

COSTQUEST WIRELESS NETWORK MODELING

Leading Edge Wireless Cost Models and Related Support



Modeling of Wireless Costs and Network Design

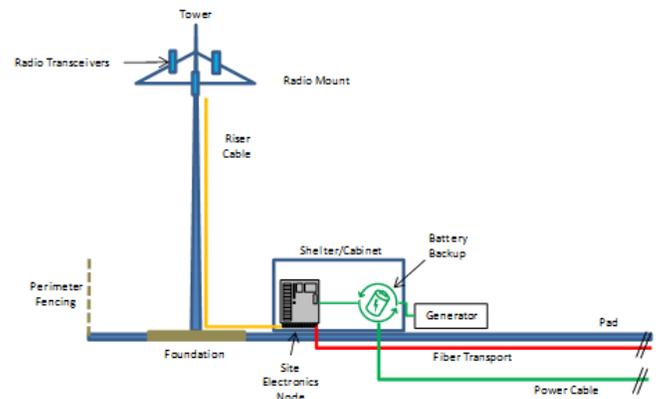
There is an increasing momentum behind the build-out of mobile wireless voice and data networks. Study after study points to the important role these networks play in the future of our communications capabilities. From public safety / first responder issues to education to health care, the unique mobility value and the speed with which these networks can be deployed makes them a priority for providers and policy makers alike...especially as we work to reach our more rural areas. As a result, it is important to understand what these networks cost as they are constructed – and as they go operational.

The CostQuest Wireless Cost Model was developed to address these issues.

CostQuest Wireless is unparalleled in its ability to produce a real-world LTE network topology including tower counts, radio access network ('RAN') capacity configuration, backhaul type and capacity, distance of backhaul fiber, and other key factors including an analysis of customer locations and demand. The network design can be either brownfield (using existing assets) or greenfield (building all new). At the end of the modeling process the result is a customized, forward-looking network developed on a customer-by-customer analysis of network utilization.

With the topology in place the model then employs relevant contemporary equipment cost and capacity data to develop capital expenditure requirements as well as an estimate of ongoing operational costs.

The methodology for creating coverage in the modeled wireless architecture produces a well-reasoned dimensioning of base station requirements for network planning. Where appropriate existing tower sites are incorporated into the model and used as the basis for existing coverage. However, the model can also be run without known towers. In the instance where towers are not available CostQuest Wireless employs a method using hexagonal tessellation cells (HTCell) to approximate site coverage in unserved areas. The use of HTCell is symbolic of a three sector cell site and the hexagonal shape which provides a reliable method to simulate 100% coverage.



As with other CostQuest network cost models what sets the CostQuest Wireless platform apart is its granular approach, its use of spatial analysis, and its reality-based engineering guidelines. CostQuest model platforms are used by companies with operations in over 40 states in the U. S, have been used in property tax valuations, have been used to value networks in acquisitions, and have been used by international government agencies.

Understanding wireless network costs is important to the future of our communications networks. Contact us today to learn more about how the CostQuest Associates wireless network modeling platform can help you.

Contact: Mike Wilson – mwilson@costquest.com or 425-772-2261

