Weekly Wireless Report



Inside This Issue:

This Week's Stories

95 Percent of Cell Sites Still Running In Most Areas Affected By Harvey

Comcast's Xfinity Mobile Plans To Launch BYOD, Trade-in Services This Year—But \$65 Tier Remains postponed

Products & Services

YouTube's Big Makeover Continues With Redesigned Mobile App, New Logo And More

Fitbit Tries To Catch Up To The Apple Watch

Emerging Technology

'Cortana, Open Alexa,' Amazon Says And Microsoft Agrees.

Big iPhone 8 Reveal: How The Virtual Home Button Will **Probably Work**

Mergers & Acquisitions

Western Digital Acquires Startup **UpThere For Cloud Storage**

CBS To Buy Troubled Australian **Broadcaster Ten Network**

Industry Reports

Smartphone Shipments To Grow to 1.7 Billion in 2021, IDC Says

Report: Fixed Wireless 5G Could Reach \$1B In Revenues By The End Of 2019

This Week's Stories

95 Percent of Cell Sites Still Running In Most Areas Affected By Harvey

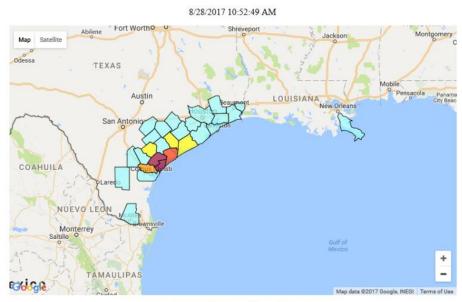
August 30, 2017

Fifty-five counties along the Texas and Louisiana coasts have been designated as disaster zones after former Hurricane Harvey dumped more than three feet of rain in the region over the past several days. But while many are stranded by rising flood waters, the Federal Communications Commission indicated in a Monday report most lines of wireless communication are holding out against the deluge.

As of around 11 a.m. Monday, the Commission said approximately 95 percent of cell sites across the affected area remained online. The FCC noted, though, that number was down from 96 percent the day prior. Only 3.5 percent of cell sites were reported down in Harris County, home to the city of Houston, which has been the subject of much flood coverage by national media.

However, that proportion of online and offline sites was flipped in some harder hit areas northeast of Corpus Christi. Nearly 95 percent of cell sites in Aransas were out of commission as of Monday morning, as were 85 percent of cell sites in Refugio and 74 percent of cell sites in Calhoun. More than a third of cell sites were down in Goliad (35 percent), Jackson (35 percent), and San Patricio (43 percent).

Percent Cell Sites Out-of-Service By County



1 - 20 21 - 40 41 - 60 61 - 80 81 - 95

All told, 26 counties in Texas registered some cell site outages. Just one county in Louisiana, Plaquemines, reported downed sites. The FCC did not break out the outage numbers by carrier.

All four U.S. wireless carriers hunkered down ahead of the storm, announcing deployments of backup generators, pre-positioned fuel, cells-on-wheels, and emergency response teams. In the wake of the







storm, Verizon, AT&T, T-Mobile, and Sprint have all also announced they will credit call, text, and data fees for those impacted by Hurricane Harvey.

"Thanks to wireless, millions of people in the path of Hurricane Harvey have been able to seek help and connect with family and loved ones in the face of this unprecedented event," CTIA CEO Meredith Attwell Baker commented. "I'm proud of the planning and close collaboration of carriers to prepare for the storm and the ongoing work to both maintain and restore service."

The FCC's report also noted how 911 services are performing in the aftermath, as call volumes shot up sevenfold. According to the Commission, a total of 16 Public Safety Answering Points (PSAPs) were down Monday morning, marking an improvement from 17 on Sunday. More details here.

Neither Texas nor Louisiana has signed on to AT&T's FirstNet buildout. However, Texas in 2014 signed a Spectrum Manager Lease Agreement with FirstNet for the operation of an LTE public safety network using FirstNet's licensed Band 14 frequencies. More on that here.

wirelessweek.com

Comcast's Xfinity Mobile Plans To Launch BYOD, Trade-in Services This Year—But \$65 Tier Remains postponed

August 29, 2017

Comcast executive Randall Hounsell said the company maintains a team dedicated to improving its Xfinity Mobile MVNO service, and that later this year the company expects to launch a device trade-in program as well as a bring-your-own-device (BYOD) option for Xfinity Mobile.

"We've got a team focused on introducing new features and enhancements into the whole experience. One of the things we're focused on now is the bring-your-own-device," Hounsell, VP of product management for Comcast's Xfinity Mobile, told FierceWireless. "I think you'll see some version of that by the end of the year. And when we do it, we're going to try to do it right. It's going to be a very clean, simple experience."

When questioned on exactly when Comcast might support device trade-ins and BYOD services, Hounsell declined to provide specifics. "It's unclear the timing of stuff. It's a focus of ours right now. I'll think you'll see some flavor or some beginnings of bring-your-own-device by the end of the year."

Added Hounsell: The BYOD feature "is a popular request, and we're excited about offering that for our customers."

The same, he said, is true for device trade-ins. "By trading in the device, we'll give back the value of that device, and they can put that against the cost of their new device and bring down the cost of the service," Hounsell explained. "So effectively it reduces the cost of switching for the end user."

"So those two tools [BYOD and trade-ins], think of them as tools, will really help our customers switch and defray those switching costs," he added.

Interestingly, Hounsell added that Comcast plans to continue to offer a \$45 unlimited wireless option to all of its customers, not just those who subscribe to its "best" X1 video offerings. "We decided to just indefinitely offer all of our subscribers the \$45 for unlimited. Anyone can take advantage of that. And in the future, as we get into next year, you'll see us provide a better price for our best X1 customers, but we're not there right now," he said.



During Comcast's recent quarterly earnings call with investors, Comcast CEO Brian Roberts boasted of Xfinity Mobile that "while it's still early days, the customer feedback confirms our belief that we have an attractive proposition in the market."

Specifically, Comcast executives said that roughly half of the company's new Xfinity Mobile customers are signing up for the service through Comcast's digital channels. Further, the executives said that most Xfinity Mobile customers are selecting the company's per-GB pricing plans, rather than the unlimited data tier. Comcast's Xfinity Mobile is an MVNO service that runs on Verizon's LTE network; the two companies inked the MVNO agreement as part of an AWS spectrum sale by a group of cable companies to Verizon.

fiercewireless.com

Products & Services

YouTube's Big Makeover Continues With Redesigned Mobile App, New Logo And More

August 29, 2017

Earlier this year, YouTube introduced a major redesign of its desktop website which delivered a cleaner look and new features like a "dark mode" for nighttime watching. Today, YouTube is taking this update out of beta, and making it available to all users. In addition, the company is extending the design and select new features to its mobile app, and is unveiling an updated logo and icon.

This is the biggest change the YouTube logo has received over the years, as earlier improvements were much more minor tweaks, as you can see in the image below.



Google says this new logo – a cleaned up version of the YouTube wordmark and icon – was designed to be more flexible across devices of varying screen sizes. On smaller screens, YouTube can use just the icon alone to abbreviate its logo, while still making it easy to spot. The updated logo and icon are rolling out across desktop and mobile starting today, before arriving on other apps and services, the company notes.

Meanwhile, the desktop redesign introduced in May is now the default instead of an opt-in beta. This upgrade had included rebuilding YouTube on top of the open source JavaScript library Polymer, which will allow Google to more quickly bring new features to market going forward, it had said at the time.

However, for end users, the most noticeable changes were about the way YouTube looked. The upgraded desktop experience leverages Google's design language, Material Design, which influences

"...the company is extending the design and select new features to its mobile app, and is unveiling an updated logo and icon."









things like how the left-side navigation can now be tucked away with a click on the hamburger menu; the size and placement of key elements; and the overall cleaner look-and-feel.

The desktop update also includes a great "dark mode" for nighttime viewing, giving YouTube a more cinematic feel. Unfortunately, this feature is not making its way over to YouTube's mobile app today, we're told.

However, the app is getting a number of new features, too.

This includes its own take on the cleaner redesign, where the header is now white and the navigation tabs have been moved to the bottom, making them easier to reach with your thumbs.

The big, red YouTube header was a bit gaudy and not well-received when it first rolled out. The new, white header is a serious improvement.

There are also new Library and Account tabs to make it easier to access the things you're looking for, says Google.

The app will introduce various playback controls, too, including one that uses gestures.

As you may recall, YouTube earlier this year introduced a way to double tap on the left or right side of a video to rewind or fast forward 10 seconds. In the months ahead, the new mobile app will introduce another gesture - a way to jump between videos with a swipe of your hand. You'll just swipe left to watch the previous video, or swipe right to watch the next. (This is not live today, but is being pre-announced).

The app will also now include the ability to speed up and slow down the playback of a video, similar to how you can on desktop; and the new player will change its shape to match the video format being viewed. This feature was teased this summer, noting that the rise in vertical video was among the reasons to roll out a more adaptive player.

Another recently launched feature that suggests videos while you're watching in full-screen mode is included in the update, as well.

The changes to the logo, mobile app, and desktop site will begin rolling out today. YouTube tells us the roll out may not complete until tomorrow, however.

techcrunch.com

Fitbit Tries To Catch Up To The Apple Watch

August 28, 2017

Fitbit gave Apple a two-and-a-half-year head start on smartwatches. Now it's finally trying to catch

The leader in wearable devices is hoping the Fitbit Ionic will drum up interest in its brand and a tech category that's lost some appeal.

The "space-themed" smartwatch (\$299.95) is \$30 more than the starting price for the Apple Watch, its biggest competitor. That's a hefty price to ask of people who may already own a smartwatch or are cautious about investing in one for the first time.









The lonic has everything you'd expect from a fitness device: sleep and activity tracking, a heart rate monitor, GPS integration, smart notifications and long battery life -- one of its biggest selling points. It'll last up to four days, compared with 18 hours for the Apple Watch.

The waterproof Ionic comes sprinkled with additions for fitness fanatics, too. There's a sensor that measures oxygen in the blood and personalized workouts that adapt to your feedback.

You can work toward goals -- such as running a mile faster -- listen to audio coaching and store up to 300 songs on the device. The Ionic also features a payments system called Fitbit Pay that allows you to tap the device at checkout to pay.



The Ionic is Fitbit's first product with both hardware and software, Fitbit OS, designed in house. Jonah Becker, vice president of design, said the device was inspired by the concept of a "space journey" and "progressive thinking that gets you to a destination."

"The space theme influences the color palate," said Becker, referencing the orange, blue and steel color options. "Think about 'The Martian' ... think about Elon Musk colonizing Mars ... and the icy landscape of 'Interstellar.'"

The lonic features a lightweight casing made of aluminum and a colored spherical glass touch screen.

The company flirted with a smartwatch before with the Fitbit Blaze. But CEO James Park previously said the category didn't make sense for the company -- that smartwatches lacked "purpose." Now it's changed its mind.

"We're not entering the category for the sake of entering the category," Park told a group of reporters in New York City last week. "For us, there's a purpose. We feel very strongly that smartwatches are a platform for us to deliver the most powerful tools the market has seen. The larger form factor of smartwatches versus activity and fitness trackers allow us to integrate many more advanced sensors and provide richer displays and user interfaces."

But Fitbit (FIT) has catching up to do. Smartwatches are a \$10 billion market, and that's expected to double in four years, according to IDC. But shipments of wearables were also down late last year compared with the year before.









Experts believe the category will surge again once smartwatches are freed from the smartphone. The Ionic, like the Apple Watch, requires a sync from a smartphone, but Fitbit plans to launch a version next year that won't. And the pay feature already means you can leave your wallet at home.

The Ionic also comes with apps from Starbucks and AccuWeather and music streaming from Pandora. Other developers can start building apps for the Ionic starting in September.

Apple is expected to launch a cellular version next month.

Apple also recently reported its best quarter yet for wearables. Fitbit's stock has plunged 60% in the past year and now trades 70% below the IPO price. Yet it still holds the No. 1 spot for health app downloads on iTunes and Android.

In addition to the Ionic smartwatch, the company revealed its first Bluetooth wireless earbuds and a second version of the popular Aria smart scale. It also promoted future Ionic features, including sleep apnea tracking, and its vision for disease screening and monitoring for research.

Fitbit is emphasizing fashion, too. As with the Fitbit Charge and Alta, you can swap out bands and upgrade to premium options like leather (\$29.95 each). Fashion brands like Fossil, and its sub-brands like Kate Spade, Emporio Armani and Michael Kors -- have added smart features to accessories.

Fitbit is clearly late to the smartwatch race, and it's unclear whether the Ionic will be enough to fix that. But Park said he's confident Fitbit is the "best positioned company to have the most profound impact on people's health outside of the healthcare system."

cnn.com

Emerging Technology

'Cortana, Open Alexa,' Amazon Says And Microsoft Agrees.

August 30, 2017

The crowded pack of voice-controlled digital assistants — Apple's Siri, Google Assistant, Amazon's Alexa and Microsoft's Cortana — are good at numerous things. They can help people play music, set up calendar appointments and check the weather.

They can even get two rival tech executives, Jeff Bezos of Amazon and Satya Nadella of Microsoft, to join hands in a rare partnership.

For the past year, the two companies have been coordinating behind the scenes to make Alexa and Cortana communicate with each other. The partnership, which the companies plan to announce early Wednesday, will allow people to summon Cortana using Alexa, and vice versa, by the end of the year.

It is unusual for big tech companies to cooperate on important new technologies that they want to stand out from the competition. Amazon, Apple, Microsoft, Google and nearly every other big tech company is pouring huge amounts of money into making digital assistants that are smarter and can do more, seeing them as a new way for people to interact naturally with devices and online services.

But Mr. Bezos and Mr. Nadella are concerned that keeping assistants from working together could hold them back. The way they see it, each assistant has unique strengths that could benefit the other assistants.

In an interview last Friday at one of Amazon's Seattle high-rises, Mr. Bezos predicted that over time people would turn to different digital assistants — also called "A.I.s," for artificial intelligence — the

". The partnership, which the companies plan to announce early Wednesday, will allow people to summon Cortana using Alexa, and vice versa, by the end of the year."









same way they turn to one friend for advice about hiking and another for restaurant recommendations.

"I want them to have access to as many of those A.I.s as possible." Mr. Bezos said.

As an example, Mr. Bezos cited Cortana's superior integration with Outlook, the popular calendar and email application that is part of the Microsoft Office suite of software. Because Microsoft controls both products, Outlook is integrated more deeply with Cortana than with other voice assistants. Through its collaboration with Microsoft, Amazon said, Alexa users will get answers to some of the same questions that Cortana can now answer— for instance, when is the next budget review with the boss?

Initially, getting the two systems to work together is going to be a little awkward. Someone working with an Alexa device will have to say "Alexa, Open Cortana" followed by their command, while someone starting with a Cortana machine will have to say "Cortana, Open Alexa."

The Amazon-Microsoft partnership started in May 2016, when Mr. Bezos raised the idea with Mr. Nadella at Microsoft's CEO Summit, an annual event for business leaders in the Seattle area. Mr. Nadella was receptive to the idea, so a short while later Mr. Bezos emailed a draft of a brief news release that described how their assistants would work together, both men said.

It is standard at Amazon to create such news releases for internal consumption as part of what Mr. Bezos calls the company's "working backward process." Through that exercise, Amazon's teams depict in writing how a new product or service will look to its customers before engineers write a line of code.

In a phone interview, Mr. Nadella compared digital assistants like Cortana and Alexa to competing web browsers that provide access to the same pools of online information.

"The personality and expertise of each one will be such that if they interoperated, the user will get more out of it," he said. "That resonated for me and for him, and then that's what led to the teams working."

Mr. Bezos said he had not reached out to Apple or Google to invite them to join in the effort and does not know if they would want to.

"I'd welcome it," he said.

"Hopefully, they'll be inspired by it," Mr. Nadella said. "At least that would be my hope."

An Apple spokeswoman declined to comment, while a Google spokeswoman did not return a request for comment.

Apple and Google may see competitive advantages in keeping their A.I.s separate from rival assistants, partly as a way to protect a selling point of their mobile software, iOS and Android. Apple is especially finnicky about wanting to control as much as it can of people's experiences with its iPhones and iPads.

"There's no reason Google or Apple would offer it because they're trying to drive their own ecosystems," said Jan Dawson, an analyst with Jackdaw Research, a technology research firm.

By contrast, Alexa is mostly used on Echo speakers that sit around a home, and Cortana is largely used on PCs. Amazon says it has sold millions of Echo devices, accounting for around 70 percent of the market for smart speakers, according eMarketer, a market research firm. Microsoft says there are 145 million active monthly users of Cortana through Windows 10.









The two companies have struggled in the smartphone business, which makes it hard to get people using Alexa and Cortana outside homes and offices. Amazon and Microsoft are cutting deals with carmakers to integrate their assistants directly into vehicles. While Amazon and Microsoft have released digital assistant apps for mobile devices running Google and Apple software, the apps are not as widespread and using them is usually not as effortless as the ones Apple and Google build into their devices.

Eventually, Mr. Bezos predicted, the primary assistant on a device will be smart enough to automatically route a person's request to whichever assistant is best equipped to answer, without needing a verbal introduction between the two.

"In my view of the world, because that would be best for the customer, that's probably what eventually happens," he said.

nytimes.com

Big iPhone 8 Reveal: How The Virtual Home Button Will **Probably Work**

August 30, 2017

How could an iPhone work without a home button? We now have some idea.

Apple is widely suspected to unveil three new iPhones at a September event: the iPhone 7S, iPhone 7S Plus, and the highly anticipated iPhone 8. All rumors point to the latter being a radical redesign of the device—one that includes and edge-to-edge screen with very thin bezels, which would mean the home button, a fundamental of iPhone design since the first model debuted in 2007, is going away.

A new report from Mark Gurman at Bloomberg, who has historically been one of the most reliable Apple reporters, reveals at least one possible way the iPhone 8 will make up for the lack of a home button. Apple is said to be testing multiple solutions, including one that is entirely gesture-based, meaning the user would return to the home screen by swiping with a finger in a specific way.

Here's how it would work. The bottom of the iPhone 8's display will show a thin bar. It's unclear from the report whether the bar would be present just on the lock screen or at all times, but swiping up "opens the phone," presumably calling up the keypad for a passcode or whatever biometric security is in the iPhone 8 (it's rumored to be face recognition and possibly Touch ID if Apple can find a place for the fingerprint sensor without a home button).

Once the phone is unlocked, swiping up a little will open up the App Switcher for multitasking (currently called up by a double click on the home button), and swiping up a lot will bring the user all the way back to the home screen, punctuated by an animation that shrinks the active app back into its icon. The App Switcher has been redesigned, too, and it'll look like a grid of active windows instead of stacked cards, like it is now (similar to what Android did in Nougat).

So many questions! What happens to Control Center, which has become one of the most important parts of the iPhone UI since its introduction in iOS 7? Every current iPhone owner knows that swiping up from the bottom of the screen brings up quick controls for wireless connections, the flashlight, and more. Moving that, or creating an extra step to get to it, would be a big change.

What about reachability? The report says the iPhone 8 will have symmetrical bezels on all sides, with a "notch" on the top for the earpiece, sensors, and cameras, allowing for a display that's even bigger than the 5.5-inch screen on the iPhone Plus models. That means having a way to slide the display

"Apple is said to be testing multiple solutions, including one that is entirely gesturebased, meaning the user would return to the home screen by swiping with a finger in a specific way."







I could go on. Even tiny details, like which home screen to bring the user back to, which now seems unclear if returning to the home screen necessitates an animation that involves the current app's icon, could be up in the air. When the Mashable Tech team tackled this issue in our iPhone 2020 project, we quickly ran up against the many UI problems that manifest when the physical home button goes away.

Gurman also reveals a few more details about the hardware: The display has rounded corners, but it doesn't have curved sides a la the Samsung Galaxy S8 and Note 8. The power button on the right side is physically longer to make it easier to press. The overall footprint is closer to the iPhone 7 than the iPhone 7 Plus. The aspect ratio of the screen is taller than the current iPhones, too, allowing for six rows of apps, or 24 icons per home page. There's still a dock of four persistent apps on the bottom, but it looks more like the new iPad dock in iOS 11.

The notch up top means the status bar at the top of the display is split into two areas, which some Apple employees apparently call "ears." The current time, which currently resides in the center of the status bar, has been relocated to the left side, and wireless connection status (Wi-Fi, cellular) moves to the right. That status bar would also change based on the current task, since space is more limited. The front and back of the iPhone 8 are rumored to both be glass, but the report says there will be a steel band along the edge that functions as an antenna.

The report cautions that it could only say Apple has "tested" the new gesture controls and that it's likely one of multiple solutions for making up for the lack of a home button. But so far it's the most detailed report we've seen so far of exactly how the iPhone 8 will actually work.

Within a few hours of the Bloomberg report, another prominent iPhone 8 leaker, Guilherme Rambo, tweeted out a video rendering of how an iPad Pro-like dock would look on the iPhone 8. Rambo says it's in the iOS 11 beta, disabled by default, but that he got it to work by changing some "hidden" settings.

mashable.com

Mergers and Acquisitions

Western Digital Acquires Startup UpThere For Cloud Storage August 28, 2017

Western Digital Corp. announced Monday afternoon that it has acquired the assets of startup Upthere, an app-based cloud-storage offering meant to challenge services like Dropbox. Terms of the deal were not announced. Western Digital, known for storage hardware, will incorporate the Upthere services into its consumer offerings and place Barbara Nelson in charge of its cloud services division. UpThere received \$77 million in venture funding in July 2016, led by Western Digital's capital-investment arm and well-known Silicon Valley venture capital firm Kleiner Perkins Caufield & Byers.

Upthere, which counts two former Apple executives among its co-founders, wanted users to upload content such as photos, music, documents and more to their platform and access them from anywhere. Another Apple veteran, Chris Bourdon, was acting as chief executive at Upthere and will join Western Digital as a "strategic leader." Western Digital shares did not move in late trading after the announcement Monday, but have gained more than 33% so far this year, beating the S&P 500 index's SPX, +0.28% gain of 9.1% in that time.

marketwatch.com



CBS To Buy Troubled Australian Broadcaster Ten Network

August 27, 2017

Troubled Australian television broadcaster Ten Network will be sold to U.S. giant CBS Corp. subject to regulatory approval of foreign ownership, the Sydney-based company's administrator said on Monday.

New York-based CBS had "entered into binding transaction documents" to buy the network's owner, Ten Network Holdings Ltd., administrator KordaMentha said in a statement.

CBS is the biggest creditor of Australia's third most popular three-to-air commercial TV network that went into voluntary administration in June.

The sale is subject to conditions including approval by Australia's Foreign Investment Review Board, KordaMentha said.

The sale price will be revealed in a report to creditors within days.

Armando Nunez, president and chief executive of CBS Studios International, said CBS recognized the significance of Ten to Australian broadcasting.

"We are committed to the efficient, reliable and successful turnaround, operation and development of Ten to support continued growth in Australian media," Nunez said in a statement.

Ten chief executive Paul Anderson said his network and CBS had a strong relationship.

"We are very excited about further developing that relationship with CBS as an owner and strength that they will provide to the company at this critical time," Anderson said in a statement.

CBS chairman and chief executive Leslie Moonves said the sale added Ten to CBS's global content and distribution portfolios.

"We have been able to acquire it at a valuation that gives us confidence we will grow this asset by applying our programming expertise in a market with which we are already familiar," Moonves said in a statement.

Ten appointed administrators after its billionaire backers, Lachlan Murdoch and Bruce Gordon, refused to guarantee a new 250 million Australian dollar (\$198 million) bank loan when a current AU\$200 million loan is due to expire in December.

Murdoch, who co-chairs News Corp. with his father Rupert, and Gordon, who owns regional network WIN Television, want to each buy a 50 percent share in the Ten.

The Australian Competition and Consumer Commission, the competition watchdog, said last week it would not oppose the joint bid, saying it was unlikely to result in a "substantial lessening of competition in any relevant market."

But the deal is blocked by federal laws passed in the 1980s to ensure diversity of media ownership. The government is currently negotiating with the Senate to relax those laws and allow Murdoch and Gordon to buy the network.

washingtonpost.com





Industry Reports

Smartphone Shipments To Grow to 1.7 Billion in 2021, IDC Says

August 30, 2017

Global smartphone shipments are set to grow to just over 1.7 billion in 2021, up from 1.47 billion in 2016, according to new estimates from IDC's Worldwide Quarterly Mobile Phone Tracker.

IDC indicates that first-time users, and a rather stagnant two-year replacement cycle will drive a sluggish five-year annual growth rate of 3.3 percent.

"The big inflection point that everyone is watching for is when the smartphone market experiences its first year-over-year decline," Ryan Reith, program vice president with IDC's Worldwide Quarterly Mobile Device Trackers, commented. "We believe the two main catalysts for continued growth are bringing first-time users onto a smartphone and maintaining life cycles that are close to two years. At the end of 2016 we estimated that about half of the world's population was using a smartphone, which leaves plenty of room for additional first-time users."

"And, despite very high saturation levels in mature markets like North America, Western Europe, Korea, and Japan, we still see the majority of users replacing their handsets roughly every two years," he added. "We expect these trends will hold through the forecast."

IDC noted Android continues to hold a lion's share of the OS market, with device shipments up 2.3 percent in 2017 for 85.2 percent market share. Shipments of Apple's iOS devices were up 1.5 percent year over year, for 14.6 percent market share.

IDC doesn't call for much change in the coming years, as it estimates Android shipments will grow 3.6 percent in 2021 for an 85.5 percent market share, compared to a 0.8 percent increase of iPhone shipments for a 14.4 percent market share.

However, the report notes that Apple's anticipated nominal 1.5 percent growth in 2017 is a large improvement over the 7 percent decline of iPhone shipments in 2016.

IDC also indicated 2018 will be a bright year for Apple, as the arrival of the iPhone 8 will entice a high number of upgrades next year. That will combine with new 7S and 7S+ models to spur a projected 9.1 percent growth in 2018.

The new iPhone 8 will reportedly launch September 12, with forecasters expecting features such as a new fingerprint sensor and memory tiers with a 512 GB high-end option. More on that here.

While Android may dominate the market share of smartphone shipments, the story is different when looking at market value based on non-subsidized device retail pricing, according to the report.

IDC forecasts Apple will own 36 percent of the device market value by 2021, equaling about \$180 billion. This figure of more than half of the combined value of all other Android OEMs together, and doesn't include revenue from apps or services.

That may not be surprising given the newest iPhone is expected to carry a hefty price tag of around \$1,000.

"The high-end spectrum of the smartphone market shows no signs of slowing down as we expect the average selling price of a smartphone to increase over 7 percent in 2017," Anthony Scarsella, research manager with IDC's Worldwide Quarterly Mobile Phone Tracker, noted.

"IDC indicates that first-time users, and a rather stagnant two-year replacement cycle will drive a sluggish five-year annual growth rate of 3.3 percent."

"Premium phablet offerings from a variety of vendors look to be the main driving force behind the growth of devices with screens 5.5 inches and larger, which are set to grow over 34 percent in 2017 across all operating systems."

"The average selling price of these devices is also expected to increase 9 percent as we await the arrival of ultra-premium devices such as the iPhone 8, Note 8, V30, Essential Phone, and the secondgeneration Pixel," he added. Read more about Samsung's Galaxy Note 8 here.

Scarsella also noted that large screens will continue to become more popular, and phablets are expected to control just over 51 percent of the smartphone market by 2021.

wirelessweek.com

Report: Fixed Wireless 5G Could Reach \$1B In Revenues By The End Of 2019

August 28, 2017

When it comes to the last mile, it's clear that using fixed wireless access (FWA) to hook homes and businesses up to broadband costs less than traditional connections. While a lack of a business case for operators has traditionally held back the FWA market, all that is about to change with 5G, according to analysts.

SNS Research estimated that the initial cost of establishing last-mile connectivity for can be reduced by as much as 40% in comparison to FTTP. And on the other side of the margin model, the first estimates that service revenue associated with 5G-based FWA subscriptions will reach \$1 billion by the end of 2019.

Even better, the market is further expected to grow at a CAGR of approximately 84% between 2019 and 2025, eventually accounting for more than \$40 billion. In other words, operators can look forward to boosted margins—all while significantly accelerating rollout times by eliminating the need to lay cables.

"Fixed wireless access has emerged as one of the most predominant use cases for early 5G network rollouts," the firm said in its report on the subject. "Multiple mobile operators and service providers are initially seeking to capitalize on 5G as a fixed wireless alternative to deliver last-mile connectivity—at multihundred megabit and Gigabit speeds—in areas with insufficient fiber holdings."

FWA has been around for years of course—and has always failed to gain significant market traction (i.e., WiMAX and Clearwire). However, principal analyst of wireless infrastructure for Ovum, Daryl Schoolar, said that the sheer scale of the players could be what's different this time, bringing to fruition SNS' forecasts. The first standardized deployments of 5G-based FWA are expected to be commercialized as early as 2019, and a number of rural carriers—including C Spire and U.S. Cellular are beginning to view 5G as a means to deliver last-mile broadband connectivity to underserved rural communities.

However, crucially, there will also be significant early commercial rollouts by Verizon Communications and AT&T in the United States. Both are looking to deploy FWA using 5G in cities and urban areas that one would normally expect them to place FTTP, Schoolar said.

"In the past, FWA was either being deployed by smaller operators with limited resources or deployed by major operators in very selected markets," he wrote in FierceWireless. "Those markets for the most parts were areas not covered by any type of fixed broadband and often rural and sparsely

"Fixed wireless access has emerged as one of the most predominant use cases for early 5G network rollouts."

populated. FWA was only used in cases where other options didn't make sense. AT&T and Verizon seem to be taking a different approach this time, at least when it comes to 5G."

At the same time, Google is also part of this, given its acquisition of Webpass.

"This change in use case matters," Schoolar said. "It creates a much bigger market for network and CPE solutions. Rural is a niche market with low volumes. Going after bigger markets for FWA will create more service demand, increase broadband competition, spur innovation and help drive down cost of the network and CPE. All of those things will be key in sustaining FWA."

As for the spectrum aspect of the rollouts, SNS noted that the 28 GHz frequency band is widely preferred for early 5G-based FWA deployments, as many vendors have already developed 28 GHzcapable equipment—driven by demands for early field trials in multiple markets including the United States and South Korea.

Furthermore, "millimeter wave wireless connectivity specialists are well-positioned to capitalize on the growing demand for 5G-based FWA," SNS said. "However, in order to compete effectively against existing mobile infrastructure giants, they will need to closely align their multigigabit capacity FWA solutions with 3GPP specifications."

fiercewireless.com



20 Madison Street, 15th Floor Syracuse, New York 13202 www.ksrinc.com (315) 470-1350 1-888-8KSRINC





