ArcPad Eases Address Canvassing in 2010 U.S. Census

The 2010 U.S. Census is less than one year away, and preparations are in full swing. In April of this year, the Census Bureau launched the address canvassing operation, where approximately 140,000 census workers verified the nation's residential addresses and captured GPS locations for each of these addresses using a PDA equipped with ArcPad software. The address canvassing operation helps ensure that everyone residing in the United States receives a 2010 Census questionnaire and helps simplify future census enumeration operations by providing a specific coordinate, or "map spot," of each household in case a revisit is necessary. The result will be the most comprehensive U.S. address list.

According to Timothy Trainor, U.S. Census Bureau's Geography Division chief, "The goal of address canvassing is to go out and check the address list that we have and GPS capture each of the individual housing unit locations." The results of this effort will be used for the distribution of 2010 Census questionnaires to U.S. households. However, the U.S. Census Bureau expects that 35 percent of all households will not return their census questionnaires on time, and follow-up will be necessary. Says Trainor, "We not only use the address information [captured in address canvassing] for mailing questionnaires, but we also use the coordinates to help untangle some of those difficult-to-observe or difficult-to-read situations. Now the enumerator can actually go to the right unit based on a precise set of coordinates and record the information directly into a handheld computer. We believe that having a mobile infrastructure in place will head off many of the problems with census nonresponse."

ArcPad is also helping the U.S. Census Bureau reduce costs and produce fewer paper forms. "We produced a lot of paper in the last census," says Trainor. "And it wasn't just the use of the paper; it was all the things that go with the paper. We had to procure it, store it, and ship it. It was just all over the place. One of the goals of the 2010 Census is to simplify operations, and we're currently achieving that with the mobile data collection system."

The U.S. Census Bureau is not a new user of ArcPad software. Andrea Johnson, the Census Bureau's Geographic Products Branch chief, says that the Census Bureau has been using ArcPad since 2002 in various iterations in many of its census tests. "When we were planning for the 2010 Census operations, we knew that the enumerator would need an integrated tool that could facilitate many tasks," says Johnson. "The combination of mobile hardware and ESRI software was the most interoperable and flexible solution for our address canvassing operation."

More Information
For more information, contact Andrea Grace Johnson, Geographic Products Branch chief, U.S. Census Bureau (e-mail: andrea.grace.johnson@census.gov).