DETROIT -- For Howard Cash and employees of Gene Codes Corp., the challenge of identifying the remains of victims of the Sept. 11 attacks has dominated their work over the past two years.

Cash, chief executive of the privately held Ann Arbor-based software company, said Thursday the effort is difficult, but he and his employees gain satisfaction knowing that families waiting for a chance at closure may achieve it with their help.

Cash remembers one family whose loved one officials were still working to identify. The night before the family was to meet recently with the New York City medical examiner’s office, Gene Codes employees received new data that helped make the match.

"When the family came in the next day, they were overwhelmed. The mother said: ‘I would have waited a lifetime for this information.’” Cash said. “They don’t know our staff, but knowing that happened keeps our staff going.”

Following the attacks, the medical examiner’s office asked Gene Codes to help identify remains of the nearly 2,800 people believed killed at the World Trade Center. Already a producer of DNA sequencing software, Gene Codes developed the Mass Fatality Identification System.

M-FISys, pronounced “emphasis,” was designed to manage forensic DNA information on a larger scale than previously available. The first version was ready three months after the attacks, and the company continued to issue updates on a nearly weekly basis.

"It’s just an enormously sad project and some people don’t deal well with it,” said Cash, who has 18 of his 34 employees working full-time on the effort. “But people still feel it has to be done.”

The software sorts information from three DNA tests conducted on remains and matches them with DNA samples from victims’ relatives and personal effects. The information used for identification comes from about 20,000 pieces of remains and about 14,000 other samples.

The remains of about 1,520 people have been identified, most of them by DNA, and 1,230 others were confirmed dead by the courts. But 42 cases have no such closure and no identified remains. They will remain listed on the trade center death toll for now.

By next summer, the New York City medical examiner’s office has said it expects to exhaust all available DNA technology for identifying thousands of unmatched human remains. Unidentified remains will be stored in tomb at the ground zero memorial.

"The people who are still working on it now at this level are just working their hearts out,” Cash said. “The families know, and that is what matters.”