

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114.

I want to start with two stories—two stories that illustrate why what the Commission is doing today is so important.

First story. The summer before last, Shanika Parker finished working the night shift at her job outside of Indianapolis. She was on her way home when exhaustion got the better of her. She dozed off behind the wheel. The next thing Ms. Parker knew, her car was upside down—and quickly filling with water.

Ms. Parker acted fast. She called 911 from her mobile phone. But when the operator asked where she was, Ms. Parker could only answer: “I don’t know. I don’t know. Can you please help me?”

Using location information from her mobile phone, local police were able to trace the call. Using their knowledge of the area, responding officers were able to figure out that her car slid into a pond next to an interstate on her way home. When the officers arrived on the scene, they found her overturned car. Mud was oozing through the windows and doors. Time was running out.

Fortunately, this story ends well. But by the time the police pulled Ms. Parker out from the car she had only eight inches of air left. Still, this story shows very clearly what first responders can do with the right tools—that is, with accurate location information.

Second story. Mary Thomas suffered a stroke in New York. Ms. Thomas knew something was wrong. So she mustered up the strength to call 911. But the stroke had taken its toll. Her speech was slurred. She was unable to tell the dispatcher where she was and what help she needed.

So the first responders turned to technology. The tower information for Ms. Thomas’s mobile phone gave an address for the call. But the address was wrong. It turns out that on the Upper East Side of Manhattan, it can be easy to get lost. Lots of buildings, lots of floors, lots of apartments stacked high in the sky. In fact, first responders in New York followed several false leads trying to track the call. All in all, they searched for eight hours before they found Ms. Thomas. She died the next day.

These stories illustrate very clearly what we all know intuitively. When the unthinkable occurs you want first responders to find you—no matter where you are—indoors or out—and no matter what kind of phone you use to make that call.

That is why what we do here today is so critical. The number of wireless calls to 911 is skyrocketing. In fact, more than 70 percent of 911 calls are now made from wireless phones. That is more than 400,000 calls across the country every day. This number is only going to grow. Because today, for roughly 2 in 5 households, their wireless phone is their only phone.

So the way we connect and call is changing. But until today our policies providing first responders with information about where we are when we call 911 have been stranded in the calling practices of the last century. They provide for location information for 911 calls made using wireline phones. They provide for location information for 911 calls made outdoors using wireless phones. But for calls made indoors using wireless phones your best bet would be to cross your fingers and hope and pray, because no location accuracy standards apply. This gap is unacceptable. It does not reflect the way we now reach out for help in our moment of greatest need.

Today, at long last, we take steps to fix this problem and close this gap. For the first time, we bring indoor dispatchable location into our wireless location accuracy policies. This is big—and it is bound to save lives. Because, as Steve Souder from the Fairfax County Department of Public Safety Communications suggests, before a blue and red light flashes, before a whistle on the volunteer fire station blows, before a pager rings, or an air horn blares—the front line of public safety in the United States are the people who answer your 911 call. When they have more information about where you are when you call, we are all safer. He's right—and his words illustrate the importance of that call made by Ms. Parker in Indiana, by Ms. Thomas in New York, and by hundreds of thousands of us each and every year.

Our effort today has taken a lot of work and wrangling. Thank you to the countless first responders and the authorities at the Association of Public Safety Communications Officials International and National Emergency Number Association who helped us in this process. Your insights and assistance have been invaluable. Thank you also to the Chairman for making this effort a priority and Admiral Simpson and the Public Safety and Homeland Security Bureau for pushing this issue forward.

Finally, we owe a debt of gratitude to the bipartisan support this initiative has received from Capitol Hill. Last year, the Senate Committee on Commerce, Science, and Transportation held a hearing to bring focus to this problem. Senator Schumer also pressed us to modernize our rules—and get this right. In particular, he called for us to update our policies to give first responders the information they need to help us in our hour of need. In addition, Congressman Upton and Congressman Pallone encouraged this agency to put a premium on dispatchable location—and get this done. For their support and willingness to champion this important public safety matter, we are grateful.

**STATEMENT OF
COMMISSIONER AJIT PAI**

Re: *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114.

Whoever you are or from wherever you are calling, 911 has to work. It doesn't matter if you're in a school or library, a hotel or motel, an office or government building; your call needs to go through, and emergency responders need to be able to find you.

That is why I supported the commencement of this proceeding last February—because it is time that 911 calls provide emergency responders with accurate location information regardless of whether the caller is indoors or outdoors. My goal, as I said back then, was to adopt rules that are both “aggressive and achievable.”¹ At the time, I expressed concern that the NPRM's proposals would fail to meet that test. And that concern was borne out by the record in this proceeding, which shows that our original proposals were impractical and unrealistic.

So I am pleased that we've adjusted course and are now adopting requirements that meet those two watchwords. I am also glad that the framework we're putting in place puts us on a path to providing emergency responders with a “dispatchable location”—that's the room, office, or suite number where the 911 caller is located. Public safety organizations have described this as the “gold standard” for indoor location accuracy because it tells first responders exactly which door they need to knock on, or in some cases, kick in during an emergency.²

I commend all the parties that worked cooperatively on this important issue. Although I had concerns with this Order when it first circulated, I appreciate the changes that have been made and would like to thank Commissioner Rosenworcel in particular for helping steer the item down a better path. I am pleased too that the Order now makes it clear that nothing in our decision authorizes the use of any non-U.S. satellite system in conjunction with the 911 system. I will thus be voting to approve.

Finally, I would be remiss if I did not take a moment to mention another issue that affects millions of Americans when they dial 911 from indoor locations. As some of you might recall, I launched an inquiry a year ago to ensure that dialing 911 always works.³ I started the effort after hearing about the tragic death of Kari Rene Hunt Dunn in a Marshall, Texas hotel room. As I've recounted before, Kari's daughter tried calling 911 four times, but the call never went through because the hotel's 911 system required guests to first dial a “9” to get an outside line.

After hearing this story, I gave Kari's father, Hank Hunt, my personal commitment that I would do my best to ensure that no one—and no child—would ever again confront that situation. Last week, I had the chance to visit Marshall, Texas and the 911 dispatch center where the call from Kari's daughter would have—and should have—gone. I was honored to stand with Kari's father, Hank—someone whose

¹ *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, Notice of Proposed Rulemaking 29 FCC Rcd. 2374 (2014) (Statement of Commissioner Ajit Pai Approving in Part and Concurring in Part), <http://go.usa.gov/SQXV>.

² See, e.g., Letter from Derek Poarch, Executive Director, APCO International to Marlene Dortch, Secretary, FCC (Jan. 21, 2015), <http://go.usa.gov/SQXH>.

³ See Statement of FCC Commissioner Ajit Pai on the Importance of Connecting Americans to Emergency Personnel Whenever They Dial 911 (Jan. 13, 2014), <http://go.usa.gov/9DxJ>; Remarks of Commissioner Ajit Pai at the 9-1-1 Goes to Washington Conference (Mar. 24, 2014), <http://go.usa.gov/9DjA>; Statement of FCC Commissioner Ajit Pai Regarding the Ongoing Inquiry into Consumers' Ability to Reach Emergency Personnel Whenever They Dial 911 (June 24, 2014), <http://go.usa.gov/NNj4>.

courage, fortitude, and determination is humbling and inspiring. And I was pleased to report on the progress that's been made in just one year's time.⁴

While both my progress report and a shorter summary are available on the Commission's website, I wanted to take just a minute to highlight some of the progress that's been made. By raising awareness and through voluntary efforts, we are now on track to have solved this problem by the end of the year at all Country Inn & Suites, Crowne Plaza, Doubletree, Embassy Suites, Fairfield Inn, Four Points, Gaylord, Hampton Inn, Hilton, Holiday Inn, Hyatt, InterContinental, La Quinta, Marriott, Motel 6, Park Plaza, Radisson, Residence Inn, Ritz-Carlton, St. Regis, Sheraton, Staybridge, W, and Westin properties. That's real progress.

Manufacturers and vendors of multi-line telephone systems (MLTS) have also stepped up to the plate. Today, half of surveyed vendors ship all of their MLTS products with a default setting of direct 911 dialing—this includes NEC, Shortel, Vertical, and Windstream—and 100% recommend that their products be set up to allow for direct 911 dialing.

Bottom line: we're getting serious and substantial results. It's been an honor to work alongside Hank, Mark Fletcher, the American Hotel & Lodging Association, the National Emergency Number Association, and many others to solve this problem. I look forward to continuing our labors and making further progress in the time to come.

⁴ See Remarks of FCC Commissioner Ajit Pai on Connecting Americans to Emergency Personnel Whenever They Dial 911 (Jan. 23, 2015), <http://go.usa.gov/SQ5k>; see also Summary of FCC Commissioner Ajit Pai's Report on the Progress Being Made to Ensure that Dialing 911 Always Works (Jan. 23, 2015), <http://go.usa.gov/SQ5P>.

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

Re: *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114

Over the past few months, I have been fortunate to visit several Public Safety Answering Points (PSAPs). From New York City, to Fairfax County, Virginia, to Anchorage, Alaska, dedicated and hardworking 911 call takers have expressed the great need for better location information. The location of the caller can be the single most critical data point taken during each emergency call, as demonstrated by the fact that the first thing some call centers ask is “where is your emergency?” not “what is your emergency?” For this reason, I support today’s item that will facilitate the ability of 911 call takers to access quicker and more accurate location information for wireless callers that contact 911 during emergencies, especially when they are indoors. This is a particular concern as it pertains to more densely populated locations, including urban centers with skyscrapers and high-rises.

In the February 2014 Notice of Proposed Rulemaking (Notice), the Commission challenged the wireless sector and public safety community to develop a “consensus approach” to improve indoor location accuracy.¹ I applaud the wireless industry, NENA and APCO for stepping up to the plate and putting forth a “roadmap” to deliver “dispatchable location,” the so-called gold standard of emergency location information, sooner than expected. By providing the address, along with other information such as floor, apartment or suite, emergency services will be able to locate the person in need and administer assistance faster than ever before, when seconds count.

By setting a goal to provide dispatchable location to first responders within specified timeframes and with specific performance results, however, we are tasking industry with a quite a challenge. In response to the 2014 Notice, I cautioned that deadlines needed to be realistic and that we should not adopt rules based on unproven technologies that have not been commercially deployed. Within the modified roadmap confines, industry and public safety are prepared to take on this challenge, along with testing alternative technologies if dispatchable address cannot be timely deployed. In fact, I am able to support today’s item because we are adopting a compromise that addresses many of the concerns raised on this issue. I am sure that everyone – including my colleagues and stakeholders alike – can look at what is being adopted today and see particular portions that they would have done differently, but this is a consensus document receiving all of my colleagues’ support and it skillfully balances all of the competing interests.

Ultimately, this item should serve to bring tremendous benefits forward for all concerned. The public safety community will receive more precise information, in the desired format, to increase efficiency and rapidly respond to emergencies. Industry has a path forward that will likely be achievable in the timeframes provided. Moreover, companies will not be faced with a single vendor solution or possibly forced to build out multiple indoor location solutions, wasting money and stranding investment. And, the real winners, of course, are American consumers, who, in time, will be more locatable by first responders when placing a wireless call.

Today, the Commission is successfully implementing a voluntary industry and public sector compromise, albeit after several rounds of revisions. And, the plan put forth will hopefully reduce the need for future action and waivers down the road, as experienced during the previous location accuracy proceeding.

¹ *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, *Third Further Notice of Proposed Rulemaking*, 29 FCC Rcd 2374 (2014).

Separately, I renew my concern that the location information resulting from the implementation of this item could be used by government agencies to pinpoint the location of law abiding Americans. While this is not the direct responsibility of the Commission, I trust that appropriate oversight, including congressional involvement, will seek to ensure that this information is not used or abused to the detriment of the American people. Improving location accuracy for wireless 911 callers should not happen at the expense of greater exposure to surveillance or monitoring by government officials. It is to help public safety during emergencies, not limit the freedoms and lawful activities of American citizens.

I thank the Chairman and my fellow Commissioners for agreeing to this approach, and I thank the Public Safety and Homeland Security Bureau for their hard work on this item.

STATEMENT OF CHAIRMAN TOM WHEELER

Re: *Inquiry Concerning the Development of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket Nos. 14-126 and 12-228.

Earlier this month, I was in Las Vegas for the annual Consumer Electronics Show, along with almost everyone else in this room. As usual, I saw innovators pushing the envelope of what is technologically possible even further than the year before. As diverse as this year's offerings were, one common element was that almost every device on display requires high-speed connectivity. The more sophisticated and powerful these products and services get, the more bandwidth they require. Our challenge at the FCC is making sure that the U.S. has continually improving fast and open broadband networks that enhance growth in this vital sector of our economy and will enable *all* Americans to enjoy the Internet-powered innovations of today and tomorrow.

In 1996, Congress had the wisdom to require the FCC to ask regularly how we are doing toward that goal. More specifically, they asked the Commission to "determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."

Today, by issuing the first Broadband Progress Report of my chairmanship, the Commission offers its assessment of where we stand. We found that we have made notable progress, but many challenges remain. Perhaps most significantly, we found that to get the right answers we needed to update the question.

First, the good news. Private industry continues to invest billions of dollars to expand America's broadband -- \$75 billion a year by one analysis. Both fixed and mobile providers continue to improve broadband speeds, and current and new entrants to the market are investing and expanding broadband availability to many Americans with speeds in some locations exceeding 1 gigabit per second (Gbps).

No doubt, we have seen improvements in our wired and wireless broadband infrastructure that are delivering real benefits for our economy and the American people. But remember what Congress asked: are "*advanced* telecommunications ... being deployed to *all* Americans in a reasonable and timely fashion?" The first step to answering that question is to define "advanced telecommunications" in 2015. As this report makes clear, it ain't what it used to be.

For starters, "advanced" means at the forefront, progressive, cutting-edge. It doesn't mean the average or the happy medium. The current benchmark of 4 megabits per second (Mbps) was established in 2010, before the iPad had even been introduced. Safe to say, consumer behavior and the marketplace has changed.

Four Mbps is less than the recommended capacity to stream a single HD video. Now consider that the average connected household has seven Internet-connected devices -- including televisions, desktops, laptops, tablets, and smartphones. On any given evening, it would not be surprising to see one child doing online homework, another streaming a movie, one parent uploading data files for work, and another parent paying bills or downloading photos while also streaming music or video. That's not just tough to do with a 4 Mbps connection, it's pretty much impossible without taking turns being online, which is a non-starter. In 2015, taking turns to share the Internet bandwidth is as absurd as taking turns to use the electricity.

As I saw at the Consumer Electronics Show and during my travels across the country, true high-speed connections are crucial not only for delivering today's entertainment and basic communications, but tomorrow's innovations that will educate our children, deliver quality health care, improve energy efficiency, fill the employment ranks, and maintain the United States as the world's innovation leader for the 21st Century.

A 25 Mbps connection has become "table stakes" in 21st century communications. That's why today's report increases the benchmark for "advanced telecommunications" to 25 Mbps down, 3 Mbps up.

Why 25 Mbps?

Application and service providers, consumers, and the broadband providers are all pointing to 25/3 as the new standard. Content providers are increasingly offering high-quality video online, which uses a lot of bandwidth and could use a lot more as 4K video emerges. If you were to look at the ISPs marketing materials, most recommend speeds of 25 Mbps or higher if you plan on using multiple connected devices at the same time. Connections under 10 Mbps are marketed as "best for 1 device" and uses like sharing photos or downloading music.

Consumers are flocking to 25/3 when they have the opportunity. The percentage of consumers adopting 25/3 has quadrupled since 2011 and 2013 – from 7 percent to 29 percent.

So, today's report sets the standard for advanced telecommunications as 25 Mbps broadband service. That leads to the follow up question: Are those services being "deployed to all Americans in a reasonable and timely fashion?" Simply put, no.

Nationwide, 17 percent of U.S. households -- about 1 in 6 Americans -- don't have access to 25 megabit broadband.

There is a large, and unacceptable, disparity in broadband access between urban Americans and Americans in rural areas and Tribal lands.

In rural areas, more than half – 53 percent – lack access to broadband at the new benchmark; in Tribal lands, it's almost two thirds – 63 percent – that lack access. The disparity persists at all speeds. For example, at our previous benchmark of 4 Mbps/1 Mbps, 20 percent of Americans in rural areas cannot get that level of service. In urban areas, only 1 percent lack access to that service. Sadly, we wouldn't be where we need to be on broadband deployment to all Americans, even if we hadn't increased the benchmark speed.

Despite the billions in network investment, progress in deployment of faster networks to underserved areas is too slow. The percentage of Americans without access to 25/3 service came down only 3 percentage points between 2012 and 2013, and improvement was even slower in rural areas.

The FCC doesn't just have a statutory obligation to report on the status of broadband deployment; we have a duty to take immediate action if we assess that the goal of deployment to all Americans is not being met. And act we have.

We have many ongoing efforts to remove barriers to infrastructure investment and promote competition. For example:

- In June and December, the Commission issued two Connect America Fund orders that will disburse \$11 billion to support build-out to Americans in rural areas without broadband;
- The Commission is well underway to provide support to mobile providers that will extend voice and broadband services to unserved areas;
- We have allocated \$75 million and provisionally selected participants for the Rural Broadband Experiments, which will bring next generation service to rural, high cost, and Tribal areas; and
- Our E-rate Modernization efforts are expected to support the deployment of fiber to schools that need it to support digital learning.

But we acknowledge that more efforts may be needed. Today, we are issuing a Notice of Inquiry seeking comment on additional ways to bring 25 megabit broadband to all Americans in a reasonable and timely fashion, beyond what we have done to date.

There's an old adage from my days in the private sector that, "What gets measured gets managed." Today's report offers a valuable assessment of U.S. broadband and will hopefully serve as an impetus for meaningful improvements in the speed and availability of true high-speed networks for all Americans. We know where we need to be. Now we need to do the hard work to get there.

Thank you to the members of the FCC staff who worked on this report, notably Julie Veach and her team in the Wireline Bureau. This team has done a great public service by raising the bar for broadband in America.

**STATEMENT OF
COMMISSIONER MIGNON CLYBURN**

Re: *Inquiry Concerning the Development of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 14-126.

When afforded the opportunity to travel internationally, I beam with pride as I represent this great nation. So many look to the United States for expertise and leadership because of our advanced broadband networks, world-class research, innovation and investment and more.

We lead and are admired in large part because we are visionary – we are never satisfied with the status quo. We want to be better, we continue to push the limits and that is most notable when it comes to technology.

At CES, we witnessed some amazing innovations, like wearables, which promise to greatly improve the quality of life, particularly for our most vulnerable and fragile. But without ubiquitous broadband, and absent the means to connect, these incredible inventions are simply gadgets and flashy expensive toys for us to gaze, marvel and wonder.

As consumers adopt and demand more from their platforms and devices, the need for broadband will increase requiring robust networks to be in place in order to keep up. And what is crystal clear is that the broadband speeds of yesteryear are woefully inadequate today and beyond

So today's Broadband Progress Report adopts a forward-looking speed of 25 Mbps to ensure that America continues to lead the world and meet the needs of its consumers because as a nation we should always aspire to deliver the very best. We must ensure that all consumers have access to these life-changing technologies. Yet, what the Report affirms is that too many Americans still lack access to the broadband speeds to support the very technologies that promise to be both life altering and life-saving.

Today, however, that persistent gap affects too many households especially those who are low-income Americans, living on Tribal lands and in rural communities. This is unacceptable. And we must do more.

We must not be in such a rush to declare victory until we can honestly proclaim that we have broken down the barriers to broadband adoption, accelerated the deployment of broadband networks, and have ensured that broadband technology continues to evolve and keep pace with consumer needs.

I also believe is that the FCC has an obligation and the ability to tackle some of these barriers through the modernization of its Lifeline program. Affordability remains a barrier for too many and a recent report from the Southern Education Foundation affirmed what we already knew if we bothered to pay attention -- over 50% of our students enrolled in public schools today are living in poverty. We took a noble and noteworthy step just a few weeks ago to close the broadband gap for schools and libraries but the race is not won if it is plain to see that millions of families are still struggling to gain educational and economic parity in part because they remain disconnected at home.

Will modernizing the Lifeline solve the adoption, connectivity and educational disparity problems on its own? No, it will not. But what it will do, and what is incumbent upon the FCC to do, is to use every tool at its disposal to close as many layers of the connectivity divide as possible. Last November, I outlined [principles](#) to reform the Lifeline Program and today I am reissuing the call to all stakeholders to engage now for the returns of greater connectivity to our society are limitless. As Michelangelo famously

said, “The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it.”

I want to thank the staff of the Wireline Competition Bureau and the Wireless Telecommunications Bureau for their work on this item.