

January 3, 2018

William Rice, Chairman
Village of Nelsonville Zoning Board of Appeals
258 Main Street
Nelsonville, NY 10516

Re: Homeland Towers/AT&T/Verizon Wireless application for a proposed cell tower at 15 Rockledge Road, Nelsonville, NY

The following is a supplemental response to Mr. Graiff's Letter dated December 9th, 2017, that was not provided to the applicants until December 28, 2017.

Mr. Graiff's letter brings up the issue of capacity and whether it has been demonstrated that a capacity problem exists in this area. He references Forward Data Volume (FDV) plots which are common plots that Verizon Wireless uses in order to demonstrate capacity exhaustion problems. No FDV plots have been provided because no capacity problems currently exist in this area. The purpose of this site is to alleviate a significant coverage gap as identified and demonstrated in previous RF reports.

Additional information demonstrating the significant gap in coverage is attached to this letter in the form of Key Performance Indicators (KPIs). Two KPIs, dropped calls and setup failures, are attached for the existing McKeel's Corners site located to the east on Route 301. The attached graphs provide these KPI's for each sector of the existing site. The sector which attempts to provide coverage in the direction of Nelsonville is the third sector identified as the Gamma sector. There are two LTE frequencies currently deployed as this site, and these two frequencies are shown in the chart. These are shown by the pink (700 MHz) and teal (2100 MHz) colors as shown in the legend.

Verizon Wireless designs its networks to have 98% of calls be completed successfully. This means that the dropped call and setup failure percentages should be 2% or lower. As seen in the KPI graphs, the Gamma sector experiences setup failures at a rate greater than 2%. Sometimes these setup failures are 4% or greater. The Gamma sector also experiences dropped calls at a rate greater than 2%. The dropped call rate is mostly about 7.5% with some days having a dropped call percentage as high as 15% or greater. Please keep in mind that setup failure rates and dropped call rates are also sometimes artificially low as customers may not initiate a call or prematurely end a call because they know there is unreliable service in an area such as this part of Nelsonville. Nevertheless the foregoing Key Performance Indicators demonstrate that Verizon Wireless has a significant gap in reliable voice call coverage in this area.

Sincerely,

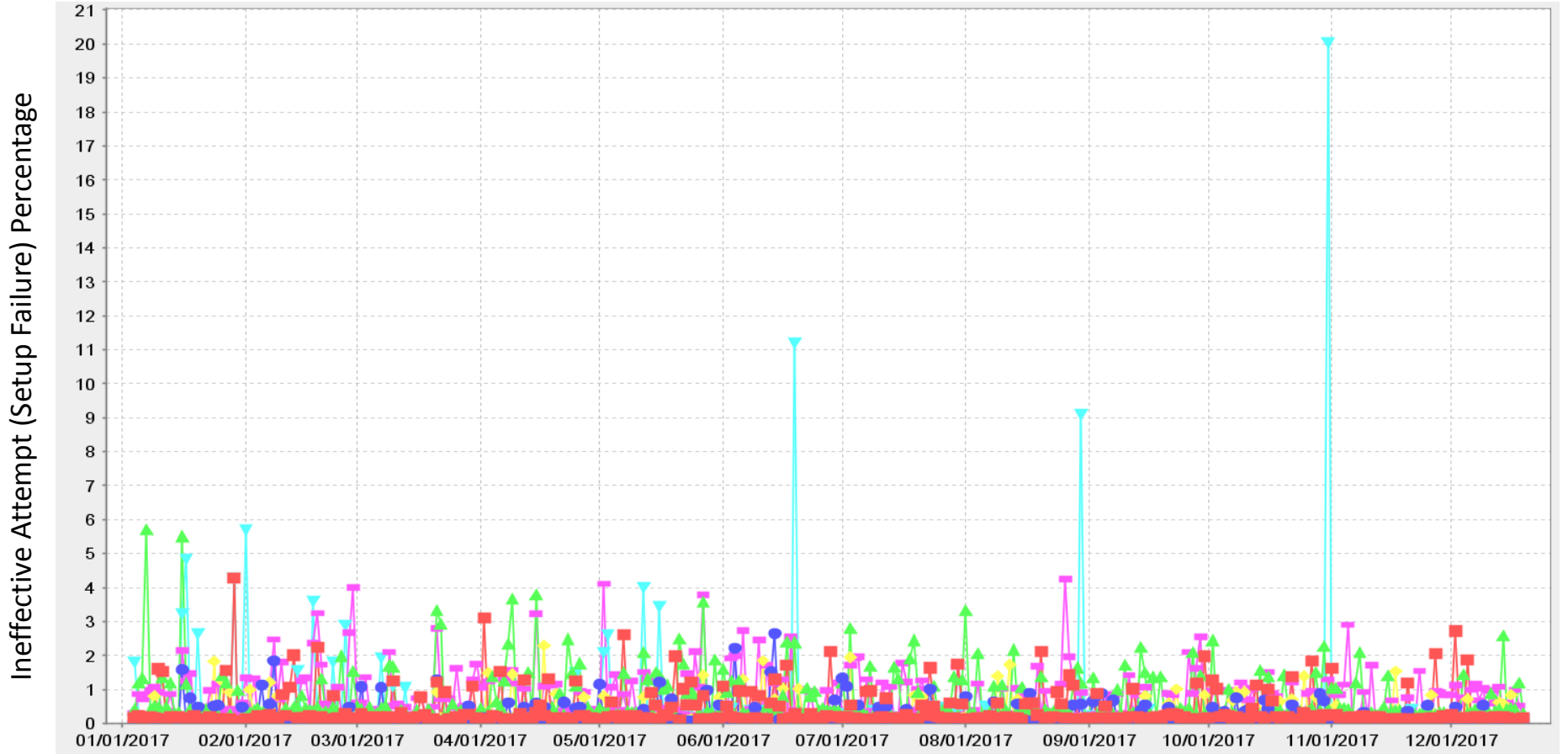


Adam Feehan, Sr. RF Engineer
PierCon Solutions, LLC

Key Performance Indicators for McKeel's Corners

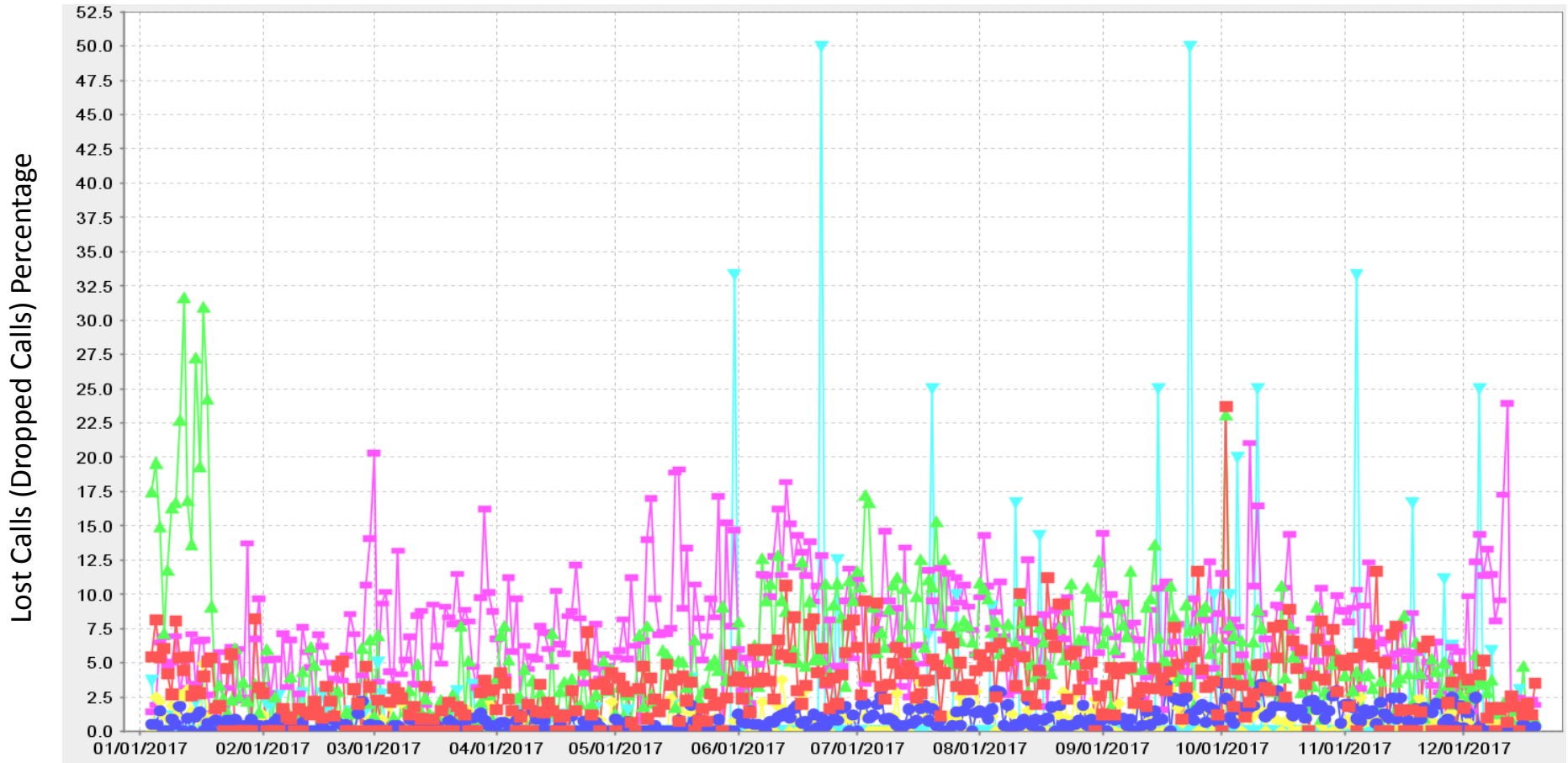
By Adam Feehan

Setup Failures for McKeel's Corners Sectors



- McKeel's Corners Alpha Sector (100°) 700 MHz VoLTE Ineffective Attempt (Setup Failure) Percentage
- McKeel's Corners Alpha Sector (100°) 2100 MHz VoLTE Ineffective Attempt (Setup Failure) Percentage
- McKeel's Corners Beta Sector (160°) 700 MHz VoLTE Ineffective Attempt (Setup Failure) Percentage
- McKeel's Corners Beta Sector (160°) 2100 MHz VoLTE Ineffective Attempt (Setup Failure) Percentage
- McKeel's Corners Gamma Sector (240°) 700 MHz VoLTE Ineffective Attempt (Setup Failure) Percentage
- McKeel's Corners Gamma Sector (240°) 2100 MHz VoLTE Ineffective Attempt (Setup Failure) Percentage

Drop Calls for McKeel's Corners Sectors



- McKeel's Corners Alpha Sector (100°) 700 MHz VoLTE Lost Call (Dropped Call) Percentage
- McKeel's Corners Alpha Sector (100°) 2100 MHz VoLTE Lost Call (Dropped Call) Percentage
- McKeel's Corners Beta Sector (160°) 700 MHz VoLTE Lost Call (Dropped Call) Percentage
- McKeel's Corners Beta Sector (160°) 2100 MHz VoLTE Lost Call (Dropped Call) Percentage
- McKeel's Corners Gamma Sector (240°) 700 MHz VoLTE Lost Call (Dropped Call) Percentage
- McKeel's Corners Gamma Sector (240°) 2100 MHz VoLTE Lost Call (Dropped Call) Percentage