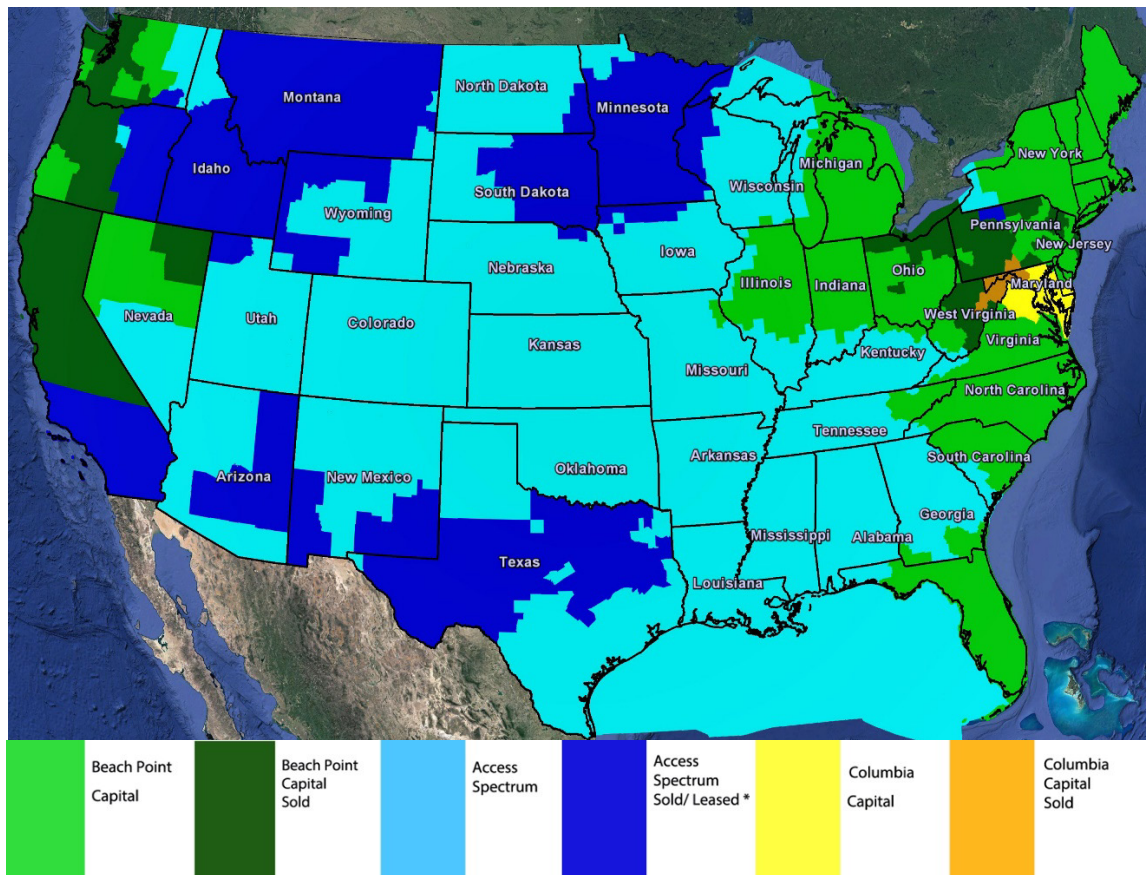


## Wireless Spectrum Licenses in the Upper 700 MHz A Block Ideal for Passenger & Freight Rail Applications Available Nearly Nationwide

Select Spectrum represents Beach Point Capital and Dominion 700, holders of 2 x 1 MHz of **Upper 700 MHz A Block FCC licensed spectrum**. The other historical license holder in the band is Access Spectrum. To date, all three license holders combined have sold licenses covering nearly 88 million people, (approximately 27% of the total U.S. population), and licenses covering the remaining 73% are available for purchase. **The California High-Speed Rail Authority (CaHSRA)** has acquired Upper 700 MHz A Block spectrum in the State of California to support multiple CaHSRA applications, including Positive Train Control “PTC”.

BPC spectrum coverage available for purchase is shown on the map below in light green, with spectrum sold being reflected in dark green. Dominion 700 spectrum available for purchase is shown in yellow, with the portion already sold in orange. **All three license holders will partition the licenses to match rail operating areas to the county level.**



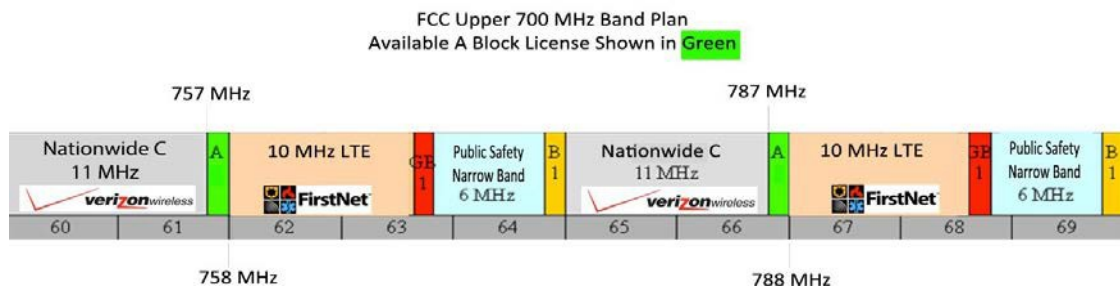
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**The A Block spectrum can be used for a broad range of applications including fixed or mobile data, voice or video.** Networks may employ point-to-point, point-multipoint (tall site) and/or cellular architectures. Engineers recommend the spectrum for small-cell deployments requiring good building penetration.

BPC has announced its Critical Infrastructure Network Expansion Initiative “CINEI” to construct regional systems using its unsold licenses to demonstrate the spectrum’s excellent propagation and performance and is seeking rail, critical infrastructure, and utility users to participate.

The Upper 700 MHz A Block spectrum is located between 757.0 and 758.0 MHz and between 787.0 and 788.0 MHz and has excellent propagation characteristics.



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 is similarly protected from interference from the adjacent public safety broadband channels at 758-768 MHz and 788-798 MHz. These frequencies were granted to FirstNet which Congress established to construct a national first responder LTE network. AT&T has been selected as the prime supplier to FirstNet; no construction schedule has been released.

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.

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