



December 13, 2019

Pittsburgh Post-Gazette

Could Pittsburgh be the next Silicon Valley? A new study thinks so.

CNN

FCC unanimously approves proposal for new 3-digit number as Suicide Prevention Hotline

New York Times F.T.C. Is Said to Consider an Injunction Against Facebook

Reuters

U.S. telecoms, traffic agencies clash on plan to use some auto safety spectrum for Wi-Fi AT&T Inc. was dismayed at its report card from a government test measuring internet speeds. So the telecom giant sought to change its grade. The company pushed the Federal Communications Commission to omit unflattering data on its DSL internet service from the report, which assesses whether providers are delivering the speeds they advertise. AT&T also didn't provide information the FCC needed to validate speeds on those customers, the test officials confirmed.

In the end, the DSL data was left out of the report released late last year, to the chagrin of some agency officials. AT&T's remaining speed tiers notched high marks. The FCC's nearly decade-old program, Measuring Broadband America, is the U.S. government's gauge of whether home internet-service providers are holding up their end of the bargain when they promise users certain speeds.

Companies wield tremendous influence over the study and often employ tactics to boost their scores, according to interviews with more than two dozen industry executives, engineers and government officials. As a result, the FCC's report likely gives consumers an unreliable measure of internet providers' performances by overstating speeds. "It's hard to trust the numbers when you know" of efforts to massage the results, said veteran cable and telecom consultant Mark Lubow.

The stakes are high. <u>Cable and phone companies often tout the scores</u> while trying to sell packages promising ever-faster speeds at higher <u>prices</u>, and they are increasingly leaning on their broadband businesses to drive growth. The FCC informs companies which customers are part of the speed tests, allowing some to prioritize giving those households better service,

Zap2It Cable Top 25 for Week Ending December 8

Philadelphia Inquirer

A Pennsylvania
election fiasco with
new voting
machines happened
because they were
set up incorrectly

Allentown Morning Call Elizabeth Warren gets head start on Pennsylvania campaign

Pennlive Op-ed by RNC cochair: Pennsylvania is ready for four more years of President Trump

engineers who worked at some of the companies said. The FCC relies on companies to provide information about the speed plans for the customers being tested. Major providers have persuaded the FCC to remove unfavorable data, including individual houses with poor scores, blaming faulty equipment. They have successfully argued to exclude test days when heavy traffic slowed scores, such as during NFL games or when Apple Inc. pushed a new software update. Reasons for the deletions aren't always included in the FCC reports.

Many internet providers gain additional information about the users being tested by paying SamKnows, the U.K.-based company that administers and provides equipment for the tests, for real-time access to testers' scores year-round, and other analytics. Representatives of major broadband providers denied tampering with the FCC study, pointing to a code of conduct they sign that forbids them from influencing the results unless it is "consistent with normal business practices." They said any network upgrades improved service for swaths of their subscribers, not just households in the FCC's tests.

AT&T said that in its case, the company asked the FCC to remove DSL data from the report because it no longer markets that older technology, which relies on copper phone lines, used by a small percentage of its customer base. The company said the commission's own policies should have excluded the "obsolete" internet plans. AT&T also said that it did validate the DSL accounts for the FCC. An FCC spokesman said the program has a transparent process and that the agency will continue to enable it "to improve, evolve, and provide meaningful results as we move forward."

SamKnows said it doesn't believe anything the providers did could have made a difference to the results, given the checks and controls it has in place. The company's chief executive, Alex Salter, said having internet providers as clients doesn't interfere with its ability to do accurate testing for regulators. The program has spurred companies to make major nationwide investments in network upgrades, he said. The tests cover thousands of users who sign up directly with SamKnows, or are invited to sign up by the FCC or their internet providers. They install measuring devices in their homes, known as whiteboxes, which measure speeds throughout the day.

For the official report, the FCC uses data from a specific time period, usually a month or two in the fall, to produce a report that has been published eight times in nine years, most recently last December. The FCC and SamKnows inform the internet providers the dates of the testing period and send them lists of individual testers' names so they can confirm which speed packages the customers have signed up for. The agency compares that information with the actual results from the tests administered by SamKnows. That makes it possible for companies to keep tabs on many testers from year to year, engineers said. Providers can use that information, as well as real-time data from the dashboard SamKnows sells them, which anonymizes the users but shows their states and regions, to make targeted upgrades that improve service for those households, engineers said.

Internet experts and former FCC officials said the setup gives the internet companies enormous leverage. "How can you go to the party who controls the information and say, 'please give me information that may implicate you?' "said Tom Wheeler, a former FCC chairman who stepped down in January 2017. Jim Warner, a retired network engineer who has helped advise the agency on the test for years, told the FCC in 2015 that the rules for providers were too lax. "It's not much of a code of conduct," Mr. Warner said. The reports largely paint a rosy picture for internet providers. Last year, a key finding was that "for most of the major broadband providers that were tested, measured download speeds were 100% or better of advertised speeds during the peak hours."

Internet providers such as Altice USA's Optimum and Verizon Communications Inc. 's Fios have used the FCC's results over the years to bolster their marketing claims. Charter Communications Inc., which in 2016 swallowed

Time Warner Cable to become the No. 2 U.S. internet provider with its Spectrum brand, cited FCC speed-test results to defend itself when the New York attorney general sued it in 2017 for overpromising and underdelivering internet speeds. Comcast Corp. says about its Xfinity service on its website that "recent testing performed by the FCC confirms that Comcast's broadband Internet access service is one of the fastest, most reliable broadband services in the United States."

Marcia Pearson, a Cox Communications Inc. customer in Goleta, Calif., pays for 30 Mbps—or megabits per second—service but registered speeds of only 3.6 Mbps when she used Cox's own online tool to test her speed on a recent day. "It is annoying that one has to pay for something that is falsely advertised," she said. In interviews, several other consumers said they have had similar experiences. Cox said that after it was contacted by The Wall Street Journal about Ms. Pearson, it discovered outdated equipment in the network connecting to her home and fixed it. Ms. Pearson said her speeds have improved. Last year, Cox, one of the biggest U.S. broadband providers, wasn't pleased with a weak score on a key FCC metric, which said Cox's speed "consistency"—what most subscribers get most of the time—was 37% of what it advertised. Cox officials denied responsibility, arguing to the FCC that a congested link to an internet middleman had lowered scores for some of its Arizona customers.

In the December 2018 report, Cox's results aren't included in two main charts that show how companies compare in consistency. The FCC put Cox's scores, including the 37% figure, in a footnote, where it said that, factoring out the contested results, the consistency score would have been 85%. Cox and the FCC said most of the speed tests occurred over the congested internet link, the upgrade of which had been delayed. In normal use that link carried less than 3% of Cox's web traffic, they said. Some FCC officials were uncomfortable with the omission, people familiar with the episode said. Network experts say broadband providers share responsibility with internet middlemen to keep their connections upgraded.

AT&T was repeatedly at loggerheads with the FCC over its results and worked closely with the agency to have favorable items included in the report, a former AT&T employee familiar with the testing program said. FCC officials decided reluctantly not to publish AT&T's DSL data in last year's report, according to Walter Johnston, a former FCC official who oversaw the program until he retired last year. "Personally, I was not happy about that," he said. Overall, Mr. Johnston defended the FCC test, saying the agency never meant it to be a "consumer guarantee." AT&T this year told the commission it will no longer cooperate with the FCC's SamKnows speed test. Instead, it said it plans to use its own measurement tool, which it believes to be more accurate, to report performance to the government.

Providers have requested the FCC delete poor results from individual users, such as when major weather events like hurricanes hurt internet service, or when users have outdated modems. Some FCC staff felt the providers should be responsible for ensuring their customers have updated equipment, a former FCC official said. The FCC routinely allows those deletions as long as companies make good-faith efforts to inform users of old modems.

In 2013 and 2014, millions of Comcast, Verizon and Time Warner Cable Customers experienced internet slowdowns—most notably while viewing Netflix, but also on a range of other sites and applications. The FCC omitted speed-test results reflecting that in its report. The agency said the network congestion, which stemmed from a standoff between Netflix, the providers and internet middleman Cogent Communications Inc. over who should pay for upgrading their shared connections, was outside the scope of the study. Comcast, Verizon and Time Warner Cable got stellar grades in the 2014 report. Henning Schulzrinne, the chief technology officer at the FCC for several years, said he was against such exemptions because they obscured customers' actual experiences.

New York-based Cablevision Systems Corp., which was acquired by Altice in 2016, got especially bad results in 2011. Top executives pushed a network-wide effort to improve service, and during the upgrades, FCC speed-testing users were given white-glove treatment, some former Cablevision engineers said. Jack Burton, a former Cablevision engineer who is now a consultant, said "there was an effort to make sure known [users] had up-to-date equipment" like modems and routers. Cablevision also marked as "high priority" the neighborhoods that contained speed-testing users, ensuring that those neighborhoods got upgraded ahead of others, said other former Cablevision engineers close to the effort.

Cablevision's SamKnows scores dramatically improved within a span of months, according to an FCC blog post. The following year Cablevision topped the rankings.

Altice declined to comment on activity before its acquisition of the company. A former senior Cablevision executive denied the company gave households involved in FCC speed tests special treatment. FCC officials said they are unaware of any such effort to influence the test. They added that they publish the raw data from tests online and rely on rival carriers to keep one another honest.

One way providers keep tabs on households is by paying SamKnows for access to its real-time dashboard. SamKnows said its contracts with providers range from about \$13,000 to more than \$650,000 a year. Through the dashboard, companies could find out before the test that "you have issues somewhere," said Jason Weil, a former engineer at Time Warner Cable and Charter who worked on the FCC program at both companies. "If you know six months ahead of time, that is much, much easier." Mr. Weil said the close collaboration between SamKnows and the providers worked to the benefit of all users.

Sometimes providers boost speeds for households during the actual FCC speed-testing period. Comcast a few years ago upgraded speeds in some regions without notifying the FCC, making test results look stellar, people close to the FCC program said. The FCC discovered the changes after spotting anomalous data and adjusted the numbers. This September, amid an FCC test, Comcast rolled out speed upgrades for many customers in several states. "We have done annual speed increases during various months of the year for the past 18 years," a Comcast spokeswoman said. "In addition, the FCC's measurement system is designed to ensure that any changes in speed or tier during the testing window are accounted for so they can be measured accurately."

Internet providers can spot government speed-test data on their networks and essentially open more bandwidth for a customer for the duration of the test, said James Cannon, a longtime cable and telecom engineering executive who left Charter in February and now consults for various providers. "I know that goes on," he said. "If they have a scheduled test with a government agency, they will be very careful about how that traffic is routed on the network." Michael Dozier, a former AT&T engineer who left this year; Maurice Dean, a telecom and media consultant with 22 years' experience working on streaming, cable and telecom projects, including at Alphabet Inc. 's Google; and Mr. Lubow, the cable and telecom consultant, agreed there was special treatment of speed tests. "It is problematic," Mr. Dean said. "This attempt to 'enhance' performance for these measurements is a well-known practice in the industry" and makes the FCC results "almost meaningless for describing actual user experience."

The Journal reached out to the top 10 U.S. broadband providers to ask about special treatment of speed-test traffic. AT&T, CenturyLink Inc., Charter, Comcast, Cox, Mediacom Communications Corp., Verizon and Windstream Holdings Inc. denied that they prioritize speed tests, and said they upgrade their networks continually and don't give special treatment to FCC speed

testers. Altice USA and Frontier Communications Corp. said they follow the FCC's code of conduct. Last year, satellite internet provider Viasat Inc. left the FCC's program after growing concerned about rivals' behavior. Its satellite competitor Hughes Network Systems LLC had posted results in 2017 showing it was providing greater than 160% of its advertised download speeds on average, far exceeding Viasat's. Also worrisome, the New York attorney general alleged that Charter-Time Warner Cable juiced its FCC results by using certain tactics to paper over bad scores. Million while admitting no wrongdoing.

It "really made us question...whether [others] are intentionally trying to influence the results," said Christopher Murphy, Viasat's associate general counsel. The fact that some internet providers were also clients of SamKnows struck Viasat as a conflict of interest. FCC officials said their investigation of Viasat's complaint found no evidence of tampering by Hughes. A Hughes spokeswoman said the company has also left the program and always abided by the FCC's rules. A big reason for the gap between the speeds internet companies promise and those they deliver is the structure of most broadband networks. Service providers pipe bandwidth into neighborhoods, where it is shared by those households. The amount of bandwidth providers deliver is a fraction—often as low as 1%—of the total bandwidth all households in the neighborhood have collectively signed up for in their monthly plans, according to CTC Technology & Energy, a telecommunications consulting firm.

That helps explain why at times of peak usage, when lots of people are playing "Fortnite" or streaming movies, for example, there isn't enough bandwidth to go around, and people experience speeds slower than what they paid for. Company executives said they provision bandwidth based on how much a neighborhood actually uses in order to be fiscally responsible. When providers roll out faster speed plans, without upgrading the total bandwidth available to neighborhood networks, the results can be even more frustrating for consumers. For example, Charter-Time Warner Cable oversold its network to the point where 200 Mbps and 300 Mbps households "would achieve speeds that were only a half to a third of their promised speeds," the New York attorney general alleged in its 2017 suit. Yet Time Warner Cable's FCC speedtest results in the two years prior averaged 100% or more of promised speeds.

Internet experts said the FCC's entire testing approach needs to be rethought to be more useful for consumers. The current test measures how much capacity internet providers supply to a household, in a vacuum, but doesn't monitor the internet performance that users actually experience while streaming, gaming or surfing the Web, which can be affected by overtaxed neighborhood networks, Wi-Fi interference or traffic jams deep in the guts of the internet. The Journal conducted its own test this year to assess how speed affects internet performance, focusing on how users actually experience a variety of streaming services. The Journal's testing found that there were marginal benefits for paying for faster speeds beyond 100 Mbps. The FCC has considered a similar approach to testing streaming experiences, but hasn't moved forward, people involved in the program said. Tim Wu, a longtime broadband industry critic and Columbia University professor, likened the FCC's approach to measuring the speed of a car after getting rid of traffic. "If you want to get an idea of what Americans are experiencing, that's a totally different story," he said. - Wall Street Journal

It's only been nine months since the last special election for West Philadelphia's 190th District seat in the state House of Representatives. Now we are gearing up for another, since Friday is State Rep. Movita Johnson-Harrell's last official day in office. Her first official day in prison has yet to be determined. Johnson-Harrell, the second Democrat in a row to resign in disgrace from that seat amid criminal charges, was charged last week with stealing more than \$500,000 from a nonprofit to fund a lavish lifestyle, with fur coats, family vacations, and designer clothes. State Attorney General Josh Shapiro says a guilty plea is in the works and will include jail time.

The Democratic City Committee had a mess of a time selecting a candidate for the last special election. Johnson-Harrell was <a href="text-weether-left-style

The progressive organization is holding a town hall meeting Wednesday evening in the 190th District to ask voters what they're looking for in a representative, according to Vanessa Clifford, the Working Families Party political director for Pennsylvania and Delaware. Nicolas O'Rourke, a Working Families Party Council candidate who didn't win in last month's election, will run the show as the party's new state organizing director. Clifford said her party is getting a lot of pitches from people interested in seeking the seat. "Most of the candidates have reached out to me," she said. "My phone has been blowing up." Among the potential candidates who confirmed their interest to Clout: Ray Bailey from Local 1291 of the International Longshoremen's Association; Jabari Jones of the West Philadelphia Corridor Collaborative, marketing consultant Rashaad Lambert; and Pastor Pam Williams and Amen Brown, who both ran as independent candidates in the March special election won by Johnson-Harrell.

Brady said Danyl Patterson, who ran unsuccessfully for a judgeship in 2017, has expressed an interest. And Clifford said Roni Green, business agent for SEIU Local 668, is mulling a run. The state Election Code requires House Speaker Mike Turzai, an Allegheny County Republican, to call a special election within 10 days of a vacancy in the office. That election must be held at least 60 days after that. So a special election could happen as early as mid-February. Special elections cost about \$175,000 when held apart from regular elections, an approach Turzai has signed off on several times in recent years. And they can complicate the primary election planning process. City elections officials, who still haven't requested reimbursement from the state for March's special election, plan to ask for this one to run concurrently with the April 28 presidential primary.

Quotable:

"Pennsylvania is the single most important swing state in the country. I truly believe that. And it's going to be incredibly competitive. It's about margins in smaller counties. Those are the individuals that Donald Trump speaks to. Those are the individuals who feel left behind by a lot of the recent economic trends and turns. And it's going to come down to battles in small places and counties that a lot of people haven't heard of, not Philadelphia and Pittsburgh. I always try to push back on this notion that there is a blue wave in Pennsylvania. There is not." — Lt. Gov. John Fetterman, a Democrat, speaking about the 2020 presidential race in Pennsylvania on MSNBC Tuesday in Hershey, before President Donald Trump appeared at a rally there. — Chris Brennan's "Clout" column in Philadelphia Daily News



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