



Broward County Public Schools Counts on WeatherBug to Support Student Safety

ABOUT

Broward County Public Schools (BCPS) is the sixth largest public school system in the United States, the second largest in the state of Florida and the largest fully accredited K-12 and adult school district in the nation. BCPS has over 260,000 students and approximately 175,000 adult students in 229 schools and education centers and 95 charter schools. BCPS serves a diverse student population. Students are from 204 different countries and speak 130 different languages.

CHALLENGES

Weather in south Florida often changes rapidly and can become extremely dangerous, bringing fast approaching storms with lightning, powerful winds, tornadoes, or extreme heat. The district's size, large student population, and wide range of outdoor student-related activities make severe weather a major concern to school administrators charged with the task to protect and oversee the safety of students, faculty and staff.

SOLUTION

In 2006, BCPS became the first school district in the nation to implement a comprehensive, real-time weather monitoring and alerting system:

- **Weather stations** measuring conditions including temperature, wind speed and direction, precipitation, humidity and more;
- **Total lightning sensors** for detecting cloud to ground (CG) lightning and in cloud (IC) lightning, which makes up the vast majority of lightning and often indicates severe weather.
- A **mobile tool** specifically designed for BCPS that provides localized weather alerts that have been customized for BCPS-issued cell phones.

In 2013, school officials learned that the mobile network service that BCPS relied on would be discontinued in a matter of months. To be ready for the new school year, they contacted WeatherBug once again to build a new, robust alerting platform designed for the latest smartphone technology.

BCPS officials worked closely with WeatherBug to build a customized alerting app on district-issued phones for the exclusive use of school faculty and staff. The streamlined, easy-to-use app – called **Protect M.E.** (Mobile Enterprise) – delivers real-time weather and lightning strike information and alerts from dozens of WeatherBug weather stations, lightning sensors and cameras at schools and county sites throughout the district. Using the app, school faculty and staff can quickly view active weather warnings, see up-to-the-minute conditions and forecasts, check the radar, and see live camera views to monitor changing conditions.

Because Florida receives more lightning strikes per year than any other state, accessing up-to-the-minute information on lightning is critical for ensuring student safety whenever students are outside. In alignment with school district weather procedures, the WeatherBug Protect M.E. app alerts staff when lightning approaches an unsafe



Using the WeatherBug Protect M.E. app, school staff can get all of the information they need to monitor critical factors such as temperature, humidity and more—plus receive the latest alerts.

radius around the user's exact location. **Lightning is monitored on a second-by-second, mile-by-mile basis.** Further, the app provides recommendations for when to seek shelter and when to stay tuned to help make certain that students are kept out of harm's way.

To support BCPS' commitment to student safety, **the app sends both National Weather Service alerts and WeatherBug's own DTAs** (Dangerous Thunderstorm Alerts) to users based on their current location when severe weather threatens. The GPS on each phone allows devices to be used when students are off campus – whether they are on a field trip in St. Augustine or a football game in Gainesville.

Users also receive Heat Index alerts, which are critical for the safety and well-being of student athletes during outdoor games and practices. To ensure alerts are noticed, the app makes a sound or causes the phone to vibrate when an alert is issued, and a dedicated "Alerts" tab shows active and recently expired warnings.

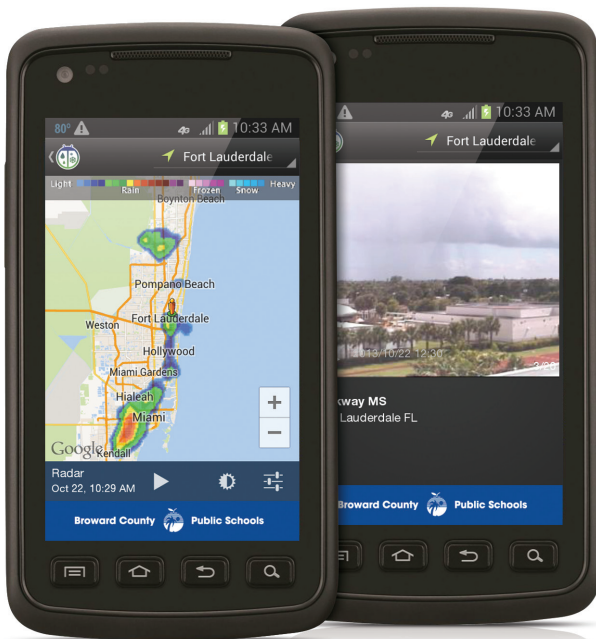
RESULTS

The WeatherBug Protect M.E. app delivers critical weather intelligence from WeatherBug's dense local network of weather and lightning sensors. Combined with a sound, county-wide severe weather procedures – Broward County is one of the most technologically advanced and prepared school districts when it comes to severe weather safety.

Faculty and staff at each school share phones equipped with the WeatherBug Protect M.E. app:

- **In the morning:** A principal can check weather conditions as students arrive to class.
- **During the school day:** A driver's ed teacher can stay alerted to storms when outside during a driving lesson.
- **After school:** A football coach can monitor lightning and any heat index warnings during outdoor practice.

School officials can use the app for the latest weather information and alerts with just a few clicks – and no longer need to call the staff at the local weather service office for information.



The WeatherBug Protect M.E. mobile app allows school officials to check the radar for approaching storms and verify by using live cameras.

"The weather solutions developed and implemented by WeatherBug continue to provide important lightning updates required to make decisions for the safety of students, faculty and event spectators, and it also provides peace of mind knowing that we have a reliable weather and safety system in place for the district," says Jerry Graziore, Director, Safety & Chief Fire Official Safety Department, The School Board of Broward County, Florida. "The system has also been used during times of extreme heat and humidity and other weather emergencies requiring the involvement and professional judgment of district officials."