

## Harbor Networks—Wireless Site Survey



### WHAT IS A WIRELESS SITE SURVEY?

A wireless site survey, sometimes called an RF (radio frequency) site study, is the process of planning and designing a wireless network to provide a solution that will deliver the required RF coverage and throughput for an identified space. There are two predominant methods of surveys — predictive and active. Any wireless survey requires some input from the customer, including: device types, bandwidth, and applications that will be used on the network.

### HOW IS A SURVEY DONE?

- A *predictive* survey is done using only floor plans. Based on the floor plans alone, the engineer determines the best location for access points and produces a design. Engineers should use tools like Air Magnet or Ekahau to produce coverage maps. From there but the engineer combines his or her expertise with the findings to arrive at a predictive design. Predictive surveys are typically done at a relatively low cost.
- An *active survey* is an in-depth analysis of the physical facility. The engineer tours the site to examine the facility's layout, construction and finishes. Expert engineers typically utilize hardware and software tools to properly measure RF, carefully noting how RF functions within the space. They can make changes onsite where necessary, trying different AP placements and equipment types until a working design is established. They then use this information to develop an actual deployment design that will meet the customer's demands of the wireless network. Because an active survey is more time intensive and produces a functional design, exact bill of materials and precise budget, it is typically more expensive to conduct.

### WHAT IS THE BENEFIT?

The best, most cost-effective to design, implement and support a network is to conduct a wireless survey. Harbor Networks has used site surveys to cut customer costs by more than 60 percent in some cases. In every vertical from K-12 education to healthcare to legal services, site surveys repeatedly produce ROI at many times the cost of the survey itself.

### WHO SHOULD CONDUCT THE SURVEY?

Any organization considering a wireless site survey should check to make sure the engineer they work with is a CWDP (Certified Wireless Design Professional). This certification signifies that the engineer has demonstrated knowledge and expertise in wireless networking. Working with accredited RF Engineer for a survey helps ensure your organization saves money and gets an efficient, reliable wireless network.