

Description of Lee County TVWS experiment

The purpose of this experiment is to deploy communications solutions to a school bus to allow the students to make productive time of their journey to/from school.

The area of operation is Lee County North Carolina (Figure 1). The solution will be designed, deployed and managed by TV Band Services (TVBS) the system provider and operator of the commercial TVWS solution in Wilmington NC, as well as several other experimental TVWS solutions in the South East.

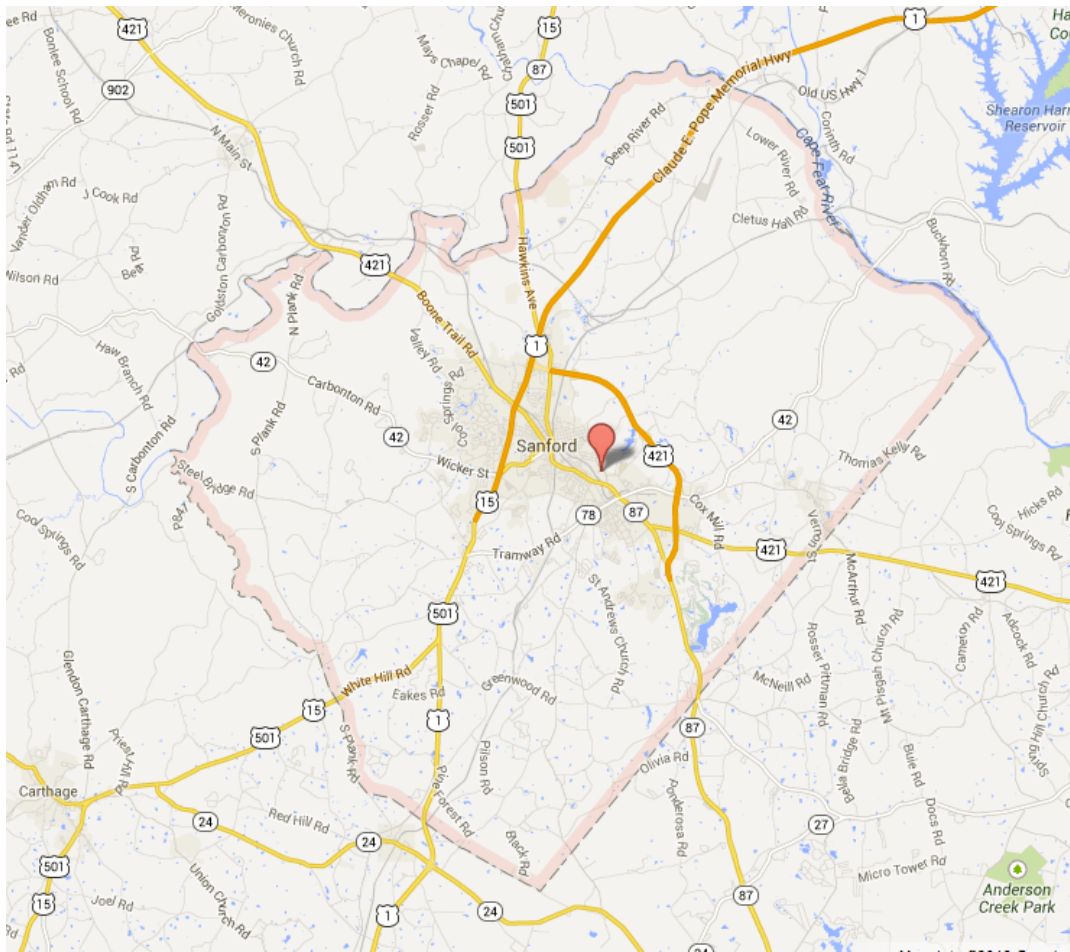
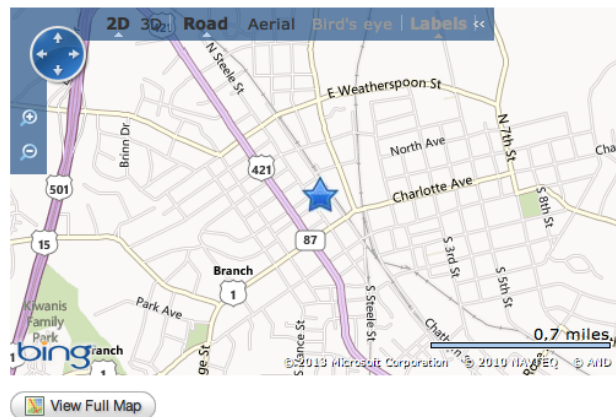


Figure 1

The solution will utilize UHF TV White Space frequencies and technologies. The frequency range is 470-698MHz but the actual frequencies used will be controlled and managed by the Spectrum Bridge Inc. (SBI) authorized TV White Space database using the channels available at this location (Figure 2)

Best match: 106 Gordon St, Sanford, NC 27330



Site HAAT: 6.90 meters

Channel Number	Frequency Range (MHz)	Allowable Antenna Height (meters AGL)	Noise Floor (dBm)
2	54-60	30	**
5	76-82	30	**
6	82-88	30	**
7	174-180	30	**
8	180-186	30	**
9	186-192	30	**
14	470-476	30	**
15	476-482	30	**
21	512-518	30	**
22	518-524	30	**
23	524-530	30	**
40	626-632	3	**

[Click here for more information about what White Space Plus has to offer.](#)

[** Click here to login to your White Space Plus account to view Noise Floor values.](#)

Interested in the rules regarding wireless microphone operation in the TV white spaces bands? [Learn More >>](#)

This product is protected by US and international patents and patent filings. Click [here](#) to review.

Figure 2

The equipment will consist of radios developed by 6Harmonics (the reason for the experimental license is their certification application is still under FCC review) consisting, initially, of a base station and a mobile unit (on a bus). Both the base station and the mobile will be operating under the control of the SBI database. As the performance and behavior of the system is characterized additional base stations and mobile units will be added to test the solution in a realistic environment. The total number of deployed units will not exceed 20.

As part of this process TVBS and SBI will monitor the local broadcast environment and ensure that both broadcast and PMSE operations are adequately protected.