Chapter 3.20 Information Technology in the Practice of Law Enforcement

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EXECUTIVE SUMMARY

In February 2001, the Charlotte-Mecklenburg Police Department began the rollout of a "mobile" information system that will eventually enable all information relating to incident reports, arrests, and investigations to be collected, distributed, and managed in a paperless, wireless environment. The system, dubbed Knowledge-Based Community Oriented Policing System (KBCOPS), began as a "grass roots" project within the police department to reduce paperwork, increase data accuracy, share knowledge and information, and promote a problem solving analytical framework. The system has been under development for seven years, from concept to implementation. The strategies and approaches used to develop this system, the technologies employed, and, most importantly, the challenges faced in merging wireless, wired, database, and applications technologies while satisfying the user requirements of the police department are detailed in this report.

ORGANIZATIONAL BACKGROUND

The Charlotte-Mecklenburg Police Department (CMPD) is the principal local law enforcement entity for the city of Charlotte, NC, and surrounding Mecklenburg County. CMPD serves a population of nearly 700,000 citizens in an area covering more than 550 square miles, and employs nearly 2,000 people, including sworn police officers and civilian support staff. Civilian personnel are assigned to a variety of clerical and administrative support functions related to but not directly involved in the practice of law enforcement activities. CMPD is headquartered in a state-of-the-art building in the downtown area of the city. This facility was designed and constructed to support the computing and data communications needs of CMPD.

CMPD is commanded by the Chief of Police with the aid of the Deputy Chief of Administrative Services, Deputy Chief of Support Services, Deputy Chief of Field Services and Deputy Chief of Investigative Services. There are many units in CMPD. Figure 2 in Appendix A contains a full organizational chart for CMPD. Technology Services, a division of Administrative Services, manages existing information systems and is responsible for the design and implementation of new IT applications. In addition, they manage strategic planning and crime analysis and provide training for all police department personnel.

The operating budget for CMPD in FY2005 is approximately \$146 million. Administrative Services, which includes but is not limited to Technology Services, accounted for approximately 20% of the overall budget. CMPD's operating budget over the 3 most recent fiscal years is shown in Table 1.

CMPD prides itself on being a communityoriented law enforcement agency whose mission is "to build problem-solving partnerships with our citizens to prevent the next crime" (FY2004 & FY2005 Strategic Plan, p. 57). As stated in the 2004-2005 strategic plan, "the Police Department's problem solving efforts are predicated on the availability of accurate and timely information for use by employees and citizens" (FY2004 & FY2005 Strategic Plan, p. 57). Since 1995, CMPD has recognized that IT will be one of the most important crime fighting tools of the 21st century and has emphasized the commitment to making information one of its most important problemsolving tools. The strategic plan recognizes that IT will play an integral role in achieving the strategic goal of "making Charlotte the safest large city in America" (FY2004 & FY2005 Strategic Plan, p. 31).

SETTING THE STAGE

CMPD was established in 1994 when the city and county police departments of the Charlotte-Mecklenburg area merged. At about that same time, CMPD hired a new Chief of Police, who recognized the potential of information technology as a problem-solving tool in the practice of law enforcement—particularly in the areas of crime analysis and computerized mapping. To further this cause CMPD commissioned a nearby university to conduct an in-depth needs analysis in 1995. CMPD also hired a planning director to lead the effort of updating or replacing antiquated systems, and more importantly, to identify new systems that would improve the quality of policing. As a result of the needs analysis, an information systems master plan was created in 1996. The master plan called for the establishment of an infrastructure, followed by the development of mission-critical databases. Top priorities included the creation of a wireless network, an improved dispatching system, and a new report management system.

The information system requirements of CMPD are many and varied. Major systems include those that support (1) administrative and personnel functions; (2) dispatching and 911 emergency services; and (3) incident reporting,

Table 1: CMPD budget summary

	FY2003	FY2004	FY2005
Field Operations	\$71,695,470	\$72,321,646	\$75,522,528
Investigative Services	\$14,963,920	\$14,388,016	\$14,915,761
Special Services	\$26,353,258	\$25,119,778	\$25,827,326
Administrative Services	\$27,513,572	\$28,886,714	\$29,827,691
Total Police Services	\$140,526,220	\$140,716,154	\$146,093,306

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