



INTELLIGENT
computing solutions

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December 28, 2017

Intelligent Computing Solutions (ICS) strongly opposes the adoption of this NPRM. Larger geographic areas will only benefit the four national-scope mobile wireless providers with deep pockets. Longer license terms will ensure that those companies keep the spectrum, regardless of the current best use of it. We will be unable to support other initiatives of the Commission, including broadband competition and bridging the digital divide, solely due to fiscal reasons.

ICS is an Illinois-based provider of (largely) fixed wireless Internet services. We focus on an area largely comprised of six counties. We started in 2004 because the founder could not get broadband service at his home. Since then, both organic and inorganic growth have expanded the company to fill the voids left by the incumbent operators.

These areas range from rural (some areas are near CAF2-eligible blocks) to suburban. However, the needs aren't necessarily entirely rural. Most of my recent growth has been in the suburban areas. The growth has come from a wide range of customers. Some are single-family homes, while others are some of the largest companies in the world. The incumbent providers are failing these people in various ways. In some areas (not necessarily rural), they don't provide service at all. In some areas, the speeds they offer are woefully inadequate. In some areas, they may offer reasonable speeds, but they don't deliver the quality of service (technically) or customer service that the customers are looking for.

The area I operate in is extremely congested in nearly all bands. There are several other fixed wireless ISPs (each filling some void, be it availability, performance, value-added services, etc.) in my area. There are many non-service provider users of spectrum as well. The power company is using the 900 and 3650 bands. The cable companies have outdoor Wi-Fi all over the place in 2.4 and 5 GHz. People are obviously using 2.4 and 5 GHz in their homes and businesses for Wi-Fi. Public entities are using the unlicensed bands and microwave bands for their own communication needs. Financial companies have chewed up an enormous amount of the microwave bands connecting data centers together at lower-than-fiber latencies.

I mention the number of users (service-provider and not) because that demonstrates the demand from the population for services outside of those four major wireless providers as well as the incumbent wireline operators. None of these entities have the resources to out-bid a national wireless provider for spectrum covering that large of an area, but keeping with the present rules adopted (and advocated for by the majority party a couple of years ago) will allow the best use of a small geographic area.

I have appended two maps showing my coverage area to highlight the differences between current rules and proposed rules. One is overlaid with PEAs and the other with census tracts. To cover the same areas I cover today with PEAs, I'm required to bid on licenses covering 9,818,357 people likely costing tens of millions of dollars just for the spectrum. To expand my coverage to include currently unserved or underserved areas near me with the new equipment available for this band, I must also bid on a license that covers the Sears Tower, the most populous city in the state, and the highest per-capita income areas of the state. How does that make the least bit of sense?



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I have deployed no 3650 gear to date as the band was not large enough for the capacity the people of today require. However, upon the completion of the current rules (which I hear is set for next year), I will be able to avail myself of the latest equipment and the spectrum required for it. The FCC has defined broadband at 25 megabit download speeds, but without this additional spectrum, we won't be able to offer those speeds to enough people to make the investment worth it.

What's wrong with the current model for the mobile wireless guys? I believe there are somewhere around 500,000 possible channel-tract combinations to bid on. These entities surely can handle that auction, spread over a comparatively significant amount of time. eBay does millions of transactions per-day and they are a significantly smaller entity than any of the national mobile wireless companies.

For the mobile wireless guys it's a fiscal play as well, just from a different perspective. If local governments, independent ISPs, utilities, etc. can bid on just the parts they need, the overall cost goes up. Those entities can find greater need on a smaller scale that justifies a higher price for a given (smaller) area than perhaps Verizon or AT&T can. Expanding the scope of eligible participants brings higher costs and thus more revenue to the Treasury, but more importantly, better use by the American people.

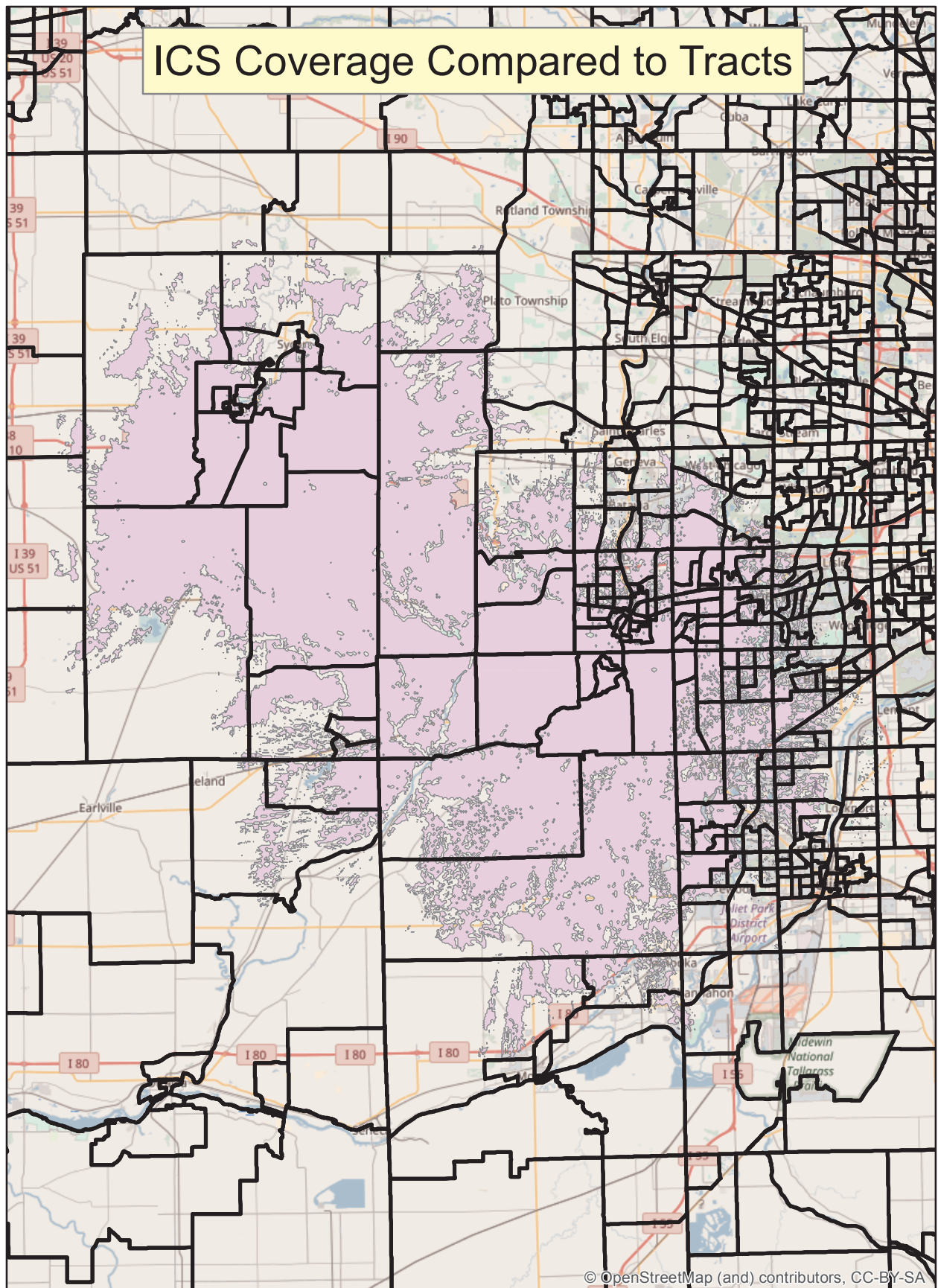
To repeat my introduction, Intelligent Computing Solutions (ICS) strongly opposes the adoption of this NPRM. Larger geographic areas will only benefit the four national-scope mobile wireless providers with deep pockets. Longer license terms will ensure that those companies keep the spectrum, regardless of the current best use of it. We will be unable to support other initiatives of the Commission, including broadband competition and bridging the digital divide, solely due to fiscal reasons.

To contact me, please call 815-739-5582, my mailing address is at the top of this letter, and my email is mike.hammett@ics-il.com. Thank you for your time.

Sincerely,

Mike Hammett
Intelligent Computing Solutions, Inc.

ICS Coverage Compared to Tracts



ICS Coverage Compared to PEAs

This map displays the coverage of the Incident Command System (ICS) compared to the Potential Evacuation Areas (PEAs) in the Joliet, Illinois area. The map shows the following:

- ICS Coverage:** Indicated by a light purple shaded area, covering a large portion of the region, including Joliet and surrounding areas.
- PEAs:** Indicated by a light blue shaded area, covering a smaller, more specific region within the ICS coverage area.
- Geographic Features:** The map includes major roads (e.g., I-55, I-80, I-190), towns (e.g., Joliet, Elgin, Schaumburg), and water bodies (e.g., Lake Michigan, Lake Zurich).
- Legend:** A legend in the bottom right corner identifies the shaded areas: "ICS Coverage" (light purple) and "PEAs" (light blue).

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