

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of	)	
	)	
Wireless E911 Location Accuracy	)	PS Docket No. 07-114
Requirements	)	

**REPLY COMMENTS OF NTCA–THE RURAL BROADBAND ASSOCIATION**

**I. INTRODUCTION AND SUMMARY**

NTCA–The Rural Broadband Association<sup>1</sup> (“NTCA”) hereby submits these reply comments in response to the Public Safety and Homeland Security Bureau’s Third Further Notice of Proposed Rulemaking (“third FNPRM”)<sup>2</sup> that proposes updates to the wireless Enhanced 911 (“E911”) location accuracy rules of the Federal Communications Commission (the “Commission”).

Improving the location accuracy of 911 wireless calls is an important public policy goal shared by public safety and small rural telecommunications providers alike; it is in the best interest of the entire community to ensure that the location of a wireless 911 caller is as accurate as possible. However, the record supports that compliance with the proposed indoor location accuracy rules is not technically feasible today. And, moving beyond technical feasibility, small rural wireless carriers face additional challenges to implementation including availability and

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<sup>1</sup> NTCA represents nearly 900 rural rate-of-return regulated telecommunications providers. All of NTCA’s members are full service local exchange carriers and broadband providers, and many provide wireless, video, satellite, and/or long distance services as well.

<sup>2</sup> *In the Matter of Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114 (February 21, 2014).

access to compliant equipment, consumer reluctance to adopt new handsets, and the inability of rural Public Safety Answering Points (“PSAPs”) to take advantage of this new information and incorporate it into their existing systems.

Imposing regulations that cannot be met realistically leaves the industry, public safety community, and 911 users with a false sense of security. It also imposes severe financial strain on a small wireless company, which recovers its costs from a limited customer base.

The Commission should not be pressured by unsubstantiated vendor claims, or public safety advocates who desire improved solutions but lack corresponding evidence that the new E911 benchmarks realistically can be met. Rather, the Commission should adopt a regulatory framework with respect to E911 indoor location accuracy requirements that accounts for the technical capabilities, commercial availability, and the economic and practical feasibility of solutions.

With respect to rural areas, NTCA urges the Commission to provide small rural wireless carriers with flexibility. The Commission should exclude rural areas with a low density of multi-story commercial buildings (e.g., less than 10 multi-story buildings per square mile) from the indoor location accuracy requirements for a minimum of two years past the initial compliance deadline placed upon urban carriers. In addition, initial commenters support NTCA’s recommendation to develop a streamlined waiver process for small wireless providers based on the provider’s good faith efforts to comply with the proposed rules.

**II. THE RECORD SUPPORTS THAT COMPLIANCE WITH THE PROPOSED INDOOR LOCATION ACCURACY E911 RULES IS NOT TECHNICALLY FEASIBLE TODAY.**

The telecommunications industry, including carriers of all sizes and financial statures, is unanimous in its position that given the state of third-party vendor solutions currently available

or under consideration, the proposed E911 location accuracy requirements cannot be achieved.<sup>3</sup> The Commission’s proposal outlined in the third FNPRM is based on various technologies still under development by several different vendors, including Qualcomm’s AGPS/AFLT, Polaris’ RF fingerprinting, a beacon technology from NextNav, and TruePositions’s UT-DOA technology for 2G networks.<sup>4</sup> As AT&T states, “While some of these technologies work better in some morphologies than others, none works well in all morphologies—dense urban, urban, suburban, and rural—and none provides anything approaching a consistent, reliable, or accurate indoor ALI [Automatic Location Information] of the kind proposed by the Commission.”<sup>5</sup>

Even the largest mobile operators acknowledge technological feasibility is just the first step, as the solution to meeting any mandate must be commercially and economically feasible as well.<sup>6</sup> Once the technology has been developed, tested, and certified as compliant, it will still need to be standardized, commercially manufactured in large scale, readily accessible and affordable to carriers of all sizes and financial resources, deployed across the carrier’s network, and adopted by a significant portion of mobile wireless subscribers. In regard to the practical implementation of new technology, “such transitions take years, not months, to ensure that they are incorporated into industry standards as well as into actual equipment, software, and products.”<sup>7</sup>

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<sup>3</sup> See comments of CTIA at 8-9; Verizon and Verizon Wireless at 11; AT&T at 6; T-Mobile at 10-11; Rural Wireless Association at 2; *Ex parte* Mobile Future and Competitive Carriers Association, May 12, 2014.

<sup>4</sup> Third FNPRM at ¶14 and ¶17. *Note: TruePosition did not participate in the Communications Security Reliability and Interoperability Council (“CSRIC”) Working Group 3 sponsored test-bed process.*

<sup>5</sup> AT&T at 6.

<sup>6</sup> Verizon and Verizon Wireless at 18, 20, and 21; AT&T at 10; T-Mobile at 18-19.

<sup>7</sup> T-Mobile at 18-19.

### **III. SMALL RURAL WIRELESS CARRIERS FACE ADDITIONAL CHALLENGES TO THE DEPLOYMENT OF NEW E911 TECHNOLOGY.**

Initial commenters assert that rural wireless operators often are last in line to receive access to new hardware, as equipment carriers first satisfy the needs of larger carriers.<sup>8</sup> This places the small Commercial Mobile Radio Service (“CMRS”) provider at a significant disadvantage, as it delays the carrier’s deployment and implementation timeline. This challenge is only further heightened without competition between vendor solution providers. Indeed, to ensure that providers are not reliant on any one single vendor or proprietary technology, multiple competitive products must be available.<sup>9</sup> CTIA reiterates NTCA’s concern in regard to scope and scale: “If only one vendor has a technology capable of satisfying the rules, it will be difficult to fill orders from every CMRS carrier and rollout the necessary technology nationwide in a reasonable time frame.”<sup>10</sup>

As NTCA noted in its initial comments, the Commission’s implementation timetable also should recognize rural consumers’ reluctance to swap existing operational equipment for new, more expensive handsets.<sup>11</sup> Rural America is home to segments of the overall U.S. population that may not regularly upgrade their handsets every two years, and, as such, for any new technology to reach critical mass, it will likely take longer for rural subscribers to adopt. Even the largest carriers recount that replacing handsets across their large subscriber base is a time-consuming and tedious process, and “unless the Commission is going to require every wireless

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<sup>8</sup> Blooston Rural Carriers at ¶6, Rural Wireless Association at 4.

<sup>9</sup> Verizon and Verizon Wireless at 23; AT&T at 10; CTIA at 14.

<sup>10</sup> CTIA at 14.

<sup>11</sup> NTCA at 3.

consumer to turn in their phones and buy new ones, it will take years for consumers to exchange their old handsets for new ones with additional location capabilities.”<sup>12</sup>

As NTCA has noted in past proceedings, and the Rural Wireless Association asserts in its initial comments filed in this proceeding, many rural 911 call centers have not upgraded their internal systems to become Phase II compliant.<sup>13</sup> Before the Commission mandates that wireless carriers “prepare to incur the substantial costs necessary to provide ‘floor level’ accuracy, the Commission should ensure that the majority of PSAPs are willing and able to expend the substantial resources that will be needed for them to properly utilize vertical location data.”<sup>14</sup>

#### **IV. THE COMMISSION SHOULD ADOPT A REGULATORY FRAMEWORK THAT ACCOUNTS FOR THE TECHNICAL CAPABILITIES, COMMERCIAL AVAILABILITY, AND ECONOMIC AND PRACTICAL FEASIBILITY OF INDOOR LOCATION ACCURACY E911 SOLUTIONS.**

In initial comments filed in response to the third FNPRM, numerous commenters recounted the long and protracted history of the E911 Phase II rules,<sup>15</sup> whereby the Commission put the “regulatory cart before the feasibility horse,”<sup>16</sup> thereby imposing a rulemaking before the underlying technology had been invented. As a result, the Commission was forced to revisit its rules and modify its implementation benchmarks, and, despite these revisions, still issued approximately 40 requests for waivers and more than one dozen enforcement decisions. Despite these lessons learned, the Commission has proposed new rules that risk repeating the mistakes of the past, suggesting new location accuracy requirements that are unachievable today in the hope that solutions will soon follow. The need to file waivers for exemption from rules that cannot be

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<sup>12</sup> T-Mobile at 3-4.

<sup>13</sup> Rural Wireless Association at 4.

<sup>14</sup> *Id.*

<sup>15</sup> CTIA at 10-13; Verizon and Verizon Wireless at 6; Rural Wireless Association at 2-3.

<sup>16</sup> AT&T at 8.

technical, economically, or practically met within the allotted timeframe “imposes substantial cost burdens on small carriers, and results in resources being directed to the preparation of legal pleadings rather than the buildout and maintenance of the broadband networks that are critical to the health and well being of rural America.”<sup>17</sup>

As CTIA asserts, “experience teaches us that location accuracy proposals should be grounded in verified data. . . not aspirational target setting.”<sup>18</sup> The Commission should not be swayed by the rhetoric of public safety advocates that lack technical underpinnings, or, likewise, vendor claims that they will deliver new solutions in the future. Rather, regulatory rulemakings should rely upon factual evidence that the new proposed requirements realistically can be met within the proposed timeframe. As such, the Commission should adopt a regulatory framework with respect to indoor location accuracy requirements that accounts for the technical capabilities, commercial availability, and economic and practical feasibility of solutions.

**V. THE COMMISSION SHOULD PROVIDE RURAL WIRELESS PROVIDERS WITH ADDITIONAL FLEXIBILITY.**

NTCA supports the Rural Wireless Association and the Blooston Rural Carriers in their assertion that the Commission should exclude rural areas from the proposed indoor location accuracy requirements.<sup>19</sup> Even when the technology is available, rural carriers will be faced with significant hurdles to deployment, including the commercial availability of and access to equipment, and the considerable expense associated with compliance. Further, rural areas are not characterized by large, multi-story buildings targeted in the third FNPRM; rather, “buildings

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<sup>17</sup> Rural Wireless Association at 3.

<sup>18</sup> CTIA at 10-11.

<sup>19</sup> Rural Wireless Association at 5.

in rural areas are commonly only one or two stories in height, and building concentrations are much lower than in urban areas.”<sup>20</sup>

The Rural Wireless Association has developed parameters around this potential exclusion, noting that it should apply to “areas with a low density of multi-story commercial buildings (e.g., less than 10 multi-story buildings per square mile),” and the length of the exclusion should extend at least two years beyond the time allotted to urban carriers.<sup>21</sup> This will ensure small rural wireless carriers “have sufficient time to come into compliance with the standards ultimately adopted without requiring such carriers to incur financial hardship”<sup>22</sup> via substantial hardware and software upgrades that take place outside the normal business upgrade cycle and operating budget.

Finally, as noted in NTCA’s initial comments in this proceeding and supported by industry,<sup>23</sup> the Commission should adopt a streamlined waiver process with clear guidelines and procedures. NTCA agrees with the approach noted in the third FNPRM, whereby a wireless carrier that cannot comply with a particular location accuracy requirement, despite its good faith efforts to the contrary, can submit a request for waiver from the rules up to six months before the applicable deadline. However, if the Commission rejects this approach outright, small and rural wireless service providers should be able to apply for and obtain a waiver based upon established impediments to adoption such as technology limitations, lack of access to equipment, or compliance expense.

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<sup>20</sup> Blooston Rural Carriers at ¶10.

<sup>21</sup> Rural Wireless Association at 6.

<sup>22</sup> *Id.*

<sup>23</sup> *See* Rural Wireless Association at 7; CTIA at 20.

## VII. CONCLUSION

For the aforementioned reasons, the Commission should refrain from adopting indoor location accuracy requirements until such time as the rules are technically and economically feasible. However, if the Commission decides to proceed forward, NTCA urges the Commission to consider the unique circumstances of small and rural wireless carriers, and provide additional flexibility given their challenges to full-scale deployment.

Respectfully submitted,



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