

October 28, 2014

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street S.W.
Washington, DC 20554

James Arden Barnett, Jr.

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Re: Notice of Permitted Ex Parte Presentation – Wireless E911 Location Accuracy Requirements, PS Docket No. 07-114

Dear Ms. Dortch:

On October 24, 2014, James Arden Barnett, Jr. of the law firm Venable LLP, an attorney representing TruePosition, Inc., sent an email to the following Commissioners, Chiefs, and staff at the Federal Communications Commission (FCC):

Chairman Thomas Wheeler
Commissioner Jessica Rosenworcel
Commissioner Mignon Clyburn
Commissioner Ajit Pai
Commissioner Michael O’Rielly
Daniel Alvarez, Legal Advisor to Chairman Wheeler
David Goldman, Legal Advisor to Commissioner Rosenworcel
Louis Peraertz, Legal Advisor to Commissioner Clyburn
Matthew Berry, Chief of Staff to Commissioner Pai
Brendan Carr, Pai’s Legal Advisor to Commissioner Pai
Nicholas Degani, Legal Advisor to Commissioner Pai
Erin McGrath, Legal Advisor to Commissioner O’Rielly

David Simpson, Rear Admiral USN (Ret), Chief of PSHSB
David Furth, Deputy Bureau Chief, PSHSB
Tom Beers, Chief of the Policy & Licensing Division, PSHSB
Zenji Nakazawa, Deputy Chief of the Policy & Licensing Division, PSHSB
Nicole McGinnis, Deputy Chief of the Policy & Licensing Division, PSHSB
David Siehl, Attorney Advisor, PSHSB
Tim May, Telecommunications Specialist, PSHSB
Eric Ehrenreich, Attorney Advisor, PSHSB
Dana Zelman, Attorney Advisor, PSHSB

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This email, including an embedded article, is set forth below:

I want to alert you and your team to this NPR report yesterday evening on All Things Considered about wireless 911 indoor location accuracy. It includes quotes from Steve Souder in Fairfax County, VA as well as a short piece by Rob Anderson, CTO of our client, TruePosition. The UTDOA technology exists today and is available from more than one vendor, regardless of what others may be saying. The NPR piece is only about 5 minutes in length.

<http://www.npr.org/blogs/alltechconsidered/2014/10/23/358307881/calling-911-on-your-cell-its-harder-to-find-you-than-you-think>

Best wishes and very respectfully,
Jamie

[Policy](#)

Calling 911 On Your Cell? It's Harder To Find You Than You Think

by Lucy Perkins

October 23, 2014 6:24 PM ET

[Listen to the Story](#)

[All Things Considered](#)

4 min 56 sec

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*The Fairfax County 911 Center in Virginia takes calls during Hurricane Sandy in 2012. It was relatively easy to locate callers when most people used landlines. But most 911 calls now come from cellphones, which can pinpoint a callers' location only within 100 to 300 meters. **Greg E. Mathieson Sr./Mai/Landov***

Today's mobile phones can do almost everything a computer can. But we still need them for their most basic purpose: making phone calls — especially in emergencies.

Yet existing technology can't always pinpoint a caller's location, particularly when a 911 caller is indoors.

The Federal Communications Commission has proposed new regulations for wireless carriers to help address the problem, but so far, wireless providers are resisting the changes.

One of the first questions callers are asked when they call 911 is, "Where is your emergency?" It's also "absolutely the most important," says Steve Souder, director of the Fairfax County Department of Public Safety Communications in Virginia.

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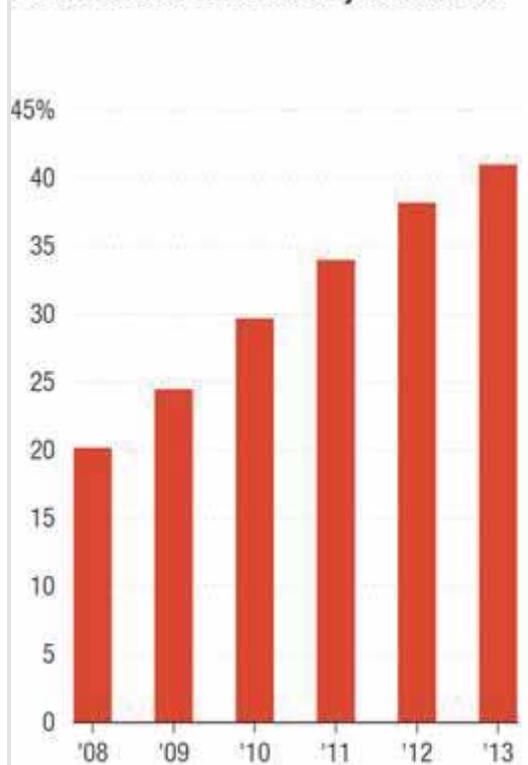
"We need to know where you are to send somebody. We don't need to know what; we don't need to know how; we don't need to know when," Souder says. "The 'where' is the No. 1 thing."

But that's become a much harder question for first responders in the past 20 years. First, the GPS on cellphones doesn't work as well indoors as it does outside.

Second, callers used to reach 911 via a landline, which was linked to a specific address — down to the apartment number. That's not true with cellphones.

Chris Frederick, a 911 call taker in Fairfax County, remembers when an 8-year-old called him on a cellphone because his parents had a medical emergency. The boy couldn't read very well, and his parents didn't speak English. So Frederick asked him to walk outside.

Percent Of U.S. Wireless-Only Households



NPR/Centers for Disease Control and Prevention/National Center for Health Statistics National Health Interview Survey

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"And I said, 'Can you tell me what the number is on your house?' And he told me the number. It took about 10 minutes."

If the call had come in on a landline, Frederick says, identifying the house would have been instantaneous — the location would have just popped up on his computer screen.

With nearly half the children in the U.S. — like the boy Frederick helped — living in wireless-only households, situations like that are common. According to the National Emergency Number Association, around 210 million 911 calls come from cellphones every year. And about half of the people calling on a cellphone from indoors don't know where they are specifically.

The FCC regulates the cellphone industry, including wireless carriers like Verizon, AT&T and Sprint. Currently, the FCC requires cellphones to have technology that tracks a person to between 100 and 300 meters of where he is.

But as Jodie Griffin, senior staff attorney at the consumer advocacy group Public Knowledge, points out, "100 meters, which is the stricter end of the rules right now, is more than a football field."

And a football field is longer than some city blocks.

"When you're talking about someone who's outdoors, the ambulance may be able to arrive and just see where someone is in distress," Griffin says.

But if a caller is inside one of these buildings? Good luck.

So earlier this year, the FCC [proposed new rules that would require vertical location information](#). That way, first responders could identify which floor a caller is on. The rules would also require location information within 50 meters — still longer than some apartment building hallways.

The new rules would apply to any phone, no matter what type.

So far, wireless providers are resisting the proposed changes. In [filings with the FCC, Sprint said](#) that the agency's timeline wasn't realistic.

In an email to NPR, Verizon said the company is "working with a variety of organizations across the ecosystem on a viable path forward."

The technology to meet those requirements is actually already available.

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Several companies have created systems that can better track a phone's location. The company [TruePosition creates custom geolocation technology](#).

"Special receivers are installed in the existing wireless operators' or carriers' cell towers," says Rob Anderson, TruePosition's chief technology officer. "Those receivers are able to very accurately measure the time the signals that are transmitted from the cellphones arrive at the various cell towers. And by making those time measurements, we can compute a position. And we measure those signals very precisely, on the order of nanoseconds."



TruePosition's system doesn't require updates to every cellphone, but it does require cellphone carriers to add equipment to their towers.

Obviously, this would cost money — which companies would likely pass on to consumers in one way or another.

Public Knowledge's Griffin says the added cost could also raise *another* problem.

"The people who can't afford the newest smartphone, or can't afford to be on an LTE network, are going to be left behind if we just assume that we'll let the new technology that comes along in two years solve everything," she says.

The FCC is currently taking comments on the proposed rules. If they're approved, the regulations would still take at least a year to implement.

This disclosure is made in compliance with 47 C.F.R. § 1.1206.

Sincerely,

/s/ James Arden Barnett, Jr.

James Arden Barnett, Jr.
Rear Admiral USN (Ret.)
Venable LLP

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cc: Chairman Tom Wheeler
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