STATEMENT OF
COMMISSIONER BRENDAN CARR

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

At the PSAP in Pasco County, Florida, small light posts are attached to each of the cubicles. They almost look like miniature streetlights, with stacked red, yellow, and green bulbs. In the calm moments, the lights on all of the cubicles shine green, indicating that no one is calling in for help. Aside from the lights, at those times, the PSAP seems like any other office, with coworkers chatting while scrolling through databases on their computer screens. But then all of the sudden a light turns red.

"9-1-1 Operator, what is your emergency?"

In that moment, no one knows what will come next. Mike, a 9-1-1 dispatcher for Pasco County, says that he is trained for anything—a misdialed number or a life in danger. The on-and-off of adrenaline every day must be stressful, and I asked Mike about it. He said, "If you like helping people, there's no better job."

When PSAP operators like Mike first answer a 9-1-1 call, they try to learn the nature of the problem, who the caller is, and then of course, where the emergency is occurring.

Now, landline calls have the advantage of tying the caller to a specific address. But today, more than 80 percent of 9-1-1 calls are made from wireless devices. When the phone number you're calling from travels with you, figuring out the call's origin and routing it to the right answering point present challenges. And so since 1996, the Commission has promulgated rules requiring service providers to assist emergency responders with pinpointing the location of 9-1-1 calls.

The latest location challenge is height. Although we may be accustomed to Uber or Waze using our smartphone's location sensors to optimize their services automatically, less is done with height data. And yet knowing on what floor an emergency is occurring can mean the difference between life and death.

Smartphone manufacturers, wireless service providers, and entrepreneurs have been hard at work trying to solve this problem. One approach is to use various transmitters, including Bluetooth and WiFi devices, as beacons to locate an emergency call. Since 2016, Google has relied in part on this strategy for its Emergency Location Services function in Android. Wireless providers are trying a similar approach through the National Emergency Address Database. The NEAD uses the registered addresses of various beacons to provide a potentially dispatchable address to PSAPs.

A different way of solving the problem is to use the phone's own barometric pressure sensors to add height data to latitude and longitude. The Commission required wireless providers to test this technology over the last couple of years. The two companies that submitted their technology to the test-bed produced somewhat different results. One identified height location with an accuracy of less than two meters; the other came within five meters.

Given the state of the technology, the wireless providers proposed that we require height accuracy data to be reported to PSAPs within five meters. The public safety community rejected this, arguing that three-meter accuracy is technically feasible and would allow first-responders to get to the right floor the first time in many more cases. We sided with the public safety community. Furthermore, we preserved the option to choose an even more stringent standard than three-meter accuracy based on the record that develops. I look forward to additional submissions from technologists educating the Commission on the feasibility of the height standards we consider between this Notice and the order.

I want to thank the Public Safety and Homeland Security Bureau for its work on the Notice. It has my support.