



NORTH AMERICA

ERICSSON MOBILITY REPORT

NOVEMBER 2015

MARKET OVERVIEW

Key figures: North America

	2015	2021	CAGR 2015–2021
Mobile subscriptions (million)	400	470	3%
Smartphone subscriptions (million)	280	410	5%
Data traffic per active smartphone (GB/month)	3.8	22	35%
Total mobile traffic (EB/month)	1.3	9	40%

As the availability of mobile broadband grows in the US and Canada, consumers require consistent access to a variety of online services. In fact, mobile data usage is anticipated to grow by 40 percent annually through to 2021. To meet these expectations, operators are not only providing expansive coverage, but speed and capacity as well

Data-hungry consumers are making smartphones ubiquitous

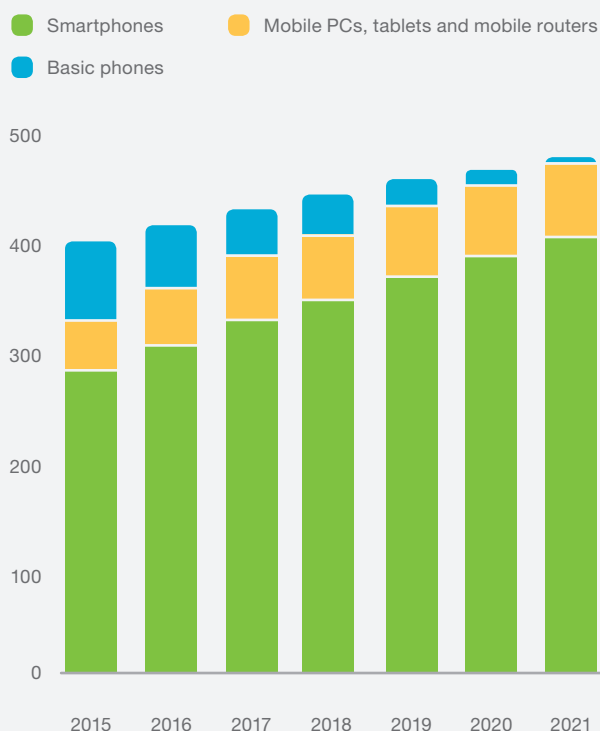
Half of all mobile devices in the US and Canada now use LTE, giving their users access to higher data speeds. This increase in speed is in turn driving more data usage for things like video, internet usage and social media. The region already has the highest monthly data usage per smartphone, in the world, and this trend will continue. In 2021, total mobile data usage will exceed 9 Exabytes (EB) per month, equivalent to 900,000 copies of the total printed collection of the Library of Congress.

Over 90 percent of the data growth from 2015 to 2021 will come from smartphones. For many, smartphones and high-speed access to smartphone applications have become a requirement of everyday life. Between 2015 and 2021, smartphone subscriptions will increase by 45 percent in the US and Canada, to 410 million. Smartphones are so popular that basic phones will see an almost total decline during the same period. Total mobile subscriptions, including mobile PCs, tablets and mobile routers, will exceed 470 million by 2021.



In 2021, total mobile data usage will exceed 9 EB per month

Mobile subscriptions by device, US and Canada (million)



COMMUNICATION IS STILL KEY

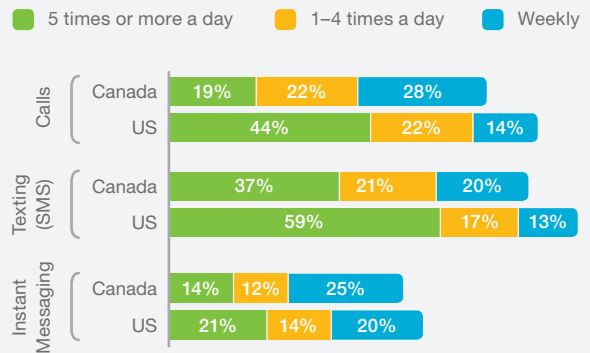
When the amount of time spent on different applications is compared, communication services remain predominant. In the US, consumers use 30 percent of their smartphone application time on voice calling, Instant Messaging (IM), voice/video calling over IP, email and social networking

Consumers spend half that amount of time on games – the second biggest application.¹ In terms of calling and texting, traditional methods still hold sway. Almost 90 percent of voice calling in the US and Canada is done via traditional voice calls rather than Over-the-top (OTT). Similarly, traditional network-based SMS texting overshadows the IM services. Every day, three out of four of all messages sent in the region are for SMS, rather than IM.

Around 60 percent of consumers in the US and around 40 percent of consumers in Canada text at least 5 times a day. The corresponding figures for IM are around 20 percent for the US and over 10 percent for Canada.²

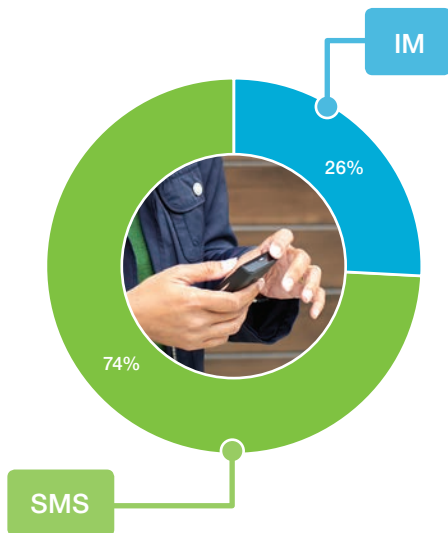
The amount of time spent sending SMS continues to grow. In 2014, this added up to over 1.9 billion texts sent in the US.³

Daily usage of communications services, US and Canada



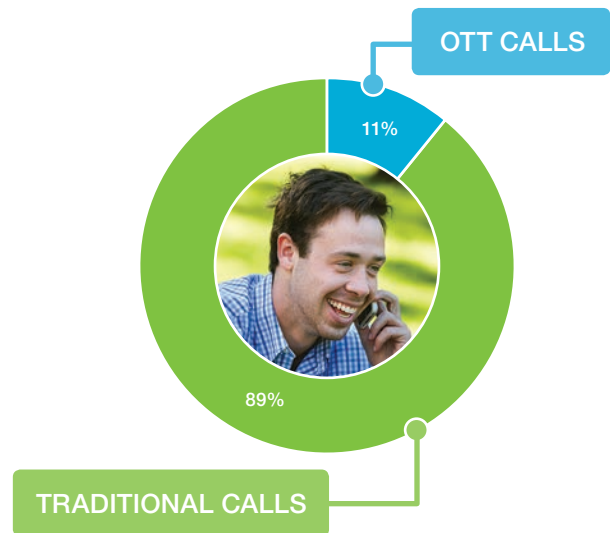
Source: Ericsson ConsumerLab, Liberation from location, global report (2014)
Base: Mobile phone users in the US and Canada

Daily share of messages, US and Canada



Source: Ericsson ConsumerLab Analytical Platform (2014)
Base: OTT users in the US and Canada

Daily share of calls, US and Canada



Source: Ericsson ConsumerLab Analytical Platform (2014)
Base: OTT users in the US and Canada

¹ Source: Ericsson ConsumerLab, Communication in the world of apps (2015)
Base: Android users in the US
² Ericsson ConsumerLab, Bringing families closer (2015)
³ TBR and Ericsson study (2015)

MOBILE SUBSCRIPTIONS

In the US and Canada, LTE is expected to represent approximately 50 percent of mobile subscriptions at the end of 2015. By 2021, there will be roughly 460 million LTE/5G subscriptions, representing more than 95 percent of the total base

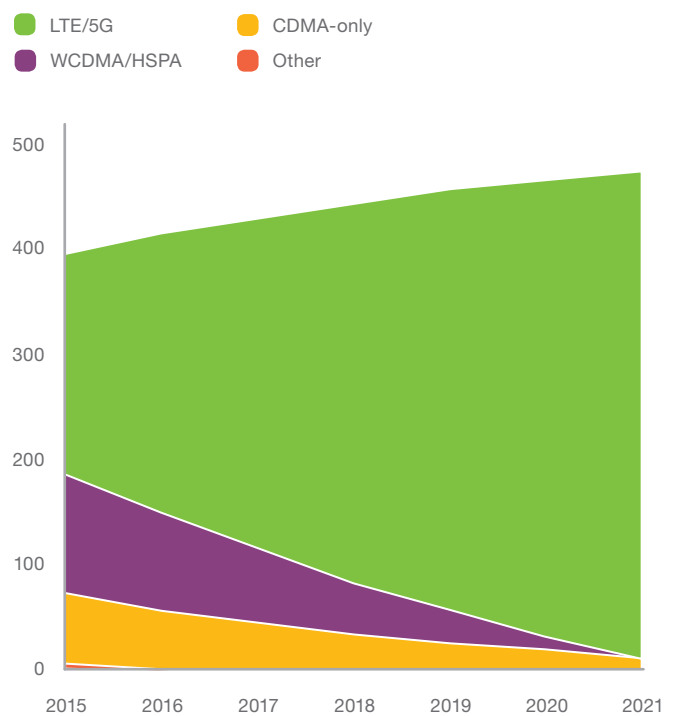
The number of LTE subscriptions will more than double between 2015 and 2021 as consumers migrate from other technologies. This growth will allow operators to deliver advanced services such as Voice over LTE (VoLTE), in addition to providing consumers with the high-speed, always-connected experience they expect. By 2021, overall mobile subscription numbers will increase by nearly 20 percent to 470 million, primarily due to an increase in the number of connected devices per user.

Consumers are increasingly adopting family plans. These multi-device offerings increase device ownership and contribute to the number of smartphone and LTE subscriptions. Most consumers use their smartphones to access the internet and social media, as well as view short and long videos, play games and stream music.



The average US subscriber on 4G consumes 2.5 times more data watching video than a subscriber on 3G⁴

Mobile subscriptions, US and Canada (million)



⁴Ericsson ConsumerLab, TV and Media 2015
Base: Android users in the US who watch video content on their smartphones, on-device metering data

MOBILE TRAFFIC

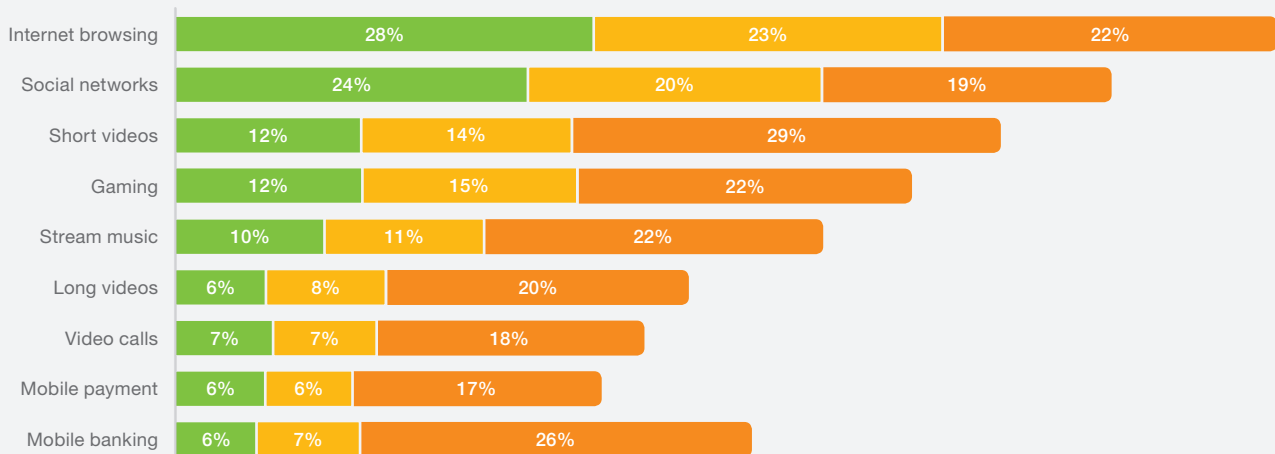
Overall traffic is dominated by the growth in mobile data. Total mobile data traffic per active smartphone will grow 6 fold between 2015 and 2021, on top of an increase of 10 times over the past 5 years

The increase in LTE availability enables the use of high bandwidth services. Over half of mobile service users browse the internet at least daily from their mobile device, while nearly 75 percent browse via a mobile device on a weekly basis. Social networking is the next largest category, with over 60 percent of mobile users accessing a social networking site at least once a week from a mobile device.

In 2021, mobile data traffic per active smartphone in the US and Canada will be the highest among world regions – 22 GB per month. The growth in traffic per user is in part driven by technology advances in devices, like higher resolution screens. The usage corresponds to 15–30 minutes of video streaming per day. Social networking and other apps will also contribute to larger traffic volumes in 2021. Total mobile data traffic in 2021 is expected to exceed 9 EB per month, a growth of almost 40 percent annually.

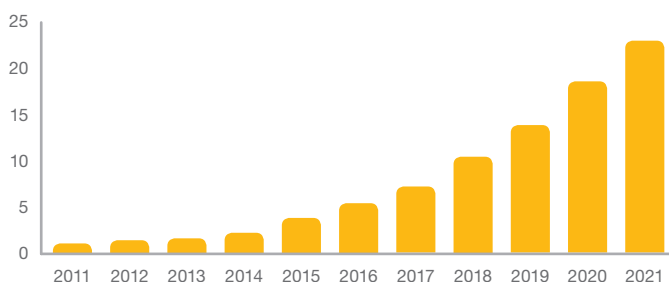
Mobile services usage frequency, US and Canada

5 times or more a day 1–4 times a day Weekly



Source: Ericsson ConsumerLab Analytical Platform (2014)
Base: Mobile phone users in the US and Canada

Mobile data traffic per active smartphone, US and Canada (monthly GigaBytes)



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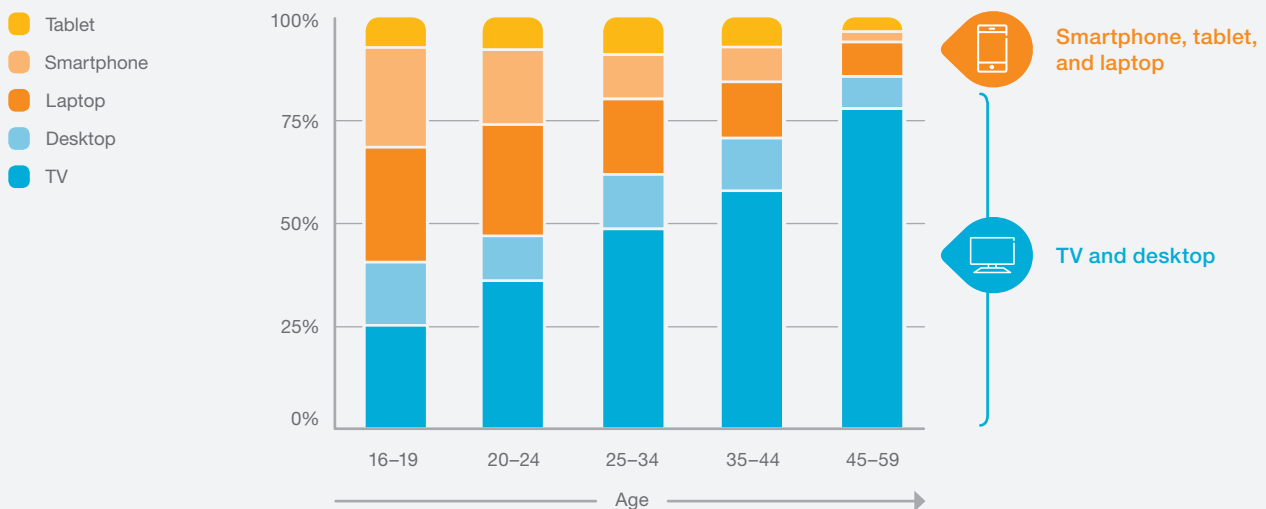
VIDEO IS GOING MOBILE

Video consumption on mobile devices in the US and Canada is driving the data surge. Now that people can watch what they want on-demand wherever they are, TV viewing is shifting from fixed to mobile. The number of consumers that watch video weekly on their smartphones in 2015 has increased by over 50 percent in the last 2 years⁵

Mobile video use is even more pronounced among consumers aged 16–19. Nearly two-thirds of this age group’s TV/video viewing hours are spent on mobile devices, compared to one-fifth for those aged 45–59.

Over 55 percent of users watch short videos on a weekly basis, meaning that it remains the most popular video category. However, long formats such as full length movies are gaining popularity, with over 30 percent of users watching them weekly via a mobile device.

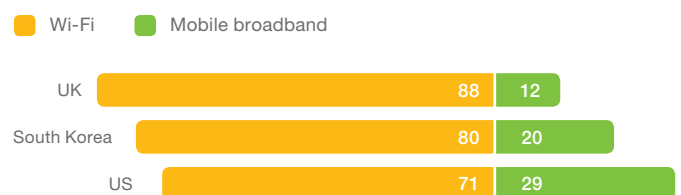
Device share of total TV/video time, US and Canada



Source: Ericsson ConsumerLab, TV and Media (2015)
 Base: Population with broadband at home who watch any type of TV/video at least weekly in the US and Canada

Smartphone users in the US consume significantly more mobile video data compared to other countries, with 30 percent of smartphone video data on cellular networks. However, Wi-Fi remains the top access method for TV and video, representing 70 percent of total smartphone data in the US.

Data usage for TV and video apps by smartphone users (percent)



⁵Ericsson ConsumerLab, TV and Media 2015
 Base: Population with broadband at home who watch any type of TV/video at least weekly in the US and Canada

Source: Ericsson ConsumerLab, TV and Media 2015
 ConsumerLab Analytical Platform, on-device metering data
 Base: Android users that watch video content on their smartphones

WI-FI CALLING

Most major device vendors have introduced Wi-Fi calling natively on Android and iOS systems. Up until recently, Wi-Fi calling has been available only on smartphones but it is now also being enabled on some brands of Wi-Fi-only devices such as tablets and PCs

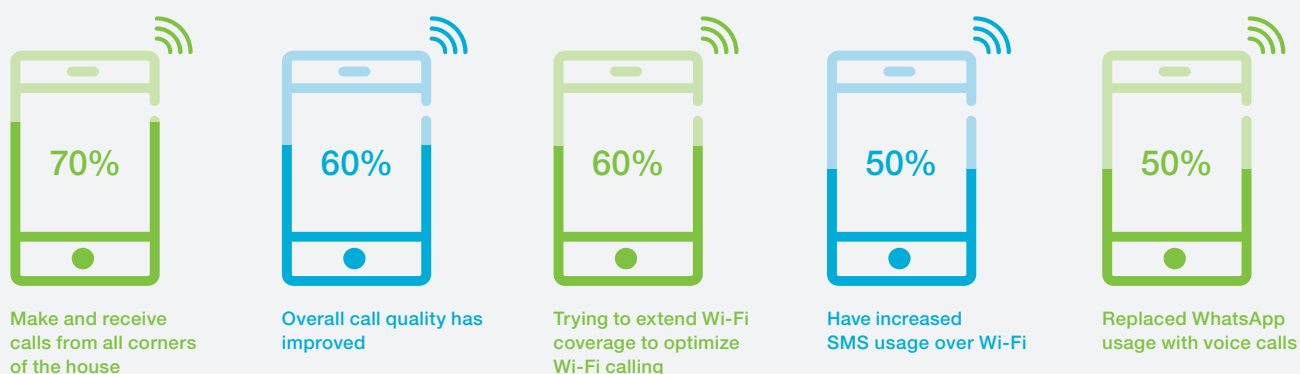
Wi-Fi calling allows consumers to make regular phone calls and send text messages from their mobile phone number by using a Wi-Fi network. Wi-Fi calling does not require a separate app to be installed – nearly half of surveyed smartphone users stated this as a reason for considering the service.⁶

Wi-Fi calling is emerging as one way to support voice calls in indoor locations with limited circuit-switched voice or VoLTE coverage, such as inside residential buildings. A survey conducted among 200 smartphone Wi-Fi callers in the US⁷ revealed that 70 percent of the respondents say that the service has allowed them to make calls from every corner of the house. The feeling of always being

contactable has resulted in a change in communication behavior, with consumers stating that they make more frequent and longer voice calls. They are also generally 1.5 times more likely to be loyal advocates of the providers offering the service.⁷

Today, 70 percent of surveyed US travelers that own a smartphone⁸ minimize the number or duration of voice calls while traveling internationally. However, if Wi-Fi calling was available, an equal proportion say that they would increase both the frequency and length of voice calls.

Wi-Fi calling user perception (percentage of users)



Source: Ericsson ConsumerLab, Wi-Fi calling finds its voice (2015)
Base: 200 existing smartphone Wi-Fi callers in the US

SUMMARY

Consumers today demand ubiquitous coverage and consistently high speeds, and operators have responded by rapidly expanding LTE in the US and Canada. This expansion, coupled with increasing amounts of available video content and the growing use of social networking, is creating a dramatic surge in mobile data usage that will continue through to 2021 and beyond.

⁶Ericsson ConsumerLab, Wi-Fi calling finds its voice (2015)
Base: Smartphone users in Brazil, Egypt, Spain, the UK and the US

⁷Ericsson ConsumerLab, Wi-Fi calling finds its voice (2015)
Base: 200 existing smartphone Wi-Fi callers in the US

⁸Ericsson ConsumerLab, Wi-Fi calling finds its voice (2015)
Base: 1,000 smartphone users in the US who have traveled internationally in the past 12 months

Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With approximately 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.