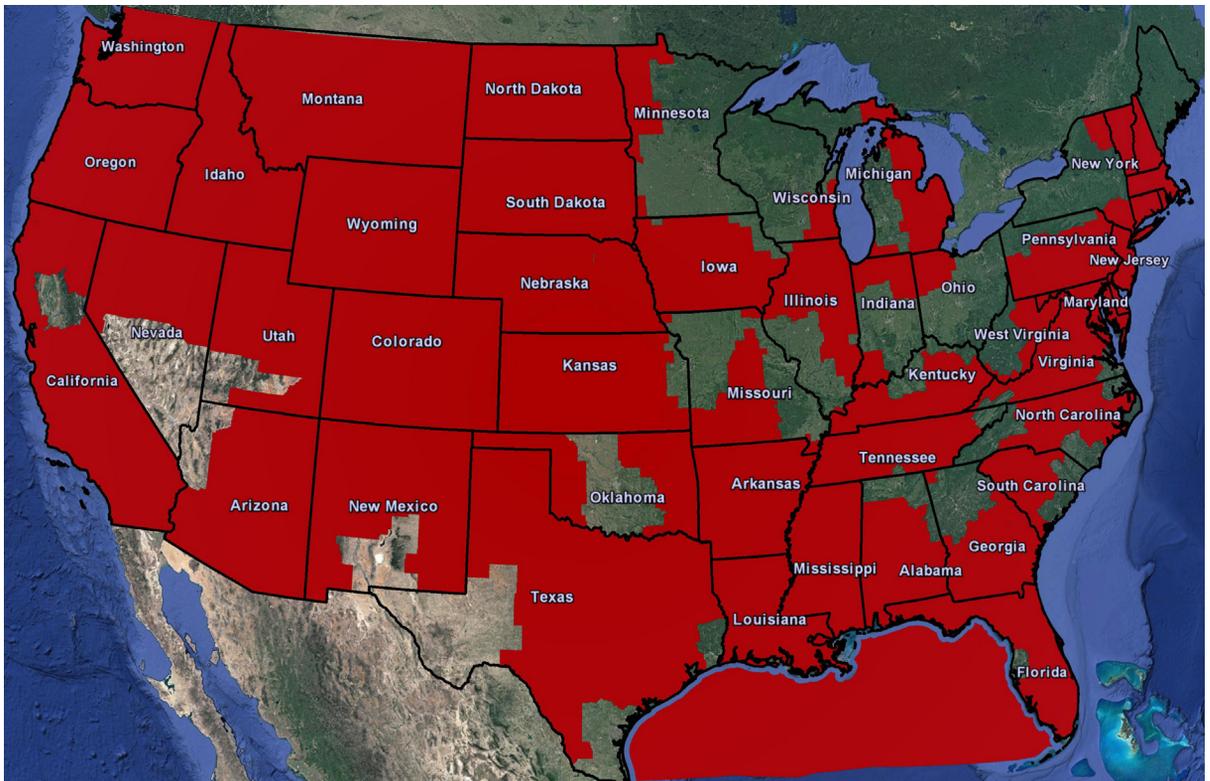


Wireless Spectrum Licenses in Location Monitoring Services (LMS) Ideal for Precision Location Monitoring Applications Available Nearly Nationwide

Select Spectrum represents Susan L. Uecker and Associates, Receiver and manager of **Location and Monitoring Service (LMS) FCC licensed spectrum** in 128 BEAs across the portions of 49 states offering nearly nationwide coverage. Together, these licenses cover a population of over 258 million in both urban and rural markets, totaling 78% of the U.S. Population. All licenses offered are in the LMS A Block and up to 4 MHz of bandwidth is available in all offered markets, including key geographic areas of coverage such as New York, Los Angeles, Chicago and Houston. **Progeny/NextNav** has found the band ideal for their Urban and Indoor Locations Services for vertical positioning accuracy.

Select Spectrum believes that a sale or lease to a qualified party will be approved by the FCC and anticipates that a successful deployment on the available licenses would encourage the FCC to run a new LMS auction of any terminated A Block license to allow complete U.S. coverage on these frequencies.

Available LMS licenses are shown in the map below.



900 MHz M-LMS spectrum has excellent propagation and be used for location monitoring and is under consideration for equipment that supports an LTE based solution.

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Visit our website at <http://selectspectrum.com> to learn more

The LMS Band is shown with neighboring service groups below:

PCS Narrow Band	LMS	Amateur Site- based Radiolocation (Shared)	LMS	Paging
900 MHz		910	920	930

These licenses provide excellent propagation and are designated to allow for highly-accurate terrestrial-based location determination services for asset and location monitoring, including indoors and major city applications.

The LMS A Block offering has been spectrally disaggregated into 4 MHz licenses, located between 904-906 & 907.75-909.75 MHz, and 2 MHz licenses, located between 906-907.75 & 927.75-928 MHz. The 2 MHz licenses have since been terminated and the timing of reinstatement through auction is unknown. The remaining spectrum capacity of 4 MHz of bandwidth, located in the “sub-band”, is capable of uplink and/or downlink and 30 Watts ERP is permissible under FCC rules.

LMS operations must not cause excess interference to industrial, scientific, and medical (ISM) devices and radiolocation government stations. A 100% transmit time with a 100% on duty cycle is permitted, but another LMS (B Block) license holder has stated that it generally operates at 30 Watts ERP and has implemented a 10-20% duty cycle to avoid interference with Part 15 users operating in the 900 MHz Band.

The LMS licenses are particularly effective in dense city and urban environments, which often contain numerous tall buildings that shield typical GPS signals. Subject to FCC Part 90 rules, LMS spectrum can be used for bidirectional or monodirectional systems that track mobile assets and systems are authorized to transmit data or possibly voice, so long as the applications are related to location functions of the system. Utilizing the spectrum for location-based services for non-mobile applications is possible, and such services have a clear advantage over GPS location services that do not work reliably indoors, are less precise and are distorted by signal absorption and reflection in urban areas and cannot provide accurate data regarding vertical locations.

LMS licenses have been used for both public safety and commercial mobile and fixed location monitoring and tracking and are recommended as an ideal way for U.S. wireless operators to meet the FCC’s Wireless E911 Location Accuracy requirements. Public Safety use will provide E-911 operators and emergency responders with precise locations in urban environments. The licenses would also be advantageous for mobile advertising applications.

Equipment for the band is made by a variety of suppliers. One supplier - Puloli (<http://www.puloli.com>) - has offered to demonstrate a solution using the "sub-band" and a suitable forward link.

A Block License	Licenses Available	2018 POPs	2018 MHz POPs
4 MHz	128	258,275,747	1,033,102,988