AUDIT REPORT

CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF FINANCIAL AUDIT
WILLIAM C. THOMPSON, JR., COMPTROLLER

Audit Report on the Development and Implementation Of the Omniform System By the New York City Police Department

7A04-066

April 30, 2004

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341
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WILLIAM C. THOMPSON, JR.
COMPTROLLER

To the Citizens of the City of New York

Ladies and Gentlemen:

In accordance with the responsibilities of the Comptroller contained in Chapter 5, § 93, of the New York City Charter, my office has performed an audit of the development and implementation by the New York City Police Department of the Omniform system, which stores information on arrests and complaints in a centralized database.

The results of our audit, which are presented in this report, have been discussed with Police Department officials, and their comments have been considered in preparing this report.

Audits such as this provide a means of ensuring that City agencies are developing computer systems in an efficient, timely, and cost effective manner.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please contact my Audit Bureau at 212-669-3747 or e-mail us at audit@Comptroller.nyc.gov.

Very truly yours,

William C. Thompson, Jr.
WCT/GR

Report: **7A04-066**
Filed: **April 30, 2004**

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Office of the Comptroller
Bureau of Financial Audit
EDP Audit Division

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7A04-066

AUDIT REPORT IN BRIEF

We performed an audit on the development and implementation of the Omniform System (Omniform) by the New York City Police Department (Department). The system stores information on arrests and complaints in a centralized database, allows the Department to eliminate duplicate data entry, and provides better access to data.

Audit Findings and Conclusions

Omniform meets the initial business and system requirements and the overall goals as stated in the system justification. In addition, Omniform's system design allows for future enhancements and upgrades, and the Department followed a formal methodology when developing the system. Also, the Department complied with PPB rules when it procured the equipment and software for the system.

The Department, however, has not resolved certain "critical" issues that it identified in 2001. In addition, acceptance certificates for each deliverable were not in the Department's files even though the Department approved the final project. Further, certain system users indicated that they would like to see changes made to the system; and, when developing the system, the Department did not hire a quality-assurance consultant. Moreover, the Department has no formal disaster recovery plan to enable the timely resumption of agency operations. Other issues identified during this audit included weaknesses in system-access and change-control procedures as well as problems with system screens.

Audit Recommendations

To address these issues, we recommend that the Department:

➢ Resolve the three remaining problems that were identified by the 2001 tests. Specifically, the Department should ensure that Omniform should includes:

- a drop-down box on the Vehicle Screen to permit the user to select the license plate type;
- a time stamp on the printed complaint report and a field in which to record the date when the complaint was last updated; and
- the capability to enter information about a weapon in the box for "weapon," even though the report indicates that a weapon was not used.

➢ Obtain acceptance certificates for all deliverables on all future system development projects.

➢ Ensure that the user concerns identified in the report are addressed. In this regard, the Department should make Omniform more accessible and user friendly. In addition, the Department should provide training to those individuals who stated that they had not received training and additional training to those individuals who felt they needed it. Finally, the Department should ensure that all data in the system is correct.

➢ Engage an independent quality-assurance consultant to monitor and review development work and any system enhancements or subsequent work on Omniform and on all future system development projects.

➢ Develop and complete a formal disaster recovery plan for Omniform. Periodically test it and document the test results to ensure that the plan functions as intended and is adequate to quickly resume computer operations without material loss of data.

➢ Develop written policies and procedures for terminating inactive user-IDs. Also, the Department should review the status of the inactive users and terminate access, as appropriate.

➢ Establish written program-change control procedures and policies to ensure that only appropriate and authorized changes are made to its application and system software.

➢ Identify all fields that compel the entry of inaccurate information. Review, analyze, and correct all the inaccurate information found in these fields.

INTRODUCTION

Background

The New York City Police Department (Department) protects lives and property by responding to emergency calls, investigating crimes, and apprehending violators. The Department also responds to disasters; keeps order at public events, demonstrations, and civil disturbances; intervenes in family disputes; refers people in distress to appropriate social service agencies; hires, trains, and supervises City school safety agents; and works in partnership with communities to achieve crime prevention.

The mission-critical Omniform System (Omniform) stores information on arrests and complaints in a centralized database. The information contained in Omniform is available for review, follow-up, and statistical analysis from any of the Department's Citywide Local Area Network (LAN) locations as well as from other, authorized agencies. Omniform allows the Department to eliminate duplicate data entry and provides better access to data. Omniform replaced the Department's online booking and complaint systems.

In 1996, the Department, through Procurement Policy Board (PPB) rule § 3-05, Sole Source Procurement, hired Information Builders, Inc. (IBI) to design, develop, and implement Omniform. The Department spent a total of $1,033,950 for IBI's multi-year contract. Omniform was implemented in September 2001. Subsequently, in October 2001, the Department entered into another sole-source contract with IBI to enhance and upgrade Omniform as well as other computer systems.

Objectives

The objectives of the audit were to determine whether:

- Omniform meets the Department's initial business and system requirements;

- Omniform, as a finished product, will meet overall goals as stated in the system justification;

- Omniform has been included in the Department's disaster recovery plan;

- The system design allows for future enhancements and upgrades;

- The Department followed a structured methodology when developing Omniform; and

- The Department complied with all relevant PPB rules.

Scope and Methodology

Our fieldwork was conducted from July 2003 through December 2003. To achieve our audit objectives we:

- Interviewed Department officials;

- Observed various system entries and inquires to test whether the system performed as intended;

- Conducted a system walk-through;

- Reviewed system specifications documents, project plans, user manuals, contracts, purchase orders, and other system-related documentation;

- Reviewed and analyzed system testing results; and

- Reviewed the Department's compliance with §3-05 of the PPB rules.

In addition, we conducted a user satisfaction survey, in which we randomly selected 210 system users from a total of 20,446 users (146 users responded to our survey). The general purpose of this survey was to determine whether users are satisfied with the system, whether they have been appropriately trained, and what changes they would like made to the system.

We used Comptroller's Internal Control and Accountability Directive 18, *Guidelines for the Management, Protection and Control of Agency Information and Information Processing Systems* (Directive 18), and §3-05 of the New York City Procurement Policy Board (PPB) rules as criteria for this audit. Since the City has no formal system-development methodology, we used the National Institute of Standards and Technology Special Publication 500-233, *A Framework for the Development and Assurance of High Integrity Software*, to assess whether the Department had followed a formal methodology.

This audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of the records and other auditing procedures considered necessary. This audit was performed in accordance with the audit responsibilities of the City Comptroller, as set forth in Chapter 5, § 93, of the New York City Charter.

Discussion of Audit Results

The matters covered in this report were discussed with Department officials during and at the conclusion of this audit. A preliminary draft was sent to Department officials and discussed at an exit conference held on March 10, 2004. On March 19, 2004, we submitted a draft report to Department officials with a request for comments. We received a written response from the Department on April 7, 2004. In its response, the Department agreed with one recommendation, partially agreed with one recommendation, and disagreed with another recommendation. In addition, the Department stated that four recommendations were not necessary because the action, policy or practice called for was planned or existed independent of the audit. Furthermore, the Department stated that it needs to further analyze and evaluate the remaining recommendation.

The full text of the Department response is included as an addendum to this final report.

FINDINGS AND RECOMMENDATIONS

With the exception of certain unresolved issues that are discussed below, Omniform meets the initial business and system requirements and the overall goals as stated in the system justification. In addition, the system's design allows for future enhancements and upgrades, and the Department followed a formal system methodology when developing Omniform. Also, the Department complied with § 3-05, Sole Source Procurement, of the PPB rules when procuring services, equipment, and software for the system.

The Department, however, has not resolved certain "critical" issues that it identified when it tested the system in 2001. In addition, acceptance certificates for each deliverable were not provided even though the Department approved the final project. Further, users who responded to our survey indicated that they would like to see changes made to the system; and, when developing the system, the Department did not hire a quality assurance consultant. Moreover, the Department has no formal disaster recovery plan to enable the timely resumption of agency operations.

Other issues identified during this audit included weaknesses in system access and change-control procedures as well as problems with system screens.

These issues are discussed in the following sections of the report.

Unresolved Issues Identified by the Department

The Department tested the system in 2001 and identified 51 issues critical to system operations that needed to be resolved. Our review of the system as well as documentation provided by the Department disclosed that three of these issues remain unresolved. The Department should have reviewed and resolved these issues by now since Omniform has been implemented and in use for more than two years. These issues are: the lack of a drop-down box on the Vehicle Screen to permit the user to select the license plate type; the lack of a time stamp on the printed complaint report and a field in which to record the date when the complaint was last updated; and the capability to enter information about a weapon in the box for "weapon," even though the report indicates that a weapon was not used.

Acceptance Certificates Not Obtained

The Department had no acceptance certificates on file for each deliverable, contrary to requirements in the Project Plan. Instead, the Department signed a final acceptance certificate, which covered the entire project. The Omniform Project Plan states that an acceptance certificate, completed and signed for each deliverable as it is put in place, is critical to indicate the satisfaction of Project Plan requirements and the completion of system components. The Plan also states that the signed acceptance certificates are to be used as written authorizations to proceed to the next task or stage of development. Without the acceptance certificates for each deliverable, the Department may not know whether users acknowledge that the system functions

properly or whether they are satisfied with the system's performance. In addition, we question why the Department approved the final project acceptance certificate and paid IBI the full amount of the contract, even though critical issues were not resolved.

User Satisfaction

Although, 76 percent of the respondents to our survey stated that the process of entering data into the system was easy and 88 percent of the respondents stated that the system's reporting capabilities met their needs, 73 percent of the respondents would like to see changes made to Omniform. Some of these changes involved developing more user-friendly screens and formats and modifying and creating new search capabilities. Also, 41 percent of the respondents felt that they needed additional system training, and 12 percent reported that they had received no training. In addition, 50 percent of the respondents reported that they encounter difficulty in accessing Omniform, 69 percent stated that they had problems entering information into Omniform, and 38 percent reported that the data in the system are occasionally incorrect.

Independent Quality Assurance

Although the Department considers Omniform a mission-critical system, it did not "engage an independent quality assurance consultant to assist the agency" in monitoring and reviewing the work of the development and integration team when the system was being developed, as recommended by Directive 18. In this case, a quality assurance consultant might have ensured that all critical issues and user complaints were resolved.

Department Has No Disaster Recovery Plan

The Department has no formal disaster recovery plan. The Department is in the process of contracting with an outside vendor to develop a disaster recovery plan for its network; Omniform will be included in this plan. Directive 18, § 10.0, states that: "A formal plan for the recovery of agency operations and the continuation of business after a disruption due to a major loss of computer processing capability is an important part of the information protection plan." In addition, Directive 18 states that "periodic reviews and updates are necessary to insure that the business recovery plan remains current. A comprehensive test should be conducted annually." The Department should ensure that the disaster recovery plan is developed in a timely manner so that it is able to expeditiously resume agency operations in the event of a disaster.

Other Issues

User IDs and Passwords Are Not Adequately Controlled

We found that 2,638 former employees still had active Omniform access after leaving the Department. Those individuals were listed on the City Payroll Management System database as no longer employed, retired, or on leave. These users were not deleted from the system. Directive 18, § 8.1.2, states: "Active password management includes deactivation of inactive

user accounts and accounts for employees whose services have terminated." In addition, the Omniform user-ID list contained 2,306 duplicated user-IDs. Neglecting to delete duplicate user-IDs burdens the system with maintaining excess information and reduces the system's response time, thereby hindering user productivity.

All Changes or Modifications to System Software
Were Not Documented, Tested, and Approved

Although Department officials stated that modifications had been made to system software, it did not have documentation in its files to show that changes were requested, authorized, tested, and approved. Further, the Department has no policies or procedures in place for making changes to the system. Directive 18, § 9.3, states that "a change control policy is necessary to insure that only appropriate, authorized changes are made to application and system software . . .. Periodic reports describing the changes underway and the progress toward implementation should be provided to executive management."

Omniform May Contain Inaccurate Information

To complete the Omniform arrest and complaint process, users must enter information in every required field, thus forcing the user to enter possibly inaccurate information in some fields. For example, if the victim's age is known but the exact date of birth is unknown, the user must enter a specific date—any specific date—into Omniform. According to Department officials, "January 1" and the corresponding year are generally used. Furthermore, according to Department officials, only individuals between the ages of seven and 15 are deemed juveniles. However, when individuals between the ages of 16 and 18 are arrested, Omniform requires the user to enter detailed juvenile information even though they are not juveniles.

Recommendations

The Department should:

1. Resolve the three remaining problems that were identified by the 2001 tests. Specifically, the Department should ensure that Omniform includes:

   - a drop-down box on the Vehicle Screen to permit the user to select the license plate type;
   - a time stamp on the printed complaint report and a field in which to record the date when the complaint was last updated; and
   - the capability to enter information about a weapon in the box for "weapon," even though the report indicates that a weapon was not used.

   Department Response: With the exception of the drop-down box for license plate type on the Vehicle screen, the Department agrees with the recommendation and has or will attempt to implement the recommendation. Specifically, the Department stated: "A time stamp is an enhancement to be completed in the 3rd Quarter, 2004. The rules controlling

access to the 'weapon' screen will be incorporated as an enhancement in the 3rd Quarter, 2004.' The Department disagrees and will not implement the recommendation concerning plate type stating: "Plate type is not considered a critical issue and was placed on a 'problem' list as a result of a user's suggestion. It was never a requirement or an enhancement requested through our quality assurance team or through satisfaction questionnaires during or subsequent to the pilot roll out of the system."

Auditor Comment: Contrary to its response, in July 2001, the Department's Office of Management Analysis and Planning (OMAP) conducted several tests on Omniform, which identified the license plate type as a critical issue and documented the need to correct it. Therefore, we maintain that the Department should ensure that Omniform include this feature.

2. Obtain acceptance certificates for all deliverables on all future system development projects.

Department Response: The Department stated that it agrees with the recommendation and has or will attempt to implement it. Specifically, the Department stated: "wherever stated in the Project Plan, all future systems that specify individual certification of acceptance will comply with signatures before the next task begins."

3. Ensure that the user concerns identified in the report are addressed. In this regard, the Department should make Omniform more accessible and user friendly. In addition, the Department should provide training to those individuals who stated that they had not received training and additional training to those individuals who felt they needed it. Finally, the Department should ensure that all data in the system is correct.

Department Response: The Department stated the recommendation is not necessary because it calls for an action, policy or practice that was planned or existed independent of the audit. Specifically, the Department stated: "based upon performance feedback and satisfaction questionnaires, issues pertaining to increased user friendly screens and searching capabilities were identified and are in the process of being addressed. Training and data accuracy with regard to Omniform is an on-going and existing practice in the Department."

4. Engage an independent quality-assurance consultant to monitor and review development work and any system enhancements or subsequent work on Omniform and on all future system development projects.

Department Response: The Department stated that it "must further analyze/evaluate the recommendation." In addition, the Department stated that "a decision to engage an independent quality assurance consultant for a project will be made on a project by project basis and will depend on project size and complexity, as well as the availability of funding for that project."

5. Develop and complete a formal disaster recovery plan for Omniform. Periodically test it and document the test results to ensure that the plan functions as intended and is adequate to quickly resume computer operations without material loss of data.

Department Response: The Department stated the recommendation is not necessary because it calls for an action, policy or practice that was planned or existed independent of the audit. Furthermore, the Department stated: "a Department-wide full disaster recovery plan is being implemented. Omniform currently has a real-time mirror image at an offsite location. Arrest processing can also be accomplished in stand-alone mode via the Photo Imaging Mug Shot System and the old OLBS system. This constitutes a Fault Tolerant expeditious resumption of operations in the event of a disaster. Periodic tests are difficult to conduct due to the nature of arrest processing. When disasters have actually occurred, the backup plans have consistently worked. This action was being developed independently and prior to this audit."

Auditor Comment: During the audit and at the exit conference, the Department never provided a disaster recovery plan or informed us that Omniform has a real-time mirror image at an offsite location. Periodic tests, which are necessary to insure that the business recovery plan remains current, should be conducted annually. These tests should be documented to ensure that the plan functions as intended and is adequate to quickly resume computer operations without material loss of data in the event of a disaster.

6. Develop written policies and procedures for terminating inactive user-IDs. Also, the Department should review the status of the inactive users and terminate access, as appropriate.

Department Response: The Department stated the recommendation is not necessary because it calls for an action, policy or practice that was planned or existed independent of the audit. Specifically, the Department stated: "the current policy is for the Integrity Control Officer (ICO) to maintain access and passwords over many of the Department's systems including Omniform. The NYPD utilized RACF security as the overall mechanism to enter all applications. Passwords expire after 90 days; therefore the terminated employees' reference in the report cannot enter any application and breach security. Access to the system depends on the member being in the personnel file. When the member is separated from the Department they are removed from the file and cannot access the system."

Auditor Comment: Having user IDs of former employees on the system, even if it only exposes the system to possible unauthorized use for 90 days, is unacceptable. Therefore, we maintain that the Department should develop written procedures requiring that IDs of terminated employees be removed from the system immediately after they leave the agency.

7. Establish written program-change control procedures and policies to ensure that only appropriate and authorized changes are made to its application and system software.

Department Response: The Department stated the recommendation is not necessary because it calls for an action, policy or practice that was planned or existed independent of the audit. Specifically, the Department stated: "a change control process has always existed. At the time of the audit, the computerized reporting system database did not include electronic signoff capability for changes being requested, authorized or approved;

however, there has always been a paper trail showing all signoff activity for changes being made in the system. MISD has recently implemented a new system which will produce executive signoff tracking as well as Help Desk access to the log showing recent changes. This system is currently in pilot mode."

Auditor Comment: The Department did not provide documentation for program changes that were requested, authorized, approved or signed off by Department officials. In addition, the computerized reporting system database was never mentioned.

8. Identify all fields that compel the entry of inaccurate information. Review, analyze, and correct all the inaccurate information found in these fields.

Department Response: The Department disagrees and will not implement the recommendation. Specifically, the Department stated: "information entered into the Omniform system is not inaccurate. Data is validated and signed off by a supervisor for accuracy and conformity against the arrest worksheet. To this extent the data entered into the system must match the arrest data on the arrest worksheet which is sometimes not available or is refused to be released by the perpetrator. Required searchable fields must have consistent accurate content under the edit rules established by the Department of Criminal Justice services (DCJS) and the National Crime Information Center (NCIC). Age is understood to be dynamically scaleable. All NYPD applications utilize 'Year of Birth' with a tolerance for one year in either direction. Therefore 'January 01' is standard acceptable practice when birth day is not available."

Auditor Comment: While the Department indicates that the accuracy of dates of birth recorded on the system is not critical, we are concerned that it may be willing to accept other inaccurate information on the system. As stated in the report, the Department labels 16 to 18 year old individuals, as juveniles in Omniform—only individuals between the ages of seven and 15 are deemed juveniles. The Department did not address this issue in its response.

POLICE DEPARTMENT
Office of Management Analysis and Planning
One Police Plaza, Room 1403

April 1, 2004

Mr. Greg Brooks.
Deputy Comptroller
The City of New York
Office of the Comptroller
1 Centre Street, Room 1100
New York, N.Y. 10007-2341

<div align="right">

Re: Omniform System Draft
Audit Report #7A04-066

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Dear Mr. Brooks:

We wish to thank the Comptroller for the opportunity to review this draft report of the audit on the Omniform System and comment upon the audit's methodology, findings, and recommendations. We have been conscientious in our review and, consequently, trust that our comments will be seriously considered by your office and reflected in the audit's final report.

We agree with your conclusions that Omniform's system design allows for future enhancements and upgrades, that the Department followed a formal system development methodology when developing Omniform and has complied with PPB rules and regulations when procuring services, equipment, and software for the system. In addition we are satisfied that 76 percent of the respondents to the user survey stated that the process of entering data into the system was easy and 88 percent indicated that the system's reporting capabilities met their needs.

The Omniform system, which became effective citywide in March of 2003, has improved on the Department's previous complaint (OLCS) and arrest (OLBS) on-line systems by utilizing the most up-to-date "web" technology for processing arrests and complaints. The system provides for single city-wide access to crime information and has removed redundancy and eliminated duplicate data entries.
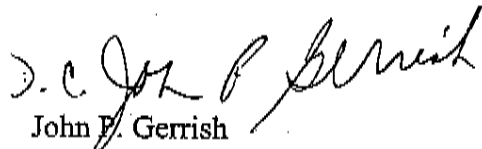
COURTESY • PROFESSIONALISM • RESPECT

Please find the attached Audit Implementation Plan indicating the Department's response to each of the Comptroller's recommendations. We have transformed recommendation #1 into three separate recommendations, namely, 1a, 1b, and 1c, in order to create an effective response to the audit. The Department agrees with recommendations #'s 1b, 1c, and 2, contained in the audit report, all of which will be implemented. The Department disagrees with recommendation #'s 1a and 8. The subject matter of recommendation #'s 3, 5, 6 and 7 has been addressed by the Department prior to the commencement of this audit. The subject matter of recommendation #4 will require additional study before that recommendation is implemented.

The Department is developing new software enhancements including two (a time stamp on the complaint report and an expansion of the weapons box) that are briefly outlined in the attached report. In addition to increasing the capability for storing additional information in the system, we believe these new enhancements and upgrades will help to further increase user satisfaction rates. Besides these enhancements there are on-going requests from users for expansion of the system based upon new police initiatives that are currently being reviewed (i.e. identity theft).

We appreciate the Comptroller's efforts to conduct the audit and prepare this report. We hope your office found that the Department demonstrated its policy of cooperation with the Comptroller's office during the course of the audit.

If you have any questions concerning this response, please call Administrative Staff Analyst Kenneth Wesley at 646-610-8366.

Sincerely,

John P. Gerrish
Deputy Chief
Commanding Officer
Office of Management Analysis
and Planning

ATTACHMENT
Copy: K. Wesley
      Mayor's Office of Operations

NYPD AUDIT IMPLEMENTATION PLAN

Auditing Agency	NYC Comptroller
Audit Title/Subject	Development and Implementation of the Omniform System
Audit #	7A02-061

AUDIT REPORT STATUS	Draft Report	Report Dated	3/19/2004

PD EVALUATION OF RECOMMENDATIONS BY CATEGORY			
Category		Recommendation Numbers	Total Recommendations
A	We agree with the recommendation and have implemented or will attempt to implement	1b; 1c; 2	3
B	We agree with the recommendation but are unable to implement		
C	We disagree with the recommendation and will not implement.	1a; 8	2
D	The recommendation, while valid, is unnecessary because it calls for an action, policy or practice that was planned or existed independent of the audit.	3; 5; 6; 7	4
E	We must further analyze/evaluate the recommendation.	4	1
TOTAL – All Recommendations Made			10

1

#	Recommendation	"A" Agree. Will Imple-Ment.	"B" Agree. Can't Imple-Ment.	"C" Disagree. Won't Imple-Ment.	"D" Not Necessary. A Planned or Existing Practice.	"E" Requires Study.
	LIST OF RECOMMENDATIONS AND PD EVALUATION OF EACH					
				Category		
1.	The NYPD should resolve the three remaining problems that were identified by the 2001 tests. Specifically, the Department should ensure that Omniform includes: (a) A drop-down box on the Vehicle Screen to permit the user to select the license plate type.			X		
1.	(b) A time stamp on the printed complaint report and a field in which to record the date when the complaint was last updated.	X				
1.	(c) The capability to enter information about a weapon in the box for "weapon," even though the report indicates that a weapon was not used.	X				
2.	Obtain acceptance certificates for all deliverables on all future system development projects.	X				
3.	Ensure that the user concerns identified in the report are addressed. In this regard, the department should make Omniform more accessible and user friendly. In addition, the Department should provide training to those individuals who stated that they had not received training and additional training to those individuals who felt they needed it. Finally, the Department should ensure that all data in the system is correct.				X	

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4.	Engage an independent quality-assurance consultant to monitor and review development work and any system enhancements or subsequent work on Omniform and on all future system development projects.					X
5.	Develop and complete a formal disasterrecovery plan for Omniform. Periodically test it and document the test results to ensure that the plan functions as intended and is adequate to quickly resume computer operations without material loss of data.				X	
6.	Develop written policies and procedures for terminating inactive user ID's. Also, the Department should review the status of the inactive users and terminate access, as appropriate.				X	
7.	Establish written program-change control procedures and policies to ensure that only appropriate and authorized changes are made to its application and system software.				X	
8.	Identify all fields that compel the entry of inaccurate information. Review, analyze, and correct all the inaccurate information found in these fields.			X		

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Category "A"	We agree with the recommendation and have implemented or will attempt to implement.

Recommendation #	1. b.		Report Page #	8

Recommendation

The Department should ensure that Omniform includes a <u>time stamp on the printed complaint report</u> and a field in which to record the date when the complaint was last updated.

Implementation Methods/Procedures and Projected/Actual Implementation Date

A time stamp is an enhancement to be completed in the 3rd Quarter, 2004

Recommendation #	1.c.		Report Page #	8

Recommendation

The Department should ensure that Omniform includes the capability to enter information <u>about a weapon in the box for "weapon,"</u> even though the report indicates that a weapon was not used.

Implementation Methods/Procedures and Projected/Actual Implementation Date

The rules controlling access to the "weapon" screen will be incorporated as an enhancement in the 3rd Quarter, 2004.

Recommendation #	2		Report Page #	8

Recommendation

Obtain acceptance certificates for all deliverables on all future system development projects.

Implementation Methods/Procedures and Projected/Actual Implementation Date

Wherever stated in the Project Plan, all future systems that specify individual certification of acceptance will comply with signatures before the next task begins.

Category "C"	We disagree with the recommendation and will not implement.

Recommendation #	1a		Report Page #	8

Recommendation

The Department should ensure that Omniform includes a drop-down box on the Vehicle Screen to permit the user to select the license plate type.

Explanation

Plate type is not considered a critical issue and was placed on a "problem" list as a result of a user's suggestion. It was never a requirement or an enhancement requested through our quality assurance team or through satisfaction questionnaires during or subsequent to the pilot roll out of the system.

Recommendation #	8		Report Page #	

Recommendation

Identify all fields that compel the entry of inaccurate information. Review, analyze, and correct all the inaccurate information found in these fields.

Explanation

Information entered into the Omnform system is not inaccurate. Data is validated and signed off by a supervisor for accuracy and conformity against the arrest worksheet. To this extent the data entered into the system must match the arrest data on the arrest worksheet which is sometimes not available or is refused to be released by the perpetrator. Required searchable fields must have consistent accurate content under the edit rules established by the Department of Criminal Justice services (DCJS) and the National Crime Information Center (NCIC). Age is understood to be dynamically scaleable. All NYPD applications utilize "Year of Birth" with a tolerance for one year in either direction. Therefore "January 01" is standard acceptable practice when birth day is not available.

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Category "D"	The recommendation is not necessary because it calls for an action, policy or practice that was planned or existed independent of the audit.

Recommendation #	3		Report Page #	8

Recommendation

Ensure that the user concerns identified in the report are addressed. In this regard, the Department should make Omniform more accessible and user friendly. In addition, the Department should provide training to those individuals who stated that they had not received training and additional training to those individuals who felt they needed it. Finally, the Department should ensure that all data in the system is correct.

Implementation Methods/Procedures and Projected/Actual Implementation Date

Based upon performance feedback and satisfaction questionnaires, issues pertaining to increased user friendly screens and searching capabilities were identified and are in the process of being addressed. Training and data accuracy with regard to Omniform is an on-going and existing practice in the Department.

Recommendation #	5		Report Page #	8

Recommendation

Develop and complete a formal disaster recovery plan for Omniform. Periodically test it and document the test results to ensure that the plan functions as intended and is adequate to quickly resume computer operations without material loss of data.

Explanation

A Department-wide full disaster recovery plan is being implemented. Omniform currently has a real-time mirror image at an offsite location. Arrest processing can also be accomplished in stand-alone mode via the Photo Imaging Mug Shot System and the old OLBS system. This constitutes a Fault Tolerant expeditious resumption of operations in the event of a disaster. Periodic tests are difficult to conduct due to the nature of arrest processing. When disasters have actually occurred, the backup plans have consistently worked. This action was being developed independently and prior to this audit.

Category "D"	The recommendation is not necessary because it calls for an action, policy or practice that was planned or existed independent of the audit.

Recommendation #	6		Report Page #	8

Recommendation

Develop written policies and procedures for terminating inactive user-ID's. Also, the Department should review the status of the inactive users and terminate access, as appropriate.

Explanation

The current policy is for the Integrity Control Officer (ICO) to maintain access and passwords over many of the Department's systems including Omniform. The NYPD utilized RACF security as the overall mechanism to enter all applications. Passwords expire after 90 days; therefore the terminated employees' reference in the report cannot enter any application and breach security. Access to the system depends on the member being in the personnel file. When the member is separated from the Department they ae removed from the file and cannot access the system. Regarding the employee records being duplicated: duplicate records are necessary and required. Department policy requires that an audit trail exist for investigations by our Internal Affairs Bureau. RACF retains only one current level of access as an audit trail. Omniform as well as many other applications retains an audit trail of all levels of permissions granted.

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Recommendation

Establish written program-change control procedures and policies to ensure that only appropriate and authorized changes are made to its application and system software.

Explanation

A change control process has always existed. At the time of the audit, the computerized reporting system database did not include electronic signoff capability for changes being requested, authorized or approved; however, there has always been a paper trail showing all signoff activity for changes being made in the system. MISD has recently implemented a new system which will produce executive signoff tracking as well as Help Desk access to the log showing recent changes. This system is currently in pilot mode.

Category "E"	We must further analyze/evaluate the recommendation.

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Recommendation

Engage an independent quality-assurance consultant to monitor and review development work and any system enhancements or subsequent work on Omniform and on all future system development projects.

Explanation and Projected Completion of Analysis/Evaluation

A decision to engage an independent quality assurance consultant for a project will be made on a project by project basis and will depend on project size and complexity, as well as the availability of funding for that project.