corinth*	7.64	334	3.67	474	Princes Town
Friendshipb	7.64	334	3.67	474	Princes Town
Friendship*b	7.64	334	3.67	474	Penal-Debe
Bon Jean*	7.64	334	3.83	404	Princes Town
St. Mary's Village	7.64	334	3.83	404	Princes Town
Mc Bean	7.65	330	4.22	270	Couva-Tabaquite-Talparo
Cane Farm	7.65	330	4.24	267	Tunapuna-Piarco
St. John's Village*	7.65	330	4.24	267	Tunapuna-Piarco
Surrey Village*	7.65	330	4.24	267	Tunapuna-Piarco
Dinsley*	7.67	328	3.93	374	Tunapuna-Piarco
Tunapuna	7.67	328	3.93	374	Tunapuna-Piarco
Cedar Hill*	7.68	322	3.63	505	Princes Town
Kumar Village*	7.68	322	3.63	505	Princes Town
Lothian	7.68	322	3.63	505	Princes Town
Palmyra Village/Mt. Stewart*	7.68	322	3.63	505	Princes Town
Longdenvilleb	7.68	322	3.66	487	Chaguanas
Fonrose Village	7.68	322	3.84	397	Mayaro-Rio Claro
Princes Town Proper	7.69	320	4.01	342	Princes Town
St. Clements*	7.69	320	4.01	342	Princes Town
Maturita*b	7.72	301	3.43	570	Tunapuna-Piarco
Mausica*	7.72	301	3.43	570	Tunapuna-Piarco
Paradise Gardens*	7.72	301	3.43	570	Tunapuna-Piarco
Tacarigua	7.72	301	3.43	570	Tunapuna-Piarco
Madras Settlement	7.72	301	3.44	566	Couva-Tabaquite-Talparo
Orange Valley*	7.72	301	3.44	566	Couva-Tabaquite-Talparo
Point Lisas Industrial Estate*	7.72	301	3.44	566	Couva-Tabaquite-Talparo
Welcome*	7.72	301	3.44	566	Couva-Tabaquite-Talparo
Matilda	7.72	301	3.80	408	Princes Town
Palmyra*	7.72	301	3.80	408	Princes Town
Five Rivers	7.72	301	4.05	335	Tunapuna-Piarco
Pasea Extension*	7.72	301	4.05	335	Tunapuna-Piarco

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Bon Air Development	7.72	301	4.19	285	Tunapuna-Piarco
Broadway*	7.72	301	4.63	103	San Fernando
Embacadere*	7.72	301	4.63	103	San Fernando
Marabella	7.72	301	4.63	103	San Fernando
San Fernando Proper*	7.72	301	4.63	103	San Fernando
Union Village*	7.72	301	4.63	103	San Fernando
Paradise	7.72	301	4.96	56	San Fernando
Lowlands	7.73	299	4.33	221	St Patrick
Old Grance/Sou Sou Lands*	7.73	299	4.33	221	St Patrick
Castara	7.75	295	3.80	408	St David
Culloden*	7.75	295	3.80	408	St David
Carapo	7.75	295	3.95	367	Tunapuna-Piarco
Wallerfield*	7.75	295	3.95	367	Tunapuna-Piarco
Agostini Village	7.76	291	3.37	578	Mayaro-Rio Claro
Ben Lomond	7.76	291	3.70	452	Princes Town
Golconda*b	7.76	291	3.70	452	Princes Town
Golconda*b	7.76	291	3.70	452	Penal-Debe
Jacob Village*	7.77	286	4.14	310	Siparia
Palo Seco	7.77	286	4.14	310	Siparia
Vance River*	7.77	286	4.14	310	Siparia
Morvant	7.77	286	4.56	138	San Juan-Laventille
Soconusco*	7.77	286	4.56	138	San Juan-Laventille
El Dorado	7.78	282	3.49	555	Tunapuna-Piarco
La Resource*	7.78	282	3.49	555	Tunapuna-Piarco
El Socorro	7.78	282	4.51	142	San Juan-Laventille
Santa Cruz*	7.78	282	4.51	142	San Juan-Laventille
Hermitage Village	7.79	279	3.80	408	Penal-Debe
Tulsa Village*b	7.79	279	3.80	408	Penal-Debe
Tulsa Village*b	7.79	279	3.80	408	Siparia
Las Lomas (Nos. 1 & 2)*	7.80	270	4.10	323	Couva-Tabaquite-Talparo
Todd's Road	7.80	270	4.10	323	Couva-Tabaquite-Talparo
Petit Café	7.80	270	4.18	287	Princes Town
Iere Village*	7.80	270	4.33	221	Princes Town
St. John'S Villageb	7.80	270	4.33	221	Princes Town
St. John's Villageb	7.80	270	4.33	221	Penal-Debe
Bucarro	7.80	270	4.50	145	Couva-Tabaquite-Talparo
Couva Central*	7.80	270	4.50	145	Couva-Tabaquite-Talparo
Fairview*	7.80	270	4.50	145	Couva-Tabaquite-Talparo

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Navet Village*	7.81	267	3.91	383	Mayaro-Rio Claro
Rio Claro	7.81	267	3.91	383	Mayaro-Rio Claro
Les Efforts West	7.81	267	4.51	142	San Fernando
Batchyia Village	7.82	257	3.98	346	Penal-Debe
Diamond*	7.82	257	3.98	346	Penal-Debe
Picton*	7.82	257	3.98	346	Penal-Debe
Canaan Village/Palmiste*	7.82	257	4.26	259	Penal-Debe
Duncan Village	7.82	257	4.26	259	Penal-Debe
Rambert Village*	7.82	257	4.26	259	Penal-Debe
Broomage*	7.82	257	4.49	150	Princes Town
Harmony Hall	7.82	257	4.49	150	Princes Town
Petit Morne*	7.82	257	4.49	150	Princes Town
Arouca	7.82	257	4.55	140	Tunapuna-Piarco
Coal Mine	7.83	256	4.79	80	Sangre Grande
O'Meara Road	7.84	253	3.94	369	Arima
Eccles Villageb	7.84	253	4.69	93	Couva-Tabaquite-Talparo
Eccles Village*b	7.84	253	4.69	93	Princes Town
Edinburgh Gardens*	7.86	249	4.58	125	Chaguanas
St. Charles Village	7.86	249	4.58	125	Chaguanas
St. Anns	7.86	249	4.58	125	San Juan-Laventille
Petit Valley	7.86	249	4.77	83	Diego Martin
Usine Ste. Madeleine*	7.87	245	3.84	397	Princes Town
Dyers Village*	7.87	245	3.94	369	Princes Town
Lengua Village/Barrackpore	7.87	245	3.94	369	Princes Town
Edinburgh 501	7.87	245	5.04	42	Chaguanas
Basta Hall	7.88	241	4.33	221	Couva-Tabaquite-Talparo
Indian Trail*	7.88	241	4.33	221	Couva-Tabaquite-Talparo
Newtown*	7.88	241	4.88	65	Port of Spain
St. James	7.88	241	4.88	65	Port of Spain
Brooklyn Settlement*	7.90	227	4.41	188	Sangre Grande
Manzanilla*	7.90	227	4.41	188	Sangre Grande
Matura	7.90	227	4.41	188	Sangre Grande
Salybia Village*	7.90	227	4.41	188	Sangre Grande
Bethel/Mt. Gomery*	7.90	227	4.45	163	St Andrew
Signal Hill/Patience Hill	7.90	227	4.45	163	St Andrew
Milford Court/Pigeon Point	7.90	227	4.45	163	St Patrick
Chaguanas Proper*	7.90	227	4.98	53	Chaguanas
Charlieville	7.90	227	4.98	53	Chaguanas

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Syne Village*b	7.90	227	4.99	50	Penal-Debe
Syne Villageb	7.90	227	4.99	50	Siparia
Lower Santa Cruz*	7.90	227	5.07	39	San Juan-Laventille
Mt. Hope*	7.90	227	5.07	39	San Juan-Laventille
Mt. Lambert	7.90	227	5.07	39	San Juan-Laventille
La Canoa	7.92	224	4.48	153	San Juan-Laventille
Marie Road*	7.92	224	4.48	153	San Juan-Laventille
Mon Repos*	7.92	224	4.48	153	San Juan-Laventille
Mon Desir/Silver Stream	7.93	223	5.04	42	Siparia
Borde Narveb	7.94	220	4.73	90	Princes Town
Borde Narve*b	7.94	220	4.73	90	Penal-Debe
Danny Village	7.94	220	4.83	69	Siparia
La Fortune*	7.95	215	4.10	323	Penal-Debe
La Romain	7.95	215	4.10	323	Penal-Debe
Maloney Gardens	7.95	215	5.08	36	Tunapuna-Piarco
Olton Road*	7.95	215	5.08	36	Tunapuna-Piarco
Oropuna Village/Piarco*	7.95	215	5.08	36	Tunapuna-Piarco
Delaford*	7.96	206	3.84	397	St Paul
Delaford/Louis D'Or/Lands Sett.	7.96	206	3.84	397	St Paul
King's Bay*	7.96	206	3.84	397	St Paul
Roxborough*	7.96	206	3.84	397	St Paul
Zion Hill*	7.96	206	3.84	397	St Paul
Point Lisas (NHA)*	7.96	206	4.39	196	Couva-Tabaquite-Talparo
Ravine Sable	7.96	206	4.39	196	Couva-Tabaquite-Talparo
Waterloo*	7.96	206	4.39	196	Couva-Tabaquite-Talparo
Petit Curucaye	7.96	206	4.81	78	San Juan-Laventille
St. Joseph Village*	7.97	196	3.76	428	Mayaro-Rio Claro
Union Village	7.97	196	3.76	428	Mayaro-Rio Claro
Easterfield	7.97	196	3.93	374	St George
Reform Village	7.97	196	3.97	357	Princes Town
Canaan	7.97	196	4.39	196	St Patrick
Carnbee/All Field Trace*	7.97	196	4.39	196	St Patrick
Mt. Irvine/Black Rock*	7.97	196	4.39	196	St Patrick
Orange Hill*	7.97	196	4.39	196	St Patrick
St. Mary's Village	7.97	196	4.61	115	Siparia
Thick Village*	7.97	196	4.61	115	Siparia
Green Acres*	7.98	193	5.09	33	San Fernando
St. Joseph Village*	7.98	193	5.09	33	San Fernando

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Union Park	7.98	193	5.09	33	San Fernando
Bennet Village*	7.99	187	4.83	69	Siparia
Cedros*	7.99	187	4.83	69	Siparia
Erin/Buenos Ayres*	7.99	187	4.83	69	Siparia
La Fortune/Pluck*	7.99	187	4.83	69	Siparia
St. John*	7.99	187	4.83	69	Siparia
Waddle Village	7.99	187	4.83	69	Siparia
Fort George*	8.00	185	4.33	221	Diego Martin
Point Cumana	8.00	185	4.33	221	Diego Martin
Esperance Village*	8.01	176	3.72	440	Penal-Debe
Phillipine*	8.01	176	3.72	440	Penal-Debe
Wellington	8.01	176	3.72	440	Penal-Debe
Gasparillo	8.01	176	4.22	270	Couva-Tabaquite-Talparo
Nancoo Village*	8.01	176	4.22	270	Couva-Tabaquite-Talparo
Palmiste*	8.01	176	4.22	270	Couva-Tabaquite-Talparo
California	8.01	176	4.90	61	Couva-Tabaquite-Talparo
Sum Sum Hill*	8.01	176	4.90	61	Couva-Tabaquite-Talparo
White Land*	8.01	176	4.90	61	Couva-Tabaquite-Talparo
Buen Intento*	8.02	167	3.90	385	Princes Town
Jordan Village*	8.02	167	3.90	385	Princes Town
Malgretoute	8.02	167	3.90	385	Princes Town
Sisters Village*	8.02	167	3.90	385	Princes Town
St. Charles Village*	8.02	167	3.90	385	Princes Town
Covigne	8.02	167	3.97	357	Diego Martin
Saut Deau*	8.02	167	3.97	357	Diego Martin
Oropouche*	8.02	167	4.12	314	Sangre Grande
Valencia	8.02	167	4.12	314	Sangre Grande
Cantaro Village*	8.03	165	4.50	145	San Juan-Laventille
Malick	8.03	165	4.50	145	San Juan-Laventille
Caparo	8.04	162	3.50	549	Couva-Tabaquite-Talparo
Mount Pleasant*	8.04	162	3.50	549	Couva-Tabaquite-Talparo
Riversdale*	8.04	162	3.50	549	Couva-Tabaquite-Talparo
Malabar	8.05	152	3.89	393	Arima
Brickfield*	8.05	152	4.16	296	Couva-Tabaquite-Talparo
Cedar Hill*	8.05	152	4.16	296	Couva-Tabaquite-Talparo
Chickland	8.05	152	4.16	296	Couva-Tabaquite-Talparo
Esperanza*	8.05	152	4.16	296	Couva-Tabaquite-Talparo
Phoenix Park*	8.05	152	4.16	296	Couva-Tabaquite-Talparo

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Union Village*	8.05	152	4.16	296	Couva-Tabaquite-Talparo
Claxton Bay	8.05	152	4.17	288	Couva-Tabaquite-Talparo
Farnum Village*	8.05	152	4.17	288	Couva-Tabaquite-Talparo
Felicity Hall*	8.05	152	4.17	288	Couva-Tabaquite-Talparo
Victoria Village	8.06	151	5.03	44	San Fernando
Spring Village (North)	8.07	147	4.42	187	Couva-Tabaquite-Talparo
Apex Oil Field*	8.07	147	5.42	13	Siparia
Bonasse Village*	8.07	147	5.42	13	Siparia
Harris Village	8.07	147	5.42	13	Siparia
Tumpuna Road	8.08	146	4.07	334	Arima
Dinsley/Trincity	8.09	141	3.98	346	Tunapuna-Piarco
Trincity*	8.09	141	3.98	346	Tunapuna-Piarco
Calcutta Road No.2*	8.09	141	5.39	16	Couva-Tabaquite-Talparo
Carlsen Field	8.09	141	5.39	16	Couva-Tabaquite-Talparo
Chandernagore*	8.09	141	5.39	16	Couva-Tabaquite-Talparo
St. Andrew'S Village	8.10	139	4.66	98	Couva-Tabaquite-Talparo
Warren Village*	8.10	139	4.66	98	Couva-Tabaquite-Talparo
Cleghorn And Mt. Pleasant	8.11	131	4.09	328	Princes Town
Robert Village*	8.11	131	4.09	328	Princes Town
Avocat Village*	8.11	131	4.94	57	Siparia
Bois Bough*	8.11	131	4.94	57	Siparia
Pepper Village	8.11	131	4.94	57	Siparia
Point D'or*	8.11	131	4.94	57	Siparia
Edinburgh Village	8.11	131	5.27	29	Couva-Tabaquite-Talparo
Plaisance Park*	8.11	131	5.27	29	Couva-Tabaquite-Talparo
Beau Pres*	8.12	127	4.34	217	Diego Martin
Four Roads*	8.12	127	4.34	217	Diego Martin
Maraval Proper	8.12	127	4.34	217	Diego Martin
Pleasantville	8.12	127	4.59	122	San Fernando
Coalmine*	8.13	121	3.55	531	Couva-Tabaquite-Talparo
Corosal	8.13	121	3.55	531	Couva-Tabaquite-Talparo
Gran Couva*	8.13	121	3.55	531	Couva-Tabaquite-Talparo
Ouplay Village*	8.13	121	3.55	531	Couva-Tabaquite-Talparo
Mt. Pleasant	8.13	121	4.33	221	St Patrick
Lower Hill Side	8.13	121	4.86	67	San Fernando
Whim	8.14	115	3.61	514	St David
Real Springs*	8.14	115	4.60	119	Tunapuna-Piarco
Valley View	8.14	115	4.60	119	Tunapuna-Piarco

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Valsayn*	8.14	115	4.60	119	Tunapuna-Piarco
Red Hill	8.14	115	5.81	4	Tunapuna-Piarco
Warren Village*	8.14	115	5.81	4	Tunapuna-Piarco
Sargeant Cain	8.15	113	4.31	232	St Andrew
Spring Garden/Signal Hill*	8.15	113	4.31	232	St Andrew
Centeno*	8.17	110	5.33	23	Tunapuna-Piarco
Kelly Village	8.17	110	5.33	23	Tunapuna-Piarco
Sherwood Park*	8.17	110	5.33	23	Tunapuna-Piarco
Upper Belmont	8.18	104	4.70	92	San Juan-Laventille
Cap-De-Villeb	8.18	104	4.75	85	Point Fortin
Esmeralda	8.18	104	5.43	12	Chaguanas
Ellerslie Park	8.18	104	5.76	8	Port of Spain
Federation Park*	8.18	104	5.76	8	Port of Spain
Long Circular*	8.18	104	5.76	8	Port of Spain
La Horquetta	8.20	97	3.79	415	Tunapuna-Piarco
Santa Margarita*	8.20	97	3.79	415	Tunapuna-Piarco
Plum Mitan*	8.20	97	4.11	317	Sangre Grande
Toco	8.20	97	4.11	317	Sangre Grande
Erin Proper	8.20	97	4.74	88	Siparia
Los Charos*	8.20	97	4.74	88	Siparia
Belmont	8.20	97	4.79	80	Port of Spain
Aripero Village	8.21	94	4.99	50	Siparia
La Puerta*	8.21	94	5.00	48	Diego Martin
Powder Magazine	8.21	94	5.00	48	Diego Martin
Mount St. George	8.23	93	4.29	250	St George
Cap-De-Villeb	8.24	92	4.34	217	Siparia
Diego Martin Proper	8.25	91	4.98	53	Diego Martin
La Horquette*	8.26	89	4.61	115	Diego Martin
River Estate	8.26	89	4.61	115	Diego Martin
Anglais Settlement*	8.28	84	4.37	210	Sangre Grande
Cumana	8.28	84	4.37	210	Sangre Grande
Four Roads - Tamana*	8.28	84	4.37	210	Sangre Grande
Howsen Village*	8.28	84	4.37	210	Sangre Grande
Tamana*	8.28	84	4.37	210	Sangre Grande
Macaulay*	8.31	82	4.59	122	Couva-Tabaquite-Talparo
St. Margaret	8.31	82	4.59	122	Couva-Tabaquite-Talparo
Beach Camp*	8.32	80	5.16	31	Siparia
Siparia	8.32	80	5.16	31	Siparia

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Petit Bourg	8.33	79	4.78	82	San Juan-Laventille
Barataria	8.34	78	5.32	26	San Juan-Laventille
Bacolet	8.35	73	3.71	446	St Andrew
Argyle/Kendal*	8.35	73	4.04	337	St Paul
Belle Gardens	8.35	73	4.16	296	St Paul
Betsy Hope*	8.35	73	4.16	296	St Paul
Maraj Lands	8.35	73	5.03	44	San Fernando
Jerningham Junction	8.37	72	4.16	296	Chaguanas
Beetham Estate*	8.38	64	4.63	103	San Juan-Laventille
Blanchisseuse*b	8.38	64	4.63	103	San Juan-Laventille
Febeau Village	8.38	64	4.63	103	San Juan-Laventille
Las Cuevas*	8.38	64	4.63	103	San Juan-Laventille
Maracas*	8.38	64	4.63	103	San Juan-Laventille
Maracas Bay*	8.38	64	4.63	103	San Juan-Laventille
Blanchisseuse*b	8.38	64	4.63	103	Tunapuna-Piarco
Endeavour Village	8.38	64	4.68	95	Chaguanas
Hope/Blenheim	8.42	53	3.71	446	St George
Hope Farm/John Dial*	8.42	53	3.71	446	St George
New Village	8.42	53	4.31	232	Point Fortin
Point Ligoure*	8.42	53	4.31	232	Point Fortin
Bayshore*	8.42	53	4.45	163	Diego Martin
Blue Range*	8.42	53	4.45	163	Diego Martin
Champ Elysees*	8.42	53	4.45	163	Diego Martin
Glencoe*	8.42	53	4.45	163	Diego Martin
Goodwood Gardens*	8.42	53	4.45	163	Diego Martin
Haleland Park/Moka*	8.42	53	4.45	163	Diego Martin
West Moorings	8.42	53	4.45	163	Diego Martin
Sam Boucaud	8.43	52	6.23	1	San Juan-Laventille
Belmont*	8.45	49	3.90	385	St George
Concordia	8.45	49	3.90	385	St George
Mason Hall*	8.45	49	3.90	385	St George
Mon Repos	8.46	47	4.26	259	San Fernando
San Juan	8.46	47	4.52	141	San Juan-Laventille
Cochrane*b	8.49	40	4.58	125	Point Fortin
Chatham	8.49	40	4.58	125	Siparia
Cochrane*b	8.49	40	4.58	125	Siparia
Coromandel*	8.49	40	4.58	125	Siparia
La Brea*	8.49	40	4.58	125	Siparia

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Parry Lands South*	8.49	40	4.58	125	Siparia
Sudama Village*	8.49	40	4.58	125	Siparia
Bon Air West Development	8.52	36	4.21	275	Tunapuna-Piarco
Eric Williams Medical Sciences Complex*	8.52	36	4.21	275	Tunapuna-Piarco
La Florisante*	8.52	36	4.21	275	Tunapuna-Piarco
Mission	8.52	36	4.40	192	Sangre Grande
Alyce Glen*	8.54	32	5.03	44	Diego Martin
Fairways	8.54	32	5.03	44	Diego Martin
La Baja	8.54	32	6.21	2	Tunapuna-Piarco
Spring Village*	8.54	32	6.21	2	Tunapuna-Piarco
Cinnamon Hall (Gov'T House)	8.55	30	3.71	446	St Andrew
Lambeau*	8.55	30	3.71	446	St Andrew
Blue Basin	8.58	27	4.21	275	Diego Martin
Carenage*	8.58	27	4.21	275	Diego Martin
Carib Homes	8.58	27	4.77	83	Arima
Palmiste	8.60	24	4.80	79	Penal-Debe
Newlands*	8.60	24	4.83	69	Point Fortin
Point Fortin Proper	8.60	24	4.83	69	Point Fortin
El Socorro Extension*	8.61	21	4.75	85	San Juan-Laventille
La Pastora	8.61	21	4.75	85	San Juan-Laventille
Edinburgh 500	8.61	21	5.70	11	Chaguanas
Montrose Village	8.64	17	5.37	19	Chaguanas
Munroe Settlement*	8.64	17	5.37	19	Chaguanas
Petersfield*	8.64	17	5.37	19	Chaguanas
St. Thomas Village*	8.64	17	5.37	19	Chaguanas
Glamorgan	8.65	14	3.73	437	St Mary
Goodwood*	8.65	14	3.73	437	St Mary
Pembroke*	8.65	14	3.73	437	St Mary
Gulf View	8.67	13	4.89	64	San Fernando
Santa Rosa Heights	8.70	12	4.32	231	Tunapuna-Piarco
Les Efforts East	8.72	10	4.65	100	San Fernando
Vistabella*	8.72	10	4.65	100	San Fernando
Diamond Vale	8.73	8	5.28	27	Diego Martin
Victoria Gardens*	8.73	8	5.28	27	Diego Martin
Butler Village*	8.75	5	4.57	135	Couva-Tabaquite-Talparo
Calcutta Settlement No.2*	8.75	5	4.57	135	Couva-Tabaquite-Talparo
Carapichaima	8.75	5	4.57	135	Couva-Tabaquite-Talparo
Navet Village	8.76	4	4.64	102	San Fernando

Communities	IDI 2021 Value	IDI 2021 Rank/609	DII 2021 Value	DII 2021 Rank/609	Administrative Area
Aranguez	8.77	3	4.85	68	San Juan-Laventille
Homeland Gardens	8.82	1	5.77	6	Chaguanas
Lange Park*	8.82	1	5.77	6	Chaguanas

Appendix III

Computation of IDI and DII

Detailed Procedure

A3. Methodology for Calculating the IDI and DII

The calculation methodologies for the ICT Development Index (IDI) and Digital Inclusion Index (DII) are all procedurally similar and the method that will be illustrated in the sections that follow is applicable to data that is aggregated at all levels – the community, municipality or the country level.

Firstly, the value of each indicator ($ind_{i,k}$) is calculated in accordance with its definition from the sample data for each respective level of aggregation – community, municipality or country. Each subindex within the major sections of the index is calculated by reference to the relevant indicator and its reference value or goal post, as follows:

$$a_{i,k} = \left(\frac{ind_{i,k}}{r_{i,k}} \right)$$

where:
$a_{i,k}$ denotes the value of the kth sub-index in the i_{th} section of index.
ind_k denotes the k^{th} indicator utilised in the index; and
r_k denotes the k^{th} reference value associated with the individual indicator.

In the event that a sub-index's value exceeds the reference (or goalpost) and produces a value that is greater than 1, a sub-index value of 1 is assigned to that sub-index to indicate that the particular reference or goalpost has been achieved in its entirety.

Secondly, each section's index is calculated as weighting the section sub-indices by *its item weight ($w_{j,k}$) to calculate the weighted section index, as follows:*

$$i_j = \frac{\sum \left(w_{j,k} \cdot a_{j,k} \right)}{\sum w_{j,k}}$$

where:
$w_{j,k}$ denotes the weight assigned to the kth indicator in section j of the index.

The weighted index is then produced by computation of the weighted average of each of the section indices across their assigned section weight (W_j).

$$I_0 = \frac{\sum \left(W_j \cdot i_j \right)}{\sum W_j}$$

A3.1 Methodology for Calculation of the IDI and its Sub-Indices

The IDI consists of 11 indicators within three sections to calculate the broad section indices. The section sub-indices are weighted to calculate the final index. Table A3.1 provides a schema for the computation of the IDI and its section indices (access, use and skills).

Table A3.1: Computation Matrix for the IDI

IDI Index	Weights (indicators)	Reference	Weights (sub-indices)
ICT Access			**W_1=0.40**
$ind_{1,1}$	$w_{1,1}$ = 0.20	$r_{1,1}$	
…	…	…	
…	…	…	
….	…	…	
$ind_{1,5}$	$w_{1,5}$ =0.20	$r_{1,5}$	
ICT Use			**W_2=0.40**
$ind_{2,1}$	$w_{2,1}$ = 0.33	$r_{2,1}$	
…	…	…	
$ind_{2,3}$	$w_{2,3}$ = 0.33	$r_{2,3}$	
ICT Skills			**W_3=0.20**
$ind_{3,1}$	$w_{3,1}$ = 0.33	$r_{3,1}$	
….	…	…	
$ind_{3,3}$	$w_{3,3}$ = 0.33	$r_{3,3}$	

These indicators and sub-indices will be calculated in the sections that follow by use of the matrix. A numerical example of each calculation will be presented using Trinidad and Tobago.

A3.1.1 The ICT Access Indicators

i. Fixed telephone subscriptions per 100 inhabitants

The number of fixed telephone subscriptions was obtained from administrative data and was estimated at approximately 25 per 100 against a reference value of 60. Hence, the indicator value is calculated as illustrated:

$$i_{1,1} = \frac{25}{60}$$
$$= 0.417 \; or \; 41.7\%$$

ii. Mobile-cellular telephone subscriptions per 100 inhabitants

An estimate of the number of mobile-cellular subscriptions per 100 inhabitants in Trinidad and Tobago was sourced from the Authority's *Annual Market Report 2020*. The estimate, 140 subscriptions per 100 inhabitants, was set against a reference or goalpost value of 120 subscriptions per 100 inhabitants and the item index was estimated as follows:

$$i_{1,2} = \frac{140}{120}$$

$$= 1.167 \; or \; 116.7\%$$

Note that the index value is greater than 100%, which indicates that the goalpost value was exceeded. As a consequence, the index value is adjusted to a value of 1.00 to recognise the full achievement of the goal.

iii. International Internet bandwidth per Internet user

An estimate for the international Internet bandwidth indicator was extracted from the Authority's market data, which provided a figure of 245,016 Mbit/s. The figure used in the calculation (226,812.06 bits/s) is derived when the estimate of the international bandwidth is expressed across a user population of 1.08 million. The indicator for the item is itself the ratio of the logarithms of the estimate and the reference value of 2,158,212 bits/s.

$$i_{1,3} = \frac{\log_{10}(226{,}812.0638)}{\log_{10}(2{,}158{,}212)}$$
$$= 0.846 \; or \; 84.6\%$$

iv. Proportion of households with a computer (%)

The proportion of households with a computer was obtained from the responses from householders in the survey and was estimated to be approximately 59.6% against a goalpost or reference value of 100. Accordingly, the item index is estimated as follows:

$$i_{1,4} = \frac{\left(\frac{294{,}289.42}{494{,}042.8}\right) \cdot 100}{100}$$
$$= \frac{59.57}{100}$$
$$= 0.596 \; or \; 59.6\%$$

v. Proportion of households with Internet access (%)

The proportion of households with Internet access was obtained from the respondents to the survey. In Trinidad and Tobago, 80.9% of households surveyed were found to have had Internet access and, for the purposes of the IDI, this figure was framed against a reference value of 100. The item index was therefore calculated as follows:

$$i_{1,4} = \frac{\left(\frac{399{,}850.89}{494{,}042.8}\right) \cdot 100}{100}$$

$$= \frac{80.93}{100}$$

$$= 0.809 \; or \; 80.9\%$$

The ICT access sub-index

The ICT access sub-index of the IDI was computed as the weighted average of the item indices in the first section by the application of the item weights ($w_{j,1} = 0.20$):

$$I_{ACCESS} = (0.20 \cdot 0.417) + (0.20 \cdot 1.000) + (0.20 \cdot 0.846) + (0.20 \cdot 0.596) + (0.20 \cdot 0.809)$$

$$= 0.733$$

A3.1.2 The ICT Use Indicators

i. Proportion of individuals using the Internet (%)

Across Trinidad and Tobago, 79.0% of respondents to the survey indicated that they used the Internet. This response was scaled against a goalpost of 100, in accordance with the IDI methodology, and the relevant item index was computed as follows:

$$i_{2,1} = \frac{\left(\frac{1{,}080{,}260.36}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{78.991}{100}$$
$$= 0.79 \; or \; 79.0\% \; approx$$

ii. Fixed broadband Internet subscriptions per 100 inhabitants

Fixed broadband Internet subscriptions were estimated from the appropriately weighted survey data. An indicator value of 80.0 per hundred persons was obtained against a goalpost of 60. Accordingly,

$$i_{2,2} = \frac{\left(\frac{1{,}093{,}731.33}{1{,}367{,}558.35}\right) \cdot 100}{60}$$
$$= \frac{79.977}{60}$$
$$= 1.333$$

Since the resultant index is greater than 1, indicating that the goalpost has been exceeded, we adjust the value of the item index to 1 to indicate achievement in full.

iii. Active mobile broadband subscriptions per 100 inhabitants

Active mobile broadband subscriptions were estimated based on respondents' answers to specific questions on the issue. The data was weighted and estimates at the appropriate level were derived from the sample data. In the case of Trinidad and Tobago, it was estimated that there were approximately 83.9 active subscriptions per 100 inhabitants and this was scaled against a goalpost of 100. Accordingly, the item index is given by:

$$i_{2,3} = \frac{83.931}{100}$$
$$= 0.839 \; or \; 83.9\%$$

The ICT use sub-index

The use index is calculated by applying the item weights (0.33) to the index values derived:

$$I_{USE} = (0.33 \cdot 0.790) + (0.33 \cdot 1.000) + (0.33 \cdot 0.839) = 0.876$$

A3.1.3 The ICT skills index

i. Mean years of schooling

An assumed mean of 11 years of schooling was used during estimation. Based on this data, and given a goal post of 15 years, the index is calculated as follows:

$$i_{3,1} = \frac{11}{15}$$
$$= 0.733 \; or \; 73.3\%$$

ii. Secondary gross enrolment ratio

The secondary gross enrolment ratio represents the number of students enrolled in secondary level of education, regardless of age, expressed as a percentage of the official secondary school-age population. An indicator value of 96.6%, sourced from the administrative records of the Government of the Trinidad and Tobago's Ministry of Education (2018), was utilised and the item index was derived as follows:

$$i_{3,2} = \frac{96.6}{100}$$
$$= 0.966 \; or \; 96.6\%$$

iii. Tertiary gross enrolment ratio

Similar to the example above, the tertiary gross enrolment ratio represents the number of students enrolled in tertiary programmes and the index is calculated by reference to a reference or goalpost of 100.

With respect to Trinidad and Tobago, the indicator value is 42.9% against a goalpost or reference value of 100. Accordingly, the item index is calculated as follows:

$$i_{2,3} = \frac{\left(\frac{34{,}451.75}{80{,}264.18}\right) \cdot 100}{60}$$
$$= \frac{42.923}{100}$$
$$= 0.429 \; or \; 42.9\%$$

The ICT skills sub-index

The ICT skills index is computed as the weighted average of the item indices in the section. The item weights are applied to the three indices in the section, as follows:

$$I_{SKILL} = (0.33 \cdot 0.733) + (0.33 \cdot 0.966) + (0.33 \cdot 0.429) = 0.710$$

The ICT Development Index for Trinidad and Tobago

Given the foregoing, the IDI for Trinidad and Tobago is given by:

$$I_{IDI} = (0.40 \cdot 0.733) + (0.40 \cdot 0.876) + (0.20 \cdot 0.710) = 0.7858$$

The figure is rescaled to produce a score out of a possible total of 10 for a final index value of 7.86.

A3.2 Methodology for the Calculation of the DII and Sub-Indices

The DII consists of 18 indicators within four sections to calculate the broad section index. As in the previous section, the section indices are weighted to calculate the final index. Table A3.2 provides a schema for the computation of the DII and its section indices (access, participation, trust and readiness).

The methodology used to construct the DII assumes that the weights attached to the individual section are equal. This assumption may be relaxed with further research in the area and the index itself develops over time.

Respondents to the survey were asked to provide a simple ranking of the importance of each of the index features (access, participation, trust and readiness) in terms of whether an improvement in any of these areas would promote his or her use of the Internet. These responses were used to weight the individual sections of the index in preference to the presumption of equally weighted sections. The relevant section weights are shown in the Table A3.2.

Table A3.2: Computation Matrix for the DII

DII Index	Weights (indicators)	Reference	Weights (sub-indices)
ICT Access			**W_1=0.25**
$ind_{1,1}$	$w_{1,1}$ = 0.20	$r_{1,1}$	
…	…	…	
…	…	…	
….	…	…	
$ind_{1,5}$	$w_{1,5}$ =0.20	$r_{1,5}$	
ICT Participation/Use			**W_2=0.25**
$ind_{2,1}$	$w_{2,1}$ = 0.25	$r_{2,1}$	
…	…	…	
$ind_{2,4}$	$w_{2,5}$ = 0.25	$r_{2,4}$	
ICT Trust and Confidence			**W_3=0.25**
$ind_{3,1}$	$w_{3,1}$ = 0.25	$r_{3,1}$	
….	…	…	
$ind_{3,4}$	$w_{3,4}$ = 0.25	$r_{3,4}$	
ICT Readiness/ Digital Literacy			**W_4=0.25**
$ind_{3,1}$	$w_{3,1}$ = 0.20	$r_{3,1}$	
….	…	…	
$ind_{3,5}$	$w_{3,5}$ = 0.20	$r_{3,5}$	

The indices and sub-indices will be calculated in the sections that follow, using the matrix above.

3.2.1 The ICT access sub-index

The access index for the DII mirrors the computation for the access index for the IDI and, as such, will not be repeated.

3.2.2 The ICT participation/usage sub-index

i. Proportion of individuals using the Internet (%)

The proportion of individuals using the Internet was derived from the answers provided by respondents to the survey. It is the count of the number of individuals using the Internet expressed as a proportion of the total number of individuals in a community, municipality or country. In respect of Trinidad and Tobago, the estimate of the proportion from the survey was 79.0%, which was set against a reference value of 100 to derive the item index as follows:

$$i_{2,1} = \frac{\left(\frac{1{,}080{,}260.36}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{78.992}{100}$$
$$= 0.790 \; or \; 79.0\%$$

ii. Proportion of individuals using online e-government services (%)

During enumeration, individuals were asked whether they used certain e-government platforms. Individual responses were aggregated and expressed as a proportion of the total number of persons interviewed in the community, municipality or country. In the case of Trinidad and Tobago, these calculations yielded a proportion of 3.5% and was scaled against a reference value of 100 and the sub-index for the item is derived as follows:

$$i_{2,2} = \frac{\left(\frac{48{,}388.75}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{3.538}{100}$$
$$= 0.035 \; or \; 3.5\%$$

iii. Proportion of individuals using online services (%)

Respondents to the survey were questioned to determine whether they used online services, and the proportion of individuals in communities/municipalities using online services (15.0%) was calculated. The index for Trinidad and Tobago was then computed, as depicted below, using a reference value or goalpost of 100:

$$i_{2,3} = \frac{\left(\frac{204{,}482.81}{1{,}367{,}558.35}\right) \cdot 100}{100} = \frac{14.952}{100} = 0.150 \; or \; 15.0\,\%$$

iv. Proportion of individuals using virtual social networks (%)

Respondents were asked if they used virtual social networks and their responses were aggregated and expressed as a proportion of the total number of responses, at the appropriate level, to compute the required item index.

Based on weighted survey data aggregated at the country level, the index was calculated as follows:

$$i_{3,4} = \frac{\left(\frac{616{,}290.79}{1{,}367{,}558.35}\right) \cdot 100}{100} = \frac{45.065}{100} = 0.451 \; or \; 45.1\%$$

The ICT participation index

The participation index is calculated as the weighted average of the item in the section. For Trinidad and Tobago, the calculation was as follows:

$$I_{PARTICIPATE} = (0.25 \cdot 0.790) + (0.25 \cdot 0.035) + (0.25 \cdot 0.150) + (0.25 \cdot 0.451) = 0.356$$

3.2.3 The ICT trust sub-index

i. Proportion of persons who will make payments online with a credit card (%)

Within households, persons who made payments with credit cards online were counted and their responses were expressed as a proportion of all respondents in the particular community/municipality represented. In the case of Trinidad and Tobago, the data obtained illustrates that 27.2% of respondents in the municipality indicated that they made online credit card payments. Given a goalpost of 100, the section sub-index was calculated as follows:

$$i_{3,1} = \frac{\left(\frac{372{,}471.28}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{27.238}{100}$$
$$= 0.272 \; or \; 27.2\%$$

ii. Proportion of persons who trust information obtained from social networking sites (%)

Respondents were asked whether they trusted information obtained from social networking sites. A count of the responses was obtained and the percentage calculated by reference to the number of respondents in the particular community, municipality or country.

For Trinidad and Tobago, this estimate (33.9%) was set against a goalpost of 100. The resultant sub-index for the indicator item in the sub-section was derived as follows:

$$i_{3,2} = \frac{\left(\frac{463{,}337.73}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{33.881}{100}$$
$$= 0.339 \; or \; 33.9\%$$

iii. Proportion of persons who believe that personal information provided during online transaction is secure (%)

Respondents were asked whether they held the belief that their personal information was secure during online transactions. These responses were counted and expressed as a percentage of the total number of people interviewed, to derive an estimate of the indicator at the required level of aggregation. In the case of Trinidad and Tobago:

$$i_{3,3} = \frac{\left(\frac{399{,}795.2}{1{,}367{,}558.35}\right) \cdot 100}{100}$$

$$= \frac{29.234}{100}$$
$$= 0.292 \; or \; 29.2\%$$

iv. Proportion of persons who feel comfortable using e-government services (%)

Similarly, respondents were asked whether they felt comfortable using e-government services in particular. The count of the responses was expressed as a proportion of the number of respondents, to provide an estimate for the respective community, municipality or country. In the case of Trinidad and Tobago, the percentage of persons indicating comfort was 2.9% and was rescaled against a goalpost of 100, as follows:

$$i_{2,4} = \frac{\left(\frac{39{,}364.73}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{2.878}{100}$$
$$= 0.029 \; or \; 2.9\%$$

The ICT trust index

Given the forgoing, the ICT trust/confidence index was calculated for Trinidad and Tobago as follows:

$$I_{TRUST} = (0.25 \cdot 0.272) + (0.25 \cdot 0.339) + (0.25 \cdot 0.292) + (0.25 \cdot 0.029)$$
$$= 0.233$$

3.2.4 ICT readiness or digital literacy sub-index

i. Mean years of schooling

As before, an assumed mean of 11 years of schooling was used in estimation. Based on this data, and given a goalpost of 15 years, the item index was calculated as follows:

$$i_{4.1} = \frac{11}{15}$$

$$= 0.733 \; or \; 73.3\%$$

ii. Proportion of population with secondary level education (%)

Respondents were questioned concerning their highest level of education and the results were aggregated to compute the indicator at the appropriate level. For Trinidad and Tobago, the item index was calculated as follows:

$$i_{4,2} = \frac{\left(\frac{586{,}206.85}{1{,}367{,}558.35}\right) \cdot 100}{100}$$

$$= \frac{42.865}{100}$$

$$= 0.429 \; or \; 42.9\%$$

iii. Proportion of household income spent on ICT (%)

Data was collected on the ICT expenditure of each household in the sample and the weighted data was used to provide an estimate of this expenditure as a proportion of the total expenditure of the household on goods and services.

With respect to Trinidad and Tobago, an average indicator value of 4.9% was derived from the survey data and placed against a reference value of 100. The calculation of the sub-index for the section was as follows:

$$i_{4,3} = \frac{\left(\frac{486{,}921{,}436.33}{10{,}024{,}596{,}080.26}\right) \cdot 100}{100}$$

$$= \frac{4.857}{100}$$

$$= 0.049 \; or \; 4.9\%$$

iv. Proportion of individuals with basic ICT skills (%)

Individuals were asked to indicate their level of ICT skill by choosing from among a series of activities that they were capable of performing. These activities were classified into three categories: basic, intermediate and advanced. Estimates of the proportion of individuals with basic ICT skills were derived from the responses at the community, municipality and country levels, as appropriate for analysis. In the case of Trinidad and Tobago, 55.1% of respondents indicated ability that corresponded to the basic capabilities and the indicator held a goalpost or reference value of 100. Accordingly,

$$i_{4,4} = \frac{55.123}{100}$$
$$= 0.551 \; or \; 55.1\%$$

v. Proportion of individuals with intermediate/advanced ICT skills (%)

The proportion of respondents with intermediate or advanced ICT skills was derived from the survey data for each community/municipality represented in the survey. In the example of Trinidad and Tobago, the calculation of the index was as follows:

$$i_{4,5} = \frac{\left(\frac{147{,}670.26}{1{,}367{,}558.35}\right) \cdot 100}{100}$$
$$= \frac{10.798}{100}$$
$$= 0.108 \; or \; 10.8\%$$

The ICT readiness index

Given the foregoing, the ICT readiness, or digital literacy, index of the DII is calculated as follows

$$I_{READY} = (0.20 \cdot 0.733) + (0.20 \cdot 0.429) + (0.20 \cdot 0.049) + (0.20 \cdot 0.551) + (0.20 \cdot 0.108)$$
$$= 0.374$$

The Digital Inclusion Index for Trinidad and Tobago

The overall DII is computed by applying the section weights to the respective section sub-indices. In Trinidad and Tobago, the DII is computed as follows:

$$I_{DII} = (0.25 \cdot 0.733) + (0.25 \cdot 0.356) + (0.25 \cdot 0.233) + (0.25 \cdot 0.374) = 0.4242$$

The index is rescaled for a possible maximum score of 10 to 4.24.

Appendix IV

Digital Inclusion Survey 2021 Questionnaire

Generated by caribbeandms, Feb 01, 2022 07:25
Questionnaire created by caribbeandms, Apr 17, 2021 20:44
Last modified by thingssmooth, Dec 24, 2021 06:37

Shared with:
stephan_samuell (never edited)
rdegazon (never edited)
edwinstcather last edited 4/23/2021 9:54:11 PM
thingssmooth last edited 12/24/2021 10:37:38 AM
ryan_biran (never edited)
kmaillard (never edited)
lthomas (never edited)

Sections: 5, Sub-sections: 27,
Questions: 163.
Questions with enabling conditions: 79
Questions with validation conditions:53
Rosters: 3
Variables: 3

Survey Solutions

TATT DIGITAL INCLUSION SURVEY 2021 V7

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

Basic information

Title	TATT DIGITAL INCLUSION SURVEY 2021 V7
Version identificator	3

Survey data information

Mode of Data Collection	CAPI

Survey information

Country	Trinidad and Tobago
Year	2021
Languages	English
Unit of analysis	Households

SECTION 1: HOUSEHOLD IDENTIFICATION

Municipality Code	TEXT	Region_code
Name of Municipality	TEXT	Region_name
SubsampleNo	TEXT	SubsampleNo
ED Number	NUMERIC: INTEGER	ED
Community Code	NUMERIC: INTEGER	Community
Name of Community	TEXT	Comm_name
Household Selection	NUMERIC: INTEGER	hhno

SECTION 2: VISITATION RECORD

CLICK BUTTON BELOW TO RECORD CURRENT TIME	DATE: CURRENT TIME `Intv_Start` ....

STATIC TEXT

If there are multiple Dwelling Units/Households in the selected building, the following procedure MUST be used to identify the household to be interviewed.

If the dwelling unit is numbered or uses an alphabetical listing, follow the pattern used to establish the order of the dwelling units.

If however, there is no numbering, starting from the right end of the ground floor, number each dwelling unit continuing up each floor while maintaining the count from right to left. Proceed to interview the household that corresponds to the number displayed in the "SELECTED HOUSEHOLD" box.

NUMBER OF DWELLING UNITS (ENTER 1 IF SINGLE DWELLING UNIT.) W1 `self.InRange(1,100)` M1 <font color="blue"> THE NUMBER OF DWELLING UNITS SHOULD BE B ETWEEN 1 AND 100.	NUMERIC: INTEGER `Ndwell` -
VARIABLE `(int)Math.Round((Ndwell.Value-1)*Quest.IRnd() + 1)`	LONG `selectedhh`

STATIC TEXT

INTERVIEW DWELLING UNIT NUMBER!: %selectedhh%

STATIC TEXT

Good Day

My name is __________ and I am a field interviewer employed by Kairi Consultants Limited to conduct a National Digital Inclusion Survey on behalf of the Telecommunications Authority of Trinidad and Tobago, which is undertaking this survey in collaboration with the Central Statistical Office.

This survey aims to measure the digital divide, that is, the gap that exists between those who have access to information and communication technologies (ICTs) and those who do not. Data will also be collected to assess factors necessary for the efficient use of ICTs such as skill, motivation and trust.

Your household is one of approximately 6,000 households selected randomly to participate in the survey. You do not have to answer any question that you are uncomfortable with and all information provided will be treated as confidential. All household members five years and older are eligible to take part in this survey.

If you need further information about this survey, you can contact Mr. Stephan Samuell of TATT at 675-8288 Ext. 426, Kairi Consultants Limited at 663-2677 or the Central Statistical Office at 624-7001.

Do you agree to participate in the survey?	SINGLE-SELECT V2 01 O Yes 02 O No 03 O No contact 04 O ED Completed

INTERVIEWER! How many visits have you made to this household?

FOR EACH VISIT MADE, ENTER/SELECT A HIGHER VALUE THAN THE PREVIOUS VISIT.

DO NOT CHANGE THE NUMBER OF A PREVIOUS VISIT TO A SMALLER NUMBER. YOU WILL NOT BE ABLE TO RE-ENTER THE CURRENT TIME THAT WAS CAPTURED FOR THAT VISIT.

V1 `RVISITS.Count(v=>v.@rowcode<(self-1) && v.visitResult.InList(1,5,6))==0`

M1 Error! You should not be revisiting households if options 1, 5 or 6 is selected in the results field!

NUMERIC: INTEGER — nvisits

SPECIAL VALUES

00 No visits were attempted
01 One Visit
02 Two visits
03 Three visits
04 Four visits

SECTION 2: VISITATION RECORD

Roster: %VISITTITLE% - VISIT

generated by numeric question nvisits — RVISITS

STATIC TEXT

E `RVISITS.Count(v=>v.@rowcode<@rowcode && v.visitResult.InList(1,5,6))!=0`

V1 `/* macro is not used here to facilitate copying */ RVISITS.Count(v=>v.@rowcode<@rowcode && v.visitResult.InList(1,5,6))==0`

M1 Error! There should be no visits after a terminal visit.

Visitation logic check:

□□ INTERVIEWER! INTERVIEWER: Please record the date and time of the interview by clicking the "RECORD CURRENT TIME" button below.

V1 `(@rowcode==RVISITS.Min(x=>x.@rowcode)) || (self>RVISITS[@rowcode-1].visitTimestamp)`

M1 Error! The visit's timestamp must be later than the timestamp of the previous visit!

DATE: CURRENT TIME — visitTimestamp

CLICK TO RECORD THE HOUSEHOLD'S GPS COORDINATES

GPS — visitLocation

N

W

A

VARIABLE

`IsAnswered(visitTimestamp) ? visitTimestamp.ToString() : " "`

STRING — visitTitle

INTERVIEWER! What was the result of the visit?

F (@optioncode.InList(1,2,3,7) && V2==1) || (@optioncode.InList(5,7) && V2==2) || (@optioncode.InList(4,6,7) && V2==3) || (@optioncode.InList(8) && V2==4)

SINGLE-SELECT — visitResult

01 ○ Household located, contacted, and interviewed
02 ○ Household located, contacted, and partially interviewed
03 ○ Household located, contacted, asked to return later
04 ○ Household located, nobody present
05 ○ Household located, contacted, refused to participate
06 ○ Household can't be located using the identifying information supplied
07 ○ Other (please specify)
08 ○ Excess/Extra Interview

Other result of interview: E visitResult ==7	TEXT Othervresult .....

SECTION 3: HOUSEHOLD CHARACTERISTICS

E V2==1 && IsAnswered(Intv_Start)

STATIC TEXT

We would like you to provide a telephone contact so that we can follow up with you if any questions arise while reviewing your completed questionnaire. This number can be used also to schedule a visit with another household member or to complete an interview over the telephone.

Your number will not be used for any other purpose and will not be shared with anyone.

Do you agree to provide a telephone contact?	SINGLE-SELECT phone 01 ○ Yes 02 ○ No
What is your telephone number? IF RESPONDENT REFUSES TO GIVE TELEPHONE NUMBER ENTER 7 ZEROS. (DO NOT ENTER "-"). E phone ==1	TEXT Telephone .....

STATIC TEXT

A household consists of one or more persons living together (i.e. sleeping most nights of a week 4 out of 7) and making common provision for food and other essentials for living. It is important to note that a member of a household need not be a relative of the main family.

For example, a boarder or a domestic servant who sleeps most nights of the week is a member of the household. It is possible for a household to consist of just one person, or of more than one family, as long as they share living arrangements.

A group of unrelated persons living together can also comprise a household.

INCLUDE:

All usual residents as members of the household. Usual residents may or may not have citizenship of the country, and they may also include undocumented persons, applicants for asylum or refugees. Usual residents may include foreigners who reside (legally or illegally), or intend to reside, in the country continuously for either most of the last 6 months or for 6 months or more:

Newborn babies - If babies have not been named write BABY or person

Elderly Persons

Resident Students abroad, If abroad for less then 6 months

DO NOT INCLUDE:

Visitors who reside elsewhere in the country or abroad

PROBE FOR ANYONE WHO MIGHT BE AWAY BUT WHO USUALLY LIVES IN THIS HOUSEHOLD

LIST THE HEAD OF THE HOUSEHOLD FIRST

NUMBER OF HOUSEHOLD MEMBERS E v2 ==1	NUMERIC: INTEGER hsize _

NAME: Please give me the first name of ALL members of this household.

PROBE FOR ANYONE WHO MIGHT BE AWAY BUT WHO USUALLY LIVES IN THIS HOUSEHOLD.

LIST `name`

.....

V1 `name.Length == hsize`

M1 THE NUMBER OF NAMED HOUSEHOLD MEMBERS IS NOT EQUAL TO THE NUMBER OF HOUSEHOLD MEMBERS RECORDE R ABOVE. PLEASE VERIFY.

STATIC TEXT

READ ALOUD: Disability is defined as any restriction or lack of ability - resulting from an impairment - to perform an activity in the manner or within the range considered to be normal for a human being.

Is there anyone in this household with a disability?

SINGLE-SELECT `S3H1`

01 ○ Yes
02 ○ No
03 ○ Not stated

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

E `V2==1 && IsAnswered(Intv_Start)`

S4.H1. Which of the following WORKING services does your household have?

PLEASE SELECT ALL THAT APPLY

V1 `//Either "None" not selected // or " None " is the only answer selected !S4H1.Contains(4) || S4H1.ContainsOnly(4)`

M1 IF YOU SELECT NONE, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S4H1

- 01 ☐ Fixed Voice (Land Line)
- 02 ☐ Fixed Broadband/Internet
- 03 ☐ Pay/Subscription TV (e.g. Flow, Digicel, DirecTV)
- 04 ☐ None

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.1 FIXED VOICE

E `S4H1.Contains(1)`

H4.1.1. In what year did your household FIRST receive Fixed Voice Service?

SINGLE-SELECT S41H1

- 01 ○ Before 1990
- 02 ○ 1990 – 1999
- 03 ○ 2000-2004
- 04 ○ 2005-2009
- 05 ○ 2010 – 2014
- 06 ○ 2015-2019
- 07 ○ 2020 and after
- 08 ○ Cannot remember

H4.1.2. Who is your current Fixed Voice service provider?

IF HOUSEHOLD HAS MORE THAN ONE FIXED VOICE PROVIDER AND IS UNABLE TO CHOOSE THE MAIN PROVIDER, RECORD DATA FOR THE MOST RECENT SUBSCRIPTION.

SINGLE-SELECT S41H2

- 01 ○ TSTT
- 02 ○ FLOW
- 03 ○ Digicel
- 04 ○ Amplia
- 05 ○ Prism Services Limited
- 06 ○ Lisa Communications
- 07 ○ Other (please specify)

H4.1.2. OTHER - Other Fixed Voice provider?

E `S41H2 ==7`

TEXT S41H2OTHER

.....

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD / 4.1 FIXED VOICE

CUSTOMER SERVICE - FIXED VOICE

E `S41H1 == 6 || S41H1 ==7`

H4.1.3. How many DAYS did you wait before your Fixed Voice service was first activated?

W1 `self.InRange(0,180)`

M1 THE NUMBER OF DAYS MUST BE BETWEEN 0 AND 180. PLEASE VERIFY.

NUMERIC: INTEGER S41H3

- -

SPECIAL VALUES

- 88 Don't know
- 99 Not stated

H4.1.4. Was your Fixed Voice service ever disconnected in the LAST 5 YEARS?

Disconnection of service prohibits a customer from accessing the subscribed service, usually arising from the inability of a customer to pay his/her bill.

SINGLE-SELECT S41H4
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.1.5. How many HOURS did you wait before your Fixed Voice service was re-activated after your LAST disconnection?

E S41H4 ==1
W1 self.InRange(0,168)
M1 THE NUMBER OF HOURS MUST BE BETWEEN 0 AND 168. PLEASE VERIFY.

NUMERIC: INTEGER S41H5

SPECIAL VALUES
88 Don't know
99 Not stated

H4.1.6. Have you made any complaints to your Fixed Voice service provider in the last 5 years about any aspect of the service provided?

SINGLE-SELECT S41H6
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.1.7. Was your LAST complaint resolved by your Fixed Voice service provider?

E S41H6 ==1

SINGLE-SELECT S41H7
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.1.8. How many DAYS did you wait before your complaint about your Fixed Voice service was resolved?

E S41H7 ==1
W1 self.InRange(0,180)
M1 THE NUMBER OF DAYS MUST BE BETWEEN 0 AND 180. PLEASE VERIFY.

NUMERIC: INTEGER S41H8

SPECIAL VALUES
88 Don't know
99 Not stated

H4.1.9. Was recourse sought, via the Telecommunications Authority, with respect to your unresolved complaint?

E S41H7 ==2

SINGLE-SELECT S41H10
01 ○ Yes
02 ○ No
03 ○ Not stated

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.2 FIXED INTERNET

E S4H1.Contains(2)

H4.2.1 In what year did your household FIRST receive Fixed Internet Service?

SINGLE-SELECT S42H1
01 ○ 1995-1999
02 ○ 2000-2004
03 ○ 2005-2009
04 ○ 2010-2014
05 ○ 2015-2019
06 ○ 2020 and after
07 ○ Cannot remember

H4.2.2. Did your household sign up for Fixed Internet primarily because of the COVID-19 pandemic? (E.g. to facilitate working from home or online classes).

E S42H1 ==6

SINGLE-SELECT S42H2
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.2.3. Who is your current Fixed Internet service provider?

IF HOUSEHOLD HAS MORE THAN ONE FIXED ISP AND IS UNABLE TO CHOOSE THE MAIN PROVIDER, ASK FOR DATA FOR THE MOST RECENT SUBSCRIPTION.

SINGLE-SELECT S42H3

- 01 ○ Airlink Communications
- 02 ○ Amplia
- 03 ○ FLOW (Columbus Communications Trinidad Ltd)
- 04 ○ Digicel
- 05 ○ Green Dot
- 06 ○ Lisa Communications
- 07 ○ PBS Technologies (formerly Massy Technologies InfoCom)
- 08 ○ Diversified Technologies (formerly Novo Communications)
- 09 ○ Open Telecom
- 10 ○ TSTT/Bmobile
- 11 ○ Mora's Weather Network
- 12 ○ RVR international Limited
- 13 ○ Other (please specify)

H4.2.3. OTHER - Other Fixed Internet provider?

E S42H3 ==13

TEXT S42H3OTHER

.....

H4.2.4 What Fixed Internet package does your household subscribe to?

IF THE RESPONDENT'S PACKAGE IS NOT AVAILABLE FROM THE LIST PROVIDED, PLEASE ENTER NAME OF PACKAGE (IF AVAILABLE), DOWNLOAD SPEED AND MONTHLY COST OF PACKAGE IN "H4.2.4. OTHER" BELOW.

SINGLE-SELECT: CASCADING S42H4

- 01 ○ Dash 25MB -$ 119
- 02 ○ Sprint 50MB -$ 219
- 03 ○ Zoom 100MB -$ 400
- 04 ○ Other Airlink
- 05 ○ Surf More 25MB -$ 200
- 06 ○ Surf Some More 80MB -$ 250
- 07 ○ Surf a Lot 120MB -$ 350
- 08 ○ Surf a Lot More 300MB -$ 550
- 09 ○ Surf It All 500MB -$ 650
- 10 ○ Surf It All Ultra 1000MB -$ 850
- 11 ○ Other Amplia
- 12 ○ Standard 100MB -$ 275
- 13 ○ Select 250MB -$ 450
- 14 ○ Premium 500MB -$ 675
- 15 ○ Other Flow
- 16 ○ Broadband Internet 100MB -$ 275

And 25 other symbols [6]

H4.2.4. OTHER - Other Fixed Internet Package

E S42H4==4 || S42H4==11 || S42H4==15 || S42H4==19 || S42H4 ==24 || S42H4==25 || S42H4==26 ||S42H4>=30

TEXT S42H4OTHER

.....

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD / 4.2 FIXED INTERNET

CUSTOMER SERVICE - FIXED INTERNET

E S42H1==5 || S42H1==6

H4.2.5 How many DAYS did you wait before your Fixed Internet service was first activated?

W1 `self.InRange(0,180)`

M1 THE NUMBER OF DAYS MUST BE BETWEEN 0 AND 180. PLEASE VERIFY.

NUMERIC: INTEGER S42H5

SPECIAL VALUES
88 Don't know
99 Not stated

H4.2.6. Was your Fixed Internet service ever disconnected in the LAST 5 YEARS?

Disconnection of service prohibits a customer from accessing the subscribed service, usually arising from the inability of a customer to pay his/her bill.

SINGLE-SELECT S42H6
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.2.7. How many HOURS did you wait before your Fixed Internet service was re-activated (after your LAST disconnection)?

E `S42H6 ==1`

W1 `self <=168`

M1 THE NUMBER OF HOURS MUST BE BETWEEN 0 A ND 168. PLEASE VERIFY.

NUMERIC: INTEGER S42H7

SPECIAL VALUES
88 Don't know
99 Not stated

H4.2.8. Have you made any complaints to your Fixed Internet service provider in the LAST 5 YEARS about any aspect of the service provided?

SINGLE-SELECT S42H8
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.2.9. Was your LAST complaint resolved by your Fixed Internet service provider?

E `S42H8 ==1`

SINGLE-SELECT S42H9
01 ○ Yes
02 ○ No
03 ○ Not stated

H4.2.10. How many DAYS did you wait before your complaint about your Fixed Internet service was resolved?

E `S42H9 ==1`

W1 `self.InRange(0,180)`

M1 THE NUMBER OF DAYS MUST BE BETWEEN 0 AND 180. PLEASE VERIFY.

NUMERIC: INTEGER S4H10

SPECIAL VALUES
88 Don't know
99 Not stated

H4.2.11. Was recourse sought, via the Telecommunications Authority, with respect to your unresolved complaint?

E `S42H9 ==2`

SINGLE-SELECT S42H11
01 ○ Yes
02 ○ No
03 ○ Not stated

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.3 PAY TV

E `S4H1.Contains(3)`

STATIC TEXT

PAY TV is television services which rely on a subscription fee in order to be watched. For example Digicel Play, Flow and DirectTV. It is different from Free to Air (FTA) TV services that do not require a paid subscription for example CCN TV6, TTT, CNC3 and Parliament Channel

H4.3.1. In what year did your household FIRST receive Pay TV service?

SINGLE-SELECT S43H1

01 ○ 1995-1999
02 ○ 2000-2004
03 ○ 2005-2009
04 ○ 2010-2014
05 ○ 2015-2019
06 ○ 2020 and after
07 ○ Cannot remember

H4.3.2. Who is your current Pay TV service provider?

IF HOUSEHOLD HAS MORE THAN ONE PAY TV PROVIDER AND IS UNABLE TO CHOOSE THE MAIN PROVIDER, RECORD DATA FOR THE MOST RECENT SUBSCRIPTION.

SINGLE-SELECT S43H2

01 ○ Amplia
02 ○ FLOW
03 ○ Digicel
04 ○ DirecTV
05 ○ RVR International
06 ○ TSTT/Bmobile
07 ○ Independent Cable Network of Trinidad and Tobago
08 ○ Network Technologies Ltd.
09 ○ Air Link Communications
10 ○ Wired Technologies Ltd.
11 ○ Trico Industries Ltd.
12 ○ Green Dot
13 ○ Other (please specify)

H4.3.3. OTHER- Other Pay TV service Provider

E `//Enables this question only if "Other Specify" is one of the values selected S43H2 ==13`

TEXT S43H3OTHER

.....

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD / 4.3 PAY TV

CUSTOMER SERVICE - PAY TV

E `S43H1 ==5 || S43H1==6`

H4.3.4. How many DAYS did your household wait before your PAY TV service was first activated?

W1 `self.InRange(0,180)`

M1 THE NUMBER OF DAYS MUST BE BETWEEN 0 AND 180. PLEASE VERIFY.

NUMERIC: INTEGER S43H5

_ _

SPECIAL VALUES

88 Don't know
99 Not stated

H4.3.5. Was your PAY TV service ever disconnected in the LAST 5 YEARS?

Disconnection of service prohibits a customer from accessing the subscribed service, usually arising from the inability of a customer to pay his/her bill.

SINGLE-SELECT S43H6

01 ○ Yes
02 ○ No
03 ○ Not stated

H4.3.6. How many HOURS did you wait before your PAY TV service was re-activated after your LAST disconnection?

E `S43H6 ==1`

W1 `self.InRange(0,168)`

M1 THE NUMBER OF HOURS MUST BE BETWEEN 0 AND 168. PLEASE VERIFY.

NUMERIC: INTEGER S43H7

_ _

SPECIAL VALUES

88 Don't know
99 Not stated

H4.3.7. Have you made any complaints to your Pay TV service provider in the last 5 years about any aspect of the service provided?	SINGLE-SELECT S43H8 01 ○ Yes 02 ○ No 03 ○ Not stated
H4.3.8. Was your LAST complaint resolved by your Pay TV service provider? E S43H8 ==1	SINGLE-SELECT S43H9 01 ○ Yes 02 ○ No 03 ○ Not stated
H4.3.9. How many DAYS did you wait before your complaint about your Pay TV service was resolved? E S43H9==1 W1 self.InRange(0,180) M1 THE NUMBER OF DAYS MUST BE BETWEEN 0 AND 180. PLEASE VERIFY.	NUMERIC: INTEGER S43H10 - SPECIAL VALUES 88 Don't know 99 Not stated
H4.3.10. Was recourse sought, via the Telecommunications Authority, with respect to your unresolved complaint? E S43H9==2	SINGLE-SELECT S43H11 01 ○ Yes 02 ○ No 03 ○ Not stated

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.4 OWNERSHIP OF ICT DEVICES

STATIC TEXT

RADIO: A device capable of receiving broadcast radio signals, using common frequencies, such as FM, AM, LW and SW. A radio may be a stand-alone device, or it may be integrated with another device, such as an alarm clock, an audio player, a mobile telephone or a computer.

TELEVISION (TV): A device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. A television set is typically a stand-alone device, but it may also be integrated with another device, such as a computer or a mobile telephone.

FIXED TELEPHONE LINE: A telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange.

MOBILE (CELLULAR) TELEPHONE: A portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems and technologies such as IMT-2000 (3G) and IMT-Advanced. Users of both post-paid subscriptions and pre-paid accounts are included.

SMARTPHONE: A mobile handset that is used as the person's primary phone device which has smart capabilities, including Internet-based services, and performs many of the functions of a computer, including having an operating system capable of downloading and running applications inluding those created by third-party developers. Users of both postpaid subscriptions and prepaid accounts are included.

TABLET: A computer that is integrated into a flat touch screen, operated by touching the screen rather than (or as well as) using a physical keyboard.

LAPTOP (PORTABLE) COMPUTER: A computer that is small enough to carry and usually enables the same tasks as a desktop computer; it includes notebooks and netbooks but does not include tablets and similar handheld computers.

DESKTOP: A computer that usually remains fixed in one place; normally the user is placed in front of it, behind the keyboard.

H4.4.1.A. How many WORKING Radios (Including in vehicles) does your household own?

W1 `self.InRange(0,99)`

M1 THE NUMBER OF ITEMS MUST BE BETWEEN 0 AN D 99. PLEASE VERIFY.

NUMERIC: INTEGER S44H1A

SPECIAL VALUES
00 None
88 Don't know
99 Not stated

H4.4.1.B. How many WORKING Televisions does your household own?

W1 `self.InRange(0,99)`

M1 THE NUMBER OF ITEMS MUST BE BETWEEN 0 AN D 99. PLEASE VERIFY.

W2 `(S4H1.Contains(3))? self!=0: self.InRange(0,99)`

M2 You previously stated that your household has Pay TV. Are you sure th at you have no working televisions?

NUMERIC: INTEGER S44H1B

SPECIAL VALUES
00 None
88 Don't know
99 Not stated

H4.4.1.C. How many WORKING Smartphones does your household own?

W1 `self.InRange(0,99)`

M1 THE NUMBER OF ITEMS MUST BE BETWEEN 0 AN D 99. PLEASE VERIFY.

NUMERIC: INTEGER S44H1C

SPECIAL VALUES
00 None
88 Don't know
99 Not stated

H4.4.1.D. How many WORKING Desktop Computers does your household own?

W1 `self.InRange(0,99)`

M1 THE NUMBER OF ITEMS MUST BE BETWEEN 0 AN D 99. PLEASE VERIFY.

NUMERIC: INTEGER S44H1D

SPECIAL VALUES
00 None
88 Don't know
99 Not stated

H4.4.1.E. How many WORKING Laptops does your household own?

W1 `self.InRange(0,99)`

M1 THE NUMBER OF ITEMS MUST BE BETWEEN 0 AN D 99. PLEASE VERIFY.

NUMERIC: INTEGER S44H1E

SPECIAL VALUES
00 None
88 Don't know
99 Not stated

H4.4.1.F. How many WORKING Tablets does your household own?

W1 `self.InRange(0,99)`

M1 THE NUMBER OF ITEMS MUST BE BETWEEN 0 AN D 99. PLEASE VERIFY.

NUMERIC: INTEGER S44H1F

SPECIAL VALUES
00 None
88 Don't know
99 Not stated

H4.4.2 How does your household dispose of old electronic devices such as mobile phones, laptops, tablets, batteries and printer toner and cartridges?

PLEASE SELECT ALL THAT APPLY

V1 `!S44H2.Contains(9) || S44H2.ContainsOnly(9)`

M1 IF YOU SELECT NEVER DISPOSED OF ANY TYPE OF DEVICE, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S44H2

- 01 ☐ General garbage collection
- 02 ☐ Special collection by Municipality
- 03 ☐ A specialized e-waste company
- 04 ☐ Other waste disposal company
- 05 ☐ Stored at home
- 06 ☐ Dismantle and sell parts
- 07 ☐ Donate to Individual/Institution
- 08 ☐ Other
- 09 ☐ Never disposed of any type of devices

H4.4.3. Has anyone in your household ever had a device such as a mobile phone, tablet or laptop lost or stolen within the LAST 3 YEARS?

PLEASE SELECT ALL THAT APPLY.

V1 `!S44H3.Contains(3) || S44H3.ContainsOnly(3)`

M1 IF YOU SELECT NO, IT MUST BE THE ONLY ITEM S ELECTED

MULTI-SELECT S44H3

- 01 ☐ Yes - Lost
- 02 ☐ Yes - Stolen
- 03 ☐ No

H4.4.4 Was the MOST RECENT incident reported to the police?

E `S44H3.ContainsAny(1,2)`

SINGLE-SELECT S44H4

- 01 ○ Yes
- 02 ○ No
- 03 ○ Not stated

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.5 TELEVISION SERVICES & VIEWING PREFERENCES

E `S44H1B > 0 || S4H1.Contains(2)`

H4.5.1. Please RANK your preferred platforms for viewing television content.

OPTIONS MUST BE RANKED BY SELECTING ANSWERS IN ORDER OF PREFERENCE.

PLEASE SELECT ALL THAT APPLY.

THE SERVICE(S) SELECTED MUST BE WORKING AT THE TIME OF THE INTERVIEW.

F `(@optioncode.InRange(1,6) && (S44H1B > 0 && S4H1.Contains(2))) || (@optioncode.InRange(3,6) && (S44H1B == 0 && S4H1.Contains(2))) || (@optioncode.InList(1,2,5,6) && (S44H1B > 0 && !S4H1.Contains(2)))`

V1 `!S45H1.Contains(6) || S45H1.ContainsOnly(6)`

M1 IF YOU SELECT I DON'T VIEW TV CONTENT, IT MU ST BE THE ONLY ITEM SELECTED

MULTI-SELECT: ORDERED S45H1

- 01 ☐ Local TV (e.g. TTT, TV6)
- 02 ☐ Cable/Satellite/IP-TV (e.g. Digicel, FLOW, DirecTV)
- 03 ☐ Online streaming via a website or app (e.g. Youtube, TV6, Parliament Channel)
- 04 ☐ Paid Over-the-top (OTT) Service (e.g. Netflix, Hulu, Amazon Prime, Disney+)
- 05 ☐ Other (please specify)
- 06 ☐ I Don't view television content

H4.5.1. OTHER - Other preferred platforms for viewing television content.

E `S45H1.Contains(5)`

TEXT S45H1OTHER

.....

STATIC TEXT

OVER THE TOP (OTT) SERVICES ARE THIRD-PARTY MOBILE APPLICATION VOICE AND VIDEO CALL SERVICES SUCH AS WHATSAPP, FACETIME AND SKYPE.

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.6 NO INTERNET SERVICES

E `!S4H1.Contains(2)`

H4.6.1. Why does your household not have Internet access?

PLEASE SELECT ALL THAT APPLY

MULTI-SELECT S46H1

- 01 ☐ Do not need the Internet (Not useful, not interesting)
- 02 ☐ Have access to the Internet elsewhere
- 03 ☐ Cost of the equipment is too high
- 04 ☐ Cost of the service is too high
- 05 ☐ Privacy or security concerns
- 06 ☐ Internet service is not available in the area
- 07 ☐ Internet service is available but it does not correspond to household needs (e.g. quality, speed)
- 08 ☐ Cultural reasons (e.g. exposure to harmful content)
- 09 ☐ Lack of local content
- 10 ☐ No electricity in the household
- 11 ☐ Other reason (please specify)

H4.6.1. OTHER - Other reason for not having Internet access?

E //Enables this question only if "Other Specify" is one of the values selected S46H1.Contains(11)

TEXT S46H1OTHER

.....

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.7 HOUSEHOLD ICT EXPENDITURE

STATIC TEXT

H4.7.1 On average, how much does your household spend MONTHLY on the following services?

Enter 0 IF NO EXPENDITURE.

ROUND UP TO THE NEAREST DOLLAR.

ASK RESPONDENT TO CONSULT A RECENT BILL IF AVAILABLE.

H4.7.1.A. Fixed Voice

E S4H1.Contains(1)

W1 self <=9999

M1 AMOUNT REPORTED SEEMS TOO HIGH. PLEASE VERIFY.

NUMERIC: INTEGER S47H1A

- -.

SPECIAL VALUES

9999 Not stated

9998 Use bundled service

H4.7.1.B. Fixed Internet

E S4H1.Contains(2)

W1 self <=9999

M1 AMOUNT REPORTED SEEMS TOO HIGH. PLEASE VERIFY.

NUMERIC: INTEGER S47H1B

- -.

SPECIAL VALUES

9999 Not stated

9998 Use bundled service

H4.7.1.C. Pay TV

E S4H1.Contains(3)

W1 self <=9999

M1 AMOUNT REPORTED SEEMS TOO HIGH. PLEASE VERIFY.

NUMERIC: INTEGER S47H1C

- -.

SPECIAL VALUES

9999 Not stated

9998 Use bundled service

H4.7.1.D. OTT services (Netflix, Hulu etc.)

Over The Top (OTT) services are third-party mobile APP-based voice and video call services such as WhatsApp, Facetime, Skype etc.

E `S45H1.Contains(4)`
W1 `self <=1000`
M1 AMOUNT REPORTED SEEMS TOO HIGH. PLEASE V ERIFY.

NUMERIC: INTEGER S47H1D

SPECIAL VALUES
999 Not stated

H4.7.1.E. Bundled Services (e.g. Pay TV/Internet/Voice, PAY TV/Internet/Security)

W1 `self <=9999`
M1 AMOUNT REPORTED SEEMS TOO HIGH. PLEASE V ERIFY.
V2 `(S47H1A==9998 || S47H1B==9998 || S47H1C==9998)? self!=8888: self.InRange(0,9999)`
M2 Cannot select Not Applicable if you use bundle services in H4.7.1.A, H4.7.1.B OR H4.7.1.C

NUMERIC: INTEGER S47H1E

SPECIAL VALUES
8888 Not applicable
9999 Not stated

H4.7.1.F. Other ICT Related Services

ICT Stands for Information and Communication Technology. It refers to all communication technologies, including the Internet, wireless networks, cell phones, computers, software, video-conferencing, social networking, and other media applications and services.

W1 `self <=9999`
M1 AMOUNT REPORTED SEEMS TOO HIGH. PLEASE V ERIFY.

NUMERIC: INTEGER S47H1F

SPECIAL VALUES
8888 Not applicable
9999 Not stated

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD

4.8 CUSTOMER PERCEPTION OF SERVICES

SECTION 4: HOUSEHOLD ACCESS TO ICT - FOR HEAD OF HOUSEHOLD / 4.8 CUSTOMER PERCEPTION OF SERVICES

Roster: SERVICE RATING - PAID SERVICES
generated by multi-select question S4H1

SERVICERATING

E `S4H1.ContainsAny(1,2,3)`

STATIC TEXT

H4.8.2. Using a scale of 1 to 5 where 1 represents Very Dissatisfied and 5 Very Satisfied, how satisfied are you with your %rostertitle% service?

H4.8.2A. PRICE of service?

IF HOUSEHOLD HAS MORE THAN ONE PROVIDER AND IS UNABLE TO CHOOSE THE MAIN PROVIDER, RECORD DATA FOR THE MOST RECENT SUBSCRIPTION.

SINGLE-SELECT S48H2A

01 ○ 1. Very dissatisfied
02 ○ 2. Dissatisfied
03 ○ 3. Neither satisfied nor dissatisfied
04 ○ 4. Satisfied
05 ○ 5. Very Satisfied
06 ○ 6. Cannot say

P4.8.2B. QUALITY of service? IF HOUSEHOLD HAS MORE THAN ONE PROVIDER AND IS UNABLE TO CHOOSE THE MAIN PROVIDER, RECORD DATA FOR THE MOST RECENT SUBSCRIPTION.	SINGLE-SELECT S48H2B 01 ○ 1. Very dissatisfied 02 ○ 2. Dissatisfied 03 ○ 3. Neither satisfied nor dissatisfied 04 ○ 4. Satisfied 05 ○ 5. Very Satisfied 06 ○ 6. Cannot say
H4.8.2C. CUSTOMER SERVICE provided? IF HOUSEHOLD HAS MORE THAN ONE PROVIDER AND IS UNABLE TO CHOOSE THE MAIN PROVIDER, RECORD DATA FOR THE MOST RECENT SUBSCRIPTION.	SINGLE-SELECT S48H2C 01 ○ 1. Very dissatisfied 02 ○ 2. Dissatisfied 03 ○ 3. Neither satisfied nor dissatisfied 04 ○ 4. Satisfied 05 ○ 5. Very Satisfied 06 ○ 6. Cannot say
H4.8.3. Have you used any directory listing or directory services over the LAST YEAR? PLEASE SELECT ALL THAT APPLY V1 `//Either "Do Not Use directory service not selected // or "Do not use directory service" is the only answer selected !S48H3.Contains(6) || S48H3.ContainsOnly(6)` M1 IF YOU SELECT DO NOT USE DIRECTORY SERVICES, IT MUST BE THE ONLY ITEM SELECTED	MULTI-SELECT S48H3 01 ☐ 6411 directory call-in service 02 ☐ TSTT printed directory (Yellow pages) 03 ☐ TSTT online directory 04 ☐ FLOW online directory 05 ☐ Other online sources 06 ☐ Did not use any directory services.

SECTION 5: INDIVIDUALS

E `V2==1 && IsAnswered(Intv_Start)`

SECTION 5: INDIVIDUALS

Roster: 5.0 HOUSEHOLD MEMBER DETAILS

generated by list question `name` — `hhroster`

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.1 DEMOGRAPHICS - ALL PERSONS 5 YEARS AND OVER

P5.1.1. Is %rostertitle% male or female?

DO NOT LEAVE EMPTY.

SINGLE-SELECT — `gender`

01 ○ Male
02 ○ Female

P5.1.2. What is the relationship of %rostertitle% to the household head?

V1 `/*---------- Validation to make sure only one person is reported to be the household head ----------*/ relat==1? /// Is this person the h` And 199 other symbols [1]

M1 There must be only one person in the household designated as head.

V2 `/* Check that head has different gender than spouse(s) */ // if head is current person, and does at least one spouse exist? relat==1 && hhroster.Any(x=>x.relat==2) ? // if so, check that there` And 163 other symbols [1]

M2 The head and his/her spouse typically have different genders. Please confirm.

V3 `/* Check that spouse has different gender than head */ // if head is current person, and does at least one spouse exist? relat==2 && hhroster.Any(x=>x.relat==1) ? // if so, check whether spouse` And 136 other symbols [1]

M3 Spouse typically has a different genders than his/her spouse (the head of household). Please confirm.

V4 `//*Check that there are at most 2 parent*// // if current person is father/mother? relat==6? //Check that there are no more than 2 (hhroster.Count(x=>x.relat==6)<=2) // if not, no problem :true`

M4 Household head has at most 1 father and mother.

V5 `/* Checks if no household head was listed. Note: this runs at the end so it does not trigger errors constantly */ // Check that all information has been filled hhroster.All(x=>x.relat!=null) ?` And 119 other symbols [1]

M5 No household member was identified as the household head. Please confirm.

SINGLE-SELECT — `relat`

01 ○ Head
02 ○ Spouse/partner of head
03 ○ Child/Adopted Child
04 ○ Grandchild
05 ○ Nephew/Niece
06 ○ Father/Mother
07 ○ Sister/Brother
08 ○ Son/Daughter-in-Law
09 ○ Brother/Sister-in-Law
10 ○ Grandfather/Mother
11 ○ Father/Mother-in-Law
12 ○ Other Relative
13 ○ Domestic/Domestic's Relative
14 ○ Lodger/Lodger's Relative
15 ○ Other Non-Relative
16 ○ Other(please specify)

P5.1.6. To which ethnic group does %rostertitle% belong?

INDIGENOUS REFERS TO PERSONS OF CARIB OR ARAWAK ANCESTRY.THIS GROUP IS OF INTEREST TO THE STUDY AND SHOULD BE IDENTIFIED APPROPRIATELY, PARTICULARLY IN ARIMA AND MORUGA.

SINGLE-SELECT — `S51P6`

01 ○ African
02 ○ East Indian
03 ○ Chinese
04 ○ Syrian/Lebanese
05 ○ Caucasian
06 ○ Mixed
07 ○ Indigenous
08 ○ Other
09 ○ Not stated

P5.1.3.A. In what year was %rostertitle% born?

(4-DIGITS)

V1 /*This validation checks if the year of birth is between 1900 and 2021. */ self.InRange(1900,2021)

M1 PLEASE ENTER A VALID YEAR OF BIRTH

NUMERIC: INTEGER dob_year

P5.1.3.B. In what month was %rostertitle% born?

MONTH

SINGLE-SELECT dob_month

01 ○ January
02 ○ February
03 ○ March
04 ○ April
05 ○ May
06 ○ June
07 ○ July
08 ○ August
09 ○ September
10 ○ October
11 ○ November
12 ○ December
99 ○ Don't Know

VARIABLE

/* This calculate the age from the given date of birth. Since both month can be 99, then we have to write multiple cases to account for 99 values. FullYearsBetween finds the number of years between tw

And 368 other symbols [1]

LONG age_cur

Question	Response
P5.1.4. How old is %rostertitle%?	NUMERIC: INTEGER — age

Enter zero (0) if %rostertitle% is under one year.

ESTIMATE AGE, WITH ASSISTANCE OF RESPONDENT IF YEAR NOT KNOWN.

V1 `/* Check this recorded age is the same as the calculated age from DOB */ self == age_cur`

M1 The age recorded (%age% years old) does not match the age calculated from the date of birth (%age_cur% years old). Please verify that you have recorded the date of birth and age correctly.

V2 `(relat == 1 && age >= 15) || relat != 1`

M2 Household head is supposed to be an adult at least 15 years old, yet %rostertitle% is %age%. Check or confirm.

V3 `(relat == 2 && age > 15) || relat != 2`

M3 Person (%rostertitle%) seems to be too young to be married (%age%). Check or confirm.

V4 `(relat == 6 && age > 24) || relat != 6`

M4 Person (%rostertitle%) seems too young to be the parent. Check or confirm.

V5 `// if current person is father/mother of head relat==6 && hhroster.Count(x=>x.relat==1 && (age-x.age<=14))==0 || // if current person is head relat==1 && hhroster.Count(x=>x.relat==6 && (x.` And 168 other symbols [2]

M5 Age difference between head and his/her parent seems to be too little. Check or confirm.

V6 `// if current person is head child (relat==3 && (hhroster.Count(x=>x.relat==1 && x.gender==1 && (x.age-age<=14))==0)) && ((hhroster.Count(x=>x.relat==1 && x.gender==2 && (x.age-age<=12))==0))` And 423 other symbols [2]

M6 Age difference between head and his/her child is less than 12 years. Please check.

V7 `// if current person is grand parent of head relat==10 && hhroster.Count(x=>x.relat==1 && (age-x.age<=26))==0 || // if current person is head relat==1 && hhroster.Count(x=>x.relat==10 && (` And 48 other symbols [2]

M7 Age difference between head and his/her parents seems to be too little. Check or confirm.

V8 `// if current person is grandchild relat==4 && hhroster.Count(x=> x.relat==1 && (x.age-age<=26) )==0 || // if current person is head relat==1 && hhroster.Count(x=>x.relat==4 && (age- x.a` And 92 other symbols [2]

M8 Age difference between head and his/her grandparents seems to be too little. Check or confirm.

V9 `// if current person is head's spouse/partner (relat==2 && IsAnswered(self) && (hhroster.Count(x=>x.relat==1 && IsAnswered(x.age) && (Math.Abs((long)x.age-(long)age)>12))==0)) || // if curren` And 233 other symbols [2]

M9 Age difference between head and his/her spouse/partner seems to be too large. Check or confirm.

V10 `(relat == 10 && age > 36) || relat != 10`

M10 Grandparent should be older than 35. Please check or confirm.

Question	Response
P5.1.5. OTHER Please specify the relationship of %rostertitle% to the household head.	TEXT — relat_oth

E `relat==12 || relat==15 || relat==16`

Question	Response
P5.1.7. Where was %rostertitle% born?	SINGLE-SELECT — S51P7 01 ○ Trinidad and Tobago 02 ○ Abroad 03 ○ Not stated
P5.1.8. Is %rostertitle% a citizen of Trinidad and Tobago?	SINGLE-SELECT — S51P8 01 ○ Yes 02 ○ No 03 ○ Not stated

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.2 EDUCATION - ALL PERSONS 5 YEARS AND OVER

E `age_cur >=5`

P5.2.1. Is %rostertitle% currently attending school?	SINGLE-SELECT S52P1 01 ○ Yes Full-time 02 ○ Yes Part-time 03 ○ No
P5.2.2 What type of school is %rostertitle% attending? E `// To be answered by persons attending school only S52P1 ==1 || S52P1 ==2`	SINGLE-SELECT S52P2 01 ○ Early Childhood Care and Education/Nursery 02 ○ Primary 03 ○ Secondary 04 ○ Trade/Vocational 05 ○ Commercial/Secretarial 06 ○ Adult/Continuing Classes 07 ○ Other Post Secondary 08 ○ Tertiary Education/Non University 09 ○ Tertiary/University 10 ○ Special School 11 ○ Home School 12 ○ Other 13 ○ Not stated
P5.2.3 What was %rostertitle%'s highest level of education completed?	SINGLE-SELECT S52P3 00 ○ None 01 ○ Completed some primary 02 ○ Completed primary 03 ○ Completed lower secondary 04 ○ Completed upper secondary 05 ○ Completed post secondary non-tertiary education 06 ○ Completed short cycle tertiary education 07 ○ Completed Bachelor's degree or equivalent 08 ○ Completed Master's degree or equivalent 09 ○ Completed Doctoral degree or equivalent 10 ○ Not stated

P5.2.4. Does %rostertitle% have any of the following ICT certifications?

PLEASE SELECT ALL THAT APPLY

F (@optioncode.InRange(1,13) && S52P3.InRange(6,10)) || (@optioncode.InRange(1,7) && S52P3.InList(0,1,2,3,4,5,10))
E age_cur >=15
V1 !S52P4.Contains(1) || S52P4.ContainsOnly(1)
M1 IF YOU SELECT NO ICT CERTIFICATION, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S52P4

- 01 ☐ No ICT Certification
- 02 ☐ NEC Introduction to Computers
- 03 ☐ NEC Information Technology
- 04 ☐ CAPE Introduction to Computers
- 05 ☐ CAPE Computer Science
- 06 ☐ CAPE Animation and Game Design
- 07 ☐ CAPE Digital Media
- 08 ☐ Electrical Engineering
- 09 ☐ Information Technology
- 10 ☐ Computer Science
- 11 ☐ Information Systems Management
- 12 ☐ Data Sciences/Analytics
- 13 ☐ Other ICT related tertiary level certifications/degree programmes

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.3 ECONOMIC ACTIVITY - ALL PERSONS 15 YEARS AND OVER

E age_cur >=15

P5.3.1. Did %rostertitle% work or have a job in the REFERENCE WEEK? (APRIL 10 to APRIL 16, 2021).

SINGLE-SELECT S53P1

- 01 ○ Yes
- 02 ○ No
- 03 ○ Not stated

P5.3.2. What kind of work does %rostertitle% do?

IF OCCUPATION NOT FOUND IN LIST, CHOOSE "OTHER" AND TYPE OCCUPATION IN "OTHER KIND OF OCCUPATION"

E S53P1 ==1

SINGLE-SELECT: COMBO BOX S53P2

- 0001 ○ ABATTOIR KEEPER
- 0002 ○ ABBOT
- 0003 ○ Able-Bodied Seaman
- 0004 ○ Able-bodied Seaman Coast Guard
- 0005 ○ ACADEMIC ADMINISTRATOR
- 0006 ○ Accessories Maker
- 0007 ○ ACCOUNT EXECUTIVE ,ADVERTISING
- 0008 ○ ACCOUNTANT
- 0009 ○ Accountants
- 0010 ○ Accounting and Bookkeeping Clerks
- 0011 ○ ACCOUNTING ASSISTANT
- 0012 ○ Accounting Associate Professionals
- 0013 ○ ACCOUNTS CLERK
- 0014 ○ ACCOUNTS SUPERVISOR
- 0015 ○ ACCOUNTS TECHNICIAN
- 0016 ○ ACETYLENE PLANT OPERATOR

And 3771 other symbols [7]

P5.3.2. OTHER - Other kind of work

E S53P2 ==3839

TEXT S53P2OTHER

.....

P5.3.3. What category of worker does %rostertitle% belong to?

E S53P1 ==1

SINGLE-SELECT S53P3

01 ○ Statutory board/Similar bodies
02 ○ Government state enterprise
03 ○ Central or local government
04 ○ Private enterprise
05 ○ Unpaid worker
06 ○ Learner/Apprentice
07 ○ Self employed with employees
08 ○ Self employed without employees
09 ○ Unpaid family worker
10 ○ Self employed not specified

STATIC TEXT

E S53P1 ==1

SELF EMPLOYED - INCLUDES EMPLOYERS, OWN-ACCOUNT WORKERS, MEMBERS OF PRODUCERS' COOPERATIVES AND CONTRIBUTING FAMILY WORKERS.

P5.3.4. What is %rostertitle%'s gross MONTHLY income?

IF THE RESPONDENT GIVES AN INCOME, ENTER VALUE IN THE BOX PROVIDED. IF THE RESPONDENT REFUSED TO ANSWER, ASK HIM/HER TO PROVIDE A RANGE USING THE OPTIONS PROVIDED.

SELECT RATHER NOT SAY ONLY IF THE RESPONDENT REFUSES TO PROVIDE A RESPONSE.

E S53P1 ==1

NUMERIC: INTEGER S53P4

SPECIAL VALUES

01 Less than 1,000
02 1,000 - 3,999
03 4,000 - 6,999
04 7,000 - 9,999
05 10,000 - 12,999
06 13,000 - 15,999
07 16,000 - 18,999
08 19,000 - 21,999
09 22,000 - 24,999
10 25,000 - 27,999
11 28,000 - 30,999
12 31,000 and Above
13 Rather not say

P5.3.5. Why did %rostertitle% not work LAST WEEK?

E S53P1 ==2

SINGLE-SELECT S53P5

01 ○ Retired
02 ○ Home duties
03 ○ At school
04 ○ Disabled
05 ○ Temporary illness
06 ○ Does not want work
07 ○ Laid off/furloughed
08 ○ Other
09 ○ Not stated

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.4 DISABILITY - ALL PERSONS 5 YEARS AND OVER

E S3H1 == 1 && age_cur >=5

P5.4.1. Does %rostertitle% suffer from any of the following?

PLEASE SELECT ALL THAT APPLY

If "No Disability" is selected, no other option should be selected.

W1 `//Either "No Disability" not selected // or " No Disability" is the only answer selected !S54P1.Contains(7) || S54P1.ContainsOnly(7)`

M1 IF YOU SELECT NO DISABILITY, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S54P1

- 01 ☐ Difficulty seeing even if wearing glasses
- 02 ☐ Difficulty hearing even if wearing hearing aid
- 03 ☐ Difficulty walking or climbing steps
- 04 ☐ Difficulty remembering and concentrating
- 05 ☐ Difficulty with self care
- 06 ☐ Difficulty communicating, understanding or being understood
- 07 ☐ No disability

P5.4.1.A. Does %rostertitle% have difficulty seeing, even if wearing glasses?

E `S54P1.Contains(1)`

SINGLE-SELECT S541A

- 02 ○ Some difficulty
- 03 ○ A lot of difficulty
- 04 ○ Cannot do at all
- 05 ○ Refused
- 06 ○ Don't know

P5.4.1.B. Does %rostertitle% have difficulty hearing, even if wearing hearing aid?

E `S54P1.Contains(2)`

SINGLE-SELECT S541AB

- 02 ○ Some difficulty
- 03 ○ A lot of difficulty
- 04 ○ Cannot do at all
- 05 ○ Refused
- 06 ○ Don't know

P5.4.1.C. Does %rostertitle% have difficulty walking or climbing stairs?

E `S54P1.Contains(3)`

SINGLE-SELECT S541C

- 02 ○ Some difficulty
- 03 ○ A lot of difficulty
- 04 ○ Cannot do at all
- 05 ○ Refused
- 06 ○ Don't know

P5.4.1.D. Does %rostertitle% have difficulty remembering or concentrating?

E `S54P1.Contains(4)`

SINGLE-SELECT S541D

- 02 ○ Some difficulty
- 03 ○ A lot of difficulty
- 04 ○ Cannot do at all
- 05 ○ Refused
- 06 ○ Don't know

P5.4.1.E. Does %rostertitle% have difficulty with self-care, such as washing all over or dressing?

E `S54P1.Contains(5)`

SINGLE-SELECT S541E

- 02 ○ Some difficulty
- 03 ○ A lot of difficulty
- 04 ○ Cannot do at all
- 05 ○ Refused
- 06 ○ Don't know

P5.4.1.F. Does %rostertitle% have difficulty communicating, e.g. understanding or being understood?

E `S54P1.Contains(6)`

SINGLE-SELECT S541F

- 02 ○ Some difficulty
- 03 ○ A lot of difficulty
- 04 ○ Cannot do at all
- 05 ○ Refused
- 06 ○ Don't know

P5.4.2. Is %rostertitle% affiliated with any organisation that provides assistance to persons with disability?

E !S54P1.Contains(7)

SINGLE-SELECT S54P2

01 ○ Yes
02 ○ No
03 ○ Not stated

P5.4.3.A. What is the name of the FIRST organisation that %rostertitle% is affiliated with?

DO NOT READ LIST

PLEASE SELECT ALL THAT APPLY

E S54P2 ==1

MULTI-SELECT S54P3A

01 ☐ Academy for Special Needs
02 ☐ Ask Leadership Foundation
03 ☐ Association of Developmental Education
04 ☐ Audrey Jeffers School for the Deaf
05 ☐ Autism Spirit
06 ☐ Autistic Society of Trinidad and Tobago
07 ☐ Caribbean Kids Family Therapy Organization (CKFTO)
08 ☐ Cascade School for the Deaf
09 ☐ Cause an Effect
10 ☐ Cerebral Palsy Association of Trinidad and Tobago
11 ☐ Cerebral Palsy Society of Trinidad and Tobago
12 ☐ Cheshire Foundation Home for Physically Challenged
13 ☐ Combined Disabilities of Trinidad and Tobago (CDTT)
14 ☐ Consortium of Disability Organisations | (CODO)
15 ☐ Deaf Pioneers Life Center
16 ☐ Down Syndrome Family Network of Trinidad and Tobago

And 29 other symbols [8]

P5.4.3.B. What is the name of the SECOND organisation that %rostertitle% is affiliated with?

ENTER NOT APPLICABLE IF NOT AFFILIATED TO MORE THAN ONE ORGANISITION.

E S54P2 ==1

MULTI-SELECT S54P3B

- 01 ☐ Academy for Special Needs
- 02 ☐ Ask Leadership Foundation
- 03 ☐ Association of Developmental Education
- 04 ☐ Audrey Jeffers School for the Deaf
- 05 ☐ Autism Spirit
- 06 ☐ Autistic Society of Trinidad and Tobago
- 07 ☐ Caribbean Kids Family Therapy Organization (CKFTO)
- 08 ☐ Cascade School for the Deaf
- 09 ☐ Cause an Effect
- 10 ☐ Cerebral Palsy Association of Trinidad and Tobago
- 11 ☐ Cerebral Palsy Society of Trinidad and Tobago
- 12 ☐ Cheshire Foundation Home for Physically Challenged
- 13 ☐ Combined Disabilities of Trinidad and Tobago (CDTT)
- 14 ☐ Consortium of Disability Organisations | (CODO)
- 15 ☐ Deaf Pioneers Life Center
- 16 ☐ Down Syndrome Family Network of Trinidad and Tobago

And 30 other symbols [9]

P5.4.3.C. What is the name of the THIRD organisation that %rostertitle% is affiliated with?

ENTER NOT APPLICABLE IF NOT AFFILIATED TO MORE THAN ONE ORGANISITION.

E S54P2 ==1

MULTI-SELECT S54P3C

- 01 ☐ Academy for Special Needs
- 02 ☐ Ask Leadership Foundation
- 03 ☐ Association of Developmental Education
- 04 ☐ Audrey Jeffers School for the Deaf
- 05 ☐ Autism Spirit
- 06 ☐ Autistic Society of Trinidad and Tobago
- 07 ☐ Caribbean Kids Family Therapy Organization (CKFTO)
- 08 ☐ Cascade School for the Deaf
- 09 ☐ Cause an Effect
- 10 ☐ Cerebral Palsy Association of Trinidad and Tobago
- 11 ☐ Cerebral Palsy Society of Trinidad and Tobago
- 12 ☐ Cheshire Foundation Home for Physically Challenged
- 13 ☐ Combined Disabilities of Trinidad and Tobago (CDTT)
- 14 ☐ Consortium of Disability Organisations | (CODO)
- 15 ☐ Deaf Pioneers Life Center
- 16 ☐ Down Syndrome Family Network of Trinidad and Tobago

And 30 other symbols [10]

P5.4.3.OTHER. What is the name of the organisation?

E S54P3C.Contains(44)

TEXT S54P3OTHER

.....

STATIC TEXT

E !S54P1.Contains(7)

READ ALOUD: Assistive Technology are tools that allow persons with disabilities to use computers and other devices as well as use the Internet including devices and software programs.

P5.4.4. Does %rostertitle% currently use any assistive technology to access Internet, mobile and fixed services?

E !S54P1.Contains(7)

SINGLE-SELECT S54P4

01 ○ No - I am not aware of assistive technology
02 ○ No - I am aware but cannot afford
03 ○ No - I am aware but need assistance to setup
04 ○ No -Not interested due to personal reasons
05 ○ Yes - I currently use assistive device(s)
06 ○ Other

P5.4.5. Approximately how much did it cost %rostertitle% to purchase the assistive/special devices being used to access the Internet, mobile and fixed services?

E !S54P1.Contains(7) && S54P4 ==5

NUMERIC: INTEGER S54P5

- -

P5.4.6. Does %rostertitle% need any assistive device or software to access Internet, mobile or fixed services?

E !S54P1.Contains(7) && S54P4 !=4

SINGLE-SELECT S54P6

01 ○ Yes
02 ○ No
03 ○ Don't Know

P5.4.7. Is %rostertitle% currently receiving any of the following benefits?

E !S54P1.Contains(7)

V1 //Either "No Benefit" not selected // or " No Benefit" is the only answer selected !S54P7.Contains(13) || S54P7.ContainsOnly(13)

M1 IF YOU SELECT NOT RECEIVING ANY BENEFIT, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S54P7

01 ☐ Public Assistance Grant
02 ☐ Senior Citizens Pension
03 ☐ Worker Retirement benefit
04 ☐ National Insurance retirement benefit
05 ☐ Disability Assistance Grant
06 ☐ Food Card
07 ☐ CDAP
08 ☐ NIB invalidity grant
09 ☐ Utilities assistance
10 ☐ Support from family
11 ☐ Support from NGO
12 ☐ Other (please specify)
13 ☐ Not receiving any benefit

P5.4.7.OTHER. Other types of benefits received

E S54P7.Contains(12)

TEXT S54H7OTHER

.....

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.5 USE OF ICT - ALL PERSONS 5 YEARS AND OVER

E age_cur >=5

P5.5.1. Has %rostertitle% USED any of the following types of mobile telephone in the LAST 3 MONTHS?

Use of a mobile telephone does not necessarily mean that the telephone is owned or paid for by the individual. It should be reasonably available through work, a friend or family member, etc.

IT EXCLUDES OCCASSIONAL USE, SUCH AS BORROWING A MOBILE PHONE TO MAKE A CALL.

SINGLE-SELECT S55P1

01 ○ Dumb mobile phone (Me Too)
02 ○ Mobile smartphone
03 ○ Did not use any mobile phone
04 ○ Not stated

P5.5.2. Does %rostertitle% OWN any of the following mobile phones?

CONSULT DEFINITION OF OWNERSHIP BELOW.

W1 S55P1 == self

M1 RESPONDENT REPORTED USING A DIFFERENT TYPE OF PHONE TO THE ONE OWNED, PLEASE VERIFY.

SINGLE-SELECT S55P2

01 ○ A dumb mobile phone (Me Too)
02 ○ Mobile smartphone
03 ○ I do not own a mobile phone
04 ○ Not stated

STATIC TEXT

An individual owns a mobile phone or smartphone if he/ she has a mobile cellular phone device with at least one active SIM card for personal use. It includes mobile cellular phones supplied by employers that can be used for personal reasons (to make personal calls, access the Internet, etc.) and those who have a mobile phone for personal use that is not registered under his/her name.

It excludes individuals who have only active SIM card(s) and not a mobile phone device.

P5.5.3. Who is %rostertitle%'s MAIN Mobile Service provider?

If respondent has two different providers, choose the one that is used more frequently. You may also use the number they are more likely to give out to someone as the main mobile service provider

E S55P2 <=2

SINGLE-SELECT S55P3

01 ○ TSTT
02 ○ Digicel
03 ○ Don't know
04 ○ Not stated

P5.5.4.A. Which of the following mobile services does %rostertitle% have?

PLEASE SELECT ALL THAT APPLY.

E S55P2 <= 2

SINGLE-SELECT S55P4A

01 ○ Mobile Voice only (no data)
02 ○ Mobile Voice and data (Mobile Internet) via a handset
05 ○ Not stated

P5.5.4.B. Does %rostertitle% have a mobile hotspot device? (USB dongle, MiFi or any mobile hotspot device)

Mi-Fi is a brand ofwireless device that acts like a mobile hotspot.

E S55P2 <= 2

SINGLE-SELECT S55P4B

01 ○ Yes
02 ○ No
03 ○ Not stated

P5.5.5. Does %rostertitle% use the USB dongle or Mi-Fi device exclusively or is it the sole source of Internet access for the household?

E S55P2 <=2 && S55P4B==1

SINGLE-SELECT S55P5

01 ○ Use exclusively
02 ○ Share with other household members
03 ○ Not stated

P5.5.6.A. Using a scale of 1 to 5 where 1 represents Very Dissatisfied and 5 Very Satisfied, how satisfied is %rostertitle% with the PRICE of Mobile service?

E `S55P2 <=2 && age_cur >=15`

SINGLE-SELECT S55P6A

01 ○ 1. Very dissatisfied
02 ○ 2. Dissatisfied
03 ○ 3. Neither satisfied nor dissatisfied
04 ○ 4. Satisfied
05 ○ 5. Very Satisfied
06 ○ 6. Cannot say

P5.5.6.B. Using a scale of 1 to 5 where 1 represents Very Dissatisfied and 5 Very Satisfied, how satisfied is %rostertitle% with the QUALITY of Mobile service?

E `S55P2 <=2 && age_cur >=15`

SINGLE-SELECT S55P6B

01 ○ 1. Very dissatisfied
02 ○ 2. Dissatisfied
03 ○ 3. Neither satisfied nor dissatisfied
04 ○ 4. Satisfied
05 ○ 5. Very Satisfied
06 ○ 6. Cannot say

P5.5.6.C. Using a scale of 1 to 5 where 1 represents Very Dissatisfied and 5 Very Satisfied, how satisfied is %rostertitle% with CUSTOMER SERVICE for Mobile service?

E `S55P2 <=2 && age_cur >=15`

SINGLE-SELECT S55P6C

01 ○ 1. Very dissatisfied
02 ○ 2. Dissatisfied
03 ○ 3. Neither satisfied nor dissatisfied
04 ○ 4. Satisfied
05 ○ 5. Very Satisfied
06 ○ 6. Cannot say

STATIC TEXT

Desktop: a computer that usually remains fixed in one place; normally the user is placed in front of it, behind the keyboard.

Laptop (portable) computer: a computer that is small enough to carry and usually enables the same tasks as a desktop computer; it includes notebooks and netbooks but does not include tablets and similar handheld computers.

Tablet (or similar handheld computer): a computer that is integrated into a flat touch screen, operated by touching the screen rather than (or as well as) using a physical keyboard.

A computer: refers to a desktop computer, a laptop (portable) computer or a tablet (or similar handheld computer); it does not include equipment with some embedded computing abilities, such as smart TV sets, and devices with the telephone as their primary function, such as smartphones.

P5.5.7. Has %rostertitle% used a computer (desktop, laptop, tablet or similar) from any location in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY.

REMEMBER TO SELECT NO FOR NONE OF THE ABOVE OR YES IF IT IS THE ONLY SELECTION.

V1 `!S55P7.Yes.Contains(4) || S55P7.Yes.ContainsOnly(4)`

M1 IF YOU SELECT USED NONE OF THE ABOVE, IT MU ST BE THE ONLY ITEM SELECTED

MULTI-SELECT: YES/NO S55P7

01 ☐ / ☐ Desktop
02 ☐ / ☐ Laptop
03 ☐ / ☐ Tablet
04 ☐ / ☐ Used none of the above

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.5 USE OF ICT - ALL PERSONS 5 YEARS AND OVER

5.5.0 INTERNET USAGE

P5.5.0.1. Has %rostertitle% used the Internet in the LAST 3 MONTHS?

ACCESS CAN BE VIA A FIXED OR MOBILE NETWORK.

SINGLE-SELECT S550P1

01 ○ Yes
02 ○ No
03 ○ Not stated

P5.5.0.2. Why did %rostertitle% not use the Internet in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY

E S550P1==2

MULTI-SELECT S550P2

01 ☐ Do not need the Internet (not useful, not interesting)
02 ☐ Do not know how to use it
03 ☐ Cost of Internet use is too high (service charges, etc.)
04 ☐ Privacy or security concerns
05 ☐ Internet service is not available in the area
06 ☐ Cultural reasons (e.g. exposure to harmful content)
07 ☐ Don't know what Internet is
08 ☐ Not allowed to use the Internet
09 ☐ Lack of local content
10 ☐ Other reason, specify
11 ☐ Not stated

P5.5.0.3. Please RANK the following issues that, if addressed, will cause you to begin to use the Internet or to use the Internet more?

OPTIONS MUST BE RANKED BY SELECTING ANSWERS IN ORDER OF PREFERENCE.

E age_cur >=15
V1 !S550P3.Contains(5) || S550P3.ContainsOnly(5)
M1 IF YOU SELECT DON'T PLAN TO EVER USE INTERN ET, IT MUST BE THE ONLY ITEM SELECTED
V2 !S550P3.Contains(6) || S550P3.ContainsOnly(6)
M2 IF YOU SELECT NONE OF THE ABOVE, IT MUST BE THE ONLY ITEM SELECTED
V3 !S550P3.Contains(7) || S550P3.ContainsOnly(7)
M3 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT: ORDERED S550P3

01 ☐ 1. Having a reasonably priced Internet Connection where you live (ACCESS)
02 ☐ 2. Maintaining privacy and security when using the internet (TRUST AND CONFIDENCE)
03 ☐ 3. Having more businesses and government organizations with services online (RELEVANCE)
04 ☐ 4. Having the required skill and competencies to use computers and the Internet (READINESS)
05 ☐ Don't plan to ever use the Internet
06 ☐ None of the above
07 ☐ Not stated

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.5 USE OF ICT - ALL PERSONS 5 YEARS AND OVER

5.5.1 INTERNET USERS

E S550P1 ==1

STATIC TEXT

Work - where a person's workplace is located at his/her home, then he/she would answer yes to the home category only.

Place of education - applies only to students. Teachers and others who work at a place of education would report 'work' as the place of Internet use; where a place of education is also made available as a location for general community Internet use, such use should be reported in the Community Internet access facility category.

Another person's home -the home of a friend, relative or neighbour.

Facility open to the public - use at a facility open to the public regardless of payment, type of connection or nature of the facility, such as libraries, telecenters, cafes, restaurants, and shopping malls.

Community Internet access facility - typically free of charge; includes Internet use at community facilities such as public libraries, publicly provided Internet kiosks, non-commercial telecentres, digital community centres, post offices, other government agencies; access is typically free and available to the general public.

While commuting, in transport or walking - while moving between places, commuting or on the street, independently of the device being used.

P5.5.1.1. Which of the following activities is %rostertitle% CAPABLE of performing? INDEPENDENT OF DEVICE USED

PLEASE SELECT ALL THAT APPLY .

E `age_cur >=11`

V1 `//Either "None of the above" not selected // or " None of the above" is the only answer selected !S551P1.ContainsOnly(12) || S551P1.ContainsOnly(12)`

M1 IF YOU SELECT NONE OF THE ABOVE, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S551P1

- 01 ☐ Using copy and paste tools to duplicate or move data, information and content in digital environments (e.g. within a document, between devices, on the cloud)
- 02 ☐ Sending messages (e.g. e-mail, messaging service, SMS) with attached files (e.g. document, picture, video)
- 03 ☐ Using basic arithmetic formulas in a spreadsheet
- 04 ☐ Connecting and installing new devices (e.g. a modem, camera, printer)
- 05 ☐ Finding, downloading, installing and configuring software
- 06 ☐ Creating electronic presentations with presentation software (Including text, images, sound, video or charts)
- 07 ☐ Transferring files or applications between a computer and other devices
- 08 ☐ Setting up effective security measures (e.g. strong passwords, log-in attempt notification) to protect devices and online accounts
- 09 ☐ Changing privacy settings on your device, account or app to limit the sharing of personal data and information (e.g. name, contact information, photos)
- 10 ☐ Verifying the reliability of information found online
- 11 ☐ Writing a computer program using a specialized programming language (programming or coding in digital environments e.g. computer software, app development)
- 12 ☐ None of the above

P5.5.1.2. Where did %rostertitle% use the Internet in the LAST 3 MONTHS (independent of the device used)?

PLEASE SELECT ALL THAT APPLY

Place of education applies only to students. Teachers and others who work at a place of education should report 'WORK' as the place of Internet use.

F (@optioncode.InRange(2,9) && (S52P1<=2 || S53P1==2)) || (@optioncode.InList(1,2,4,5,6,7,8,9) && S52P1==3) || (@optioncode.InRange(1,9) && (S52P1<=2 && S53P1==1))

MULTI-SELECT S551P2

- 01 ☐ Work
- 02 ☐ Home
- 03 ☐ Place of education
- 04 ☐ Another person's home
- 05 ☐ Facility open to the public (telecenters, cafes, restaurants, and shopping malls)
- 06 ☐ Public libraries
- 07 ☐ Community Internet access facility (e.g. Community Access Centres, ICT Access Centre)
- 08 ☐ While commuting, in transport or walking
- 09 ☐ Other location (please specify)

P5.5.1.2.OTHER. Which other location did %rostertitle% use to access the Internet?

E //Enables this question only if "Other Specify" is one of the values selected S551P2.Contains(9)

TEXT S551P2OTHER

.....

P5.5.1.3. Which of the following devices has %rostertitle% used to access the Internet in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY.

BECAUSE INDIVIDUAL USED THE INTERNET, AT LEAST ONE OPTION MUST BE SELECTED.

V1 (!S551P3.Yes.Contains(8) || S551P3.Yes.ContainsOnly(8))

M1 IF YOU SELECT NOT STATED, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT: YES/NO S551P3

- 01 ☐ / ☐ A mobile phone via the cellular network
- 02 ☐ / ☐ A mobile phone via other wireless networks (e.g. WiFi)
- 03 ☐ / ☐ A tablet via the cellular network, using USB key or SIM card
- 04 ☐ / ☐ A tablet via other wireless networks (e.g. WiFi)
- 05 ☐ / ☐ A portable computer via the cellular network, using USB key or SIM card
- 06 ☐ / ☐ A portable computer via other wireless networks (e.g. WiFi)
- 07 ☐ / ☐ Other portable devices (e.g. portable games consoles, watches, e-book readers etc.)
- 08 ☐ / ☐ Not stated

P5.5.1.4. How often did %rostertitle% use the Internet during the LAST 3 MONTHS (from any location)?

The question refers to a typical period. Therefore, respondents should ignore weekends (if they only use the Internet from work or school) and breaks from their usual routine, such as holidays.

SINGLE-SELECT S551P4

- 01 ○ At least once a day
- 02 ○ At least once a week but not every day
- 03 ○ Less than once a week
- 04 ○ Not stated

P5.5.1.5. For which of the following activities did %rostertitle% use the Internet, for PRIVATE PURPOSES, in the LAST 3 MONTHS from any location?

PLEASE SELECT ALL THAT APPLY

PRIVATE PURPOSES MEANS NOT AS PART OF ONE'S CURRENT JOB OR BUSINESS.

BECAUSE INDIVIDUAL USED THE INTERNET, AT LEAST ONE OPTION MUST BE SELECTED.

V1 `!S551P5.Contains(29) || S551P5.ContainsOnly(29)`

M1 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT S551P5

- 01 ☐ Getting information about goods or services
- 02 ☐ Seeking health information
- 03 ☐ Getting information from general government organizations
- 04 ☐ Reading or downloading online newspapers or magazines, electronic books
- 05 ☐ Making an appointment with a health practitioner via a website
- 06 ☐ Using services related to travel or travel-related accommodation
- 07 ☐ Interacting with general government organizations
- 08 ☐ Using Government e-Services*
- 09 ☐ Internet banking
- 10 ☐ Purchasing or ordering goods or services*
- 11 ☐ Selling goods or services*
- 12 ☐ Sending or receiving e-mail
- 13 ☐ Making calls (telephoning over the Internet/VoIP)
- 14 ☐ Participating in social networks*
- 15 ☐ Taking part in online consultations or voting to define civic or political issues
- 16 ☐ Accessing or posting opinions on chat sites, blogs, newsgroups or online discussions

And 13 other symbols [12]

P5.5.1.5.OTHER. For which other activities did %rostertitle% use the Internet?

E `//Enables this question only if "Other Specify" is one o f the values selected S551P5.Contains(28)`

TEXT S551P5OTHER

.....

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.5 USE OF ICT - ALL PERSONS 5 YEARS AND OVER

5.5.2 E-COMMERCE - ALL PERSONS 15 YEARS AND OVER WHO PURCHASED GOODS/SERVICES ONLINE

P5.5.2.1. What types of goods or services did %rostertitle% buy or order over the Internet FOR PRIVATE USE in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY

Activities are not mutually exclusive, that is, there is overlap between some categories.

"Private Use" means not as part of one's current job or business.

E `age_cur >=15 && S551P5.ContainsAny(10,11)`
V1 `!S552P1.Contains(19) || S552P1.ContainsOnly(19)`
M1 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT S552P1

- 01 ☐ Books, magazines or newspapers
- 02 ☐ Clothing, footwear, sporting goods or accessories
- 03 ☐ Computer equipment or parts (including peripheral equipment)
- 04 ☐ Computer or video games
- 05 ☐ Computer software (includes upgrades and paid apps; not games)
- 06 ☐ Cosmetics
- 07 ☐ Financial products (including shares and insurance)
- 08 ☐ Food, groceries, alcohol or tobacco
- 09 ☐ ICT services (excluding software)
- 10 ☐ Medicine
- 11 ☐ Movies, short films or images
- 12 ☐ Music products
- 13 ☐ Photographic, telecommunications or optical equipment
- 14 ☐ Purchasing of services
- 15 ☐ Tickets or bookings for entertainment events (sports, theatre, concerts, etc.)
- 16 ☐ Travel products (travel tickets, accommodation, vehicle hire, transport services etc.)

And 3 other symbols [13]

P5.5.2.2. From whom was %rostertitle%'s online purchase(s) made?

E `age_cur >=15 && S551P5.ContainsAny(10,11)`

SINGLE-SELECT S552P2

- 01 ○ Merchant abroad only
- 02 ○ Local merchant only
- 03 ○ From merchants both locally and abroad
- 04 ○ Not stated

P5.5.2.3. How did %rostertitle% pay for the goods or services bought over the Internet for private use in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY

E `S551P5.ContainsAny(10,11)`
V1 `!S552P3.Contains(10) || S552P3.ContainsOnly(10)`
M1 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT S552P3

- 01 ☐ Cash on delivery
- 02 ☐ Credit card online
- 03 ☐ Debit card or electronic bank transfer online
- 04 ☐ Mobile money account (account connected to the mobile number)
- 05 ☐ Online payment service (e.g. PayPal, Google Checkout)
- 06 ☐ Prepaid gift card or online voucher
- 07 ☐ Financial products (including shares and insurance)
- 08 ☐ Points from rewards or redemption program (e.g. Air Miles)
- 09 ☐ Other (e.g. bank check by post, etc.)
- 10 ☐ Not stated

P5.5.2.4. What are the reasons %rostertitle% did not purchase goods or services on the Internet for private use in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY

E `age_cur >=15 && !S551P5.ContainsAny(10,11)`

MULTI-SELECT S552P4

- 01 ☐ Not interested in online purchases
- 02 ☐ Prefer to shop in person
- 03 ☐ Security concerns
- 04 ☐ Privacy concerns
- 05 ☐ Technical concerns
- 06 ☐ Trust concerns
- 07 ☐ Lack of confidence, knowledge or skills
- 08 ☐ Institutional barriers (customs charges, taxes, duties)
- 09 ☐ Personal reasons
- 10 ☐ Not stated

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.5 USE OF ICT - ALL PERSONS 5 YEARS AND OVER

5.5.3 E-GOVERNMENT - ALL PERSONS 15 YEARS AND OVER WHO USED E-GOV'T SERVICES

E `age_cur >=15 && S551P5.Contains(8)`

P5.5.3.1. Which of the following online e-Government services has %rostertitle% used in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY

V1 `!S553P1.Contains(10) || S553P1.ContainsOnly(10)`

M1 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT S553P1

- 01 ☐ Grant applications (NIB, MSDFS, UAP)
- 02 ☐ TT Connect
- 03 ☐ TT Bizlink Services
- 04 ☐ eTax
- 05 ☐ GATE
- 06 ☐ Utility bill payments (T&TEC/WASA)
- 07 ☐ Applications for BIR, birth certificates, national ID, marriage certificate
- 08 ☐ GovPay (e.g. courtPay)
- 09 ☐ Other
- 10 ☐ Not stated

P5.5.3.1.OTHER. Which other e-Government services did %rostertitle% use in the LAST 3 MONTHS?

E `S553P1.Contains(9)`

TEXT S553P1OTHER

.....

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.6 OVER THE TOP MEDIA SERVICES - ALL PERSONS FIVE YEARS AND OVER

E `age_cur >=5`

STATIC TEXT

Over The Top (OTT) services are third-party mobile APP-based voice and video call services such as WhatsApp, Facetime, Skype etc.

P5.6.1. Which of the following services has %rostertitle% used in the LAST 3 MONTHS?

PLEASE SELECT ALL THAT APPLY

Over The Top (OTT) services are third-party mobile APP-based voice and video call services such as WhatsApp, Facetime, Skype etc.

V1 //Either "None" not selected // or " None" is the only answer selected !S56P1.Contains(1) || S56P1.ContainsOnly(1)

M1 IF YOU SELECT NONE, IT MUST BE THE ONLY ITEM SELECTED

V2 !S56P1.Contains(18) || S56P1.ContainsOnly(18)

M2 IF YOU SELECT NOT STATED, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT S56P1

- 01 ☐ None
- 02 ☐ WhatsApp
- 03 ☐ Facetime
- 04 ☐ Skype
- 05 ☐ iMessaging
- 06 ☐ Google Voice
- 07 ☐ Signal
- 08 ☐ Telegram
- 09 ☐ Google Meet
- 10 ☐ Instagram
- 11 ☐ WeChat
- 12 ☐ Discord
- 13 ☐ Facebook Messenger
- 14 ☐ Microsoft Teams
- 15 ☐ Zoom
- 16 ☐ Bluejeans

And 2 other symbols [11]

P5.6.1.OTHER. Other OTT services %rostertitle% used?

E S56P1.Contains(17)

TEXT S56P1OTHER

.....

P5.6.2. Why does %rostertitle% not use OTT services?

E S56P1.Contains(1)

MULTI-SELECT S56P2

- 01 ☐ Not familiar with OTT
- 02 ☐ Quality of service is poor
- 03 ☐ Mobile data not available in my mobile package
- 04 ☐ Mobile data is too limited or too expensive for OTT use
- 05 ☐ The cost and availability of minutes in my mobile package are sufficient for all voice calls
- 06 ☐ Security and privacy concerns associated with OTT use
- 07 ☐ Legal and technical concerns associated with OTTs
- 08 ☐ Personal preference
- 09 ☐ Other

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.6 OVER THE TOP MEDIA SERVICES - ALL PERSONS FIVE YEARS AND OVER

OTT USERS - ALL PERSONS 15 YEARS AND OVER

E !S56P1.Contains(1) && age_cur >= 15

P5.6.3. Please RANK how %rostertitle% typically accesses OTT services?

OPTIONS MUST BE RANKED BY SELECTING ANSWERS IN ORDER OF PREFERENCE.

MULTI-SELECT: ORDERED S56P3

- 01 ☐ 1. Mobile Device Data Plan
- 02 ☐ 2. Wi-Fi: Home
- 03 ☐ 3. Wi-Fi: Place of Employment
- 04 ☐ 4. Wi-Fi: Public Access e.g. TT Wi-Fi, Shops, Restaurants
- 05 ☐ Not stated

P5.6.4. How frequently does %rostertitle% typically use OTT call and/ message services?

SINGLE-SELECT S56P4

02 ○ Daily
03 ○ Weekly
04 ○ Monthly
05 ○ Not stated

P5.6.5. On average, how many MINUTES do you spend calling and messaging using your OTT app?

NUMERIC: INTEGER S56P5

_ .

P5.6.6. On average, how many MINUTES do you spend calling and messaging using your OTT app ON WiFi?

NUMERIC: INTEGER S56P6

_ .

P5.6.7. Please RANK the percieved advantages of %rostertitle%'s OTT services over mobile calls and SMS. A MAXIMUM OF 3 OPTIONS CAN BE SELECTED.

OPTIONS MUST BE RANKED BY SELECTING ANSWERS IN ORDER OF PREFERENCE.

MAXIMUM OF THREE RESPONSES.

V1 `!S56P7.Contains(9) || S56P7.ContainsOnly(9)`

M1 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT: ORDERED S56P7

01 ☐ Quality of service is better
02 ☐ Quality of user-interface is better
03 ☐ Ability to share documents and photos
04 ☐ Ability to share and view statuses and user profiles
05 ☐ Ability to use OTT services without credit (WiFi offloading)
06 ☐ Availability of read receipts (know when messages are read or not)
07 ☐ Cost savings
08 ☐ Other (please specify)
09 ☐ Not stated

P5.6.7.OTHER. What other specific advantage of OTT services does %rostertitle% enjoy compared to mobile calls and SMS?

E `S56P7.Contains(8)`

TEXT S56P7OTHER

.....

P5.6.8. Please RANK the perceived advantages of %rostertitle%'s Fixed Line service over mobile services.

OPTIONS MUST BE RANKED BY SELECTING ANSWERS IN ORDER OF PREFERENCE.

E `S4H1.Contains(1) && S55P2 <= 2`

MULTI-SELECT: ORDERED S56P8

01 ☐ Quality of service is better (call quality consistently clear throughout call)
02 ☐ Cost (cheaper monthly plan)
03 ☐ Device is larger (easier to answer the phone and dial the number)
04 ☐ Calling possible when electricity goes
05 ☐ Other (please specify)
06 ☐ No advantage

P5.6.7.OTHER. Other specific advantage of fixed line over mobile service.

E `S56P8.Contains(5)`

TEXT S56P8OTHER

.....

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.7 TELEVISION & RADIO CONTENT - ALL PERSONS TEN YEARS AND OVER

E `(age_cur >=10) && ( S44H1B > 0) || (S44H1A > 0)`

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.7 TELEVISION & RADIO CONTENT - ALL PERSONS TEN YEARS AND OVER

TELEVISION

E `S44H1B >0`

P5.7.1. What type of television and online streaming content does %rostertitle% prefer? PLEASE RANK SELECTIONS.

PLEASE SELECT ALL THAT APPLY

MAXIMUM OF 5 CAN BE SELECTED.

V1 `//Either "None not selected // or " None " is the only answer selected !S57P1.Contains(17) || S57P1.ContainsOnly(17)`

M1 IF YOU SELECT NONE, IT MUST BE THE ONLY ITEM SELECTED

V2 `!S57P1.Contains(18) || S57P1.ContainsOnly(18)`

M2 IF YOU SELECT NOT STATED, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT: ORDERED — S57P1

- 01 ☐ News
- 02 ☐ Non-Fiction documentaries and infomercials
- 03 ☐ Movies
- 04 ☐ Sitcoms and comedies
- 05 ☐ Religious programming
- 06 ☐ Game shows
- 07 ☐ Soap operas
- 08 ☐ Cartoons and other animation
- 09 ☐ Sports
- 10 ☐ Action, adventure, crime and/or fantasy series
- 11 ☐ Local content and cultural programming
- 12 ☐ Ministry of Education Programming (Channel 4/104)
- 13 ☐ Current and Social Affairs (TTT, Parliament)
- 14 ☐ Home and garden, cooking
- 15 ☐ Adult content
- 16 ☐ Other

And 2 other symbols [14]

P5.7.2. What is your preferred day for viewing television?

PLEASE SELECT ALL THAT APPLY

V1 `!S57P2.Contains(8) || S57P2.ContainsOnly(8)`

M1 IF YOU SELECT NO PREFERRED DAY, IT MUST BE THE ONLY ITEM SELECTED

V2 `!S57P2.Contains(9) || S57P2.ContainsOnly(9)`

M2 IF YOU SELECT NOT STATED, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT — S57P2

- 01 ☐ Sunday
- 02 ☐ Monday
- 03 ☐ Tuesday
- 04 ☐ Wednesday
- 05 ☐ Thursday
- 06 ☐ Friday
- 07 ☐ Saturday
- 08 ☐ No preferred day
- 09 ☐ Not stated

P5.7.3 What is your preferred time for viewing television? PLEASE SELECT ALL THAT APPLY

V1 `!S57P3.Contains(5) || S57P3.ContainsOnly(5)`

M1 IF YOU SELECT NO PREFFERED TIME, IT MUST BE THE ONLY ITEM SELECTED

V2 `!S57P3.Contains(6) || S57P3.ContainsOnly(6)`

M2 IF YOU SELECT NOT STATED, IT MUST BE THE ONLY ITEM SELECTED

MULTI-SELECT — S57P3

- 01 ☐ Mornings (6am – 10am)
- 02 ☐ Daytime (10am – 6pm)
- 03 ☐ Prime time (6pm – 10pm)
- 04 ☐ Late nights/early morning (10pm – 6am)
- 05 ☐ No preferred time
- 06 ☐ Not stated

P5.7.4. Does %rostertitle% listen to radio?

SINGLE-SELECT — S57P4

- 01 ○ Yes
- 02 ○ No
- 03 ○ Not stated

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS / 5.7 TELEVISION & RADIO CONTENT - ALL PERSONS TEN YEARS AND OVER

5.7.B. RADIO

E `S44H1A > 0 && S57P4 ==1`

P5.7.5. Please RANK %rostertitle%'s preferred radio stations? A MAXIMUM OF 5 CAN BE SELECTED.

OPTIONS MUST BE RANKED BY SELECTING ANSWERS IN ORDER OF PREFERENCE.

V1 `!S57P5.Contains(36) || S57P5.ContainsOnly(36)`

M1 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT: ORDERED S57P5

01 ☐ 89.5 (Pulse 89.5 FM)
02 ☐ 90.1 (WACK Radio 90.1 FM)
03 ☐ 90.5 (Central Radio)
04 ☐ 91.1 (Talkcity 91.1 FM)
05 ☐ 91.9 (The Street 91.9 FM)
06 ☐ 92.3 (Taj 92.3 FM)
07 ☐ 92.7 (Radio Tambrin 92.7 FM)
08 ☐ 93.5 (Hott 93.5 FM)
09 ☐ 94.1 (Boom Champions)
10 ☐ 94.7 (STAR 94.7 FM)
11 ☐ 95.1 (The best mix 95.1FM)
12 ☐ 95.5 (i95.5 FM)
13 ☐ 96.1 (WE FM)
14 ☐ 96.7 (Red 96.7 FM)
15 ☐ 97 (Music Radio 97 FM)
16 ☐ 97.5 (U97.5 FM)

And 20 other symbols [15]

P5.7.6. What is your preferred day for listening to radio? PLEASE SELECT ALL THAT APPLY

V1 `!S57P6.Contains(8) || S57P6.ContainsOnly(8)`

M1 IF YOU SELECT LISTEN ONLY WHILE COMMUTING , IT MUST BE THE ONLY ITEM SELECTED

V2 `!S57P6.Contains(9) || S57P6.ContainsOnly(9)`

M2 IF YOU SELECT NO PREFERRED DAY, IT MUST BE T HE ONLY ITEM SELECTED

V3 `!S57P6.Contains(10) || S57P6.ContainsOnly(10)`

M3 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT S57P6

01 ☐ Sunday
02 ☐ Monday
03 ☐ Tuesday
04 ☐ Wednesday
05 ☐ Thursday
06 ☐ Friday
07 ☐ Saturday
08 ☐ Listen while commuting only
09 ☐ No preferred day (any day)
10 ☐ Not stated

P5.7.7. What is your preferred time for listening to radio? PLEASE SELECT ALL THAT APPLY

V1 `!S57P7.Contains(6) || S57P7.ContainsOnly(6)`

M1 IF YOU SELECT NO PREFERRED TIME, IT MUST BE THE ONLY ITEM SELECTED

V2 `!S57P7.Contains(7) || S57P7.ContainsOnly(7)`

M2 IF YOU SELECT NOT STATED, IT MUST BE THE ON LY ITEM SELECTED

MULTI-SELECT S57P7

01 ☐ Mornings (6am – 10am)
02 ☐ Daytime (10am – 3pm)
03 ☐ Evening/Prime time (3pm – 6pm)
04 ☐ Nights (6pm – 12am)
05 ☐ Early Morning (12am – 6am)
06 ☐ No preferred time (any time)
07 ☐ Not stated

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.8 CUSTOMER PERCEPTION - ALL PERSONS 15 YEARS AND OVER

E `age_cur >=15`

P5.8.3. Using a scale of 1 to 5 where 1 represents Very Dissatisfied and 5 Very Satisfied , how satisfied you with the quality of your radio reception?

E `S57P4 ==1`

SINGLE-SELECT S58P3

01 ○ 1. Very dissatisfied
02 ○ 2. Dissatisfied
03 ○ 3. Neither satisfied nor dissatisfied
04 ○ 4. Satisfied
05 ○ 5. Very Satisfied
06 ○ 6. Cannot say

P5.8.4. Using a scale of 1 to 5 where 1 represents Very Dissatisfied and 5 Very Satisfied , how satisfied you with the quality of your FREE TO AIR TV reception?

E S44H1B > 0

SINGLE-SELECT S58P4A

01 ○ 1. Very dissatisfied
02 ○ 2. Dissatisfied
03 ○ 3. Neither satisfied nor dissatisfied
04 ○ 4. Satisfied
05 ○ 5. Very Satisfied
06 ○ 6. Cannot say

SECTION 5: INDIVIDUALS / 5.0 HOUSEHOLD MEMBER DETAILS

5.9 TRUST AND SATISFACTION WITH ICT

E age_cur >=15

P5.9.1. Using a scale of 1 to 5 where one represents Very Uncomfortable and 5 Very Comfortable, how comfortable is %rostertitle% that personal information provided when conducting ANY ONLINE TRANSACTION is secure?

E age_cur >= 15 && S550P1==1

SINGLE-SELECT S59P1

01 ○ 1. Very uncomfortable
02 ○ 2. Uncomfortable
03 ○ 3. Neither uncomfortable or comfortable
04 ○ 4. Comfortable
05 ○ 5. Very comfortable
06 ○ 6. Cannot say

P5.9.2. Does %rostertitle% generally trust the information received via social media? (WhatsApp, Facebook etc.)?

E age_cur >=15 && S551P5.Contains(14)

SINGLE-SELECT S591P2

01 ○ I trust fully
02 ○ I trust sowewhat
03 ○ I do not trust at all
04 ○ Not stated

P5.9.3. Using a scale of 1 to 5 where one represents Very Uncomfortable and 5 Very Comfortable, how comfortable is %rostertitle% with the e-government services used?

E age_cur >= 15 && S551P5.Contains(8)

SINGLE-SELECT S59P3

01 ○ 1. Very uncomfortable
02 ○ 2. Uncomfortable
03 ○ 3. Neither uncomfortable or comfortable
04 ○ 4. Comfortable
05 ○ 5. Very comfortable
06 ○ 6. Cannot say

P5.9.4. Which of the following statements best describes %rostertitle%'s opinion with respect to making online credit card payments?

E age_cur >=18

SINGLE-SELECT S59P4

01 ○ I own a credit card and make payments online using my credit card
02 ○ I own a credit card but will not make payments online for security reasons
03 ○ I do not own a credit card but will make online payments with my credit card if/when I get one
04 ○ I do not own a credit card but will not make payments online for security reasons if/when I get one
05 ○ Not stated

STATIC TEXT

We appreciate the time you have taken to respond to the survey and we thank you for your cooperation on behalf of TATT and all other stakeholders.

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