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How's the Beef?: USDA Goes Mobile

By *Brian P. Watson*

When mad cow disease threatened, the U.S. Department of Agriculture started giving workers tablet PCs to record inspection results, replacing paper and pen.

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the department's Animal and Plant Health Inspection Service (APHIS) were testing **1,000 to 2,000 cattle nationwide per month** in late 2003 and early 2004, often using pen and paper to record results and observations.

[…]

In March 2004, three months after that first positive test, the agency directed a software development group based at the Centers for Epidemiology and Animal Health, a division of APHIS' Veterinary Services group, in Fort Collins, Colo., to build a mobile data-collection network to speed up test-taking and aggregating the results. **The deadline: 12 weeks. The budget: $1.2 million for equipment and services.**

[…]

"Basically, we had a small amount of time to put together the system, but it's worked well," says Rich Baca, the project's lead developer.

[…]

The tablets run software from Mi-Corporation, or Mi-Co, of Research Triangle Park, N.C. Mi-Co customized its software, called Mi-Forms, to allow inspectors to use a stylus to manually note test-site conditions, results and sample characteristics, Baca says.

The Mi-Forms program automatically converts completed forms into eXtensible Markup Language, a text format commonly used to transmit data over the Web. A Mi-Co client program then sends the text files wirelessly to the National Animal Health Laboratory Network, housed in an Oracle 10g database. Field workers now have the ability to wirelessly transmit inspection notes into the database and access health and testing records back from it, which help them decide on what, if any, action to take, like the quarantine on the Alabama farm.

The new capabilities allowed inspectors to speed up their testing regimen—they sampled 176,468 cattle in 2004, more than eight times the 2003 total of 20,543— and hit their goal of 260,000 in January 2005, months ahead of schedule.