

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of

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Wireless E9-1-1 Location Accuracy	)	PS Docket No. 07-114
Requirements	)	
	)	

**Reply Comments of the  
National Association of State EMS Officials  
National Association of EMS Physicians  
National Association of EMTs  
National EMS Management Association**

The National Association of State EMS Officials (“NASEMSO”), the National Association of EMS Physicians (“NAEMSP”), the National Association of EMTs (“NAEMT”), and the National EMS Management Association (“NEMSMA”) are jointly herein referred to as the “Associations.” The Associations submit these reply comments to summarize the wide support for the indoor location accuracy rules detailed in the comments that were filed in response to the Commission’s Third Further Notice of Proposed Rulemaking (“FNPRM”).<sup>1</sup>

NASEMSO represents the government officials charged with coordinating the EMS systems in the 56 states and territories, and with licensing personnel and agencies in those jurisdictions. These include state EMS directors, physician medical directors, and others specializing in the various components which make the systems work.

NAEMSP, with a membership of over 1,500, represents emergency physicians who specialize in EMS leadership and practice at the local and state levels.

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<sup>1</sup> Wireless E9-1-1 Location Accuracy Requirements, PS Docket No. 07-114, Third Further Notice of Proposed Rulemaking, FCC 14-13 (Feb. 20, 2014) (“FNPRM”).

NAEMT represent America's front-line medical professionals, numbering some 32,000 members who are responsible for bringing state of the art medical assistance to those in need, wherever they are.

NEMSMA is the association of EMS chiefs and other officials who lead paramedic services on a day-to-day basis. Its members, their staffs, and the public who seeks their emergency assistance, are the most immediately impacted by the ability of 9-1-1 to accurately locate callers.

Highly reliable E9-1-1 service is a critical enabler of advanced emergency medical response; it connects the caller in distress to first responders. Accurate location information can assist in finding indoor callers quickly, and improved response times translate directly to improved medical outcomes in life-threatening cases. The benefits of better location information include not just reductions in mortality, but also better prognoses for many non-life-threatening cases, potentially resulting in substantial economic as well as intangible benefits. Given the clear connection between indoor location accuracy and public safety benefits, the continued inaction by the wireless industry warrants Commission action. The Associations, therefore, urge the Commission to promptly adopt the proposed indoor wireless location accuracy requirements. Accurate indoor location information will support EMS professionals in their mission to bring lifesaving medical care to victims as quickly as possible, no matter where they are.

As the Associations explained in their initial comments, all of the criteria for a useful E9-1-1 location technology ultimately come down to the question of "How long will it take for help to reach the caller?"<sup>2</sup> Because first responders cannot provide assistance until they know where

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<sup>2</sup> Comments of State EMS Officials, the National Association of EMS Physicians, the National Association of EMTs, and the National EMS Management Association, PS Docket No. 07-114, at 1 (May 12, 2014).

the victim is, the quality of location accuracy for indoor wireless 9-1-1 calls can directly affect medical outcomes. Medical emergencies occur primarily where people spend most of their time, that is, indoors, often at home. Ventura County Public Health reports that approximately 75% of sudden cardiac incidents occur at home, with a large proportion of other incidents occurring in indoor public places.<sup>3</sup> Unlike fires or police incidents, however, “a medical trauma inside an apartment or office...may not be visible to first responders upon arriving at the approximate address.”<sup>4</sup> Thus, it can be difficult for first responders to quickly locate callers when an exact address is not provided, delaying critical care. The Commission’s proposed interim rules will provide a much-needed upper bound on the amount of space—and time—required to search for and locate callers in distress.

For positive heart attack and stroke outcomes, where time-dependency is great, even small differences in the availability and accuracy of information can affect medical outcomes.<sup>5</sup> As the American Heart Association explains, “for every minute without life-saving CPR and defibrillation, chances of survival decrease 7%-10%.”<sup>6</sup> In short, “[t]ime spent looking for a wireless 9-1-1 indoor caller is valuable, lifesaving time not spent treating patients suffering from an acute cardiovascular event.”<sup>7</sup>

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<sup>3</sup> Comments of Angelo Salvucci MD, Ventura County Public Health, PS Docket No. 07-114, at 5 (May 12, 2014) (“*Salvucci Comments*”) (citing 6 Iwami, T et al. Outcome and characteristics of out-of-hospital cardiac arrest according to location of arrest: A report from a large-scale, population-based study in Osaka, Japan. *Resuscitation* 2006 May; 69(2):221-8. (<http://www.ncbi.nlm.nih.gov/pubmed/16519986>)).

<sup>4</sup> Comments of Association of Public Safety Communications Officers, PS Docket No. 07-114, at 2 (May 12, 2014); *FNPRM*, ¶ 10.

<sup>5</sup> Comments of the American Heart Association, PS Docket No. 07-114, at 1-2 (May 9, 2014) (“*AHA Comments*”).

<sup>6</sup> *AHA Comments* at 1.

<sup>7</sup> *AHA Comments* at 2.

With regard to the costs and benefits of the proposed requirements, there is strong evidence that the Commission's estimate of the benefits of improved indoor location accuracy is actually quite conservative. To highlight the most critical benefits, the FNPRM only addresses the improvements in mortality rates associated with faster treatment due to improved location information.<sup>8</sup> As AARP notes, however, beyond just the number of lives saved "there will be additional benefits arising from improved outcomes as a result of improved response time, including the prevention of the escalation of lesser illness/injuries into more complex situations."<sup>9</sup>

According to the Department of Transportation guidelines regarding the Value of a Statistical Life, prompt care that stabilizes a victim more quickly, thus preventing escalation of the injury's impact from severe to critical, could achieve benefits of \$2.98 million per incident.<sup>10</sup> Greater E9-1-1 reliability not only improves outcomes and creates concrete economic benefits, it also promotes myriad less tangible benefits such as improved quality of life for victims, greater sense of safety, and peace of mind.

In view of the substantial continuing risk to society, and the enormous benefits of prompt remediation, the Associations concur that Commission action is appropriate. The wireless industry has not acted decisively on its own to fill the "regulatory gap" despite the incontrovertible evidence of the current shortfalls of indoor wireless E9-1-1 and the clear impact that these limitations have on victims and society. This is unsurprising because most customers are fortunate enough to rarely dial 9-1-1. As a result, wireless E9-1-1 location accuracy does not

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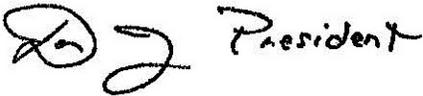
<sup>8</sup> *FNPRM* ¶ 33.

<sup>9</sup> Comments of AARP, PS Docket No. 07-114, at 4 (May 12, 2014) ("*AARP Comments*").

<sup>10</sup> *AARP Comments* at 5 and footnote 5.

appear to have been subject to the same market pressures as more visible and widely advertised metrics like cost and data speeds. Thus the issue of accuracy—or lack of accuracy—of E9-1-1 for indoor wireless calls “simply is not a market factor and...will not improve without regulatory pressure”, as stated in the comments of the National Association of State 9-1-1 Administrators (“NASNA”)<sup>11</sup> The Associations agree that critical safety services are too important to be left to languish for decades in favor of more visible and profitable product offerings. We therefore urge the Commission to act decisively to resolve this continuing market failure.

Indoor location technology will continue to develop for the foreseeable future, but this is not a reason to delay implementation of near-term, technologically feasible improvements in E9-1-1 reliability. The public deserves the safety and security of an E9-1-1 system that reflects modern wireless usage, and first responders require the best information possible to provide advanced care when and where it is needed most. We therefore respectfully urge the Commission to move forward promptly with the proposed rules to ensure that first responders and the public have an E9-1-1 system that meets their needs as soon as possible.

 <p>James DeTienne, President NASEMSO</p>	 <p>Ritu Sahni, MD, MPH, President NAEMSP</p>
	

<sup>11</sup> Comments of NASNA, PS Docket No. 07-114, at 2 (May 12, 2014) (“NASNA Comments”).

Don Lundy, President NAEMT	Troy Hagen, President NEMSMA
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Filed: July 14, 2014.