Landscape
With school attacks becoming a greater concern in America, Charlotte-Mecklenburg Schools (CMS)—one of the largest school districts in the nation with 160+ schools and more than 140,000 students—sought to create a safer school environment for its students and staff. The district had no real access control system in place. While a few buildings were equipped with a handful of standalone access locks, the district lacked a true security system that would safeguard its occupants and facilities. The district’s facilities director and locksmith began to evaluate options for creating a foundation of safety and security for their schools.

Desired outcome
Charlotte-Mecklenburg Schools desired to create a safe school environment that would proactively protect students and staff and also allow the district personnel to respond quickly, if needed, in the event of a crisis. Additionally—like most other school districts—CMS needed a system that was affordable, given the budgetary pressures and cuts facing many school districts today.

Solutions
An Allegion sales consultant worked closely with CMS’s facilities director and locksmith to determine key security needs and identify solutions that would best address them. Schlage’s AD-Series electronic locks were proposed to serve as the hardware backbone of the district’s security solution. These locks are ideal for several reasons:
Multiple Configurations: The AD-Series locks can be configured in multiple ways, depending on the need of each opening. This provides the necessary flexibility for buildings with various types of openings that all have different access protocols and uses.

Modular Design: With its patent-pending modular design, the AD-Series met the facility's current needs but offered upgrade potential for future needs—without removing the lock from the door. If CMS decides to move to smart card technology in the future, all they have to do is change the reader head on the lock, which is a lot more convenient and cost-effective than changing the entire lock.

Open Architecture Platform: Built on an open architecture platform, the locks integrate with numerous access control solutions. The AD-Series is not limited to only one type of credential, which is often the case with other access control locks.

Reliable Communications: Secure and reliable wireless communication with the Panel Interface Module (PIM) is accomplished using 900 MHz frequency. The 900 MHz bandwidth supports better signal propagation and enables longer transmission ranges.

Network-like Features: Schlage's AD-Series hardware includes many features found in a networked system, including tracking and monitoring, request-to-exit/enter sensors, interior cover tamper guard and a door position switch.

Trial period

Understanding the significant investment the district was facing, Allegion proposed a free trial of the AD-Series. In addition to the lock, the trial included about a dozen individual proximity card credentials for staff members. These individuals could access the building using the cards. Additionally, the lock was programmed to automatically lock and unlock at certain times each day. The trial was scheduled for 90 days—however, a few weeks in, CMS was so pleased with the result it was ready to equip all buildings with the locks.

Providing IT expertise was also critical to the district's decision to update the locks. Allegion's electronic access control consultant spoke several times with the district's IT director. Providing expertise in access control and electronic and wireless solutions—particularly as it pertained to control panels, ceiling locations and control closets—was invaluable to CMS.

Purchase and installation

Allegion partnered with a local distributor to provide the locks via the Federal GSA Schedules Cooperative Purchasing Program. Depending on its needs, a school system can take advantage of this state and local government program that allows schools to purchase security products at a more cost-effective rate. CMS purchased approximately 1,000 AD-Series locks. The district facilities team installed the locks and quickly discovered another advantage to the AD-Series: ease of installation. The team fine-tuned the installation to 18 minutes per lock. Being able to do this internally—and at such a fast pace—saved the district even more dollars.
Additional solutions
In addition to the AD-Series locks, the district purchased 34,000+ proximity cards as well as 300+ Schlage PIM400-1501 Intelligent Controllers. These controllers—powered by Mercury—allow the AD-Series readers to communicate with the central database. The controllers are not only more secure, they also simplify installation and reduce the cost of implementation for the client. Finally, the district added approximately 300 Von Duprin 99-Series exit Devices. With modern touchbar styling, these exit devices are ideal for heavy traffic applications such as schools.

Results
For the first time, CMS has an up-to-date access control system in place designed to safeguard its schools. Not only has it enhanced security and access control, it has allowed CMS to operate more productive and efficient in managing individual openings. Additionally, as budget allows, the district plans to elevate the system to allow wireless control and even more advanced security features.