

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021*

September 2022

Main Messages

- While most households in Latin America and the Caribbean use mobile broadband via smartphones, expensive fees and poor service quality pose major obstacles for potential users. In addition, power outages are a challenge for nearly 40 percent of existing mobile broadband users. Addressing the region's need for faster, cheaper, and more reliable internet connections is thus a policy and investment priority.
- There are persistent and significant gaps in digital infrastructure between countries in the region, as well as weighty rural-urban gaps within some countries. Bridging these digital divides will be key to inclusive digital transformation.
- Households with tertiary education are on average more connected (with better quality service and higher expenditures on data) compared to the rest of the population. As education level is correlated with income, digital inequalities mirror and may amplify existing social inequalities – underscoring the critical need to address them.
- Over two-thirds of connected households in the region are concerned about privacy and security when using the internet. However, households on average across Latin America and the Caribbean still reported increasing their use of the internet amid the pandemic, suggesting that neither issue poses a barrier to their internet use at present.

Introduction

Digital transformation is foundational to a green, resilient, and inclusive development trajectory for Latin America and the Caribbean. The International Telecommunications Union (ITU) estimated that a 10 percent increase in fixed broadband penetration can lead to a 1.48 percent rise in regional GDP for Latin America and the Caribbean in 2021.¹ Internet connectivity is positively correlated with increased labor force participation,² employment mobility,³ job creation, and overall job growth.⁴ Internet access also strengthens economic and social resilience by enabling access to critical public services such as education and healthcare, as well as remote work and training opportunities.

* This note was produced by Sharada Srinivasan (Digital Development Specialist, Office of the Infrastructure Chief Economist), Niccolò Comini (Digital Development Specialist), Mykhailo Koltsov (Consultant), and Natalija Gelvanovska-Garcia (Senior Digital Development Specialist) from the World Bank. The team is grateful for comments and inputs from Marcela Meléndez, Adriana Camacho, Laura Tenjo, and Pablo Hernández from the United Nations Development Programme (UNDP). The World Bank Digital Development Global Practice and the UNDP provided technical and financial support for the implementation of the High Frequency Phone Surveys.

1 The International Telecommunications Union. 2021. *The Economic Impact of Broadband and Digitization*. https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-EF.COV_ECO_IMPACT_B-2021-PDF-E.pdf.

2 Bahia, K., Castells, P., Cruz, G., Masaki, T., Pedros, X., Pfitze, T., Rodriguez-Castelan, C. and H. Winkler. 2020. *The Welfare Effects of Mobile Broadband Internet: Evidence from Nigeria*. Policy Research Working Paper, No. 9230, World Bank, Washington, DC.

3 Stevenson, B. 2006. *The Impact of the Internet on Worker Flows*. Working Paper, The Wharton School, University of Pennsylvania, Philadelphia, PA.

4 Bahia, K., Castells, P., Cruz, G., Masaki, T., Rodriguez-Castelan, C. and V. Sanfelice. 2021. *Mobile Broadband Internet, Poverty and Labor Outcomes in Tanzania*. Policy Research Working Paper, No. 9749, World Bank, Washington, DC.

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

In LAC, digital technologies can help address three structural issues: anemic productivity growth, high levels of labor market informality, and large income inequalities. Greater adoption of digital technologies is shown to lead to higher productivity levels in manufacturing.⁵ Proximity with other digitalized firms – either within individual sectors or in global value chains – can also generate positive spillovers, thus improving adoption and productivity.⁶ The expansion of digital platforms can help facilitate skilling and jobs, especially in the services sector. Finally, high quality and affordable internet access can reduce rural-urban disparities and income inequalities by enhancing access to critical services and economic opportunities for all.

However, only 60 percent of the population in LAC uses the internet,⁷ leaving two-fifths of the region's population without access to the benefits of digital connectivity. Wide within-region disparities also exist between Mexico and Central America, and within South America. 3G technologies dominate in Mexico and Central America, with an average market penetration of 51 percent. More advanced 4G technologies, in contrast, have a market penetration of only 37 percent. In South America, on the other hand, market penetration for 4G technologies is nearly 77 percent, over twice the penetration in Mexico and Central America.⁸ Past research has shown that the region's digital divide – i.e., the gap between those connected to the internet and those who are not – is attributable to a complex combination of supply and demand-side issues. Included among these are the lack of high-speed fixed broadband infrastructure, the high costs of data and devices, the lack of digital skills, and the unavailability of relevant, local-language content.⁹

The COVID-19 pandemic disrupted historical trends and introduced new ways of working and learning, among other changes. The evolving nature of the pandemic necessitated reduced mobility, alongside existing internet coverage, and brought 800 million people online for the first time globally.¹⁰ In Latin America and the Caribbean, as in other regions, non-pharmaceutical interventions implemented by governments to tackle COVID-19 mainly consisted of policies to reduce people's movement. As a result, many activities and services shifted online. Some governments pivoted to digital cash transfers to expand social safety nets. Many businesses introduced teleworking or expanded existing teleworking practices, while citizens started to rely more heavily on online sources for up-to-date information than ever before. Internet access and use are also correlated with individual and household characteristics, leading to potentially different impacts. Policymakers thus need timely and relevant information on the varying impacts of the crisis on internet users and non-users, as well as on intrinsic individual and household characteristics underlying these impacts. This information can be used to inform both short-term policy and regulatory measures, as well as longer-term strategies to rebuild their economies.

5 Dhyne, E., Konings, J., Konings, J. and S. Vanormelingen. 2018. *IT and Productivity: A Firm Level Analysis*. Working Paper Research, No. 346, National Bank of Belgium.

6 Gal, P., G. Nicoletti, T. Renault, S. Sorbe and C. Timiliotis. 2019. *Digitalisation and Productivity: In Search of the Holy Grail – Firm-Level Empirical Evidence from EU Countries*. OECD Economics Department Working Papers, No. 1533, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5080f4b6-en>.

7 ITU, 2020.

8 GSMA Intelligence, 2021.

9 After Access, 2018, <https://afteraccess.net/>.

10 ITU Facts and Figures 2021, International Telecommunications Union (2021).

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

It is in this context that the Household High Frequency Phone Surveys (HPFS) were conducted in mid-2021 by the World Bank Group and UNDP across 24 LAC countries.¹¹ The surveys gather information on multiple dimensions, such as changes in employment and income, prevalence of food insecurity, access to health, education, and financial services, access to broadband connectivity, and coping mechanisms amid COVID-19. The surveys were tailored to capture the impact of the COVID-19 pandemic in the region. A total of 28,602 households were interviewed using a Random Digital Dialing (RDD) methodology.¹² Survey estimates for each country are representative of adults¹³ with a landline or cellphone. Given that the surveys did not collect data from individuals without a cell phone or landline, the results may not mirror findings from nationally representative face-to-face surveys and must thus be interpreted with caution.

This policy note focuses primarily on access to, and use of, the internet by households in LAC. The findings provide a snapshot of how connectivity varies between rural and urban populations, and educational status of household heads. It also analyzes how users and non-users vary in their ability to access remote working opportunities, plus the kinds of occupations in which they engage. Further, it looks at the challenges to affordable internet access within the region, providing just-in-time information on the greatest constraints to its use, as well as insights into respondents' usage patterns on key digital services.

Findings based on High Frequency Phone Surveys (HFPS-2021)

Mobile broadband via smartphones is the primary means of internet access for households in LAC, but geographical disparities exist between smartphone use in urban and rural areas. On average, 95 percent of the region's households in urban areas have at least one member who has access to a smartphone. This same figure is slightly lower for households in rural areas, at 93 percent. Overall, the survey finds that Guatemala and Brazil have the highest rural-urban gaps (Figure 1). Due to the high degree of urbanization in Latin America, these gaps across the surveyed countries are much smaller than those observed in other regions. However, this does not necessarily suggest the lack of digital divides. Rather, it may be that households in rural areas are disadvantaged in their ability to access a mobile phone, leaving them out of the survey owing to the RDD methodology employed.

Two-thirds of Latin American households have fixed internet connections, which are necessary to facilitate high-capacity data transactions such as video-based calls for work or learning. While this marks an improvement from the regional pre-pandemic average of nearly 50 percent,¹⁴ disparities across countries persist (Figure 2). Seventeen countries of the 24 surveyed in LAC fall below the regional average – including Mexico, Uruguay, and

¹¹ Antigua & Barbuda, Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haití, Honduras, Jamaica, Mexico, Nicaragua, Panamá, Paraguay, Perú, Santa Lucia and Uruguay.

¹² The sample comprised 54 percent female and 46 percent male respondents, with half the sample between 30 and 54 years of age. Most – 71 percent – of respondents lived in urban areas, with the remaining from rural areas.

¹³ Those 18 years of age or older

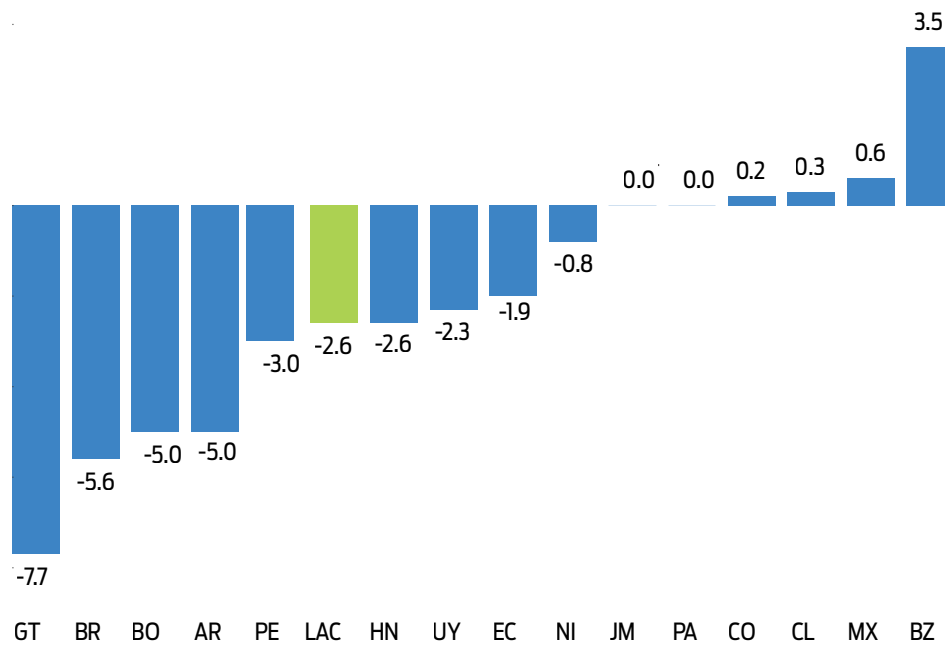
¹⁴ ITU Facts and Figures, 2019.

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Costa Rica, Haiti and Nicaragua lag other countries in the region, with only 6 percent of households in Haiti and 25 percent of households in Nicaragua having access to a fixed internet connection at home.

Figure 1: Gap in smartphone penetration between households in rural and urban areas in some LAC countries (percentage)



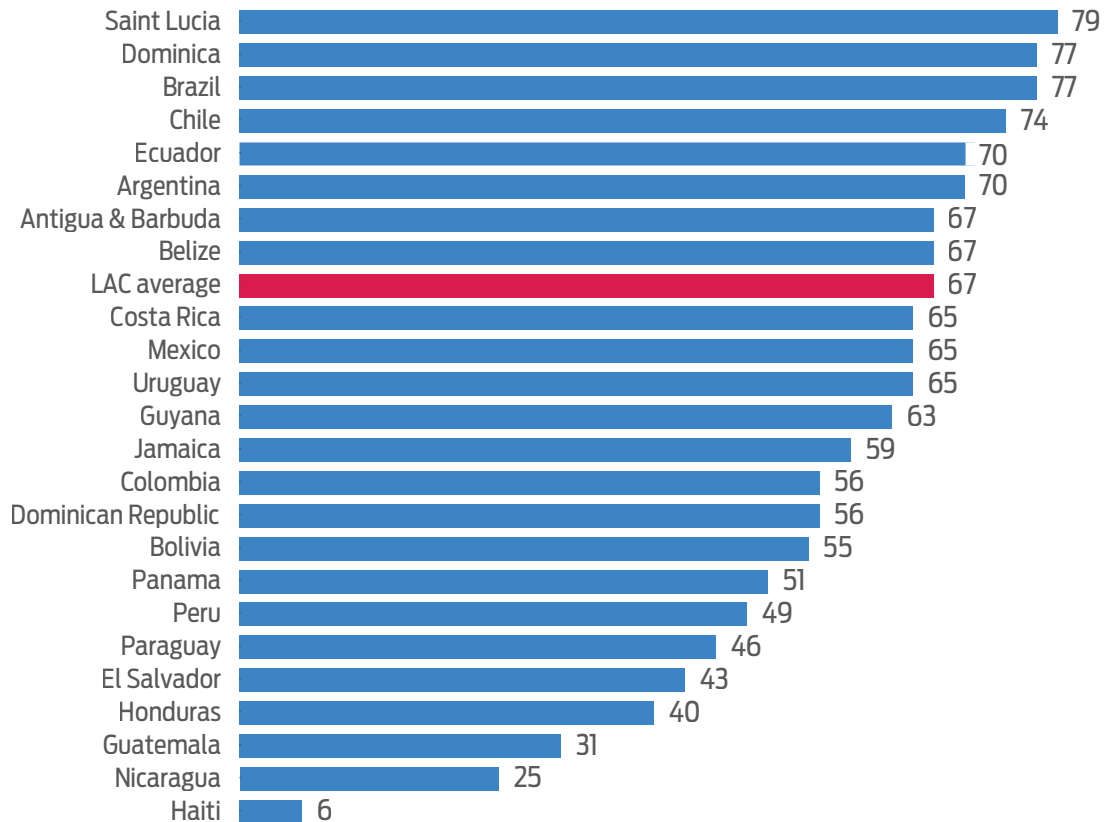
Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.¹⁵

¹⁵ Not all surveyed countries are depicted in this graph. For Antigua & Barbuda, Costa Rica, Saint Lucia, Dominica, the Dominican Republic, Guyana, El Salvador, Paraguay, and Haiti, the proportion of urban population was off by more than 10 percentage points compared to the latest household survey or population census available. Consequently, an urban-rural disaggregation for these countries may be misleading.

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 2: Percentage of households with fixed internet connection



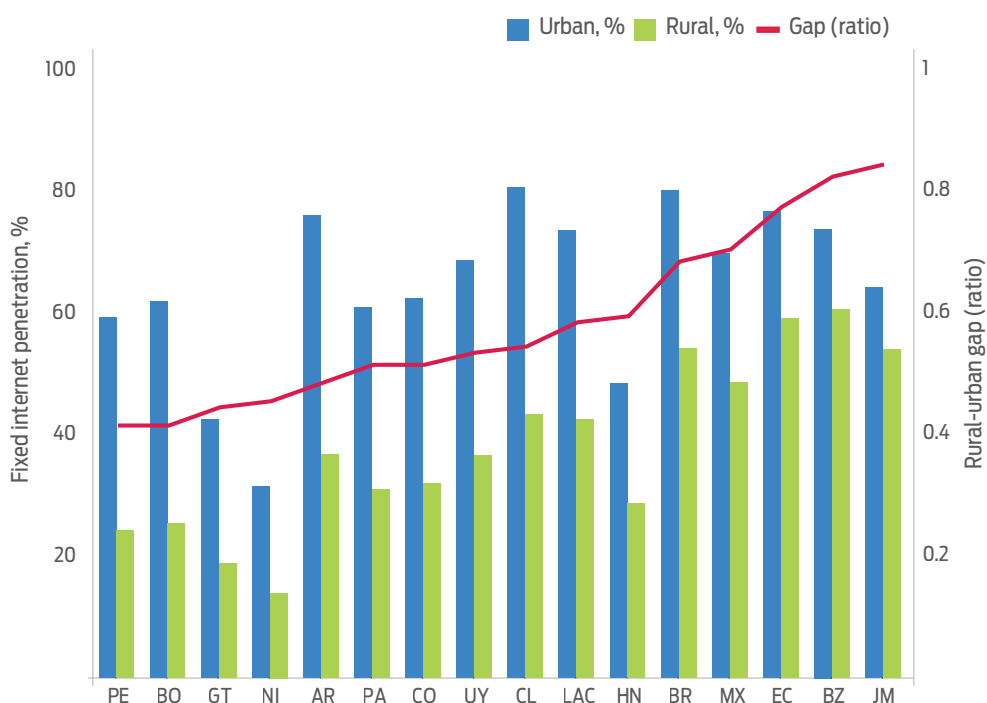
Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

As with smartphone penetration, rural households on average lag urban households in their access to fixed internet connections. This gap holds when normalized by population, land area, and income level, and may be driven by the challenges in fixed infrastructure rollout in rural areas. On average, 74 percent of the region's urban households have access to fixed internet, compared to only 42 percent of their rural counterparts (Figure 3). These rural-urban gaps are greatest in Peru and Bolivia, two countries with vast topographical variations that may prevent some mountainous regions from being connected.

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 3: Fixed internet penetration in urban and rural areas (% of households)



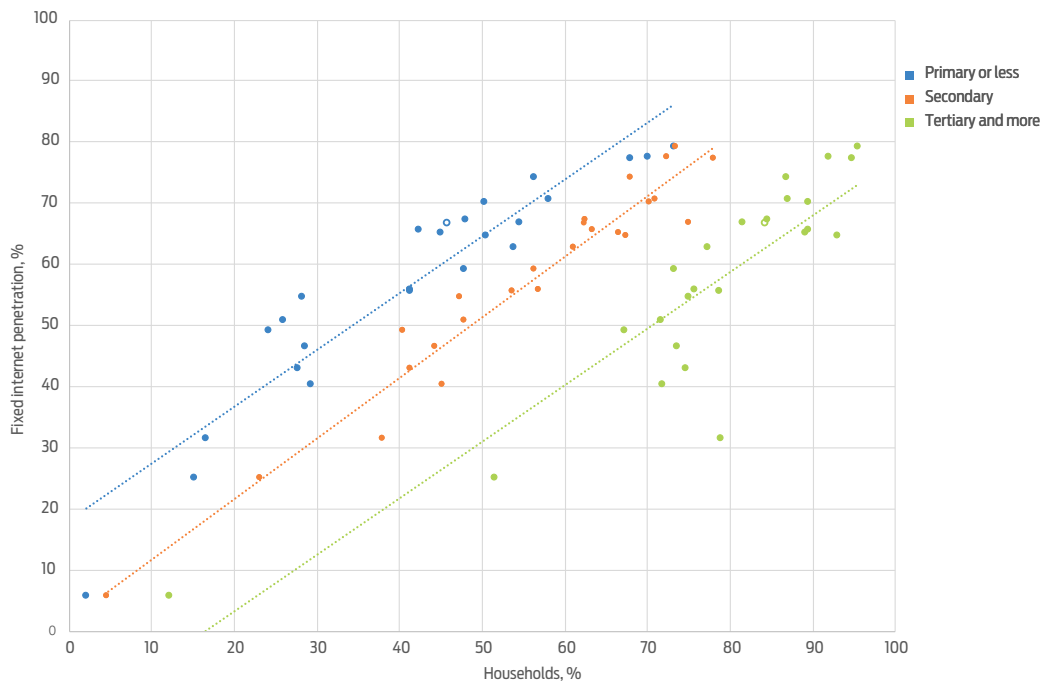
Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

Tertiary educated households are almost twice as likely to have fixed internet connections at home as those with only primary education. On average, 84 percent of households where the head received tertiary education have access to fixed internet at home, while less than 50 percent of those with primary education do (Figure 4). As the trend lines suggest, across all countries in the region, those with tertiary education (in green) have a greater share of households accessing the internet relative to households with only secondary (yellow) or primary education (blue). This may be due to higher disposable incomes enabling households to afford the internet, or a greater need for connectivity during the COVID-19 pandemic due to social distancing restrictions.

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 4: Fixed internet penetration by the household head's education level (% of households)



Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

Among surveyed households, 50 percent of those not connected to the internet by either fixed or mobile broadband pointed to the high cost of data as the main obstacle to access internet (Figure 5). This result may be driven by a combination of two factors: high data prices, on the one hand, and low income and asset levels of unconnected households, on the other. The cost of the device (12 percent), the lack of coverage (9 percent), and the lack of the necessary digital skills (6 percent) represent other reported obstacles to use. A fifth of the offline households declared no interest in, or need for, the internet. This underscores the importance of relevant content, as well as the role of national awareness programs in communicating to households the availability of relevant online services, applications, and information. These results show a shift from previously known results about barriers faced by unconnected households in Latin America and the Caribbean. Back in 2017, nationally representative surveys in seven countries suggested that lack of digital skills represented the key barrier at the time for households remaining offline.¹⁶

¹⁶ After Access, 2018. <https://afteraccess.net/>

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 5: Percentage of unconnected households reporting various obstacles to connectivity

	High Internet price	High equipment prices*	No Internet available	Poor digital skills	No need or interest	Home connection redundant
BO	24.2	4.0	34.9	5.2	18.2	9.5
AR	29.7	7.8	22.3	5.1	16.2	7.4
CL	31.1	0.0	8.6	8.8	51.4	0.0
MX	32.5	11.1	4.6	8.1	42.6	2.0
PA	37.2	9.1	13.2	4.3	26.5	4.9
GY	38.5	1.5	19.5	2.3	27.3	16.2
AG	39.8	5.7	5.9	2.9	27.6	14.1
GT	43.0	8.8	13.7	3.5	18.7	3.3
UY	45.8	0.0	7.8	9.1	24.7	22.8
LAC	49.7	12.0	8.5	6.1	27.2	3.2
BR	53.3	14.9	4.9	8.1	31.1	2.1
DO	53.8	26.4	1.4	0.3	23.6	12.9
JM	54.1	7.1	13.0	2.3	19.5	4.6
PY	56.3	6.7	8.8	3.9	15.0	1.6
DM	57.3	0.0	11.8	0.0	23.4	9.1
BZ	57.6	0.0	5.8	0.0	20.9	6.5
CR	59.6	4.3	16.7	5.8	11.2	3.4
LC	61.8	4.4	0.0	3.2	13.4	17.8
NI	64.2	1.6	17.8	5.2	18.6	5.3
HN	65.4	14.5	16.2	1.3	13.4	0.4
PE	65.8	13.1	12.7	1.3	11.7	2.5
SV	68.3	3.1	16.6	0.0	16.0	0.7
EC	70.8	7.8	5.0	3.7	15.8	13.0
CO	73.1	12.5	13.7	2.6	5.9	1.9

* Equipment refers to computers, tablets or smartphones.

Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

Once online, internet users face low quality internet connections, high service fees, and frequent power outages. Those with access to mobile broadband but not fixed internet connections typically cite the same reasons in the same order of priority. The exception is Uruguay, where high costs were salient in mobile broadband users, while poor internet quality was salient across fixed and mobile users, suggesting quality issues with fixed broadband coverage and affordability challenges for mobile internet (Figure 6). Mobile users in Nicaragua also cited poor internet quality as their biggest challenge, followed by power outages; power outages were marginally more salient as a challenge across both fixed and mobile broadband users.

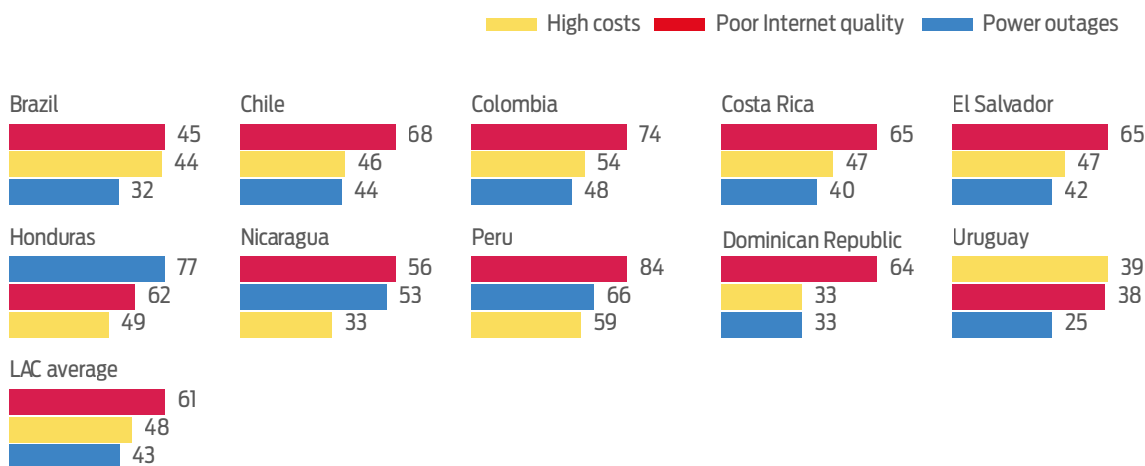
INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Across Latin America and the Caribbean, 55 percent of those using the internet flagged quality as a major challenge for internet use.

Quality of service is particularly acute for users with both fixed and mobile broadband in Peru, Haiti, Bolivia, and Colombia. 80 percent of Peruvians cited quality of service as a key challenge to remaining online, for instance (Figure 7). In addition, power outages pose a challenge to nearly 40 percent of respondents in the region with access to both fixed and mobile broadband. Honduras and Paraguay stood out sharply, with 79 percent and nearly 68 percent of respondents flagging this issue, respectively. Households in rural areas are more affected by outages across countries in the region, with slightly more than half of those living in rural areas reporting power outages as a problem. The gap between rural and urban areas is most salient in Peru (-29 percentage points [pp]), Chile (-24 pp), Argentina (-21 pp), and Bolivia (-20 pp). A third of respondents mentioned the high cost of data as a constraint, which could lead to a limited presence online and low usage of high data-demanding services.

Figure 6: Relative importance of key challenges faced by internet users (mobile broadband users only; excluding those with fixed internet access)¹⁷



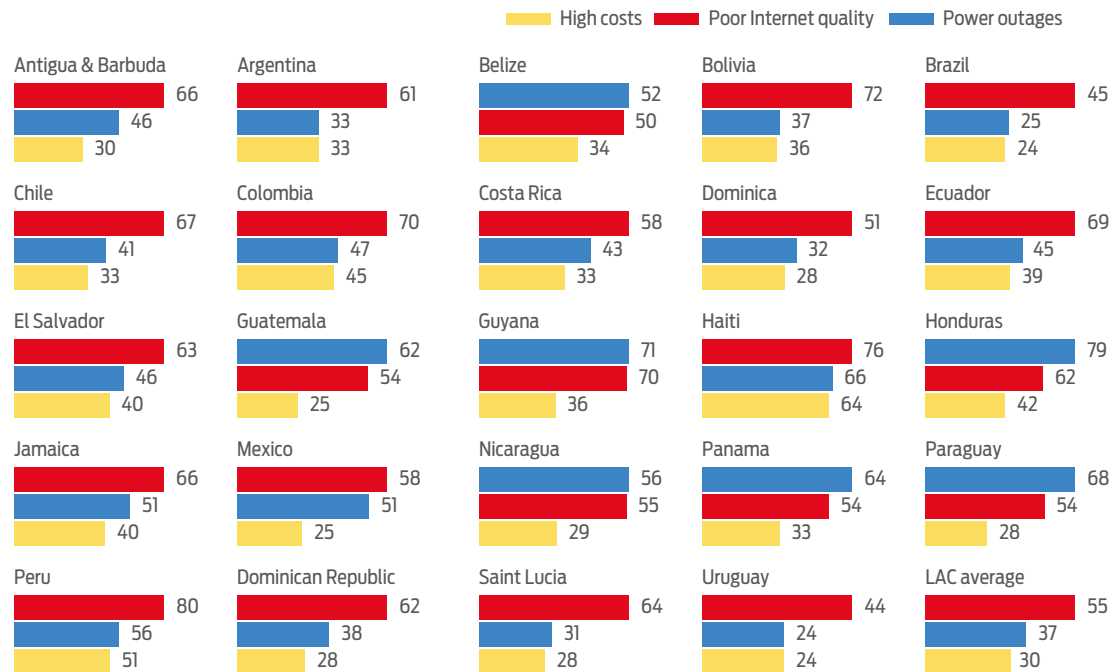
Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

¹⁷ Data is only available for 10 countries for this question. For other countries in the sample, a large number of empty values pre-empted meaningful analysis

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 7: Challenges faced by internet users



Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

Despite these challenges, spending on data packages and internet connections increased during the pandemic for one in three households, driven by the greater necessity to access digital tools for education, communications, and work. In LAC, 35 percent of respondents reported a surge in their spending on data packages, with the largest number reporting an increase in Argentina, where 73 percent of households report this was the case (Figure 8). The Argentinian trend may be attributable to e-commerce boom during which both sellers and buyers had to invest in improving internet connection with higher tariff plans.¹⁸ Higher expenditure was more pronounced among the households with tertiary-educated household heads in the sample. This is consistent with the earlier finding that higher educated households are more likely to use the internet than their less educated counterparts. Decreased spending on internet data packages, on the other hand, may be attributable to loss in incomes, as well as other emergency expenses faced by households. Reductions in spending were noted by 12 percent of respondents who lost income during the pandemic, compared to 6 percent of those with stable income and 7 percent of those whose income grew. Nicaragua has the largest share (27 percent) of those who have reduced spending on the internet in the income losers' group, followed by Haiti

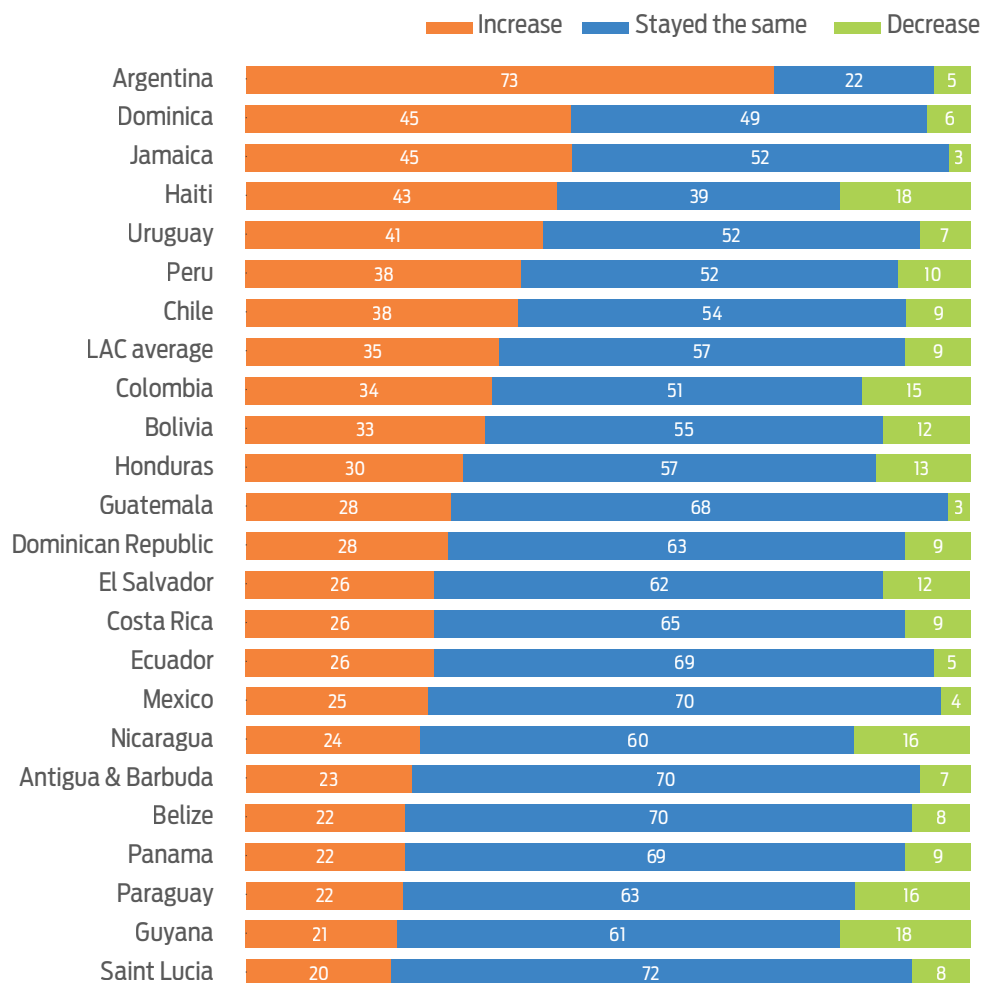
¹⁸ Buenos Aires Times, 2021. Pandemic helps deliver e-commerce boom in Argentina <https://www.batimes.com.ar/news/economy/pandemic-helps-deliver-e-commerce-boom-in-argentina.phtml>

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

(27 percent), Paraguay (24 percent), Colombia (19 percent), El Salvador (18 percent), and Honduras (1 percent). For these countries, the other income groups (i.e., stable income and income growth) report reducing their spending on internet packages at a much lower rate.

Figure 8: Dynamics of internet spending during the COVID-19 pandemic



Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.



INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Instant messaging, education, and social media are the three main uses of the internet in Latin America and the Caribbean.

Fixed internet users and mobile internet users both cite these uses, although with different ordering. The lack of differentiation between the use cases of fixed and mobile internet users is partly attributable to the fact that even fixed internet users are using poor quality internet connections, as highlighted by the challenges reported. This makes internet uses that rely heavily on the quality of the fixed internet connection less feasible. Remote work provides a case in point. The structure of underlying economies also plays a key role: one of the key reasons why a minority of workers were able to work remotely relates to the kind of job they have. Chile, for example, stands out as the only country where remote working is among the top three main uses of the internet. This is in sharp contrast with the findings in Caribbean countries, where it is not mentioned among the top five uses. Consistent with global trends,¹⁹ online gaming is also popular in the region, particularly among Costa Rican, Mexican, and Uruguayan users.

Internet use varies considerably by education level and gender and provides insights on how the digital gap is likely accentuating socio-economic inequalities.

Households where the head is tertiary-level educated or above mainly use the internet for remote work and education purposes, whereas households with a respondent with only primary education mostly use the internet for instant messaging. The high prevalence of online education (Figure 9) as a key use case may be attributable to the reliance of numerous governments in Latin America and the Caribbean on digital tools to cope with pandemic-imposed restrictions on schooling. Consultations in 2020, for instance, indicated a heavy reliance on national repositories of digital resources, alongside offline learning materials, and the implementation of learning management systems to enable students to connect with their teachers. Additionally, some governments reported encouraging the use of WhatsApp, phones, or social media to provide pedagogical guidance and support for teachers and parents.²⁰

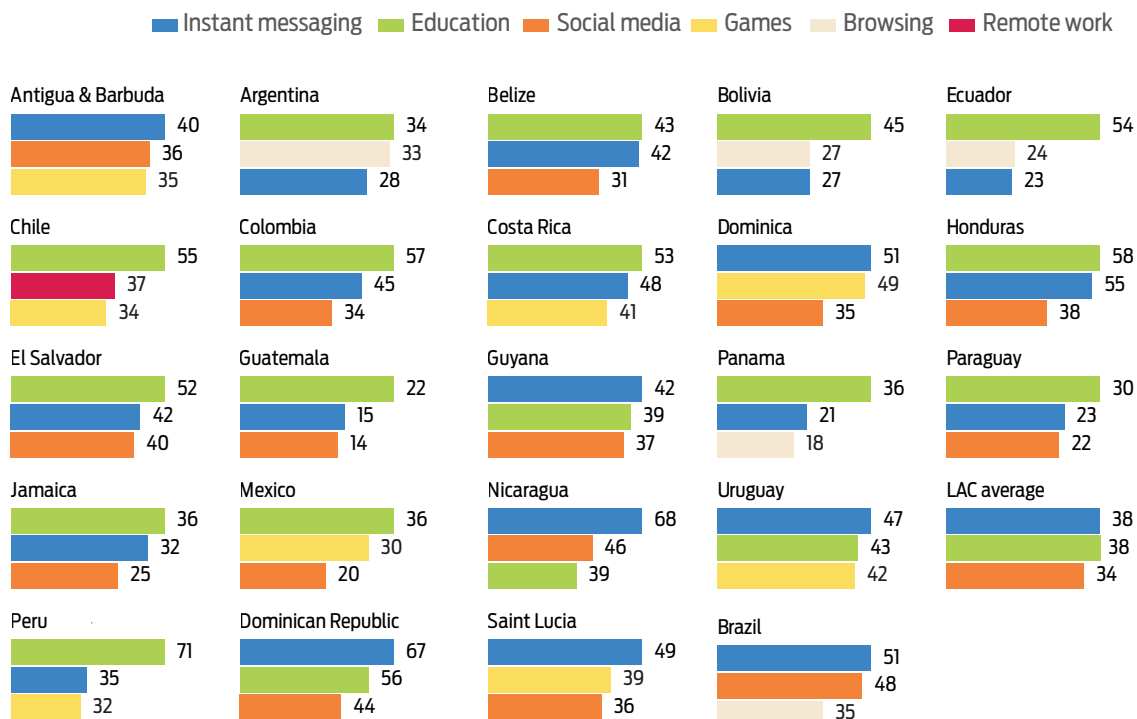
¹⁹ BBC. December 16, 2020. *How online gaming has become a social lifeline*. <https://www.bbc.com/worklife/article/20201215-how-online-gaming-has-become-a-social-lifeline>

²⁰ Cobo, C., Hawkins, R. and H. Rovner. March 31, 2020. *How countries across Latin America use technology during COVID19-driven school closures*. <https://blogs.worldbank.org/education/how-countries-across-latin-america-use-technology-during-covid19-driven-school-closures>

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 9: Top three internet use cases by country (% of households)



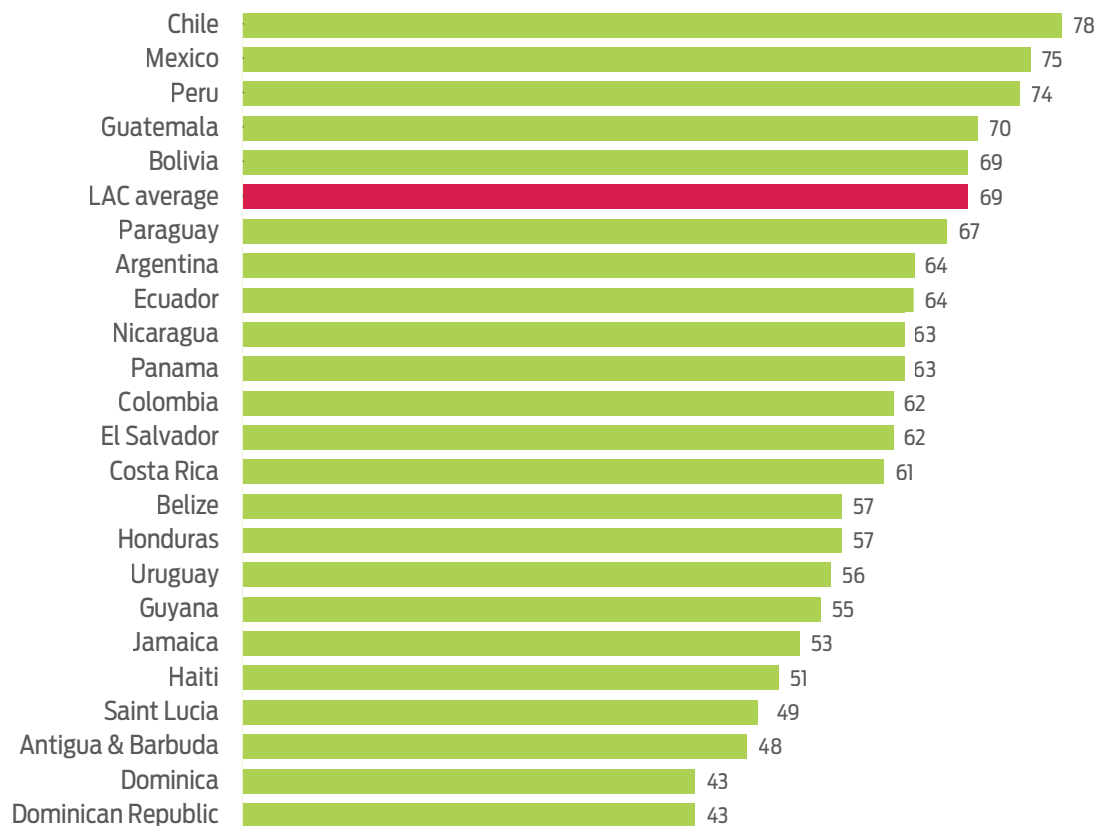
Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.

Finally, over two thirds of connected households in Latin America and the Caribbean are concerned about privacy and security when using the internet. This is particularly true for users in Chile, Mexico, and Peru (Figure 10). Men and women are equally worried about their safety when online. No significant variation exists in reported concerns based on the level of education, location, or occupation. To our knowledge, this is the first estimate of data privacy concerns in the region and further research is needed to understand if issues about privacy and security translate into a limited usage of the internet and of the online services (e.g., e-commerce, e-banking, etc.).

INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Figure 10: Concerns about online privacy (% of households)



Source: WB and UNDP LAC HFPS II (Wave 1) 2021 data. Authors' calculations.



INTERNET ACCESS AND USE IN LATIN AMERICA AND THE CARIBBEAN - FROM THE LAC HIGH FREQUENCY PHONE SURVEYS 2021

September 2022

Conclusions

Internet access and use expanded during the pandemic in many LAC countries. As COVID-19 pushed up demand for online use, governments made great efforts to increase and facilitate access to the internet. Children and adults learned to use the internet in new ways at an incredible speed. This digital learning represents fast-paced innovation and should not be ignored. Meanwhile, the low service quality is a reason for concern, as is the frequency of electricity interruptions.

The surveys clearly show that the region requires cheaper and faster internet connections. Expensive fees, together with poor service quality, represent major obstacles for wider internet use in LAC, particularly among low-income segments of the population. The promotion of competition and investments in the quality of infrastructure can help deliver efficient outcomes. To support marginalized segments of the population, governments may need to significantly scale up relevant funding schemes (such as subsidies for service and devices) to increase access. To address service quality, investments are needed in first, middle- and last-mile networks. In parallel, improving the power grid in rural areas will be important for guaranteeing future connection stability.

HPFS data confirm a persistent and significant digital gap between countries in the region as well as within countries, with the urban-rural disparity being the most notable. In line with recent studies, the HPFS findings show a significant digital gap in LAC, with a third of households lacking a fixed broadband subscription. This gap is wider in rural areas, with less than half of rural respondents across the region having access to a fixed connection. These findings underscore the urgency for infrastructure investments to expand and strengthen digital infrastructure with a focus on less economically viable areas. Both public and private investments will be required to bridge the gap.

Different levels of education – a strong proxy for income – impact the pace of digital development. Data show that households where the head's level of education is tertiary or higher are on average more connected (with better quality service and higher expenditure on data) compared to the rest of the population. Moreover, they are on average more likely to access e-learning and more interested in productive online activities. As education is highly correlated with incomes, these results suggest that the digital gap may widen existing inequalities in LAC as more educated households seem to better leverage the digital opportunities available to them. To ensure that the digital transformation is inclusive, therefore, it is important to promote universal access and raise awareness about the wide spectrum of online resources.