Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Amendment of Parts 1, 21, 73, 74 and 101 of the)	
Commission's Rules to Facilitate the Provision of)	WT Docket No. 03-66
Fixed and Mobile Broadband Access, Educational)	(Terminated)
and Other Advanced Services in the 2150-2161)	
and 2500-2690 Bands)	
)	
Transforming the 2.5 GHz Band)	WT Docket No. 18-120

Comments of AASA, The School Superintendents Association and the Association of Educational Service Agencies

James H. Johnston 4907 Crescent Street Bethesda MD 20816 (202) 262-1375 Counsel for ASA, The School Superintendents Association and the Association of Educational Service Agencies August 8, 2018

Summary

The Educational Broadband Service was supposed to benefit education, but the NPRM neither mentions an educational aim nor explains how it advances education. Indeed, it points in precisely the opposite direction by asking whether the spectrum should be commercialized. Worse, the NPRM asks educators to buy a pig in a poke. It calls for comment on future licensing of so called "white space" without providing maps of where this is located. But it is not just that the Commission launched this proceeding without giving educators the maps; the Commission itself seems not to have seen them. Nowhere in the NPRM is there even a hint that state-sized geographic areas will be awarded to large, existing licensees. Tracts the size of Indiana, Maryland, and Massachusetts may be handed out to a single incumbent. Above and beyond this, the NPRM proposes automatic expansion of service areas, calling this "rationalizing," when it is far from rational. The entire proposal grossly discriminates between existing licensees and all other educational institutions, particularly the principal, original, beneficiaries of this spectrum, K-12 schools. Finally, the NPRM overlooks the basic facts that education in the United States is a classroom-based system and that the call for auctions will require hard-pressed local taxpayers and tuition payers, who fund public and private schools, to pay the federal government for a license that the favored few got for free.

Table of Contents

I.	Educational Broadband Is for Education	4
II.	The NPRM Asks Educators to Buy a Pig in a Poke	6
III.	Automatic Expansion of Service Areas Makes No Sense	12
IV.	The Proposed System of Priorities and Preferences Is Grossly Unfair	13
V.	Local Presence Should Mean Classrooms of High-Quality Schools	14
VI.	Auctions Are Inconsistent with an Educational Purpose	15
VII.	AASA and AESA's Recommendations	15
	Statement of Policy	15
	White Space Maps	16
	Preferences Should Be Given the Have-Nots	16
	Local Presence	16
	Competing Applications	17
VIII	[. Conclusion	
	Attachment 1	
	Attachment 2	19

Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Amendment of Parts 1, 21, 73, 74 and 101 of the)	
Commission's Rules to Facilitate the Provision of)	WT Docket No. 03-66
Fixed and Mobile Broadband Access, Educational)	(Terminated)
and Other Advanced Services in the 2150-2161)	
and 2500-2690 Bands)	
)	
Transforming the 2.5 GHz Band)	WT Docket No. 18-120

Comments of AASA, The School Superintendents Association and the Association of Educational Service Agencies

AASA, The School Superintendents Association (AASA) and the Association of Educational Service Agencies (AESA) file these comments by counsel in response to the Notice of Proposed Rulemaking (NPRM). AASA and AESA are nonprofit associations for local school system and educational service agency leaders and regular parties to Commission matters that affect education and schools.

I. Educational Broadband Is for Education

The educational community is strongly supportive of the Educational Broadband Service (EBS). The spectrum has served education for more than fifty years and can do it for another fifty years.

EBS provides at least three educational benefits. First, for educators who lease, EBS provides a subsidy, often a significant one. State and local taxpayers benefit from licenses held by public schools and colleges. In the case of private and parochial institutions, tuition payers are the beneficiaries. Second, EBS delivers wireless

broadband to students. In some areas, there are competing services, but this is not true in many rural areas where EBS would be not merely the only wireless broadband but the only broadband period.¹ Third, EBS can be a tool educators might use for new and innovative ways to communicate with students.

The Commission's embrace of education was quite clear when EBS began as the Instructional Television Fixed Service (ITFS) in 1964. The Commission then said it wanted to improve the quality of education by connecting students with the nation's best teachers via television. The Commission reaffirmed its commitment to education in 1984 when it allowed educators to lease in order to get the money needed to build and operate ITFS transmitters while at the same time letting wireless cable operators use the transmitters in evening hours to compete with the cable monopolies and drive down prices.

But since ITFS was converted to the broadband service EBS, the Commission has made no similar commitment to education. Certainly, none can be found in this Notice of Proposed Rulemaking. Indeed the opposite is true, for the NPRM proposes to let current licensees sell to commercial operators and commercial operators compete with educators in applying for new licenses. If this happens, Educational Broadband would be educational in name only. Yet, no reason is given for the radical proposal that the spectrum become commercial.

It would facilitate comment if the Commission were to articulate how the proposed rules help education. AASA and AESA for their part don't see any benefit for their members in this proposal. They believe the Commission's guiding policy should be

-

¹ Paragraph 22 of the NPRM recognizes this, saying "most EBS licensees or their commercial lessees are providing digital broadband service, offered 24/7, at the school itself, at home, or anywhere within the licensee's GSA." NPRM 9.

to use EBS to benefit the greatest number of students and to test any proposal against that standard. Among other things, the Commission should issue a further notice of proposed rulemaking to articulate what its educational policy is and how the proposed rules advance that policy.

II. The NPRM Asks Educators to Buy a Pig in a Poke

The phrase "pig in a poke" originated in medieval times. A seller would offer the buyer what he said was a pig in a blanket or "poke." But meat was scarce, and the animal might actually be a dog or cat. A wise buyer would insist that the seller unfurl the blanket so he could see what he was buying. The analogy to the NPRM seems apt.

The NPRM lays out a convoluted licensing process, but the Commission does not provide educators with the information to answer the basic question: What is this proceeding all about?

The NPRM implies initially that this proceeding is about the geographic areas that are not currently served by an EBS license and refers to this as "white space" in paragraph 8. But later, such as paragraph 49, the term "white spaces" is used differently to mean geographic areas that are available for licensing after an automatic expansion of existing licenses. AASA and AESA will use "white spaces" as it is used in the former manner to refer to all geographic areas that are not currently covered by an EBS license.

The reason for focusing on what the white spaces are is two-fold. The first is that the NPRM bypasses the broad question of how white spaces should be licensed. Instead it narrows instantly to a call for comment on a proposal submitted *ex parte* four years ago by existing licensees. Not unexpectedly, their proposal heavily favors the roughly 1,300

incumbents, many of which are not schools in the traditional sense, and aims mainly to increase their lease revenue.

The second is that no one knows what the unlicensed EBS white space today is -not even the Commission -- because there are no maps of it. Pity the school
superintendent in California, Georgia, Kansas, North Carolina, Oregon, or Washington
who scratches her head and asks if her school system is in a white space. Should she be
interested in this proceeding? Might her school system get an EBS license as a result?
Should she file comments? Who knows? The Commission has not provided maps of the
white spaces that are the subject of this NPRM.

It doesn't appear all that hard for the Commission to generate such maps. The Universal Licensing System (ULS) database contains the needed data. What it lacks is a computer program on the Commission's website that will display white space maps for the public.

This is not to say the ULS doesn't generate maps. It does. In a general search, a user can generate an area map of existing licenses. These are worthless however. To illustrate, Attachment 1 is a map of the State of Washington generated by the ULS. It shows some but not all the incumbents.² Indeed while his map shows seven licenses in the state, there are in fact forty-two.³ It is off by a factor of six. To make matters worse, there is no detail to the map. One can see several of those licenses are in the Seattle area, but the cities and towns aren't shown. So this mapping function is of no help.

² The ULS will only map results found using the Search function.

³ Part of the problem is that the general license Search function seems to use a license's mailing address as its location. Thus, although a licensee's service area may be in Kansas, its service areas may be mapped to a mailing address in Reston, Virginia.

There is a second way to search in the ULS. It is the Geo Search function. Geo Search says there are forty-two licenses in Washington. But Geo Search will not map them. It only maps the first license found. Attachment 2 illustrates. It is of the service area of WBSY Leasing for license WMX627 in Yakima County. And, while the map of the entire state in Attachment 1 doesn't show any licenses in Yakima, Geo Search reveals there are five. 4 Online, the user can enlarge this map to display cities and towns, but trying to use the present iteration of Geo Search to figure out if a specific school district is in a white space is impossible.

The same result is reached for Okanogen County, Washington. Although the ULS-generated map at Attachment 1 doesn't show any licenses in this county, there are five.⁵

The long and short of it is that the Commission's databases do not currently have the capability to show white spaces, which is what this proceeding is supposed to be about. There are five blocks of channels for EBS: A, B, C, D, and G. The school superintendent wanting to learn if she might get a license doesn't want a map that shows where current licenses are; she wants a map that shows where they are not. Unless and until the Commission makes those kinds of maps easily available, educators are being asked to buy a pig in a poke in commenting on the rest of the questions in the NPRM.

It is not just hopeful school superintendents who are crippled by the absence of maps though. The entire NPRM is undermined by the deficiency.

⁴ North American Catholic Programming Foundation, Inc. (WLX807); WBSY Leasing LLC (WMX627 and WMX647); West Valley School District #208 (WNC865); and Yakima Valley College (WNC876) ULS accessed June 5, 2018.

⁵ Shekinah Network (WNC661); Views on Learning, Inc. (WNC711); Hispanic Information and Telecommunications Network, Inc. (WQC715); Clarendon Foundation, Inc. (WQCM439); and Center for Economic and Social Justice (WQN570). None are local to Okanogen County or indeed the State of Washington. ULS accessed June 5, 2018.

For example, the NPRM's proposal to give incumbents a priority to expand their service areas into all the counties their current service area touches has staggering results. Yakima County, Washington, encompasses 4,311 square miles. But in the proposed expansion, the five licensees there would have a priority to apply to extend their service areas to Kittitas, Benton, Grant, and Klichtat Counties. All told, these counties comprise 13,099 square miles. Licensees in Okanogen County, whose area is 5,268 square miles, would get a priority for Chelan, Douglas, Grant, and Kittitas Counties. All told, their service areas would grow to 14,989 square miles.

The NPRM has even more astonishing effects in California. San Bernardino County, California, is the largest county in the United States enclosing 20,105 square miles. It is larger than nine of the states, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts. It is larger than nine of the States, including Maryland and Massachusetts.

Under the NPRM, Hispanic Information and Telecommunication Network's WLX367 in the Los Angeles area would have a priority for Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties with a total area of 36,482 square miles.⁷ This service area would be larger than the State of Indiana. Thus, as proposed in the NPRM and assuming HITN's WLX367 in Los Angeles has the apparently average service area of 1,934 mentioned in paragraph 5, HITN has priority for a new service area

⁶ United States Census, State Area Measurements, https://www.census.gov/geo/reference/state-area.html, accessed June 5, 2018.

⁷ Wikipedia, List of Counties in California, https://en.wikipedia.org/wiki/List_of_counties_in_California, accessed June 11, 2018.

that would increase this single license's service area eighteen-fold.⁸ The proposed rules turn exiting licensees into Pac-Men, ghosts from applications filed decades ago that will gobble up most of the white space.

The same is true for other states. Oregon, for example, has thirty-six counties and forty-two incumbents. There seems virtually no white space in California, Oregon, and Washington if incumbents have priority.

On the East Coast, the University of Maryland would expand further into Pennsylvania and Virginia while South Carolina Educational Television would extend its reach even farther into the states of Georgia and North Carolina.

Labette County, Kansas, home to Chairman Pai's alma mater of Parsons High School, is a good example of how absurd the proposed expansion by county is. It is too late for Parsons High itself. It lies in the service areas of five existing licenses, but other schools in the county might conceivably be interested in applying, and they do not necessarily fall within an incumbent's service area. But, the Commission provides no map to give these schools the needed information. Worse, the other schools in the county would be shut out anyway since the NPRM would give a priority for all of Labette to incumbents. Indeed, there are a total of eleven licenses, which touch at least a part of Labette, and all would have priority before the schools in Labette could apply. Three of these aren't even in Kansas; they are in Missouri. One, Monett R-7 School District, is seventy-eight miles away from Parsons as the crow flies. However, if any school

-

⁸ The 1,934 square mile service area mentioned in paragraph 5 apparently was derived from the fact that licensees had their service areas cut back by what is called "splitting the football" as explained in footnote 11 of the NPRM. Mathematically, the area of a circle with a 35-mile radius is roughly 3,846.5 square miles. ⁹ The first five are Neosho County Community College (WLX280) and Unified School District #413 (WLX281) both of Chanute; Girard Unified School District #248 (WLX282) in Girard; Unified School District #101 (WLX283) in Erie; and Southeast Kansas Educational Service Center (WLX296) also in Girard. Three more Kansas incumbents have service areas that include a part of Labette. They are

superintendents in Kansas are interested in a license, they might apply for one for Goodland, near the Colorado border. Unified School District 353 there might have a chance to apply although it would have to pay for it in an auction.

The bland, and inaccurate, formulation of the issues in the NPRM, devoid as it is of maps, belies the enormity of how much spectrum would be handed over to incumbents. While there are about 2,190 licenses, there are only 1,300 separate licensees since some licensees hold multiple licenses. These multi-license holders are mostly colleges, universities, so-called "national licensees," and other institutions. They are not public, private, or parochial K-12 schools. To the extent these licensees lease, the revenue does not go to elementary and secondary education. It does not go to local taxpayers and tuition payers.

AASA and AESA's anecdotal analysis of the proposal demonstrates the impossibility of expecting educators, or anyone else for that matter including commissioners, to deal intelligently with the issues without maps. Since, the Commission's database holds the data needed to produce such maps, the Commission would do the educational community and the public a great service if it programmed the ULS to let everyone see graphically what the issues are. Otherwise, calling for comment on the NPRM is asking educators to buy a pig in a poke.

-

Chautauqua County School District #286 (WLX605) in Sedan; Caney Valley Unified School District #436 (WNC322) in Caney; and Carl Junction R-1 School District (WLX879) in Carl Junction. In Missouri are Board of Governors, Missouri State University (WHR956) in Joplin; Monett R-7 School District (WLX875) in Monett; and Carthage R-9 School District (WLX877) in Carthage.

¹⁰ The NPRM says a review of the ULS yielded 1,300 licensees in paragraph 5 although AASA and AESA's review counted only 1,129.

¹¹ By AASA and AESA's count, only 895 licenses or 40% are held by K-12 institutions.

¹² Relying on only licensee names, AASA and AESA found 693 licenses are held by colleges and universities, 713 by public K-12 schools, 182 by private and parochial schools, and 623 by other institutions, including the so-called national licensees. Thus, only 895 of he 2,191 licenses, about 40%, are held by elementary and secondary schools

III. Automatic Expansion of Service Areas Makes No Sense

The ostensible purpose of this NPRM is to resolve the decades old question of how to restart EBS licensing, frozen long ago. Less than half the country has EBS. The 2,190 existing licenses have a geographic service area described as a circle with a radius of 35-miles around the point where their ITFS antenna once stood. Those transmitters are gone, replaced by the multiplicity of antennae and low-powered transmitters of cellular service. But the service areas still exist in Commission records, like lost cities of a bygone civilization. If one imagines a map of the United States made of cookie dough, the existing licensees are holes cut out by a round cookie cutter. The remaining dough of this imaginary map is the white space.

The situation facing the Commission is not an unusual one for regulators. They often address how to deal with incumbents when they make a policy change. And the usual way to do this is to grandfather the incumbents and start anew with future applicants.

The NPRM, however, takes an unusual and indeed novel approach. Rather than simply grandfathering incumbents, it awards them additional benefits in the form first of automatic expansions of their service areas into the white space and second of an exclusive priority for additional white space.

Automatic expansions would give the incumbents small additional pieces of white space in each census tract touched by their 35-mile circle. The NPRM calls this "rationalizing" and explains, as justification, that census tracts generally are outlined by streets.¹³

12

¹³ Although census tracts change every ten years and the NPRM doesn't say which year it would choose, it presumably means the 2010 census tracts. Moreover, it presumably intends to make these permanent

This explanation doesn't make any sense on its face and doesn't stand up to scrutiny as rational. Radio waves don't follow streets. As the word "radio" suggests, they radiate out in all directions from a transmitter. In cellular systems like EBS, they are channeled to an extent by directional antenna, but not even cellular is confined to neat straight-sided boundaries like census tracts.

While no explanation is proffered as to why census tracts were chosen or are rational, the likelihood is that they were chosen because the companies leasing from incumbents base lease payments on the population in the service area and population is determined from census tracts. In other words, the real reason for the automatic expansion by census tracts is that it would simplify lease payments calculations. If this is the reason, the NPRM should be amended to say this before further comment is sought. But, if there is an engineering reason for choosing census tracts, then the NPRM should still be amended so that educators can understand why census tracts are "rational."

IV. The Proposed System of Priorities and Preferences Is Grossly Unfair

The second way incumbents gain additional white space is through a priority in the award of new licenses. Existing licensees will have a first and exclusive right to apply for the white space in every county their service areas touch. The NPRM would give Native American Tribes exclusive application priority for white space in tribal areas in a second round of licensing.¹⁴

c

choices, meaning license boundaries won't change every ten years if census tracts change. The Commission would have to incorporate the 2010 census tracts in its engineering databases and be sure to archive the 2010 census tract maps as well as make them available online.

¹⁴ The intent of this priority is unclear. Presumably, these applicants must still be eligible to hold EBS licenses and would be subject to any "local presence" the Commission decides to require.

AASA and AESA strongly oppose this system of priority and preferences for the obvious reason that it is grossly unfair. The NPRM advances no reason for it. While the NPRM hints that this will speed the deployment of broadband in white spaces, this simply isn't true. For the most part, EBS licensees are leasing to commercial operators. It is the commercial lessees, not the licensees, who determine the speed of deployment. Deployment will be just as fast or slow if the licenses are issued to non-incumbents, depending upon demand in areas leased and the financial condition of commercial operators. The NPRM offers no evidence to the contrary.

V. Local Presence Should Mean Classrooms of High-Quality Schools

The questions of whether to require new applicants to have a "local presence" in the service areas they apply for and how to define that local presence are critical. Putting aside the problem of huge counties and service areas that are as big as states, AASA and AESA believe only one thing defines a local presence and that is classroom students in high-quality educational institutions. Students are the only purpose of education. If an applicant doesn't have classrooms and students in a service area, its application should be automatically rejected. Other measures don't suffice. It is easy enough for an applicant to set up a storefront and hence claim it has an "office" in a proposed service area — or to deliver programming over the Internet and claim it has a "local presence" wherever a user views the programming. It is not so easy to set up classrooms, hire teachers, and educate. This would return EBS to the original purpose of ITFS, connecting students with teachers. Classroom students at high-quality schools should be *sine qua non* of local presence.

VI. Auctions Are Inconsistent with an Educational Purpose

If the Commission accepts that EBS should remain educational, then auctions are obviously out of the question. As AASA has said previously, public educators in states with the so-called Dillon Rule may not have authority to spend taxpayer money in an auction. Auctions would deny public schools in Dillon Rule states the right to acquire a license. But even in states that don't follow the Dillon Rule, it seems unlikely that public school boards are going to risk taxpayer ire by giving local tax money to the federal government. The only realistic way public schools could acquire a license in an auction is if commercial operators advance the money in exchange for future leases. Nothing good would come from such a charade.

Auctions further aggravate the Commission's manifest discrimination in favor of incumbents and against new licensees. The incumbents got their licenses for free. New licensees would pay. 15

VII. AASA and AESA's Recommendations

In light of what AASA and AESA have said above about the NPRM, they recommend the following.

Statement of Policy. The Commission should make a clear and simple statement of what its EBS policy is. It makes no sense to ask schools to comment on detailed rules for issuing future licenses if the Commission is thinking of taking "education" out of Educational Broadband.

15

¹⁵ It is important to note that while the NPRM would give incumbents priority in applying to expand their service areas, it does not exempt them from the auction requirement for competing applications. It seems highly likely that almost all incumbents would apply. Thus, although AASA and AESA strongly object to auctions, the NPRM is at least consistent in subjecting all new applicants to the same rules for awarding licenses where there are competing applications.

White Space Maps. The Commission should stay further action in this proceeding until it provides online maps of the EBS white space. It has the data. In order to provide meaningful comment, K-12 schools in the United States need maps of what is at stake. The short poem, "The Optimist's Creed," maybe found in doughnut shops around the country. It reads:

As you ramble on through life brother,
Whatever be your goal,
Keep your eye upon the doughnut,
And not upon the hole.

AASA and AESA suggest the Commission keep its eyes upon, and provide educators, a map of the doughnut of white space rather than the holes.

Preferences Should Be Given the Have-Nots. The NPRM has it backwards. Rather than give priorities and preferences to incumbent licensees, the preferences should be given to schools that don't hold licenses. This would be consistent with AASA and AESA's suggestion that EBS benefit the maximum number of students, and their parents the tax and tuition payers. This has the added benefit of letting the marketplace rationalize service areas since it would likely leave to the incumbents small, unwanted slivers of white space adjacent to their areas.

Local Presence. If the Commission accepts that Educational Broadband should be for the benefit of education, then it is obvious that it should require a local presence for new licensees and that local presence should be classrooms of high-quality institutions with enrolled students.

¹⁶ Alternatively, all future licenses should be issued under the same rules. Parties to this proceeding would likely realign if the Commission adopted the simple proposition that existing white space must be licensed under the same rules.

Competing Applications. If there are competing applications for the same channel block in the same service area, the license should be awarded to the applicant that has the greatest number of enrolled students in classrooms in the service area. As AASA noted in its comments in Docket 03-66, schools might join together in an application to improve their chances, and this should be an eligibility requirement. In many states, K-12 schools routinely form consortia for programs like special education for which they can achieve economies of scale.

VIII. Conclusion

AASA and AESA have participated in the EBS proceedings for the past ten years because their members want the chance to acquire a license. They want the same chance incumbents have had to earn lease revenues; they want the chance to provide their communities with wireless broadband; and, they want the chance to innovate with this technology. AASA and AESA see the NPRM as closing the door on their members' aspirations and turning its back on education. In even asking for comment without providing maps of the white spaces at issue, the NPRM is asking educators to buy the proverbial pig in a poke. If the Commission is genuinely interested in continuing EBS for the benefit of education, it should restart the licensing process by giving priority to schools without licenses and by awarding licenses in a way that benefits the most students.

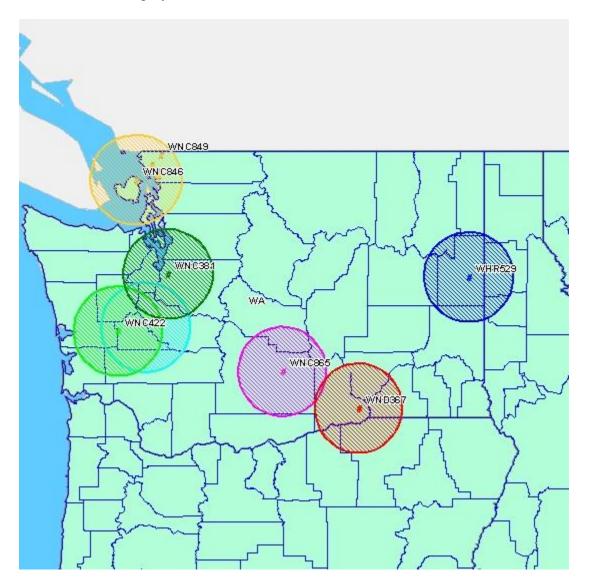
Respectfully submitted,

James Allmeter

August 8, 2018

James H. Johnston 4907 Crescent Street Bethesda MD 20816 (202) 262-1375 Counsel for AASA, The School Superintendents Association and the Association of Educational Service Agencies

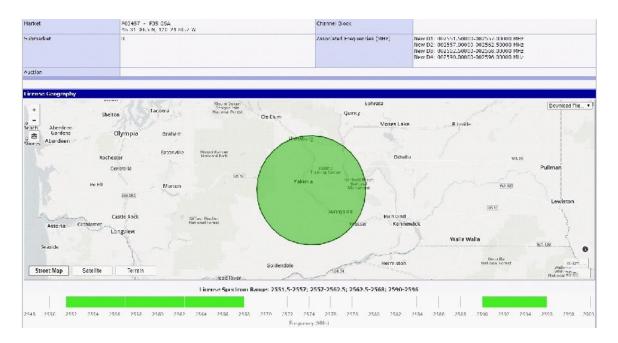
Map of EBS licenses in the State of Washington using the mapping function of the Universal Licensing System (ULS)



This map shows seven EBS licenses in the State of Washington, but there are in fact forty-two. Moreover, no detail is available when using this mapping function.

Attachment 2

Map of EBS licensees in Yakima County, Washington generated by GeoSearch in Universal Licensing System



Although there are licensees on each of the five EBS channels in Yakima County, the ULS will only map one of them.