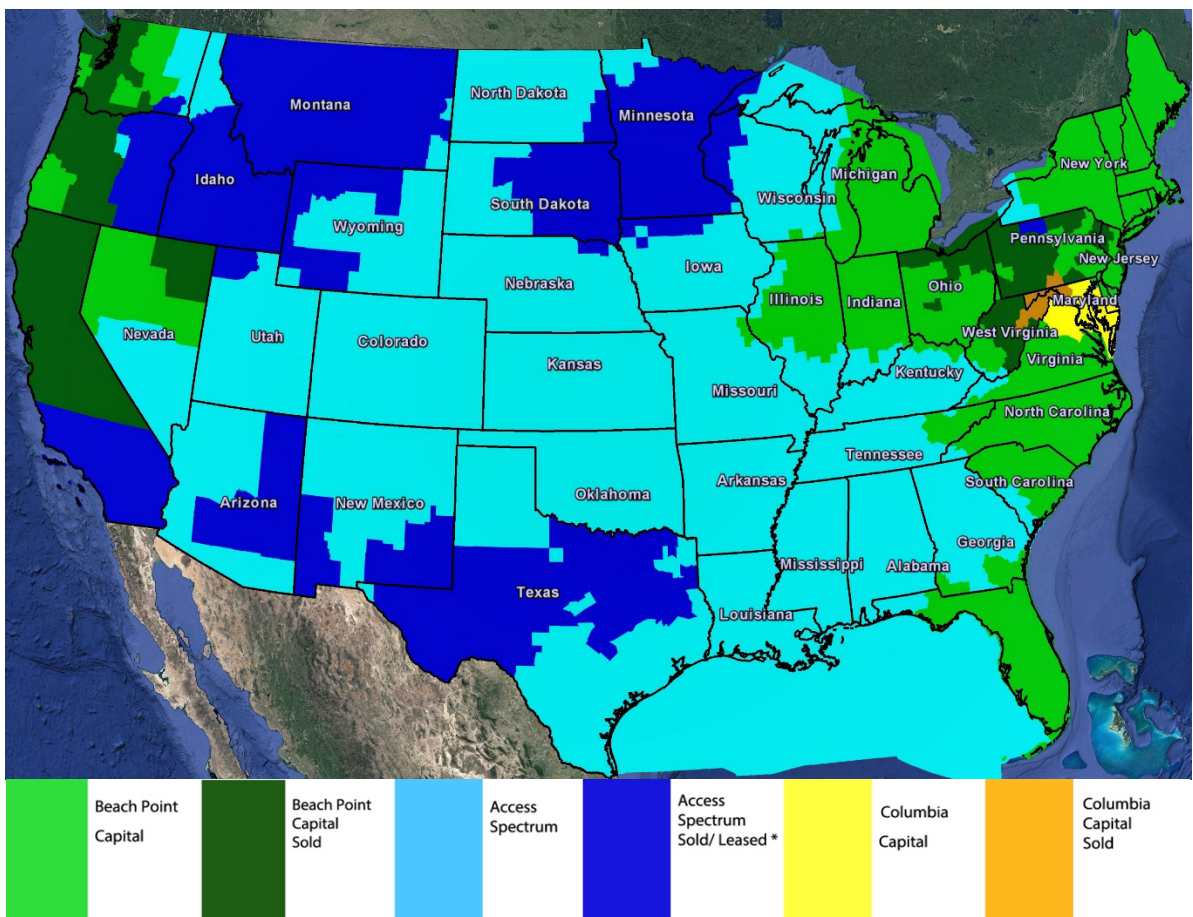


## Wireless Spectrum Licenses in the Upper 700 MHz A Block Band Ideal for Utility, Critical Infrastructure, IoT, M2M, and Rail Applications Available Nearly Nationwide

Select Spectrum represents Beach Point Capital (BPC) which holds 2 x 1 MHz of **Upper 700 MHz A Block FCC licensed spectrum** in key markets across the Great Lakes and East Coast Regions, with select offerings remaining on the West Coast. To date, BPC has sold to organizations such as FirstEnergy, Idaho Power Company, Portland General Electric, Puget Sound Energy, National Grid and the California High Speed Rail Authority.

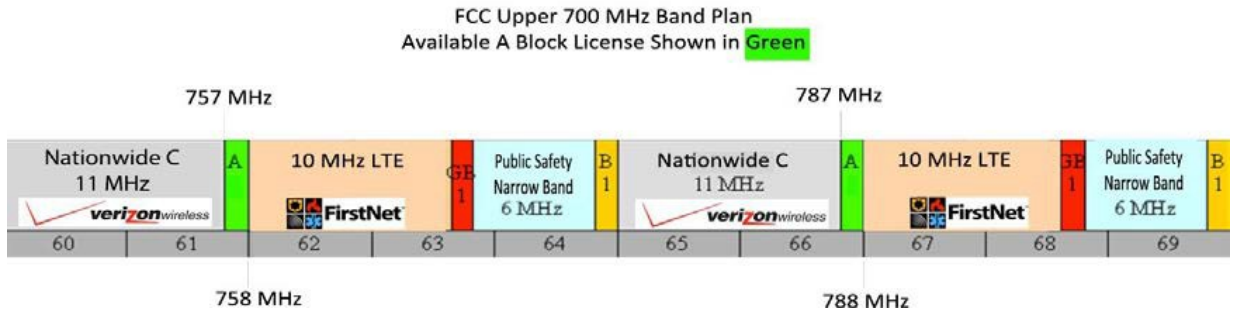
The other two license holders in the band are Dominion 700, which Select Spectrum also represents, and Access 700. All three license holders are offers held licenses for sale or lease, and to date have made combined transactions to utility, critical infrastructure, and rail organizations covering over 88 million people, (approximately 27% of the total U.S. population, with the remaining 73% available for purchase). **All three license holders will partition the licenses to match buyer/lessee requirements to the county level.**



**Contact: Robert Finch, [rfinch@selectspectrum.com](mailto:rfinch@selectspectrum.com), (571) 287- 8720**

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

The Upper 700 MHz A Block is shown with neighboring service groups below:



**700 MHz spectrum has excellent propagation and can be used for a broad range of applications including fixed & mobile data, voice, and video.** Licenses are in use by and recommend for utility, critical infrastructure, and passenger & freight rail communications, Land Mobile Radio (LMR), Surveillance Control and Data Acquisition (SCADA), Positive Train Control (PTC), M2M/Internet of Things (IoT), and Oil & Gas operations. Networks may employ point-to-point, point-multipoint (tall site) and/or cellular architectures. Engineers recommend the spectrum for small-cell deployments requiring superior building penetration.

Maximum downlink power is 1000 Watts ERP at 1000 feet, and maximum uplink power is 30 Watts ERP. Maximum out of band emissions limits of  $43 + 10\log(P)$  dB apply to the A Block and the adjacent 11 x 11 MHz Upper 700 MHz C Block where Verizon operates a nearly nationwide 10 MHz paired LTE network. The A Block, located between 757-758 MHz / 787-788 MHz, is similarly protected from interference from the adjacent public safety broadband channels at 758-768 MHz and 788-798 MHz.

In total, one passenger rail-line and ten utilities have acquired spectrum rights. The **California High Speed Rail Authority** found 700 MHz ideal to support rail safety applications. **Great River Energy** of Minnesota is currently using the band for point-multipoint data collection and **Northwestern Energy** has deployed point-to-point links across Montana, North and South Dakota. Through successful field trials **Salt River Project** and **Puget Sound Energy** found 700 highly effective. Other buyers include **FirstEnergy**, **Portland General Electric**, **Idaho Power Company**, **Oncor**, **Navopache Co-op**, and **National Grid**.

BPC has announced its **Critical Infrastructure Network Expansion Initiative**, or “CINEI”, which will provide alternative spectrum solutions to rail, utility, and other critical infrastructure participants. This program offers usage of the Upper 700 MHz A Block spectrum, **providing wireless links to interested parties at no cost**. Availability is on a limited first-come, first-served basis across many parts of the United States. Please inquire with us for further details on the program.

Pt-Multipoint and Pt-Pt Wireless Equipment for this band is made by Full Spectrum [www.fullspectrumnet.com](http://www.fullspectrumnet.com), 4RF [www.4rf.com](http://www.4rf.com), GE MDS [www.gedigitalenergy.com](http://www.gedigitalenergy.com), ConVergence Technologies [www.converge-tech.com](http://www.converge-tech.com), XetaWave [www.xetawave.com](http://www.xetawave.com), ABB <http://www.abb.com/>, MiMOMax [www.mimomax.com](http://www.mimomax.com), Cambium <http://www.cambiumnetworks.com>, PowerTrunk <http://www.powertrunk.com/>, and Tait Communications <https://www.taitradio.com>. Other manufacturers are considering upgrading their existing lines of equipment to make use of this band.

The licenses are valid through July, 2019 when they will be renewed by the FCC for \$290 per license. To be eligible for renewal, license holders must show they meet the FCC’s Substantial Service guidelines, which require a limited threshold of use of the licenses be met or exceeded. Please contact us for additional information regarding these licenses.

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