

Lane Construction/ Virginia Department of Transportation

Chantilly, Virginia

Services:

Cox Wireless Plant Extension
Cox Business InternetSM

"Not only do we enjoy the ease of access to advanced technology Cox gives us, but also the convenience of getting one bill and dealing with one company for customer care and technical questions."

Glenn D. Gorman
Job Engineer
Lane Construction

SITUATION:

For a company that got its start just a few years after the invention of the telephone, Lane Construction is certainly setting the pace today with 21st-century communications technology, care of Cox Business Services. And for a government organization that requires a high degree of efficiency to stay on schedule and on budget, the Virginia Department of Transportation found its answer through the same innovative wireless technology from Cox.

In Northern Virginia, Lane Construction was collaborating closely with the Virginia Department of Transportation (VDOT) on a road-widening project in the area. Lane has a long history of working with both public and private customers on jobs ranging from highways and bridges to locks and dams, mass transit systems, airport runways and other large projects. Both Lane and VDOT needed Internet connections to access documents and information critical to the project. As an added challenge, both groups needed an Internet solution in a place where a traditional connection wasn't feasible: on an exit ramp leading from an eight-lane highway to a four-lane highway, where teams worked from field trailers by the ramp. As a result, both groups were using dialup connections that significantly hindered their ability to manage their project efficiently.

SOLUTION:

Glenn Gorman, Job Engineer with Lane on the Virginia project, felt the communications gap first hand. "Both Lane and VDOT were using analog connections and we had lengthy download times, plus some failed downloads, which really slowed down our work schedules," Gorman said. Single construction drawings would take up to 30 minutes to download via dialup. In addition, VDOT had to take a fax machine offline to use the phone line for dialup access. A traditional high-speed Internet connection was deemed too expensive, would have taken too much time to implement and too many permits to secure, and proved unfeasible given the major highway that had to be crossed to the isolated trailer locations.

Presented with these challenges, Cox Business Services came up with the ideal solution to meet their specific requirements: a Wireless Plant Extension, which delivered Cox Business Internet service over wireless transport. This "last mile" wireless solution was enthusiastically received by both Lane and VDOT since it was easy to construct and reasonably priced. Gorman explained: "This solution gave our crews a way to download maps and other large files quickly. And it also let us connect through our Virtual Private Network to a Web-based Cost System we use to input real-time data." To Gorman and crew, this wireless solution presented no noticeable difference from a wired solution, and no weather or interference issues.

For VDOT, a crew of up to four or five people were able to access a fast, efficient system for managing e-mail, daily and weekly reports, downloads of construction drawings, ongoing workbooks and other documents.

The installation was performed successfully despite two additional challenges: The Cox Plant Extension had to be mounted to the top of an electrical shack used by the construction crews to ensure enough height to clear any potential interference from passing tractor trailers. And the two-man installation crew had to weather an unexpected snow squall while up in a bucket truck securing the HUB. Even with the reduced visibility and extreme conditions caused by the squall, the crew successfully completed the installation in about five hours.

RESULTS:

With 3.0Mbps downstream speeds and 512Kbps upstream speeds, Lane Construction and the VDOT are accessing critical documents and information at a rapid pace, staying on schedule, saving time and money, and operating more efficiently thanks to the advanced Wireless Plant Extension provided by Cox.