MEMORANDUM

To: Mayor Ruzzin and City Council, Boulder, Colorado
From: Frank W. Bruno, City Manager, and Mark Beckner, Police Chief
Subject: Proposed Purchase of Police Records Management System
Date: July 24, 2006

Purpose:
The Boulder Police Department has a longstanding records management problem due to its current unreliable and outdated software. We have investigated the software problem and possible software upgrades, and we are currently in the final stages of selecting a vendor and are hoping to begin negotiating a contract within the next few weeks. The purpose of this memo is to advise and update Mayor and City Council on the status of the proposed purchase of a new records management system to replace the system currently in place.

Summary
The Police Department’s historic problem with an unreliable and outdated records management system can be resolved with a new system, which can be purchased with funding of $680,000.00 to $845,000.00 set aside from our equipment budget for this purpose, so that no additional requests for funding or budget adjustments will be necessary. The new records management system will enhance the efficiency and safety of the department and will also serve other departments by providing them with more quick and complete access to data.

History of the Problem
The software problem developed historically as a result of the failure of the original software developer to deliver its product according to contract. In 1997, the Boulder Police Department identified the need to upgrade the management of police records and information with a computerized records management system. The looming Y2K dilemma was also a driving factor in pushing us to upgrade our system. In 1998, the department, in collaboration with the Boulder Information Technology (IT) Department, contracted with a software developer to design, develop, and implement a comprehensive records management system (referred to as the Police Information Network or PIN), which would include field-base reporting, case management, and property and evidence functionality. The selected vendor, Viking, spent the next two-and-a-half years developing a prototype, which, after multiple starts, frustrations, and failures, was not capable of delivering the product as contracted. As a condition of final settlement, the unfinished project and code were turned over to the City of Boulder.

Current Situation
The current records management software is unreliable and is based upon old technology that cannot be updated. For the past six years, therefore, the Boulder Police Department has not had a reliable records management system. The City’s IT Department has been able to help to make the system more usable, and we have made every reasonable attempt to adapt our work processes to this software and to
include work-around solutions provided by IT. We have continued to make the best use of this software for the last six years. However, due to major and frequent flaws within the software engineering of this program, the information contained within the system is considered unreliable. Some of the more notable problems are shown in Appendix 1.

**Unfortunately, this software cannot be updated.** A complete software engineering analysis of the current PIN software was conducted by Cam Marshall, a prominent software engineer. In his opinion, there is nothing that can be done to improve the software. Mr. Marshall noted that the program was written using 1997 technology and that the software needed to re-compile any modified changes is not available. In addition, Mr. Marshall stated that there is proprietary software developed into the computer code, and contact with the parent company for Viking reveals that they no longer have any copy of this code. Based upon Mr. Marshall’s expert opinion, reverse engineering the PIN software is not an option due to old compiling software that was used when developing the original product, and, as a result, the PIN software cannot be modified to meet our current needs.

**Proposed Software Upgrade**

To address this problem, we identified suitable software packages and set aside funds for a software upgrade. We issued a Request for Proposals (RFP) to determine the availability of a viable software package that would meet with the needs of the Police Department and the City of Boulder. Based upon the RFP, site visits, vendor demonstrations, and outside agency recommendations, we have identified two software vendors that have a product suited to our needs: Compudyne and Intergraph. Both of these products are robust and have a longstanding acceptable history within law enforcement nationwide.

Given the changing nature of police records management software, new technology, and the fact that our current system was flawed, we have planned for the eventual upgrading of the system for a number of years. The estimated cost for a records management system suited to our needs ranges from $680,000.00 to $845,000.00, which can be paid with funds set aside over the past several years as part of our equipment replacement fund.

**Benefits of the Software Upgrade**

The implementation of a new records management system will permit the Police Department to work more efficiently and safely and will serve other departments as well. We will be able to quickly and efficiently access information, share information with other police agencies (which we currently are unable to do), and work with other City of Boulder departments to analyze problems and conduct criminal investigations. Furthermore, a new records management system will enhance public and officer safety by allowing us to provide complete and accurate information on a timely and secure basis. We will be able to easily identify crime trends and reallocate resources to address specific problem areas.

**Other City departments will also benefit.** Transportation will have quicker and more complete access to accident data so that intersection/street design and analysis can be performed to ensure safer access for vehicles, bicycles, and pedestrians. In addition, through the collection of reliable data, they will be able to
analyze specific neighborhood problems and easily identify issues such as the quality of life concerns on the Hill. With more accurate data, we will all be able to deploy more proactive problem-solving strategies.

**Implementation**

Final selection of an RMS vendor will be made in the next thirty days, at which time the department will work with IT to begin contract negotiations for the purchase and installation of the new system.