

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL,
APPROVING IN PART, DISSENTING IN PART**

Re: *Wireless E911 Location Accuracy*, PS Docket No. 07-114, Fifth Report and Order and Fifth Further Notice of Proposed Rulemaking (November 22, 2019)

You may only make one 911 call in your life, but it will be the most important call you ever make. Before any police radio crackles, fire engine blares, or ambulance races—you need to reach a 911 operator. These professionals represent the front line of our nation’s public safety systems. They know that in emergencies every second counts. To find you, they need actionable and accurate information.

That’s our north star in this proceeding: making sure every 911 operator has the facts they need—in a format they can use—to help keep us safe.

Five years ago, after visiting 911 operators in more than two dozen call centers, I wrote an editorial calling on the Federal Communications Commission to improve the location information that comes with every 911 call. That’s because our policies were behind the times. Our rules were a hodgepodge of standards for indoor and outdoor calling that reflected communications from decades ago. Today over 80 percent of calls to 911 come from wireless phones. So I pressed the agency to kick off a proceeding to address this problem in our policies.

We got started. We set up a course to update location information for 911 calls made from wireless phones, with a mix of benchmarks and deadlines. Today the FCC tries to bring that effort to closure by adopting rules regarding vertical location data. In doing so, I am afraid we fall short. The information we require does not go as far as we need for true public safety. We make progress, but ultimately we miss the mark because the information we require is not in any format that is presently useful for those who take our 911 calls. That’s a problem—and we owe it to 911 operators and everyone who makes a 911 call—to be honest about it.

In light of this, there are three things I want to discuss regarding this order and rulemaking: the need for truly actionable location information, the need for a nationwide approach, and the need to put privacy front and center in our efforts.

First, actionable location information should have been required.

Today, the FCC adopts a requirement that carriers must meet if they provide vertical location information using a z-axis solution. Specifically, the agency requires that wireless carriers offer public safety an indoor caller’s vertical location within plus or minus 3 meters.

The truth is a 3-meter policy does not provide public safety with precise floor location. That’s a problem. We should choose standards that without fail provide for floor-level accuracy. When police or firefighters show up in an emergency, the last thing they should have to do is take out a measuring tape. They need a standard that tells them precisely where you are. We fall

short of that with the standard we adopt today. And the result—according to those who take our 911 calls—is going to be a problem.

Richard Napolitano, the Commanding Officer of the New York Police Department's Communications Division, which handled nearly 9 million 911 calls last year, has warned us that "location information must be actionable, meaning that Police Communications Technicians can quickly use it to assist the caller and direct responders to the scene." For this reason he cautioned that if you want z-axis information to work—and provide meaningful information for 911 operators—it needs to be accompanied by an estimated floor number.

Karima Holmes, the Director of the District of Columbia Office of Unified Communications, responsible for 911 right here in Washington, also made clear that "having more specific location that can be translated in lay terms" for call takers and first responders is important for ensuring help arrives at the right location. She asked that we develop a method to provide a floor number or wing specification. She cautioned that a generic number above sea level, or the like, would not be actionable or useful.

Jeff Streeter is the Executive Director of the Jefferson County Communications Center Authority in Denver, Colorado which processes over 200,000 911 calls from mobile phones each year. In our record he put it plainly: "[i]n order for 911 professionals to have the information they need to ensure that responders arrive as quickly as possible, carriers should at least provide a floor number estimate." He went on to caution that a standard of plus or minus 3 meters is not that and it will cause delay in emergencies when seconds matter.

William Pierson, the Chief of Police at the Auburn Police Department in King County, Washington, which handles 450,000 911 calls a year, warned that a plus or minus 3-meter standard is "not a helpful description of a caller's location." According to Chief Pierson, "seconds count. If first responders in the 911 center or in the field must spend any time trying to cross reference a location . . . the impact is seconds or minutes lost in influencing a positive outcome for the caller." Put simply, this is why having truly actionable information—like a floor number—is so important.

We should listen to these voices from 911. We should listen to those charged with identifying our emergency and working to send assistance. We should provide them with truly actionable information when you dial 911.

Regrettably, today the FCC does not do that. Because instead of requiring a floor number or setting up a system for useful and actionable information, we require data in height above ellipsoid format. So when calls come tumbling in to 911 in a crisis, the operator on the other end of the line is supposed to figure out where you are because they have a string of numbers representing raw height above ellipsoid data that reflects coordinates measured from the center of the earth's mass. Let's be clear: this data is not meaningful. It will need to be calibrated, translated, and reworked to be actionable for 911. What is the detailed plan for that? Comb through the text of today's decision. You won't find one.

Remember that there are over 6000 public safety answering points across the country. There are more than 100,000 911 professionals who work in them, day-in, and day-out taking every call with steely calm. They've been told they need to upgrade their systems to next generation 911. This is going to cost over \$12 billion. No one knows where this funding is going to come from and yet today we are tacking on a brand new obligation for 911 centers to take raw height above ellipsoid data and hope and pray they will be able to translate it into something actionable.

But Commanding Officer Napolitano from New York has told us in no uncertain terms that “a raw vertical estimate is of little operational value if it is relative to ‘height above ellipsoid’ . . . because our 911 center does not have the equipment to translate” z-coordinates into anything actionable. If it does not work in New York—one of the cities where the case for vertical location is the clearest—it calls to question how this will work anywhere.

In fact, this is not an issue just for the biggest cities. Kimberly Burdick, Director of the 911 Communications Center in rural Chouteau County, Montana warns that “centers like mine do not have the resources to create and maintain indoor maps for buildings in our jurisdiction” or even the “ability to translate [height above ellipsoid] to floor or “a three dimensional point in space.”

Of course, it is worth recognizing that even if 911 operators cannot translate height above ellipsoid data they can relay it to a responding paramedic, fire fighter, or police officer at the scene, who may be able to take action. But the same problem emerges. Because a height above ellipsoid set of numbers will be meaningless unless it is calibrated and translated into something actionable by the first responder. But again there is no requirement here that ensures that happens. Instead, we have to hope that every first responder will be outfitted with the right technology to translate height above ellipsoid data on the fly. That's a huge assumption and a glaring hole in the policies we adopt today. Do public safety officials in every town, city, county, and state have the budget to do this? How much will it cost? Who will pay for it? Is it even possible? Does this even work, as the New York Police Department questions, during a building fire or active shooter situation when the last thing you want is first responders wasting precious minutes fumbling with this data on a specialized device. On all of this our decision is silent. We should do better.

Putting aside these problems with data processing, it is important to peel back and take a look at the details that led the FCC to this standard. The new rules require that wireless carriers relying on z-axis satisfy their vertical location obligation with data accurate at plus or minus 3 meters height above ellipsoid for 80 percent of their wireless E911 calls made from a z-axis-capable device. This standard is based entirely on results from a testbed. That testbed was a controlled environment. It does not reflect widespread, real-world use. This, too, is a problem with this requirement.

Second, a nationwide approach would have been the right call.

The approach taken today proceeds on a pathway set up a few years ago to require vertical location information for 911 calls made in the top 25 metropolitan areas by 2021 and the

largest 50 metropolitan areas by 2023. However, it has become clear that a nationwide approach would better serve the public interest. Because by limiting our efforts here, too many people in too many places—especially in rural America—will never see the benefits of any policy designed to provide a caller’s vertical location. That’s a shame because there are multi-story office parks, town homes, and other structures across the country. I regret my colleagues did not agree to my request to be more ambitious and ensure our rules cover all. Any policy designed to improve 911 location accuracy should benefit every 911 caller nationwide. Not just those who dial from the biggest cities and most populated areas.

Third, privacy is paramount.

Finally, I’d like to discuss an aspect of today’s decision I support because the FCC is clearly on the right path—and that involves the privacy and data security protections extended to 911 vertical location data. The agency rightly concludes that 911 vertical location data should only be used for 911 purposes. While I would have preferred that we go one step further to require a report to see how these requirements are working in practice, I do support this aspect of today’s decision. The vertical location data associated with your 911 call should be private and protected.

This is especially important because this agency has been unacceptably silent about press reports about the sale of our wireless geolocation data. Last year, it was first revealed that wireless carriers were selling our private data about when and where we are using our devices to third-party location aggregators. Then, earlier this year, it was revealed that this data was still for sale—and ending up in the hands of bounty hunters. It turns out that for a few hundred dollars, shady middlemen could use this information to track where we are at any moment within a few hundred meters.

I don’t recall consenting to have my wireless location data sold this way—and yet it happened. I don’t see how this is permissible under the law. But to date, the agency has been silent. It’s been close to a year and a half since this mess was first uncovered and this agency has nothing to say? I hope that silence ends soon because this, like 911 location data, involves the security and safety of the public.

In closing, I’d like to note that even though we have some fundamental disagreements today, I appreciate my colleagues’ history working to improve 911 policy. From my efforts with Commissioner O’Rielly to end 911 fee diversion in the states to Chairman Pai’s passion to fix 911 problems in multi-line telephone systems, I am still optimistic about what this agency can accomplish.

Kurt Vonnegut once said there is no better symbol of humanity than a firetruck. I think that is true. In an emergency, whether you are a trained professional or a good Samaritan, there is a reflex in all of us that compels us to act, to ease suffering, and to save lives. That same reflex exists in those of us in Washington setting policy when we see that our public safety officials are lacking the tools they need to do their jobs. So I appreciate what is driving this agency to act. But as any trained professional will tell you, sometimes you have to look up from the immediate problem and take in the big picture. You have to pause and make sure that the

actions you are taking truly will have the impact you want them to have. So I do not support the standard we adopt today for vertical location accuracy. By any measure, it falls short of what is actionable. It does not provide floor-level information and instead just offers a series of numbers reflecting height above ellipsoid. I believe our 911 operators deserve data that is truly useful if we want to help them help keep us safe. And on that score, we have work to do.

I will support the rulemaking here because I hope it provides us with a path to fix these problems. I also will support the decisions we make regarding 911 privacy. But in all other respects, I regretfully dissent.