



## **HOBBS, UPCHURCH & ASSOCIATES, P.A.**

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### **Geographic Information System Mapping Pinehurst Championship Management, Pinehurst, North Carolina**

Hobbs, Upchurch & Associates began work with the 1999 US Open Championship Committee in the fall of 1996. What began as a simple layout and mapping project became an extensive relationship with the committee. HUA worked directly with the committee on a day-to-day basis providing in-house computer support, data creation and manipulation, analysis and decision-making. USGA and the PGA closely evaluated GIS as a viable tool in the planning of major tournaments due to this consulting partnership between HUA and the tournament committee. Prior to the tournament, all of the greens were replaced. As a crucial part of this green replacement, HUA mapped and provided 3D models all of the existing greens to accuracies of 1/8-inch. After the greens were replaced, HUA remapped the greens for comparison with the original green contours to ensure accuracy of the replacement work. As final steps for the project, HUA coordinated data collection efforts, researched existing available data, and produced site layouts, transportation and parking facilities maps, marketing displays, and training of personnel. All of this data was transformed into media presentations used for television promotions prior to and during the Open. This project has now grown to include the same services for the 2001 US Women's Open Championship, the 2002 Senior Championship, and the 2005 US Open Championship.

**This project received a 2000 Engineering Excellence Award from the American Council of Engineering Companies of North Carolina.** Projects that receive these awards are judged on criteria such as overall innovation, exceeding client expectations, number of people served, future value to the engineering industry, and social and economic benefits.