When the USArray Transportable Array (TA) entered and moved through the central and eastern United States, it serendipitously coincided with an increase in seismicity in the area. Recognizing the unique opportunity for more long-term monitoring in a region long underserved by seismic monitoring, several Federal agencies worked to create the Central and Eastern United States Network (CEUSN). Field operations conducted by IRIS established 159 stations as part of the N4 network by reinstalling equipment into existing TA vaults or permitting new sites.

Consisting of a variety of sensor types, the CEUSN is providing the eastern United States with first-of-its-kind comprehensive seismic network coverage. All N4 stations record broadband data at 100, 40, and 1 sps. Forty stations have strong motion sensors returning 100 sps in real-time, with the possibility of 200 sps in triggered mode. In addition, all N4 stations have a MEMS and Setra 278 microbarometer and Hyperion infrasound sensor; and 8 stations have a Vaisala WXT520 weather package.

The Array Network Facility (ANF) at the University of California San Diego, conducts all real-time operations for the network. The CEUSN consistently performs with excellent data return rates of greater than 99%. During 2015, the automatic system detected nearly 3000 events with detection thresholds down to M2.7, with the possibility for tuning to pick up lower magnitude events. Figure 1 shows the events detected at the ANF over the short lifetime of the network. Beyond the current archiving of all waveform data and metadata at the IRIS Data Management Center (DMC), the ANF will be implementing QuakeXML as an additional means of data sharing.