

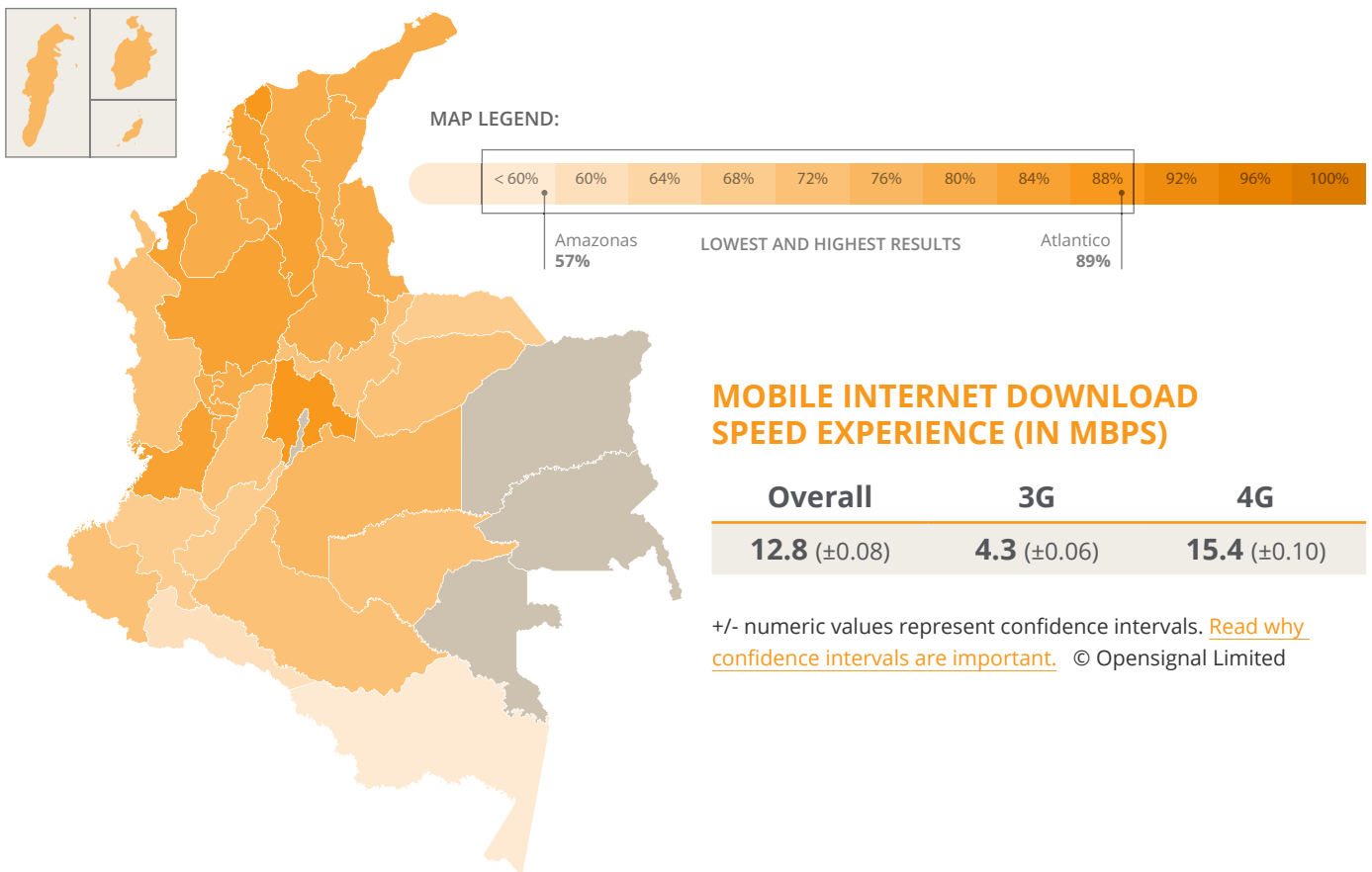
# 4G for Meaningful Connectivity

## Colombia

We have meaningful connectivity when we can use the internet every day using an appropriate device with enough data and a fast connection. The Alliance for Affordable Internet (A4AI) published these targets in 2020 to help policymakers set targets for higher quality and more affordable internet access.

### DISPONIBILIDAD 4G EN COLOMBIA

% time, Septiembre–Noviembre 2021



**This brief focuses on a fast connection — one of the four pillars to measure meaningful connectivity — and the availability of 4G across Colombia.** It uses data collected from Opensignal to test the amount of time users have a 4G signal that they're able to use on their phone.

This kind of connectivity — at 4G, rather than 3G or earlier technologies — offers higher speeds and greater potential for users to work, play, learn, and communicate online. As governments set visions for their post-Covid recovery with the digital economy as a driver for innovation and economic growth, the meaningful connectivity targets ensure this growth is inclusive and has the foundations to grow to scale.

### MOBILE INTERNET DOWNLOAD SPEED EXPERIENCE (IN MBPS)

Overall	3G	4G
12.8 (±0.08)	4.3 (±0.06)	15.4 (±0.10)

+/- numeric values represent confidence intervals. [Read why confidence intervals are important.](#) © Opensignal Limited

# What is meaningful connectivity?



## A FAST CONNECTION

Our internet speeds make or break our online experience. We all know the frustration of a buffering movie or an unstable video call. And without fast speeds, services like telehealth and real-time online learning cannot happen.

A **4G mobile connection** is the minimum threshold that can give us the speeds we need for the experience we want.



## AN APPROPRIATE DEVICE

To experience the full power of the internet, we need the right device for the task at hand.

A **smartphone** gives us the functionality to create and consume content in a way that basic phones don't — and the portability to use the internet anywhere. Ideally we will have access to a range of device types.



## ENOUGH DATA

While some people have unlimited data packages, others experience severe data scarcity, preventing them from doing certain online tasks or forcing them to wait until they can connect to public Wi-Fi.

An **unlimited broadband connection** at home, or place of work or study gives us reliable internet access in our daily lives to use the full breadth of the internet's potential.



## REGULAR INTERNET ACCESS

We benefit most from the internet when we can use it regularly. As our societies grow more digital and the internet is integrated into our daily lives, connecting occasionally is not enough.

**Daily access** to the internet is the minimum we need to see real benefits for work, education and communication.

## Why 4G for meaningful connectivity?

Video content is what people want to access and is also data intensive. Field research conducted by A4AI/Web Foundation confirms YouTube, Facebook, WhatsApp, and Instagram as the most popular online applications — all of which thrive on visual content. This matches with other research which includes photos and video as [prominent features](#) in a user's online experience and studies of the [changing dynamics](#) of internet traffic globally.

These are data-intensive activities and require a far greater bandwidth than text-based communication alone. While 3G was [designed with no lower limit to its bandwidth](#) and not expected to carry much more than 10Mbps, 4G offers greater technological capacity for users to do more online.

# Who has 4G, and what kind of internet do they have?

Colombia has generally high rates of 4G coverage in many parts of the country. However, disparities do exist in different areas in coverage and in availability, as measured by consumer time on a 4G signal. This difference is in particular felt by users in the most rural areas, which have some of the lowest rates of 4G Availability.

These disparities in 4G availability have consequences for average speeds and therefore also user experiences with voice, video, and gaming applications. As Colombia looks to grow its digital economy, it requires a strong foundation in mobile infrastructure that provides reliable, high-quality connectivity to all.

## REGIONAL COMPARISONS:

4G Availability within Colombia, September - November 2021

Top Three Regions	4G Availability
Atlantico	88.9 (±0.67)
Cundinamarca	85.7 (±0.32)
Antioquia	84.0 (±0.56)
Bottom Three Regions	4G Availability
Cauca	66.8 (±1.41)
Putumayo	60.3 (±3.44)
Amazonas	57.1 (±6.37)

+/- numeric values represent confidence intervals. [Read why confidence intervals are important.](#) © Opensignal Limited

## 4G AVAILABILITY & USER EXPERIENCE IN COLOMBIA

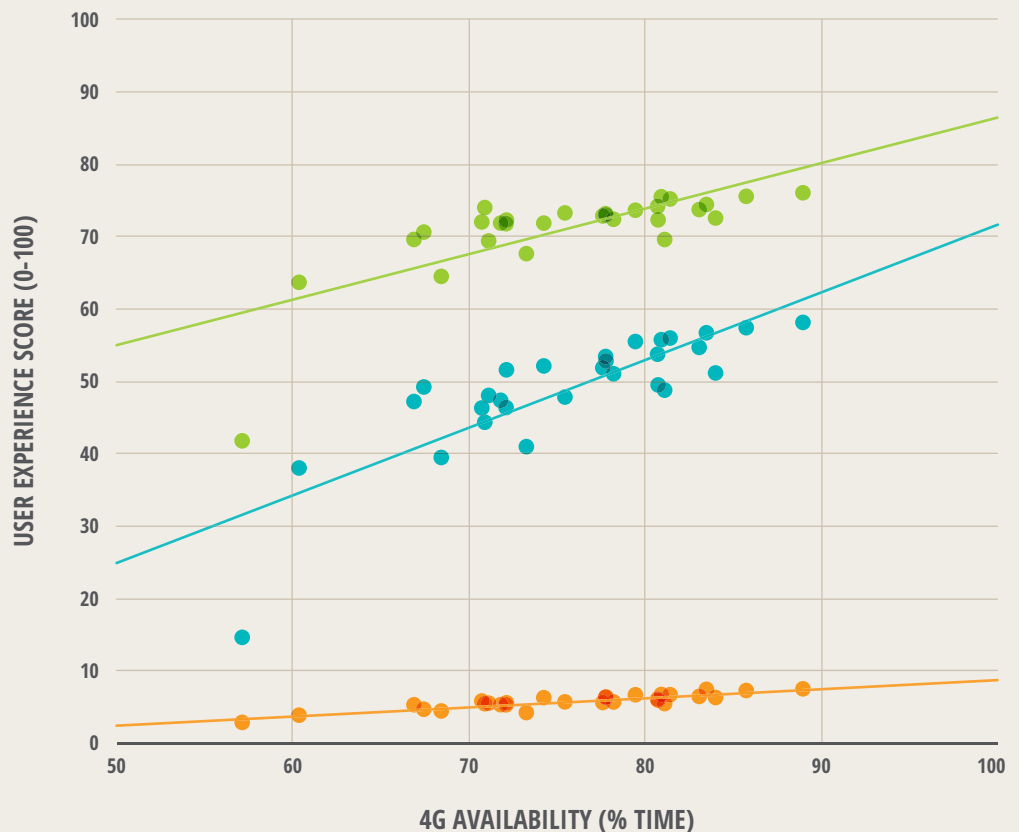
September-November 2021. Data © Opensignal Limited

Each region is represented by a trio of dots vertically aligned along 4G Availability and represent the user experience in that region.

### USER EXPERIENCE:

- Voice App Experience
- Video Experience
- Games Experience

\* Each user experience score is measured and evaluated separately and not dependent from one another.



# What's next for affordable and meaningful connectivity in Colombia?

Every year, the Alliance for Affordable Internet publishes the **Affordability Drivers Index (ADI)**, which is an assessment of policy indicators and market factors that correlate with more affordable internet prices in low- and middle-income countries.

In 2021, Colombia scored 88 out of 100 on the Index, in 2nd position on the [ADI](#), falling behind only Malaysia (89/100) and surrounded with peers Costa Rica (87/100), Peru (84/100), and Argentina (82/100).

**There's immense potential for Colombia to improve its score and to reach affordable and meaningful connectivity for everyone. Here's how:**

**SCORE ON 2021 AFFORDABILITY DRIVERS INDEX**

**88/100**

**Does the national broadband plan set targets on...?**

4G  YES

Rural  YES

Fixed  NO

Device Costs  YES

Data Costs  NO

## RECOMMENDATION 1

### Modernise the regulatory framework to attract complementary providers

Rural and remote zones deserve to have access to meaningful connectivity with 4G-like speeds. Modernising current policy and regulatory frameworks to incentivize providers — e.g., satellite operators — would be beneficial to such areas.

## RECOMMENDATION 2

### Use USAF funds towards high-quality connectivity projects

While Colombia has a good disbursement rate of its universal service and access fund (FONTIC), using it towards broadband projects — and not infrastructure that only supports a lower definition of “high speed internet”, as our research shows has happened in some occasions — is a fundamental step towards meaningful connectivity.

## RECOMMENDATION 3

### Conduct impact evaluations of all telecom and internet related projects

Conducting impact evaluations on the use of the funds is a crucial step to increasing transparency and trust. Further, understanding the strengths and weaknesses of projects is necessary for the future of resource planning.

