

WZC| CASE STUDY



Rady Children's Hospital - Predictive Wi-Fi Modeling

Predictive WiFi Modeling Project For Rady Children's Hospital

Project Scope

Rady Children's hospital requested a predictive model to be created for 27 hospital buildings and offices included in their campus, about 1.4 million square feet. The scope of work included Wi-Fi design and documentation for each floor of every building included in the project, and a presentation of the final designs.

Project Results

Predictive wireless surveys are virtual surveys that are used to plan the deployment of a Wi-Fi network using information about the site where the network will be installed. Their purpose is to account for as many variables as possible, including the site's layout, building materials, and potential sources of interference, to produce the most cost-effective wireless design capable of providing sufficient coverage and capacity to meet the requirements of the end-users. WZC took the floorplans for the 27 buildings and created separate Ekahau files for each, using the software to account for different wall types, area of exclusion, and existing AP placements. From there, designs were created that best optimized the signal strength for 2.4 and 5 GHz bands for each level's unique needs.

A separate document was created for each building with AP recommendations for individual floors with predictive heatmaps showing what 2.4GHz and 5GHz coverage, SNR, and other factors could look like with the suggested design. Below are some examples of the final documentation.



Customer Bio

Rady Children's Hospital-San Diego is a nonprofit, 511-bed pediatric-care facility and is the region's only designated pediatric trauma center. Rady Children's Hospital has been rated as one of the top ten best children's hospitals in the nation. It is the largest children's hospital on the west coast and provides care to 281,924 children, about 91% of children in the area. Their team includes nearly 1,000 physicians, almost 1,500 nurses, and more than 5,100 employees.

