



SPECIAL RELEASE

Internet Access of Households in the Cordillera Administrative Region (2020 Census of Population and Housing)

Date of Release: December 23, 2024

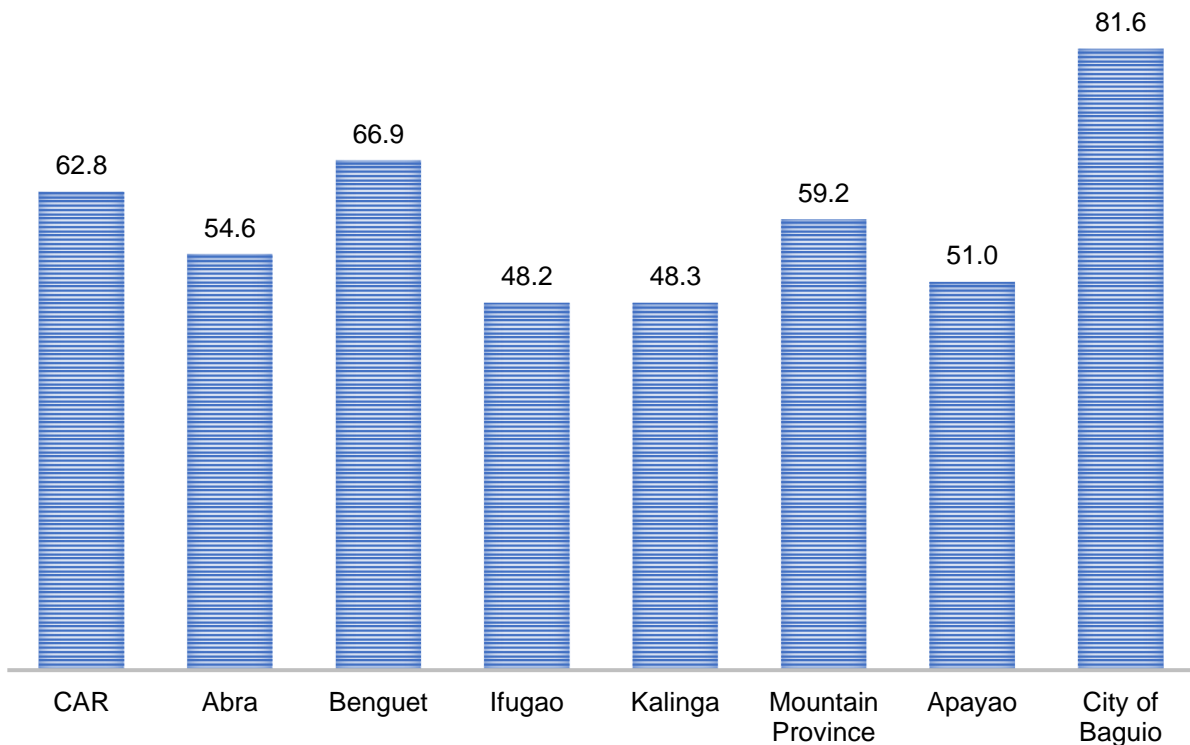
Reference No. SSR 2024-38

The 2020 Census of Population and Housing (2020 CPH) took a snapshot of the Philippine population as of May 1, 2020. Pursuant to Proclamation No. 1179, s. 2021 signed on July 6, President Duterte has declared official for all purposes the population counts by province, city/municipality, and barangay.

One-third of Cordilleran households have internet access

Out of the 439,102 households in the Cordillera region, 62.8% (275,777 households) reported having internet access.

**Figure 1. Proportion of Households with Internet Access by Province/City, CAR: 2020
(In Percent)**



Source: Philippine Statistics Authority, 2020 Census of Population and Housing



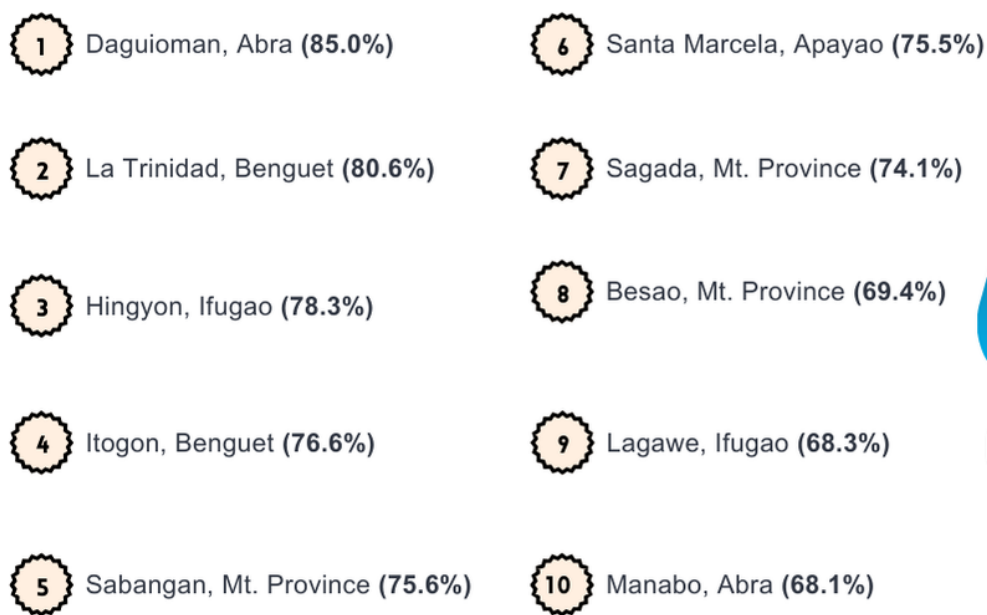
Among the provinces/city, the City of Baguio had the highest proportion of households with internet access with 81.6%, followed by Benguet with 66.9% and Mountain Province with 59.2%.

The top five municipalities with the highest proportion of households with internet access in 2020 were:

- a. Daguioman, Abra, with 85.0%;
- b. La Trinidad, Benguet, with 80.6%;
- c. Hingyon, Ifugao, with 78.3%;
- d. Itogon, Benguet with, 76.6%; and
- e. Sabangan, Mountain Province, with 75.6%.

Ifugao had the lowest proportion of households with internet access with 48.2%. It was recorded that the municipality of Hungduan had the lowest percentage of households with internet access with 3.28%.

Figure 1. Top 10 Municipalities with Highest Proportion of Households Having Internet Access, CAR: 2020



Source: Philippine Statistics Authority

Baguio City tops internet access

The City of Baguio had the largest share of households with internet access in the Cordillera region, representing 28.3% of the total. The province of Benguet was the second with a 28.3% share, while Abra came third with 11.7%.

Apayao had the smallest share, with only 5.3% of households having internet access.

Table 1. Number and Percent Distribution of Households with Internet Access by Province/City, CAR: 2020

Province/City	Number of Households*	Households with Internet Access	
		Number	Percent
CAR	439,102	275,777	100.0
Abra	58,954	32,213	11.7
Benguet	116,658	78,077	28.3
Ifugao	48,756	23,519	8.5
Kalinga	48,077	23,205	8.4
Mountain Province	37,600	22,276	8.1
Apayao	28,855	14,714	5.3
City of Baguio	100,202	81,773	29.7

*Note: *Excludes households enumerated in temporary relocation areas, households enumerated as homeless, and households living in other types of buildings (e.g., bus/trailer, boat, tent, etc.)*

Source: Philippine Statistics Authority

The top five municipalities in CAR with the largest share of households having internet access were:

- a. La Trinidad, Benguet, with 10.8%;
- b. City of Tabuk, Kalinga, with 5.8%;
- c. Itogon, Benguet, with 4.2%;
- d. Tuba, Benguet, with 2.9%; and
- e. Bangued, Abra, with 2.8%

Figure 2. Top Ten Municipalities with Largest Share of Households Having Internet Access, CAR: 2020

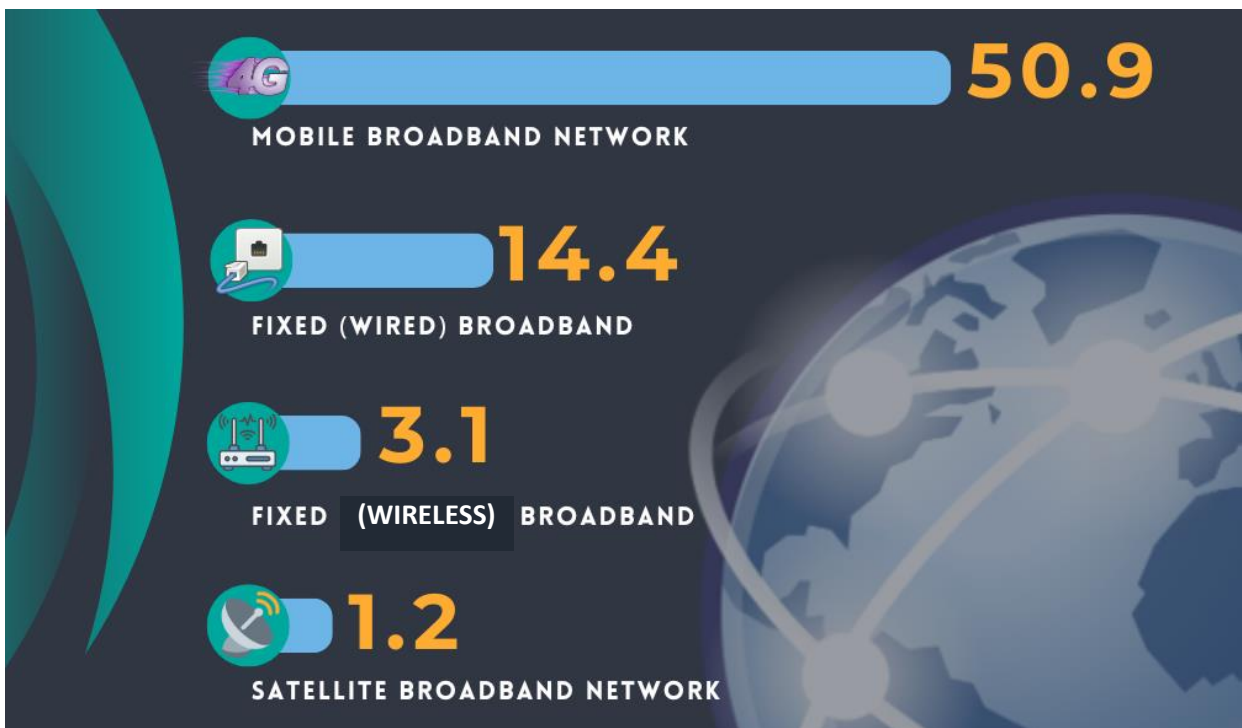


Source: Philippine Statistics Authority, 2020 Census of Population and Housing

Mobile broadband network dominates internet connection in CAR

It was reported that 50.9% of households accessed the internet through a mobile broadband network, which includes connections via a handset, SIM card (Integrated Subscriber Identity Module), or USB modem.

Figure 3. Percent Distribution of Households with Internet Access by Type of Connection, CAR: 2020



Source: Philippine Statistics Authority, 2020 Census of Population and Housing

Conversely, 14.4% of households reported having an internet connection through a fixed (wired) narrowband or broadband network. Meanwhile, 3.1% of households accessed the internet via a fixed (wireless) broadband network, and 1.2% used a satellite broadband connection.

Among all households in the region that reported mobile broadband as their primary type of internet connection, Benguet had the highest proportion, with 29.8% of the total 226 thousand households. It was followed by the City of Baguio with 22.3%, and Abra with 12.5%.

Table 2. Number and Percent Distribution of Households with Internet Access by Type of Connection and Province/City, CAR: 2020

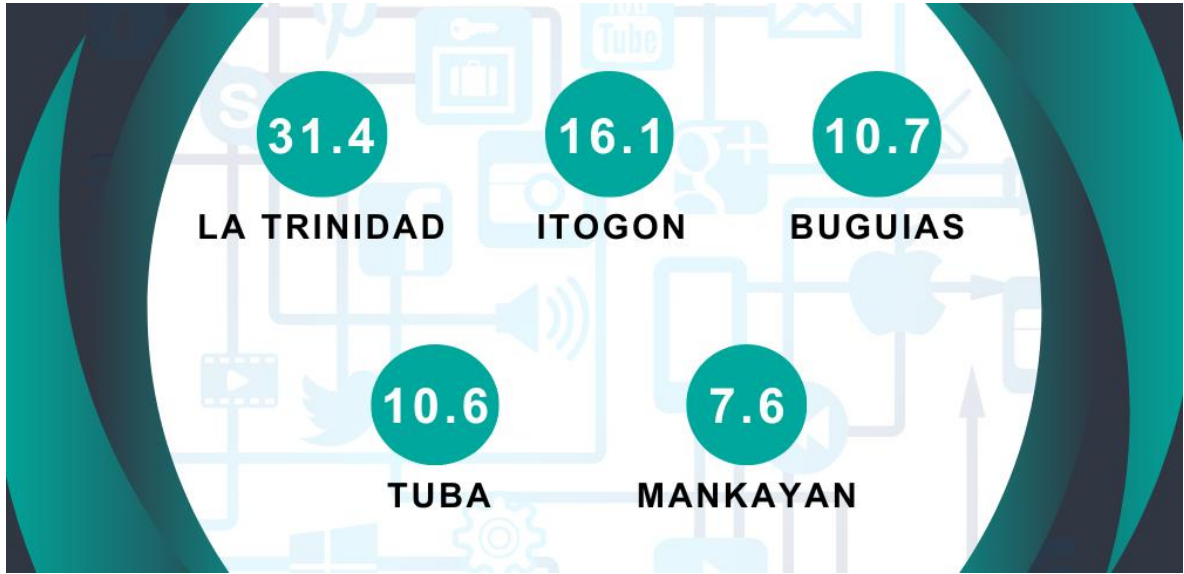
Province/City	Type of Internet Connection			
	Fixed (wired) Broadband		Fixed (wireless) Broadband	
	Number	Percent	Number	Percent
CAR	63,094	100.0	13,700	100.0
Abra	4,077	6.5	1,660	12.1
Benguet	13,713	21.7	3,430	25.0
Ifugao	1,059	1.7	604	4.4
Kalinga	2,868	4.5	1,060	7.7
Mountain Province	512	0.8	343	2.5
Apayao	493	0.8	160	1.2
City of Baguio	40,371	64.0	6,442	47.0

Table 2 -continued

Province/City	Type of Internet Connection			
	Satellite Broadband Network		Mobile Broadband Network	
	Number	Percent	Number	Percent
CAR	5,059	100.0	223,513	100.0
Abra	977	19.3	27,999	12.5
Benguet	791	15.6	66,512	29.8
Ifugao	559	11.0	22,334	10.0
Kalinga	450	8.9	20,651	9.2
Mountain Province	934	18.5	21,746	9.7
Apayao	254	5.0	14,347	6.4
City of Baguio	1,094	21.6	49,925	22.3

Source: Philippine Statistics Authority, 2020 Census of Population and Housing

Figure 4. Top Five Municipalities with Highest Proportion of Households using Mobile Broadband for Internet Access, Benguet: 2020



Source: Philippine Statistics Authority, 2020 Census of Population and Housing

Among the municipalities in Benguet, La Trinidad had the highest proportion who used mobile broadband for their internet access with 31.4%, followed by Itoigon with 16.1%, and Buguias with 10.7%.

The City of Baguio had the highest proportion of households with fixed (wired) broadband, making up 64.0% of the total 63,000 households. Benguet followed with 21.7%, while Abra had 6.5%. The same provinces/city top those reporting fixed (wireless) broadband networks as their main type of internet connection.

For satellite broadband connections, the City of Baguio had the highest share, accounting for 21.6%. It was followed by Abra with 19.3% and Mountain Province with 18.5%.

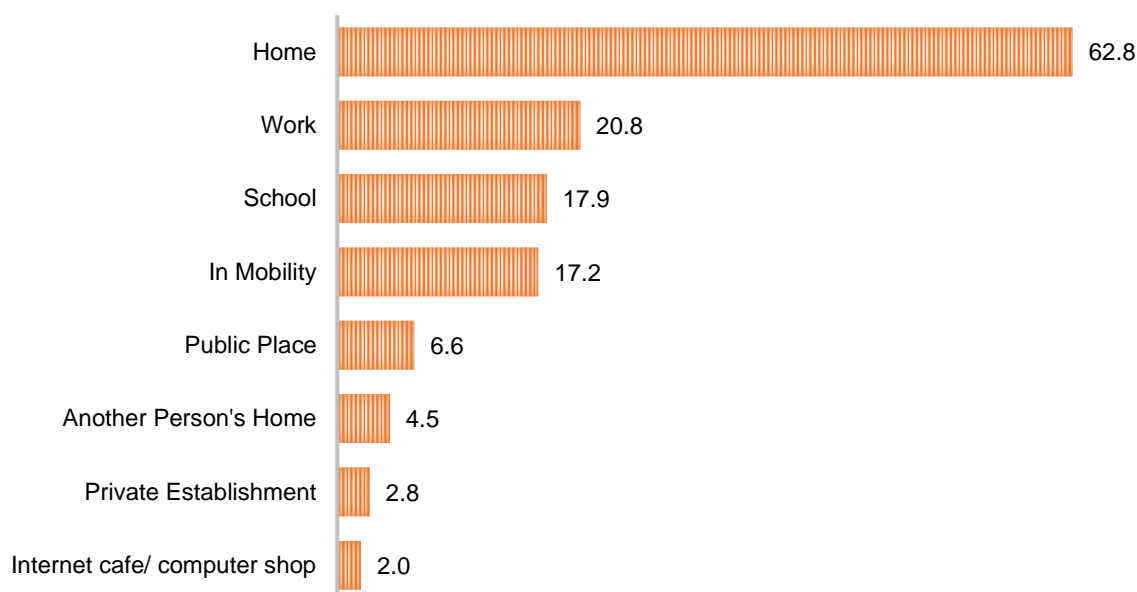
Over 50% of households access the internet at home

In 2020, most Cordilleran households accessed the internet at home, with 62.8% reporting home as their primary connection point. This was followed by 20.8% who used the internet at their workplace, and 17.2% who accessed it on the go via mobile cellular phones or other handheld devices connected to a mobile network.

More than 80% of households own a mobile phone in Cordillera

Mobile phones were the most common household convenience/ICT device in the Cordillera region, found in 88.6% of households. This was followed by televisions at 73.7% and washing machines at 49.3%. The top five household devices also included refrigerators/freezers at 48.4%, and radios/radio cassettes (AM, FM, and transistor) at 46.5%.

Figure 5. Percent of Households Using Internet by Location, CAR: 2020



Source: Philippine Statistics Authority

Table 3. Household Conveniences/ICT Devices/Vehicles Owned by Households, CAR: 2020

Household Conveniences/ICT Devices/ Vehicles	Number of Households*	Percent
Total	439,102	100.0
Mobile phone	389,092	88.6
Television	323,819	73.7
Washing Machine	216,642	49.3
Refrigerator/ freezer	212,510	48.4
Radio/radio cassette (AM FM and transistor)	204,224	46.5
Electric fan and other cooling equipment	178,631	40.7
Motorcycle/motor scooter/tricycle	133,520	30.4
Stove with oven/gas range	128,936	29.4
Personal Computer (desktop laptop notebook netbook and others)	117,394	26.7
CD/DVD/VCD player	84,640	19.3
Tablet	82,865	18.9
Car/van/jeep/truck	75,844	17.3
Microwave oven	52,705	12.0
Audio component/stereo set/karaoke	45,321	10.3
Landline/wireless telephone	34,710	7.9
Bicycle/pedicab	22,302	5.1
Air Conditioner	11,180	2.5
Nonmotorized boat/banca	2,733	0.6
Motorized boat/ banca	1,857	0.4

Note: *Excludes households enumerated in temporary relocation areas, households enumerated as homeless, and households living in other types of buildings (e.g., bus/trailer, boat, tent, etc.)

Source: Philippine Statistics Authority, 2020 Census of Population and Housing

The statistics presented in this report are based on information provided by the respondent or another responsible household member capable of providing accurate answers and relevant details about the household. Additionally, the total of 439,102 households described in this report excludes those located in relocation areas, those identified as homeless, and those residing in unconventional dwellings (e.g., buses/trailers, boats, tents, etc.).

The following data items were collected by enumerators from a sample of 20% of the total households in the enumeration areas, using either CPH Form 3 (Sample Household Questionnaire) or CPH Form 7 (Self-Administered Questionnaire for Sample Households):

1. Presence of household conveniences/information and communication technology devices/vehicles (“Does this household have the following household conveniences/information and communication technology devices/vehicles in working condition?”)
2. Internet access (“What type/s of internet access is/are available at home?”)
3. Internet use (“Where did this household member/s use the internet in the last three (3) months?”)

VILLAFE P. ALIBUYOG

Regional Director

Designation	Initials	Date
CSS	AFRB	23 Dec 2024
IO I	RJPA	
OPC	JPL	6 Dec 2024

I. Method of Enumeration

The population and housing censuses in the Philippines are conducted on a “de jure” basis, wherein a person is counted in the usual place of residence or the place where the person usually resides. The enumeration of the population and collection of pertinent data in the 2020 CPH referred to all living persons as of 01 May 2020.

Information on household characteristics contained in this release are based on the information provided by the household respondents and by observation of the enumerator during the data collection of the 2020 CPH.

The data were collected using CPH Form 3 (Sample Household Questionnaire) and CPH Form 7 (Self-Administered Questionnaire for Sample Household).

The items for the sample household questionnaire were administered through questions asked by the enumerator, which are as follows:

1. Household Conveniences/ICT Devices/Vehicles (“Does this household have the following household conveniences/devices/vehicles in working condition?”)

Household conveniences

- a) Refrigerator/freezer
- b) Stove with oven/gas range
- c) Microwave oven
- d) Washing machine
- e) Air conditioner
- f) Electric fan and other cooling equipment

ICT Devices

- g) Radio/radio cassette (AM, FM, and transistor)
- h) Television
- i) CD/VCD/DVD player
- j) Audio component/stereo set/karaoke/videoke
- k) Landline/wireless telephone
- l) Mobile phone
- m) Tablet
- n) Personal computer (desktop, laptop, notebook, netbook, and others)

Vehicles

- o) Car/van/jeep/truck
- p) Motorcycle/motor scooter/tricycle
- q) Bicycle/pedicab
- r) Motorized boat/banca
- s) Nonmotorized boat/banca

2. Internet Access and Use (“What type/s of Internet access is/are available at home?”)

- a. Fixed (wired) narrowband/broadband network
- b. Fixed (wireless) broadband network
- c. Satellite broadband network
- d. Mobile broadband network

3. For Internet Use, the respondents were asked (“Where did this household member/s use the Internet in the last three (3) months?”)

- a. Home
- b. Work
- c. School
- d. Another person’s home
- e. Public place
- f. Private establishment
- g. Internet cafe/computer shop
- h. In mobility

II. Sampling Scheme

The 2020 CPH was carried out using a combination of complete enumeration and sampling. The sampling rate or the proportion of households selected as sample households was 20 percent.

The sampling rate for the city/municipality is applied to all enumeration areas (EAs) in the city/municipality. Each city/municipality was treated as a domain to obtain efficient and accurate population and housing estimates at the city/municipality level. A 20 percent systematic cluster sampling rate was adopted to minimize the enumerator’s selection bias.

In this sampling scheme, an EA was divided into clusters composed of five households each. Clusters were formed by grouping five households, assigned with consecutive numbers as they were listed. A sample selection of one in every five clusters of households was carried out, with the first cluster selected randomly. A random start was predetermined for each EA.

III. Estimation Procedure

The estimation procedure produces a set of household weights. The weights for each sample household corresponds to the number of households that the total household represents. These weights are applied to the sample data to produce estimates from the sample questionnaire. Estimates are summary measures calculated from the sample for various characteristics of interest.

Household weight is computed at the city/municipal level. Compute the household weight as the inverse of probability of inclusion at the city/municipality level. This can be done by determining the probability of inclusion for each city/municipality and then taking the inverse of this probability.

The inverse of probability of inclusion is computed:

$$HHwgt_i = \frac{N_i}{n_{ij}}$$

where:

N_i = total number of households in the i^{th} city/municipality

n_{ij} = total number of sample households in the i^{th} city/municipality

$HHwgt_i$ = household weight for all households in the i^{th} city/municipality

The computed household weight at the city/municipality level was further calibrated to ensure that the resulting tables will conform to that of the household distribution in terms of tenure status of the housing unit/lot.

IV. Definition of Terms

Household

A social unit consists of a person or a group of persons who sleep in the same housing unit and have a common arrangement in preparing and consuming food.

Homeless

Homeless refers to individuals or households living in the streets or public spaces (such as parks and sidewalks) and all without shelter.

For 2020 CPH, those homeless or persons living in the street or public spaces who have no usual place of residence or are not certain to be enumerated elsewhere listed where they were found.

Presence of Household Conveniences/Information and Communication Technology (ICT) Devices/Vehicles

This item provides information on selected housing conveniences, information, and communications technology (ICT) devices, and vehicles, the presence of which in the household indicates the means of communication through which the population can be most easily reached. This also provides a basis for leisure statistics. The presence of vehicles in the household provides data about access to private transport. It can also provide information for the construction of roads/bridges and solution to traffic problems.

In general, the presence of household conveniences/devices can be used as proxy indicators in determining the socio-economic status of the household.

Excluded are household items which have not been in working condition for six months or longer (although intended to be repaired).

Also excluded are vehicles (car/jeep/van/truck, motorcycle/motor scooter/ tricycle, bicycle/pedicab, motorized banca/boat or nonmotorized banca/boat) which are used exclusively for business purposes.

Internet Access and Use

Information on this item could be used by the government and the private sector for planning purposes, that is, to enable wider and improved delivery of services and to assess its impact on the society. This item is concerned with determining the access and use of internet by households.

The **internet** is a *worldwide public computer network. It provides access to a number of communication services, including the World Wide Web and carries e-mail, news, entertainment, and data files, irrespective of the device used.*

Internet access

Internet access refers to the ability of the household to connect to the public Internet. The internet connection(s) should be working at the time of visit. The types of internet connection are the following:

- a. Fixed (wired) narrowband/broadband network

This includes internet connection via Digital Subscriber Line (DSL), cable modem, high speed leased lines, fiber-to-the home/building, powerline, and other fixed (wired) broadband. It also includes analogue modem (dial-up via standard telephone line) and Integrated Services Digital Network (ISDN).

This kind of network access is commonly provided by Internet Service Providers (ISP) such as Smart/Globe Telecommunications, PLDT Home, BayanDSL, SKYBroadband, Cablelink, and others.

If there is a WiFi access available inside the home to redistribute a fixed (wired) broadband signal, the answer in this item should be "Yes".

b. Fixed (wireless) broadband network

This includes WiMAX and fixed Code Division Multiple Access (CDMA).

c. Satellite broadband network

The main medium of transmission is a broadband two-way satellite transfer system which provides good access to the internet in even the least accessible areas.

Some of the common Satellite Broadband Service Provider are We Are IT Philippines Inc., WIT Philippines, Inc. (WIT), AZ Communications Network, Inc., TS2 SPACE, Bell Telecommunication Philippines, Inc. (BellTel), Jason Electronics Philippines Co., Inc. and others.

d. Mobile broadband network

This includes internet connection via a handset, a card (for example, integrated Subscriber Identity Module or SIM card in a computer) or USB modem.

Internet Use

The members should have used the Internet from any of the following locations in the last three months.

a. Home

The Internet should be generally available for use by all members of the household at any time, regardless of whether it is actually used.

b. Work

If the member/s' workplace is located at home, then the answer should be "Yes" to the home category only.

c. School

This only applies to students. Teachers and others who work at school should report "Work" as the place of internet use. If a school is also made available as a location for general public internet use, such use should be reported in the category "Public place".

d. Another person's home

Refers to internet use at the home of a friend, relative or neighbor.

e. Public place

Refers to internet use at community facilities such as public library, publicly provided internet kiosks, non-commercial telecentres, digital community centres, post offices and other government agencies, MRT, and others

f. Private establishment

Refers to internet use at publicly available commercial facilities such as hotel, coffee/tea shop, restaurant, and others.

g. Internet cafe/computer shop

h. In mobility

Use of the Internet while mobile, via a mobile cellular telephone (including devices with mobile telephone functionality) or other mobile access devices, for example, a laptop computer, tablet or other handheld device connected to a mobile phone network.
