

September 5, 2000

John F. Timoney, Commissioner
Philadelphia Police Department
314 Police Headquarters
8th and Race Streets
Philadelphia, PA 19107

Dear Commissioner Timoney:

We have performed an evaluation of the Philadelphia Police Department's 1998 crime statistics submitted to the Uniform Crime Reporting (UCR) Program. This review took place because of my concern about reported instances of inaccurate crime counts emerging from your Department. A synopsis of the results of the evaluation is provided in the executive summary of the report.

We have discussed this report with your key personnel involved in the crime statistics process here in Philadelphia and your written response is included.

We are confident that our recommendations, if implemented, will improve the accuracy of the Police Department's crime statistics.

We would like to express our thanks to you and members of your Department for the courtesy and cooperation displayed during the conduct of this evaluation.

Respectfully submitted,

JONATHAN A. SAIDEL
City Controller

cc: Honorable John F. Street, Mayor
Honorable Anna C. Verna, President,
and Honorable Members of City Council
Members of the Mayor's Cabinet

Purpose

In recent years, the Federal Bureau of Investigation (FBI) and others have questioned the accuracy of Philadelphia's crime statistics. Concerned about the reliability of these statistics, the City Controller's Office undertook this evaluation a short time after the City Administration appointed a new Police Commissioner. It was done to evaluate the effectiveness and efficiency of the Police Department's crime management system and to determine whether that system accurately accounted for serious criminal offenses — such as criminal homicide, forcible rape, and robbery — reported as Part I crimes under the FBI's UCR Program for 1998.

Background

Patrol officers document criminal offenses and other incidents in handwritten police reports. These reports serve as source documents for capturing and then tabulating Part I offenses, Part II offenses, and other incidents. We scientifically sampled these reports to evaluate the accuracy of the 107,000 Part I crimes that the Philadelphia Police Department reported to the FBI's UCR Program for 1998. The FBI reviewed these reports for us and determined whether the Department had accurately classified crimes as well as correctly counted the number of offenses in compliance with UCR Program guidelines.

Results in Brief

We found weaknesses and inefficiencies in the Police Department's system for reporting crimes during 1998 as well as inaccuracies in its 1998 crime statistics. Some of the inaccuracies resulted in an understatement of Part I crimes reported to the FBI under the UCR Program. We statistically project that the understatement of 1998 Part I crimes could range between 10 and 28 percent. We also found discrepancies between statements recorded by officers in police reports and assertions made by complainants or witnesses. Determining the validity of the complainant's assertions was beyond the scope of this audit. However, these discrepancies raise concerns that Part I crimes could be further understated.

The conditions giving rise to our findings occurred in previous Police Administrations. Under the new Commissioner, the Police Department began working towards changing the culture of officers responsible for documenting and recording crime statistics. Management emphasized a commitment to maintaining accurate and reliable data and established the Quality Assurance Bureau (QAB), an internal audit unit.

We hope our report will assist the new Commissioner in his improvement efforts and provide a benchmark for assessing progress made in the reporting of future crime data.

Principal Findings

Recorded Criminal Offenses and Incidents Contained Inaccuracies and Discrepancies

The FBI found inaccuracies in 34 of the 1,053 cases that we submitted for its review. Based on these findings, we statistically project that approximately 15,000-42,000 of the total 1.4 million cases – including Part I offenses, Part II offenses, and other incidents contained in the Police Department’s data files for 1998 – were inaccurate. These inaccuracies occurred because the cases were either: (1) inappropriately classified and counted or (2) improperly left out of the crime count. Because of these inaccuracies, the crime count of serious Part I offenses for 1998 was understated. We project that the understatement could range from 13,000-37,000 offenses. Additionally, in some instances, assertions made by complainants and witnesses we telephonically interviewed conflicted with recorded statements in police reports. These conflicting statements raised concern that an additional 31,000-39,000 Part I offenses may be unrecorded.

Weaknesses and Inefficiencies Found in System Used for Counting Crimes

The Police Department's decentralized and partially manual records management system (RMS) for crime was inefficient and caused management to be at increased risk for classification and crime count errors. The system involved hundreds of lower-ranking officers and other Police personnel classifying, scoring and manually entering crime data from handwritten police reports into the Department’s Incident Transmittal (INCT) System, as well as manually re-entering much of the same crime data into a separate computer system used exclusively to compile statistics for the UCR program. The number of personnel involved and the duplicate entering of data coupled with over 350 different classification codes – some having different state-level and UCR program meanings – raised the level of risk for errors in coding and tabulating crimes in Philadelphia.

Additionally, the Police Department did not restrict access or control use of police reports utilized to capture information about crimes and other incidents. Blank reports were strewn about and accessible to all personnel at the districts, presenting opportunity to rewrite reports to fit lesser type criminal offenses. Although we found no conclusive evidence that police reports had been rewritten, more than half of the Part I reports that contained inaccuracies had a printed name in the preparer block instead of an actual signature, suggesting report alteration could have occurred. Moreover, we found that

police reports were sometimes lost. Districts failed to maintain logs indicating when reports had been removed from files, and processing units within the Police Department did not keep track of records moving in and out of their custody.

We also found evidence of inadequate supervision. Most police reports we examined did not contain the signature of a supervisor. The inaccuracies identified by the FBI indicate the Police Department's review function needs improvement. In some instances, basic information such as the time and date of the incident or the telephone number of the complainant was missing from police reports.

Finally, while the Police Department verified some police reports by calling back complainants or witnesses, it did not do so on a regular or recurring basis. Nor did the Department attempt to verify, by telephonically contacting individuals who had called the Emergency-911 Communication Center, that patrol officers may have refrained from reporting crimes.

System Creates Potential
Conflicts of Interest

District operations room personnel making coding decisions about crimes ultimately report to district commanding officers. This line of reporting, especially in a paramilitary operation such as the Police Department, creates a conflict of interest. Commanding officers might be inclined to influence the process, since they are held responsible for crime figures in their districts.

Technology Is Available to Ensure
Better Controls and to Provide More
Efficiency

We identified police departments in other cities that employed, or were in the process of implementing, more sophisticated technologies to manage their police forces. Through use of wireless data systems called Mobile Data Computer (MDC) Systems, patrol officers prepared electronic police reports using portable laptop computers installed into squad cars. Although the Philadelphia Police Department has been installing MDC Systems into its squad cars for several years, software that would enable patrol officers to electronically prepare and automatically code police reports for later upload to the Department's records database had not been purchased and installed.

Recommendations

To improve the overall accuracy of crime statistics and the efficiency in which they are compiled, the Police Commissioner should:

- Consider acquiring software that would enable patrol officers to prepare police reports electronically. Such software would reduce the risk of coding errors and enable the Department to upload data electronically to the INCT System.
- Use the INCT System to generate data needed to prepare monthly UCR Program reports instead of re-entering crime data into a separate computer system.
- Increase attention in UCR training to the problematic coding and scoring inaccuracies identified in the report.
- Reemphasize to supervisors charged with reviewing police reports their responsibility for performing a quality review of the reports.
- Require the QAB to contact complainants and other witnesses on a more regular basis to verify facts recorded in police reports.
- Consider the feasibility of telephonically interviewing Emergency-911 callers on a periodic basis to determine if patrol officers may be deliberately failing to take police reports. Contact attorneys representing the City to pursue any necessary Court approvals for making such calls.

To help ensure the integrity of data until such time that police reports can be prepared and coded electronically, the Police Commissioner should:

- Consider centralizing the process of manually coding reports to eliminate any real or perceived corruption of data, and provide for more reliable and consistent application of crime coding.
- Restrict district personnel that might have a personal interest in the crime rates from having physical access to blank police reports to reduce the opportunity for someone to downgrade a crime.
- Compel officers who prepare and review police reports to sign their names as required by Police regulations.

To reduce the risk of losing police reports under the existing manual-produced reporting system, the Police Commissioner should:

- Require the use of logs for tracking police reports removed from files to prevent loss of paperwork. Logs should indicate who moved reports, when the reports were taken out, and when reports were returned to the file.
- Track the movement of Police paperwork between units by utilizing transmittal forms.

To increase public confidence in crime data and to monitor improvement in the benchmark identified, the Police Commissioner should request that crime data be audited by either the Controller's Office or some other independent audit organization at least once every three years.

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INTRODUCTION

BACKGROUND INFORMATION

In recent years, the FBI and others have challenged the credibility of crime statistics reported by the Philadelphia Police Department. For example, the FBI discarded all of Philadelphia's 1996 statistics along with those reported for the first half of 1997. When the current Police Commissioner took command early in 1998, he also expressed displeasure with the 1997 statistics, as well as those reported for the first half of 1998, asserting that accuracy was not just a formality, but very important to the Department's efforts in fighting crime. Throughout 1998 and 1999, the City's crime statistics continued to receive both local and national media attention with reported instances of downgrading and underreporting crime. Concerned about these reported instances of undercounting crime, the City Controller's Office, with the full cooperation of the Police Commissioner and his staff, undertook this evaluation to determine whether crimes might be underreported for 1998, and to offer recommendations on how to ensure accuracy in the future.

The process for capturing crime statistics begins when patrol officers respond to a complaint or call for service. They generally prepare a written record of the case showing details of a criminal offense or incident as alleged by a complainant. The record provides information such as when and where an incident occurred, who and/or what was involved, the nature of the offense and any injuries, as well as the identification of the patrol officer responding and preparing the written record. Further work on a case, performed by detectives or special investigators, leads to the preparation of additional written records that show the results of an investigation and a conclusion as to whether the offense is founded or unfounded.

All of these written records serve as the Police Department's source documents for capturing information about criminal activity in the City. When compiled and tabulated, they furnish Police Department officials with a variety of data for administrative and operational purposes. For instance, Police officials map where and when crimes are occurring, determine the status of investigations, and make deployment decisions. The data have also been used to measure the performance of district captains.

On a national scale, the Police Department makes use of the criminal statistics emanating from these records to comply with the requirements of the UCR Program administered by the FBI. Law enforcement agencies throughout the country submit their crime statistics to the Program (via monthly Return A Forms), which in turn provides a nationwide view of crime in various publications such as trend releases, crime index information, and a detailed annual publication produced by the FBI titled *Crime in the United States*.¹ The FBI has stated that:

¹ Many states, such as the Commonwealth of Pennsylvania, have developed state UCR programs, which mirror the national UCR Program. In these states, local law enforcement officials generally submit their statistics to the national Program through the state.

*"Law enforcement is a public service and as such requires a full accounting from the police commissioner, police chief, or sheriff as to the administration of the agency and the status of public safety within the jurisdiction. Full participation in the Uniform Crime Reporting Program will provide figures to enable a law enforcement agency to fulfill this responsibility."*²

Under the UCR Program, offenses are divided into two groups — Part I and Part II crimes. Part I crimes³ consist of the more serious offenses including 1) criminal homicide, 2) forcible rape, 3) robbery, 4) aggravated assault, 5) burglary, 6) larceny-theft, 7) motor vehicle theft, and 8) arson. Part II crimes⁴ encompass all other criminal offenses. Each of the criminal offenses has a unique UCR Program code.

The process used by the Police Department for tracking and tabulating crime in the City during 1998 is depicted in Appendix I. As shown in this appendix, the process generally begins with a complaint or call for service through the 911 system, although sometimes it originates at the district with a "walk-in" or on the street when, for example, a patrol officer makes a sighting while on patrol. Data files provided to the City Controller's Office from the Department's 911 Computer Aided Dispatch (CAD) System show that during 1998 patrol officers were dispatched to nearly 2.0 million incidents. At the incident scene, officers prepare a multi-part incident report (referred to by the Police Department as a "48"). This report is important, initially, because it provides a basis for assessing whether the offense or incident requires follow-up attention by investigators. Responding officers also record information about the location and nature of a complaint or other service rendered into their patrol log, a log of activity maintained by each officer during his/her shift. Department procedures require that a patrol supervisor review and sign this log at least once during the shift and initial it again at the end of the shift.

When officers return to their district headquarters from patrol, they turn in completed incident reports as well as their patrol log to operations room personnel. Personnel in the operations room file the patrol logs and review the incident reports for completeness. They obtain any missing information from the officers who prepared them and record a unique District Control (DC) number on the report, which is obtained from the Police Department's electronic Incident Transmittal (INCT) System. This system represents a major segment of the Department's overall RMS. It interfaces with the 911 CAD System and is used, in part, to track incident reports that are missing. Operations room personnel assign each incident report a UCR classification code and determine whether it should be sent to an Investigation Unit for further investigation. Police procedures also require district captains to review each report.

If operations room personnel determine no investigation work is possible or necessary for an incident, the incident report is considered closed. At this point they send the original copy to Police Headquarters and file the carbon copies at the districts. However, if investigation work is considered appropriate, one of the carbon copies is forwarded to an investigation unit where members of the unit are required to follow up on leads and prepare an investigation report (known as a "49"). The investigation report indicates the results of additional interviews and

² *Uniform Crime Reporting Handbook*, U.S. Department of Justice, Federal Bureau of Investigation, 1984, n.p.

³ Philadelphia Code Series 100 to 700 and 900.

⁴ Philadelphia Code Series 800 and 1000 to 2700.

interrogations, as well as any police actions taken and changes in UCR classification coding. If facts affecting the case surface after an investigation report has been completed, such as when there is a subsequent arrest of a perpetrator, investigators will then prepare a supplemental investigation report (referred to by Police as a "52").

District and Investigative Units forward their written reports — "48s," "49s," and "52s" — to the Reports Control Unit at central Police Headquarters where staff then compare them to the Department's INCT System and track and follow-up on delinquent reports. Beginning in April 1998, the Police Department established the QAB. Closed incident reports, as well as, investigation and supplemental reports were forwarded from Police Headquarters for review by the QAB to determine that the appropriate UCR classification codes had been assigned by district operations room personnel. The QAB has the authority to change the coding of reports that are misclassified.

During 1998, the Police Department also used data about each incident in its INCT System as the source for mapping crime activity throughout the City. Police Data Processing interface this system with the Department's Computerized Statistics (COMPSTAT) System, an electronic mapping system that keeps track of crimes and arrests made weekly by the Police. To compile statistics required by the UCR Program, the Department uses an independent system known as the TARTAN System to receive and store data. The information is further processed utilizing Department-written programs and the mainframe of the Mayor's Office of Information Services (MOIS) to output available final figures required for various reports of crime statistics submitted to the UCR Program.

Civilian personnel of the Police Department perform data entry of incident, investigation, and supplemental reports to the TARTAN System via three terminals. Police supervisors and Production Control utilize four other terminals for viewing, correcting, and further processing the data. The information is stored on sequential magnetic tapes, which are then physically transported to MOIS where they are run through the City's mainframe computer. Computer programs written by Police Department personnel read, sort, and select final report data, which are then output by request in printed form to the Police Research and Development Unit and used for compiling UCR Program reports.

OBJECTIVES, SCOPE, AND METHODOLOGY

We evaluated whether for 1998, the Philadelphia Police Department accurately reported statistics about serious offenses (Part I criminal offenses) occurring within the City of Philadelphia to the national UCR Program administered by the FBI. We focused our evaluation on the Part I criminal offenses presented in Table 1 below.

Table 1: 1998 Part I Criminal Offenses

Classification of Offense	Offenses Reported or Known to Police	Unfounded	Number of Actual Offenses
Criminal homicide	347	9	338
Forcible rape	915	163	752
Robbery	11,492	57	11,435
Aggravated assault	8,732	31	8,701
Burglary	15,480	43	15,437
Larceny-theft	49,958	66	49,892
Motor vehicle theft	20,207	684	19,523
Totals reported to the UCR Program	107,131	1,053	106,078
Duplicate and unreported cases ¹	-72	-11	-61
Net totals per Police data files	107,059	1,042	106,017

¹ See Page 29 in Appendix II for discussion

Source: Philadelphia Police Department

Our evaluation was limited only to those criminal offenses that became known to management through the completion of investigative reports prepared by Police officers. Criminal offenses that may have occurred and were either never reported to the Police Department, or for which officers may have failed to take a report, were not included within the scope of our evaluation.

As part of our review, we evaluated the RMS used by the Police Department to generate UCR data. Our evaluation focused on whether the system as designed and placed into operation by management during 1998 provided reasonable assurance that data about offenses and unfounded complaints were (1) effectively and efficiently compiled, (2) accurately reported, and (3) compliant with the requirements of the National UCR Program.

To determine whether the Police Department accurately reported Part I criminal offenses to the UCR Program for 1998, we:

- Used an automated statistical data base program to compile statistics about complaints occurring in Philadelphia during 1998 from copies of data files provided by the Police Department's Information Systems Division. Specifically, from TARTAN data files we classified, by UCR code and Police district, statistics about Part I criminal offenses, other lesser offenses (Part II criminal offenses) and unfounded complaints. We

similarly compiled statistics about non-criminal incidents taken from the Police Department's INCT System. For a more detailed discussion on the compilation of statistics, refer to Appendix II

- Reconciled the DC Numbers of all Part I and Part II criminal offenses and non-criminal incidents contained in the TARTAN and INCT data files to the Police Department's 911 CAD file containing records of all Police dispatches that occurred during 1998.
- Reconciled the 1998 Part I criminal offense statistics compiled by the City Controller's Office to the monthly Return A Forms prepared and filed by the Philadelphia Police Department under the UCR Program.
- Designed and selected a scientific sample of 1,054 Police Department case files⁵ from the compiled statistics of Part I and Part II criminal offenses, non-criminal incidents, and unfounded complaints with the assistance of Alan J. Izenman, Ph.D. and Senior Research Professor of Statistics in the Department of Statistics at Temple University. The sampling methodology we used to select cases for review and an explanation of the statistical evaluation of the sample is described in Appendix II. For each of the sampled case files, we: (1) ascertained whether the Department had police reports on file; (2) examined reports for completeness; (3) scrutinized reports for alteration of case facts and (4) with the assistance of the FBI reviewed and examined the reports and determined the correctness of the Police Department's UCR classification coding and crime scoring based on what was recorded. With the aid of Professor Izenman, we statistically projected the results of this work to the entire universe of the Police Department's investigative files.
- Made telephone contact, when possible, with complainants or witnesses identified in police reports to confirm the description of the criminal offense or non-criminal incident. We limited our attempts at making telephone contact to three tries. Additionally, in many instances, reports did not contain an address, or the complainant or witnesses identified had moved. In other instances, no individual except for a patrol officer was reportedly involved in the incident — for these situations we did not contact the officer.

To determine how well the Police Department's RMS provided reasonable assurance that data about offenses and unfounded complaints was effectively and efficiently compiled, accurately reported, and compliant with the requirements of the National UCR Program during 1998, we:

- Reviewed information received from the FBI about the rules and regulations pertaining to crime reporting under the program.

⁵ Our actual sample totaled 1,053 cases instead of 1,054 because the Police Department could not locate police reports associated with one of the selected cases. The impact of the missing reports on our estimates was negligible.

- Obtained and reviewed Police Department Directives and other relevant documentation related to policies and procedures over the preparation and monitoring of police reports, as well as the compilation and reporting of crime statistics.
- Interviewed Operations Room personnel and supervisors at the 3rd, 5th, 9th, and 12th Police districts to document the flow of information through the Police reporting system. For each of the districts we visited, we judgmentally selected two complaints to follow through the reporting system. In addition, using the sampled complaints referred to above, we examined police reports for compliance with key monitoring controls required by Department policies and procedures, as well as for any evidence that suggested reports may have been altered to reflect lesser offenses or incidents. We also interviewed Police officials of the 911 Radio Room; Central, South, Northwest, and Northeast Detective Divisions; Data Processing Unit; Quality Assurance Bureau; Research and Development Unit; and Reports Control Unit. We discussed the accuracy of our system documentation with supervisors and administrative personnel from each of the divisions or units visited, as well as with the Deputy Police Commissioner in charge of the Information Systems Division.
- Surveyed Police Departments of the 21 largest cities in the United States to obtain "best-practice" information for law enforcement crime record systems.

We conducted our evaluation from January through February 1999 in accordance with generally accepted government auditing standards. All recommendations have been numbered to facilitate tracking and follow-up in subsequent years.

INACCURACIES AND DISCREPANCIES IN 1998 CRIME REPORT OF SERIOUS OFFENSES SUGGEST IMPROVEMENTS STILL NEEDED

The Philadelphia Police Department needs to be commended for having implemented many changes toward improving the credibility of the City's crime statistics for 1998. Top Police management's emphasis on a commitment to maintain accurate and reliable data, as well as the establishment of an internal audit function were two of the most significant changes that occurred. While these and other changes were a step in the right direction, their impact had not been fully realized for the reported 1998 crime statistics. Our evaluation revealed some other changes that Police management should consider for further improving the system in place to account for and report these statistics. Much of the system had evolved under previous Police Administrations.

Inaccuracies identified by FBI staff, in crime reports we statistically selected for their review, caused serious 1998 Part I criminal offenses reported by the Police Department to the national UCR Program to be undercounted by an estimated 10 to 28 percent, or somewhere between 13,000 to 37,000 offenses. These inaccuracies were the result of Police staff inappropriately classifying and/or scoring (counting) crime data, as well as failing to include some of the offenses and incidents in the count. Of additional concern, however, our evaluation disclosed numerous instances when there were discrepancies between statements recorded by officers in police reports and the assertions made by complainants and witnesses when we telephonically interviewed them. We did not include these cases in arriving at our estimate of the undercounting cited above. However, we did bring these discrepancies to the attention of Police management, and the potential worst-case effect of these allegations is that serious Part I criminal offenses for 1998 may be undercounted by an additional 31,000 to 39,000 crimes.

Our evaluation did not include determining the exact causes of the inaccuracies we detected, nor did it encompass resolving the discrepancies noted between written police reports and the assertions made by complainants or other witnesses. However, we did observe systemic problems about the Police Department's system of accounting for crimes that may be contributing to the inaccuracies and discrepancies. These problems, which in our opinion increased the risk for errors and irregularities, stemmed from (1) utilizing a decentralized and partially manual system that involved numerous Police personnel making multitudinous technical coding decisions; (2) failing to require that district personnel restrict physical access and control use of blank police reports; (3) not enforcing accountability as required by Police Department regulations; and (4) not providing for more routine and systematic verification of recorded crimes. Moreover, the system created potential conflicts of interest and required labor-intensive efforts to generate and report crime statistics for management purposes, as well as for the UCR Program. We believe that if Police management takes corrective action on these matters, future criminal offenses reported to the UCR Program will be significantly more accurate and reliable, as well as more efficiently compiled.

Police Officials Implemented Changes to Improve Reliability of Crime Statistics

We found that during 1998 and continuing into 1999, the Police Department made a commitment to obtain reliable crime statistics and change what appeared to be a pervasive culture of routinely undercounting serious crimes. For example, we noted that top management set a proper tone for the organization by:

- Consistently emphasizing that accurate crime statistics are essential to fighting crime.
- Initiating the Compstat process and giving Police captains authority to target criminal activity in their districts.
- Stripping two Police captains of their command because of the questionable accuracy of statistics for their districts.
- Pulling back all 1997 crime statistics and the first half of those for 1998 after discovering a significant amount of carelessness in their reporting.
- Disseminating information regarding problematic crime classifications to district personnel involved in the process of coding and/or scrutinizing police reports.
- Assigning a liaison to work with staff of the Controller's Office in order to facilitate access to Police personnel and reports.

Additionally, top management mandated Police captains to review all "48s" for their districts, and established the QAB. This unit is an internal audit group consisting of Police personnel assigned responsibility for reviewing the accuracy of selected crime reports and for providing UCR Program training.

In our opinion, these initiatives were a step in the right direction for ensuring the validity and reliability of crime tallies. However, our findings show that even with these changes, inaccuracies in classifying, scoring, and accounting for crimes continued to occur at a level that caused the major criminal offenses reported by the Department for 1998 to be significantly undercounted.

Recorded Criminal Offenses and Incidents Contained Inaccuracies

The FBI found inaccuracies with 34 of the 1,053 cases we submitted for review. The inaccuracies involved the Police Department either: (1) classifying and/or scoring the cases inappropriately, or (2) leaving them out of the crime count. We present the complete listing of these 34 cases in Appendix III. Summary information about the numbers of inaccurate cases and rates of inaccuracies found for cases in each UCR classification group and district group are illustrated in Table 8 of Appendix II.

Based on the FBI's findings, we estimate that 15,000-42,000 of the total 1.4 million cases from which we sampled are inaccurately accounted for in the Police Department's database of crime statistics for the year ended December 31, 1998.⁶ Moreover, we are 95 percent confident that this interval contains the true number of inaccurate cases from the Police Department's entire collection of crime and incident data for 1998, with an error margin of three percent.

Instances of Misclassifications and Incorrect Scoring

The *Uniform Crime Reporting Handbook* issued by the FBI in 1984 provides guidance to law enforcement agencies for classifying and scoring crimes. The purpose of the handbook is to provide nationwide standardization in reporting statistics about criminal offenses. It provides standard definitions and examples of Part I and Part II offenses, which are to be used in classifying and scoring crimes under the UCR Program.

⁶ The actual range is 14,870 to 42,246 cases. See Appendix II for an explanation of our computations.

Our evaluation found that the Philadelphia Police Department did not always comply with the classification and scoring requirements of the UCR Program. Based solely on written content of police reports, the FBI noted cases that the Department incorrectly misclassified. For example, UCR Program guidelines indicate that purse snatching is the grabbing or snatching of a purse, handbag, etc., from the custody of an individual. If more force is used than is actually necessary to snatch the purse from the grasp of the person, then a strong-arm robbery has occurred. In one sampled case, the offender knocked the complainant to the ground and took her purse. The information about knocking the complainant to the ground appeared in the "48" report, but the Police Department classified the offense as a theft. However, because of the force used, the UCR Program requires that the crime should be classified as a strong-arm robbery. In another case, an offender threw a bottle through the back window of the complainant's pick-up truck, injuring its occupants. The Police Department classified this offense under simple (other) assaults, a Part II less serious crime. Based on the FBI, however, the bottle qualifies as a weapon and the proper classification of the offense should have been a Part I aggravated assault.

The FBI also found cases of when the Police Department classified the offenses or incidents properly, but scored them incorrectly. In one case, the Police Department counted an incident involving three females in a scuffle — the complainant, the complainant's sister, and another female as one simple assault incident. The patrol officer at the scene could not readily determine who were the aggressors and who were the victims. While the Department accurately classified the incident under simple assaults, it did not score it correctly. UCR Program guidelines require that when the aggressors and victims cannot be determined, law enforcement officials should count the number of persons assaulted as the number of offenses. Therefore, in this situation the Police Department should have counted three simple assaults instead of one. In another case, the Police counted an incident involving a complainant and her child, both of which the offender struck, as one crime. Because there were two victims, UCR Program guidelines require the offense be scored as two counts instead of one.

For some of the cases evaluated, the FBI noted a combination of inaccuracies — the Police Department misclassified the offenses or incidents inappropriately and also tallied them wrong. In one instance, for example, the Department counted a situation as two simple assaults that more appropriately should have been classified as one aggravated assault and three simple assaults. More specifically, an individual with whom three officers and a nurse had a struggle caused one of the officers to break a hand. The FBI and UCR Program guidelines require that the offense against the officer whose hand was broken should have been classified as one aggravated assault. In addition, the two other officers and the nurse were actually victims of a crime that should have been scored as three simple assaults.

Another instance of a case inaccurately classified and scored involved a female who threatened two patrol officers with a knife, wherein a brief struggle ensued as officers attempted to arrest her. The patrol officers had responded to a fight between the female and her stepfather. Review of the case revealed that the Police Department classified the incident under simple assaults and counted it as only one offense. However, under the UCR Program, the Department should more appropriately have classified and scored two aggravated assaults and two simple assaults. The aggravated assaults resulted from the offender threatening the two patrol officers with a knife. The simple assaults arose because the officers could not establish which of the two — the female or the stepfather — was the aggressor or the victim. As indicated in an earlier example, the UCR Program requires that the Police Department count the number of persons assaulted as the number of offenses.

Offenses Not Included in the Crime Count

During 1998, the Police Department used two independent computer systems to account for crime statistics — the INCT System and the TARTAN System. Police used the INCT, which interfaces with the Department's 911 CAD System, to track all complaints and incidents to a final disposition. The INCT serves as the Department's management information system for each case, providing Police management with the status of investigations and related paperwork associated with those investigations. It also serves as the Department's primary database for compiling weekly statistics utilized by management to analyze emerging trends in crime for use at weekly "Compstat" meetings. The Police Department used the TARTAN System to compile data to be reported to the UCR Program. Data entry personnel manually keypunched information from the various police reports ("48s" "49s" and "52s") into the system, which generated summarized reports used in compiling statistics sent to the UCR Program.

Our sample of cases, however, revealed at least eight instances when the Police Department included a criminal offense within the INCT System, but did not incorporate it within the count of crimes compiled by the TARTAN System for the UCR report. In one case, the offender pushed a victim off a bicycle and then rode off with it. The Department properly classified and scored the event as a robbery on the police reports and within the INCT System. However, we could not trace this crime into the TARTAN database and, therefore, were unable to account for it in the compilation of robbery offenses reported to the UCR Program for 1998. Police management has asserted that the DC Number associated with this offense was keypunched in error to the TARTAN System. Management told us that the robbery was accounted for within the TARTAN database, under an erroneous DC Number. In response to our inquiries, the Police did not provide us with the specific DC Number for the erroneous input. Therefore, we were unable to verify management's assertion. Additionally, our own attempts to identify the incident by scanning other fields of the TARTAN database — such as name, address and date of occurrence — proved ineffective.

In another sampled case retrieved from the INCT System, we could not locate the case in the 1998 TARTAN database. A "48" police report dated February 3, 1998 indicated that when the complainant reported to work on December 1, 1997 she discovered that two envelopes containing money were missing from her office. Police correctly classified the incident as a larceny-theft, but in its response to our inquiries, management indicated the offense had been reported in 1997. UCR Program guidelines require that criminal acts be counted in the year they become known to law enforcement. Since the Police Department did not become aware of this criminal act until 1998, it should have been included as a 1998 statistic.

Of the other six instances where the Police Department did not include crimes within the crime count for the 1998 UCR Program, three cases involved a Part II simple assault and two entailed vandalisms of under \$500 to private properties. Police management has asserted that it subsequently reported these errors to the UCR Program in an amended report. In the sixth instance, not only were we unable to account for the report within the TARTAN System, but the FBI found that on the "48" the Police Department inaccurately classified the incident as a contempt of court offense instead of an aggravated assault.

Inaccuracies Occurred More Frequently for Certain Districts and Crime Classifications

As summarized in Table 8 (Appendix II), rates of inaccuracy decreased with the district group risks. Thus, the high-risk group had the largest inaccuracy rate (2.74 percent), the medium-risk group the second largest (2.41 percent), the low-risk group the third largest (1.73 percent), and the unfounded group had the smallest inaccuracy rate (1.01 percent). These results followed the pattern found by the Police Department's internal audit performed by its QAB and were as we expected. Additionally, we found that certain criminal offenses and incidents were more likely to be inaccurately classified than others. Eight out of 15 (row 14 of Table 8) — or over half⁷ — of the unclassified offenses and incidents we examined were not reported in the statistics (see previous section). In total, the unclassified offenses and incidents we identified in Police Department data files consisted of 28,270 cases. They each had DC numbers assigned to them, but the Police Department had not included them as either a Part I or Part II criminal offense in its statistics. Based on the sample results, it is likely that 11,000-13,000 of these cases⁸ have been inaccurately accounted for.

The second highest classification of crime data with inaccuracies involved simple assault. Approximately 12 percent (Table 8) of the simple assault cases we examined were either misclassified and/or improperly scored. As discussed in more detail under the next heading, the Police Department failed most often to classify these cases as aggravated assault offenses, a more serious Part I crime. The UCR Program defines aggravated assault as "*...an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm.*"⁹ The FBI indicated that many agencies find it difficult to make the distinction between simple assault and aggravated assault. It advises those agencies to review the definitions for both these crime classifications and apply them to the facts presented in each case.

We also found that simple assault cases were most likely to involve inaccuracies as a result of being improperly unfounded. Of the five unfounded cases we reviewed in the simple assault classification, Police should not have deemed one as unfounded. The case in question involved a female complainant who had been sexually harassed by a male who entered her apartment without permission. Review of police reports (both the "48" and "49") revealed there was no evidence in either narrative to suggest that the incident did not occur. Consequently, the offense should have remained founded. Police officials have concurred with our assessment. Based on the results of our sample, it is likely that of the 78 unfounded simple assault cases that were reported to the UCR Program for 1998, approximately 16 of them may be improperly unfounded.¹⁰

⁷ This rate is unweighted. The weighted rate is 43.24% as shown in Table 8 within Appendix II

⁸ The actual range is between 11,336 and 13,112 cases. See Table 9 within Appendix II for our computations.

⁹ *Uniform Crime Reporting Handbook*, p. 16.

¹⁰ 20% Inaccuracy Rate = (1 Inaccuracy/5 Sample Items) x 78 Unfounded Cases = 16 Cases Improperly Unfounded.

Inaccurate Police Reports Caused Serious Criminal Offenses To Be Undercounted

Some of the inaccurate police reports found by the FBI had no impact on the count of serious Part I criminal offenses reported by the Police Department to the national UCR Program for 1998. They simply caused the less serious crimes and incidents within the Police Department's internal crime databases to be incorrectly counted. However, other inaccurate reports caused the Department's count of Part I crimes to be significantly misstated. With the assistance of our statistician, we estimate that the Police Department undercounted Part I crimes by approximately 10-28 percent¹¹. The FBI indicated that it considers "less than three percent" to be both realistically achievable and materially accurate for crime statistics.

Table 2 on the following page shows that for the sample of cases we selected, the Police Department classified only 82 of the offenses (those shown outside the broken lines on rows one and two) as Part I crime instead of more appropriately 95 of them. Projected to the population, the sample results suggest that the Police Department undercounted 13,000-37,000 of the Part I offenses.¹²

Because we amalgamated the crime classifications in designing our sample (see Appendix II), we have generalized the results only to the classification groups shown in Table 2 and Table 3 on pages 13 and 14, respectively. The rows depict the proper classifications for the sampled offenses and incidents based on the work of the FBI, while the columns indicate the classifications used by Police Department.

The FBI, for example, found that of the 1,053 cases it examined, Philadelphia Police should have reported 13 of them as more serious Part I crimes.¹³ We illustrate the cases associated with these 13 crimes in Appendix III. Reading across row one in Table 2 shows that the Police Department misclassified and counted five cases under simple assaults (column three), instead of aggravated assault the more serious crime encompassed within the Part I classification group on the table. Additionally, the Department counted two incidents as vandalism (column four) whereas the FBI said they were really a larceny-theft and aggravated assault, respectively. In another case — an incident that Police classified as lost and found property — the FBI told us that it too was a larceny-theft. The Police Department counted one incident as an informational request (column 12), while the FBI concluded it should have been a motor vehicle theft. The FBI also determined that three other cases (column 14), which the Police Department did not add into any of its crime tallies, should have been included as aggravated assault, robbery, and larceny-theft, respectively — all Part I crime classifications. Lastly, for one of the cases, the FBI found that the Department missed scoring one aggravated assault.

¹¹ The actual percentage of undercounting was 18.89 percent \pm 9.06 percent (see Table 9 within Appendix II for calculations).

¹² In making this projection, we weighted the inaccuracy rates. (See Table 9 within Appendix II for the calculations).

¹³ As shown in Table 2, the Police Department also misclassified two cases as larceny-thefts instead of a burglary and robbery, respectively. Because the FBI also considers larceny-thefts to be a Part I offense, we did not include these two cases in estimating the extent that Part I criminal offenses were undercounted.

Table 2: Effect of Inaccuracies on Sampled Criminal Offenses and Incidents

CLASSIFICATIONS AS RECORDED BY POLICE																		
CLASSIFICATIONS AS DETERMINED BY FBI	Classifications/ groups	PART I CRIMES						PART II CRIMES						INCIDENTS				TOTAL
		All Part I except larceny-thefts ¹	Larceny-thefts	Simple assaults	Vandalism/Criminal mischief	All other investigations of persons	Routine investigations of persons	Hospital cases	Other investigations	Lost & found property	Disturbances, disorder, minor inside	Disturbances, disorder, minor outside	Informational requests	All other offenses and incidents	Unclassified offenses and incidents	Total Before Scoring Inaccuracies	Scoring Inaccuracies	
PART I CRIMES	All Part I except larceny-thefts ¹	20	2	5	1					1	2	31	1	32				
	Larceny-thefts	60		1				1				1	63	63				
PART II CRIMES	Simple assaults			96							2	3	101	9	110			
	Vandalism/Criminal mischief				190							2	192	192				
	All other investigations of persons					18							18	18				
	Routine investigations of persons						63						63	63				
INCIDENTS	Hospital cases						83	1					84	84				
	Other investigations						1	60	1				62	62				
	Lost & found property								183				183	183				
	Disturbances, disorder, minor inside								82				82	82				
	Disturbances, disorder, minor outside						1		2	45			48	48				
	Informational requests										56		56	56				
	All other offenses and incidents											63	63	63				
	Unclassified offenses and incidents											7	7	7				
	TOTAL	20	62	101	192	18	64	84	60	186	84	45	57	65	15	1053	10	1063

¹ Includes: Criminal homicide, Forcible rape, Robbery, Aggravated assault, Burglary, and Motor vehicle theft

Table 3: Percentage Effects of Inaccuracies on Sampled Criminal Offenses and Incidents

		CLASSIFICATIONS AS RECORDED BY POLICE															
		PART I CRIMES				PART II CRIMES				INCIDENTS							
Classifications/ groups		All Part I except larceny-thefts ¹	Larceny-thefts	Simple assaults	Vandalism/ Criminal mischief	All other investigations of persons	Routine investigations of persons	Hospital cases	Other investigations	Lost & found property	Disturbances, disorder, minor inside	Disturbances, disorder, minor outside	Informational requests	All other offenses and incidents	Unclassified offenses and incidents	Scoring inaccuracies	TOTAL
PART I CRIMES	All Part I except larceny-thefts ¹	62.5%	6.3%	15.6%	3.1%						3.1%		6.3%	3.1%		100.0%	
	Larceny-theft	95.2%		1.6%					1.6%					1.6%			100.0%
PART II CRIMES	Simple assaults		87.3%								1.8%	2.7%	8.2%			100.0%	
	Vandalism/ Criminal mischief			99.0%										1.0%		100.0%	
	All other investigations of persons				100.0%											100.0%	
	Routine investigations of persons					100.0%										100.0%	
INCIDENTS	Hospital cases					98.8%		1.2%								100.0%	
	Other investigations					1.6%	96.8%	1.6%								100.0%	
	Lost & found property							100.0%								100.0%	
	Disturbances, disorder, minor inside								100.0%							100.0%	
	Disturbances, disorder, minor outside					2.1%			4.2%	93.8%						100.0%	
	Informational requests												100.0%			100.0%	
	All other offenses and incidents													100.0%		100.0%	
	Unclassified offenses and incidents													100.0%		100.0%	

¹ Includes: Criminal homicide, Forcible rape, Robbery, Aggravated assault, Burglary, and Motor vehicle theft

In addition to undercounting Part I criminal offenses, Table 2 illustrates that inaccurate police reports caused statistics for Part II and other types of incident classifications to be incorrect within the Police Department's RMS. For example, there were two of the 65 cases we selected from the population of all other offenses and incidents that should have been reported as simple assaults, a Part II offense. Also, one of the 84 items that we picked from the population of hospital cases should more appropriately have been classified under other investigations. Table 2, under scoring inaccuracies, shows that the Police Department also failed to pick up nine Part II simple assaults when it scored certain cases.

Table 3 summarizes the effect on the classifications of the inaccuracies in terms of percentage rates. It shows that, for the sampled cases we evaluated, the Part I (except larceny-thefts) group represented only 62.5 percent of what it should have totaled. Part of the balance for this classification was misclassified as larceny-thefts (6.3 percent), simple assaults (15.6 percent), vandalism/criminal mischief (3.1 percent), and informational requests (3.1 percent). The Police Department had also not included another 6.3 percent of serious crimes, which although documented in its files, were never included in the crime tally. Finally, the Police Department miscounted 3.1 percent of the crimes for this group because of inaccuracies made in scoring the cases.

The Police Department also undercounted Larceny-thefts. It included only 95.2 percent of the cases that should have been classified in this category, with the balance being inaccurately recorded as vandalism/criminal mischief (1.6 percent), lost and found property (1.6 percent) and some (1.6 percent), not being counted at all. We estimate that, collectively, the Police Department's data files only accounted for 81.1 percent of the true number of Part I crimes (see Table 9 within Appendix II).

Viewed from another perspective, the bold printed percentage rates in Table 3 read diagonally from upper left to lower right show that classification groups falling below 100 percent were most at risk for being undercounted during 1998. Inaccuracies detected by the FBI affected the Part I (including larceny-thefts) and simple assault crime classifications most frequently as opposed to other classification groups such as routine investigation of persons and lost and found property. Moreover, the inaccuracies affecting the Part I and simple assault crimes tended to undercount the categories and not overcount them.

Instances of Discrepancies between Police Reports and Complainant Testimony

Of the 1,053 case files available for review, we identified 806 for which we could attempt to telephonically contact and interview a complainant or other named witness. The remaining 247 cases either named the patrol officer preparing the report as the complainant or contained insufficient information for us to research a telephone number. We made no attempt to contact the patrol officers, as we believed their testimonial statements would not differ significantly from what they had previously written in their reports. For those cases, where the complainants or other witnesses could be identified, we made three attempts to reach them. In total we were able to interview 384 individuals. Complainants and witnesses we interviewed provided us with information that they asserted was told to the patrol officers taking the report.

Our interviews disclosed instances when there were discrepancies between statements recorded by officers in police reports and assertions made by complainants or witnesses. For example, in one case a police report describes a vandalism of the complainant's car. However, our interview with the complainant revealed that she told the patrol officer taking the report that a CD player had also been taken from the trunk of the car. The Police Department reported the offense as a vandalism/criminal mischief case, but under UCR Program guidelines the theft of the CD player would be a more serious crime; a larceny-theft should have been recorded. Police management has indicated that the Department took this particular report over the telephone. No officer is dispatched for these incidents; therefore, no personal observations can be made to supplement information on the report.

In another instance, the Department coded an incident as a vandalism/criminal mischief of under \$500. The report indicates the complainant stated that unknown persons damaged his unattended automobile parked on a street. During our interview with the complainant, he asserted that someone unsuccessfully used a screwdriver on the door lock of the driver's side. Additionally, he stated that a car window had been broken and the radio and airbag were stolen. He further alleged that the patrol officer was aware of these facts and that the dashboard of the vehicle was clearly damaged from the thefts. Under UCR Program guidelines, the case should have been classified a larceny-theft. Police management has indicated that the reporting officer states the "48" report documents the facts provided by the complainant at the time of the interview.

In total, we noted 29 instances where assertions made by the complainants or witnesses differed from the written facts in police reports. All of these instances are illustrated in Appendix IV. We did not include these 29 instances in arriving at our estimate of the number of inaccurate Police cases or the effect of those inaccurate cases on the 1998 crime statistics (Tables 2 and 3). However, we did bring them to the attention of Police management. Tables 4 and 5 demonstrate the potential effect of these discrepancies on our estimates of undercounting crime as portrayed previously in Tables 2 and 3. They show, for example, that Part I crimes in our sample may have been as many as 120 instead of the 95 determined from review of the documentation alone.

Read in a manner similar to Table 2, Table 4 shows there may be many incidents that Police reported as involving lost property, for example, which might in fact be larceny-thefts, burglaries, or robberies. Likewise, assertions made by complainants suggest that offenses classified as vandalism/criminal mischief could actually be larceny-thefts and Part I burglaries or robberies. For the sample of cases reviewed, Table 5 indicates it is possible that the Police may have reported only 48.8 percent of all the Part I crimes (except larceny-theft) that should have been reported, and only 75.9 percent of the larceny thefts¹⁴. Consequently, in the worst case scenario, Part I offenses (including larceny-thefts) may be undercounted by an additional 31,000-39,000 more crimes than estimated based on the results displayed in Tables 2 and 3.¹⁵

¹⁴ These percentages are unweighted.

¹⁵ Refer to Table 9 within Appendix II for calculations.

Table 4: Effect of Inaccuracies on Sampled Criminal Offenses and Incidents Including Noted Discrepancies

		CLASSIFICATIONS AS RECORDED BY POLICE																
		PART I CRIMES					PART II CRIMES					INCIDENTS						
Classifications/ groups		All Part I except larceny-thefts ¹	Larceny-thefts	Simple assaults	Vandalism/Criminal mischief	All other investigations of persons	Routine investigations of persons	Hospital cases	Other investigations	Lost & found property	Disturbances, disorder, minor inside	Disturbances, disorder, minor outside	Informational requests	All other offenses and incidents	Unclassified offenses and incidents	Total Before Scoring Inaccuracies	Scoring Errors	TOTAL
PART I CRIMES	All Part I except larceny-thefts ¹	20	2	7	3				2	1	1	1	2			39	2	41
	Larceny-thefts	60		6			1	11						1		79		79
PART II CRIMES	Simple assaults			94						2	1		2	3		102	9	111
	Vandalism/Criminal mischief				183									2		185		185
	All other investigations of persons					18										18		18
	Routine investigations of persons						63									63		63
INCIDENTS	Hospital cases						83	1								84		84
	Other Investigations						1	59	1							61		61
	Lost & found property									171						171		171
	Disturbances, disorder, minor inside										78					78		78
	Disturbances, disorder, minor outside											1	2	43		46		46
	Informational requests													55		55		55
	All other offenses and incidents														1	1	63	65
Unclassified offenses and incidents																7	7	7
TOTAL		20	62	101	192	18	64	84	60	186	84	45	57	65	15	1053	11	1064

¹ Includes: Criminal homicide, Forcible rape, Robbery, Aggravated assault, Burglary, and Motor vehicle theft

Table 5: Percentage Effects of Inaccuracies on Sampled Criminal Offenses and Incidents Including Noted Discrepancies

		CLASSIFICATIONS AS RECORDED BY POLICE												TOTAL				
		PART I CRIMES				PART II CRIMES				INCIDENTS								
Classifications/ groups		All Part I except larceny-thefts ¹	Larceny-thefts	Simple assaults	Vandalism/Criminal mischief	All other investigations of persons	Routine investigations of persons	Hospital cases	Other investigations	Lost & found property	Disturbances, disorder, minor inside	Disturbances, disorder, minor outside	Informational requests	All other offenses and incidents	Unclassified offenses and incidents	Scoring Errors		
PART I CRIMES	All Part I except larceny-thefts ¹	48.8%	4.9%	17.1%	7.3%				4.9%	2.4%	2.4%	2.4%		4.9%	4.9%		100.0%	
	Larceny-thefts		75.9%		7.6%			1.3%	13.9%						1.3%		100.0%	
PART II CRIMES	Simple assaults			84.7%					1.8%	0.9%		1.8%	2.7%	8.1%			100.0%	
	Vandalism/ Criminal mischief				98.9%									1.1%			100.0%	
	All other investigations of persons					100.0%											100.0%	
	Routine investigations of persons						100.0%										100.0%	
	Hospital cases							98.8%	1.2%									100.0%
INCIDENTS	Other investigations							1.6%	96.7%	1.6%							100.0%	
	Lost & found property									100.0%							100.0%	
	Disturbances, disorder, minor inside										100.0%						100.0%	
	Disturbances, disorder, minor outside											2.2%		4.3%	93.5%		100.0%	
	Informational request													100.0%			100.0%	
	All other offenses and incidents														1.5%	1.5%	96.9%	100.0%
	Unclassified offenses and incidents															100.0%		100.0%

¹ Includes: Criminal homicide, Forcible rape, Robbery, Aggravated assault, Burglary, Motor vehicle theft, and Larceny- theft

The above projections represent only statistical extrapolations of the sample results to the total population of Part I criminal offenses. We did not perform any supplemental investigation work or make further inquiries of the complainants and witnesses or patrol officers involved in the cases. As a result, we cannot express a definite conclusion as to the accuracy or inaccuracy of any alleged misstatements or missing information in police reports arising from our interviews with complainants and other witnesses.

Systemic Problems Observed

Ascertaining the exact causes for the inaccuracies and discrepancies we noted in the Police Department's crime statistics was beyond the scope of our evaluation. However, in gaining an understanding of the processes used by the Department to account for crime statistics, we did observe systemic problems that may have contributed to these inaccuracies and discrepancies. These problems stemmed from a partially manual RMS for recording, classifying, scoring, and compiling crimes that was at risk for errors or irregularities because it was inadequately controlled. Moreover, the decentralized structure of the system was subject to potential conflicts of interests. We also noted that the system's many redundant steps and labor-intensive reporting process was inefficient.

Weaknesses Found in System Used for Counting Crimes

UCR Program guidelines suggest that law enforcement agencies maintain a good RMS to ensure that each complaint or call for service is promptly recorded and accurately tabulated. These tabulations can contribute towards management's ability to, among other things, analyze the extent of patrol and crime prevention problems or measure the results of investigation activity to solve crimes. Essential to any recordkeeping system used to monitor, measure, and report on the results of operating activities is a system of controls. Such controls as related to crime statistics, for example, help Police management prevent and detect errors in misclassifying and scoring offenses, or irregularities such as downgrading the classification of the crime. They aid in ensuring that valid and reliable data are obtained, maintained, and fairly disclosed in UCR reports.

A key objective in any system is to process *transactions* correctly — in this case, transactions about criminal activity. Correctly processed transactions help yield accurate and reliable information. Important characteristics of effectively controlling the accuracy and reliability of crime data are (1) capable personnel to handle the coding process, (2) control over access and use of forms used as source documents for data entry of crime information, (3) adequate supervision over the transactions, and (4) periodic comparison of recorded information to independent evidence.

Numerous Personnel Making Technical Coding Decisions Raised Risk for Errors

One of the most important features of control is the qualification and ability of the people who make the system work. Numerous personnel making coding decisions coupled with multitudinous crime classifications that are subject to different interpretations can lead to errors.

Our review of the Police Departments process used to account for crimes disclosed that lower-ranking personnel are assigned to the operations room of each district to carry out the coding functions. Police management told us that during 1998, among its 26 districts, there were 400 personnel (primarily uniformed) routinely assigned to the coding of crimes. Nearly another 400 individuals served as secondary personnel who could also be called on to participate in the process, if needed. Additionally, Police management advised us that injured uniformed patrol officers were often relegated to the operations room to assist in the coding until they could resume their patrol duties.

Ascertaining reasons for the miscoding of cases was beyond the scope of our review. Consequently, we did not accumulate empirical data to conclude with any degree of certainty that vast numbers of Police personnel involved in the coding process caused the inaccuracies we observed. However, it is our opinion that the more widespread and decentralized accounting functions tend to be the more likely errors tend to occur.

Additionally, the likelihood of coding errors is especially high given that there are over 350 different classification codes within the Philadelphia Police Department Coding Manual. The FBI has indicated that local law enforcement agencies have had difficulty in classifying or scoring crimes because often there are differences between state-level criminal statutes and the offense definitions by which UCR participants must classify and score crime in order to provide nationwide standardization in reporting. It also noted that incidents might appear to be similar in nature; while, in reality, they contain varying circumstances that affect classifying and scoring.

Inadequate Control of Police Reports

Our observations of Police Department procedures revealed that adequate controls were not in place over access and use of police reports utilized to capture information about crimes and other incidents. At Police districts we visited, we often observed books of blank "48" reports strewn about and accessible to all personnel at the districts. Additionally, Police district personnel made no attempt to control distribution of the forms as well as account for their use. In our opinion, this situation presents an opportunity where someone can obtain blank "48s" and then rewrite complainant allegations to fit lesser type criminal offenses.

During the evaluation, nothing came to our attention that "48s" we examined had been rewritten and substituted for more serious crimes. However, reporters for a local Philadelphia newspaper disclosed instances of when Police personnel in Philadelphia rewrote "48s" to describe lesser offenses and then substituted them for the original police record. Facsimiles of two police reports for the same incident showed the original containing a signature of the patrol officer who allegedly prepared it categorizing the incident as a robbery, while a rewritten version of the report with a printed name classified the incident as a minor disturbance.

As part of our work, we noted that over half of the "48s" with an inaccuracy or apparent discrepancy did not contain the manual signatures of the officers who prepared them as required by Police Department regulations. A printed name appeared instead. We also observed that almost 72 percent of these "48s" did not include the signature of the operations room supervisor who had reviewed them. In the majority of instances,

only a printed rank and badge number appeared on the forms. While the lack of signatures on police reports does not mean improprieties occurred, in our opinion, they signify a "red flag" worthy of closer inspection by management.

In connection with the lack of control over forms used by the Department to capture initial crime data, we also observed that Police management did not adequately account for their usage — through utilization of preprinted sequentially numbered forms that are logged and accounted for. Unless accountability is maintained, management is again at risk for district personnel to substitute re-written reports with lesser type offenses for more serious ones.

Further, the use of manually prepared police reports within a decentralized system present the Police Department with additional risk. If movement of these documents is not adequately tracked, they may become misplaced or lost when removing them from files or moving them from unit to unit.

Records show that, during 1998, the Police Department received nearly two million complaints or calls for which officers, including investigators, prepared and submitted written records of their work. We estimate that, collectively, officers prepared millions of written "48s" which showed the data elements for generating Police crime statistics. District personnel send the original "48" to the Reports Control Unit at Police Headquarters and keep a file copy on hand. Our observations revealed that files of police reports at some districts were better organized than at others; however, none of the districts required use of a log for indicating reports had been taken from the files. Of the 1,053 police "48" reports for which we requested to examine the district copy, Police personnel could not locate about five percent of them. Instead, they had to furnish us with a photocopy of the report maintained at Police Headquarters.

Additionally, our review of procedures showed that in many instances the original "48" received by the Reports Control Unit at Police Headquarters was forwarded to Quality Assurance for review, and back again to Headquarters for data processing.¹⁶ Altogether, including the "49s" and "52s", there are millions of paper documents passing from one unit to another. Neither the Reports Control Unit nor the Quality Assurance Bureau tracks the movement of paperwork between themselves or subsequently into the Data Processing unit for data entry and compilation of information for the UCR Report. In fact, the Police Department could not locate any paperwork for one of the sampled incidents we selected for review. Attempts we made to obtain a copy of the missing "48" from the district were also unsuccessful.

Inadequate Evidence of Supervision

Throughout the entire crime reporting process, Police management has designed procedures that require various supervisory personnel to sign, date, and enter their badge numbers on documents they prepare or review. For example, Directive 103 requires patrol supervisors to check and sign patrol logs of patrol officers at least once each tour of duty. All non-supervisory uniformed patrol officers assigned to foot patrol, radio patrol car, emergency patrol wagon, and motorcycle make entries in a patrol log. This

¹⁶ Quality Assurance reviews those "48s" considered closed and not requiring any additional investigative work.

log is a chronological diary of their activities — including investigating criminal offenses and other incidents — while on tour of duty. However, our inspection of these logs in documenting the process for reporting crimes revealed that supervisors did not always sign patrol logs as required.

Additionally, despite a requirement by Directive 54 that supervisory personnel sign police reports they have reviewed, we found district personnel regularly avoided actually signing documents. Of the 1,053 cases we examined, the majority of the "48s" failed to contain the signature of the operations room supervisor. Instead, these reports contained only a printed rank and badge number in the space designated for the reviewer. In three percent of the cases, the reviewer's space on the report was left blank.

More important than the signature of the supervisors, however, is the quality of the review made by them. The inaccuracies and discrepancies enumerated in the prior sections of this report suggest the review function is inadequate. We found that even with some of the more basic information required on "48" reports, supervisors in the district operations room were not flagging and correcting them. For example, Police Directive 54 specifies that "48s" must include the time and/or date the incident occurred. We found this information missing in over 13 percent of the reports we examined. Similarly, although Department regulations require patrol officers specify the telephone number of the complainant in "48" reports, we again noted over 13 percent of them did not contain this information, or an indication that it was unavailable.

Recorded Information Not Adequately Verified

UCR Program requirements indicate that "*Law enforcement is a public service and as such requires a full accounting from the police commissioner, police chief, or sheriff as to the administration of the agency and the status of public safety within the jurisdiction.*" In our opinion, emanating from this requirement is management's responsibility to ensure the accuracy of recorded information. An effective control is for Police managers to provide for periodic comparison of the recorded classifications and scoring of offenses and incidents with independent evidence. Such evidence might include, for example, routine and periodic callbacks to complainants or other witnesses, as well as 911 callers. In the case of 911 callers, (we were informed by Police management that court approval would be required for contacting complainants) managers could also ascertain whether officers are failing to take reports in the field.

Our review indicates that although the Department's Quality Assurance Bureau has performed some callbacks to complainants and other witnesses, it is not done on a regular and recurring basis. Additionally, it does not make routine calls to 911 callers to verify recorded information in police reports. Logically, a management that performs frequent periodic comparisons of recorded information against other evidence has more opportunities to detect errors and irregularities in the records than a management that does not.

System Creates Potential Conflicts of Interest and Is Inefficient

A very important characteristic of effective control that helps ensure data are valid and reliable is an appropriate segregation of incompatible functional responsibilities. Applied to the

Police Department's RMS for crime data this means that personnel who code and score crime reports should not report to district commanders whose effectiveness in fighting crime in the district is measured by the crime figures emanating from these reports. In other words, district commanders who can influence the numbers should not oversee personnel who code and score crime reports.

Our review of Police operations in Philadelphia disclosed that operations room personnel making the coding decisions, ultimately, report to the district captains serving as commanding officers. Consequently, we believe a conflict of interest exists that exposes Police management to a greater degree of risk for "downgrading" crimes. Police management has responded to our contention by stating it is only partially correct. Management indicates that district captains surely have an interest in the crime rate since they are held responsible for the crime figures in the district. However, it believes that district personnel who do the coding have no vested interest in how much or how little crime exists in a particular district. While management did not specifically note why, it stated that no captain could routinely change or downgrade crime figures in his/her district without being caught.

Although operations room personnel may not personally have a vested interest in how much or how little crime exists, the Police Department does operate as a paramilitary organization. There are military-type rankings such as corporals, sergeants, lieutenants and captains. Additionally, all patrol personnel are required to salute higher-ranking officers. By virtue of rank, captains can exert subtle influence on lower-ranking officers such as corporals who do the coding. The influences may be negative such as in the form of disallowing requested vacation time or positive such as with a promise for better detail. Although no instances of such influences came to our attention during the evaluation, the potential for district captains to influence coding increases the risk for downgrading of crimes. Furthermore, coupled with the undercounting of the serious Part I crimes that we found as part of this evaluation, we believe management needs to reevaluate its position on the possibility for conflicts of interest.

We also found the Police Department's RMS in place during 1998 was inefficient, involving numerous people and often requiring redundant procedures. Hundreds of personnel involved with coding crimes required training in order to keep abreast or become competent in the tasks (see Numerous Personnel Making Technical Coding Decisions Raised Risk for Errors). Moreover, our observation of the processes revealed numerous levels of review are supposed to occur and recur. For example, at the districts, "48 persons" are required to review "48" reports for completeness and then code and determine if further investigation of the incident is needed. As the "48" moves through the process, the Operations Room supervisor must also review it for completeness, coding, and solvability. This review is then supposed to be followed by a third level of inspection made by the district captain. For some reports — involving Part I crimes — a Compstat officer is also required to review the coding and classification. Incidents warranting further investigation are then to be followed up by detectives who prepare and code supplemental investigation reports ("49s" and "52s"). Supervisors are then supposed to review these reports. Beginning in 1998, the Police Department added another level of review with the creation of the Quality Assurance Bureau. Despite these numerous levels of inspection, the FBI's review of the sampled cases disclosed numerous inaccuracies.

Another redundancy and resulting inefficiency in the Police Department's RMS was the use of a separate freestanding computer system to produce UCR Program reports. Despite having the INCT system, which interfaced with the Department's 911 CAD system and captured — through data entry at district operations rooms — information needed to produce monthly reports required of the UCR Program, management instead used the TARTAN system. Use of this system required data entry clerks to again manually reenter information directly from police reports to produce computerized reports that could then be used to manually compile the numbers for UCR Program reports. The process required several checking and rechecking routines to ensure the information had been entered accurately. Even with such edit routines, we found numerous errors, some of which resulted in the duplicate counting of motor vehicle thefts and other assaults by 73 and 99 crimes, respectively in the 1998 UCR Program report. Other errors occurred during data entry when crime detail would be associated with the wrong DC number. While these later errors did not always affect the crime counts, they nevertheless made the audit trail very onerous and time consuming for the Police Department when researching details of specific criminal offenses or incidents that we questioned. Additionally, through interviews we conducted with the Department's data processing personnel, we discovered that the TARTAN System used to generate the crime report for 1998 often required "patchwork repair." When Police personnel found errors in the system, they wrote programs to correct each problem.

As part of a "best practices" review conducted during this evaluation, 12 (63 percent) of the 19 Police Departments responding to our survey indicated that coding and reviewing police reports centrally is the best organizational structure to ensure compliance with the UCR Program, while still allowing for effective operations. The majority of respondents to this survey indicated that the chief benefit of centralization is consistency in coding reports. Of these respondents, eight believed it reduces or eliminates the potential for conflicts of interest. Respondents also indicated that other benefits of centralization include (1) it least interferes with other police operations, (2) allows for more focused training, (3) decreases report-processing time, and (4) reduces the overall cost of coding and reviewing. Six respondents indicated that they saw no significant disadvantage to performing the tasks of coding and scoring reports centrally, although some (three) indicated it was more difficult to obtain information when missing from reports. None of the police department's responding to our survey indicated that centralization causes an increase in overall cost.

Technology Is Available to Ensure Better Controls and to Provide More Efficiency

In the course of obtaining "best practices" information, we identified police departments in other cities that employed or were in the process of implementing, more sophisticated technologies to manage their police forces. More specifically, these other police departments utilized Mobile Data Computer (MDC) Systems. These systems utilize laptop computers installed into squad cars that eliminate the need for voice radio communication and provide users with a two-way digital communication link between the vehicles and a base station. They allow patrol officers to pull up motor vehicle and drivers license information or stolen property information from databases stored on computers maintained by the State Police or the FBI. Moreover, they enable patrol officers to get into their own department's in-house RMS, retrieve report templates for completing police reports that can be later up-loaded to the RMS, and send or receive e-mail from anyone subscribed to the system.

For several years, the Philadelphia Police Department has been involved with installing laptop systems into its squad cars. However, our inquiries have disclosed that it currently does not use these systems to their full capability. Rather, the Department uses them principally to eliminate the need for voice radio communication with the 911 Radio Room at Police Headquarters and to communicate with the State Police or FBI databases.

Our research has indicated that MDC Systems have provided other police departments with much more capability than just a data link. For one, they enhance the ability of other police jurisdictions to meet UCR Program objectives. Patrol officers use the laptop computers in their squad cars to prepare police reports. Software on the system automatically maps UCR codes to incidents. A noted feature for some software installed on these laptops is that drop-down menus enable officers to select an applicable State Statute for the incident. The system in turn assigns a UCR code. Alternately, in some systems, officers enter the details through a combination of check-off boxes and narrative. Again, the computer then automatically classifies the crime with the appropriate UCR code.

After patrol officers have completed the automated incident report, they then forward it to a supervisor for approval using cellular technology. Generally, there is not need for the officers to return to headquarters and he or she can therefore allocate more time to patrol.¹⁷ The patrol officer's supervisor electronically approves the report and then forwards it to a server for the Department's RMS. Once approved by a supervisor, the report cannot be altered. After edit checks are performed for completeness and discrepancies, the record is entered into the RMS. If for some reason the patrol officer starts, but does not complete a report to be forwarded to the supervisor, the report automatically becomes saved to the computer's hard drive and can be upload later.

Additional data, including information gathered by detectives, is added to the case file through sub-reports, which share the same DC Number. Sub-reports are subject to the same routines and controls. All communications are encrypted and sent through an Intranet, or closed communication channel, so that security and privacy are protected. Even if a problem occurs with transmission, reports are stored on computer hard drives.

Another feature of the MDC Systems is their ability to retain all versions of police reports. This characteristic provides management with an audit trail of all report changes. If a citizen subsequently makes a complaint, supervisory action is taken. Further, the system enhances management's ability to track rates of unfounding by officer and unit. If unfounded rates appear significantly high they can be further investigated.

Police officials we interviewed from other jurisdictions have suggested that personnel overseeing the MDC System should be far removed from the influences of any district captains and other patrol personnel. In Jacksonville, Florida MDC System personnel report directly to the number two person in the department. This type of organizational structure helps reduce the potential for conflicts of interest. While commanders compete with one another, they do not have influence over MDC System personnel. Additionally, police personnel to whom we spoke at each city using this type of automated technology asserted that if accurate crime reporting is to

¹⁷ Certain serious crimes in Philadelphia require patrol officers to return to the districts immediately so that police reports can be forwarded to investigative personnel.

be achieved, it is critical to remove any influences that command personnel might have over the data.

We believe that if the Philadelphia Police Department used its MDC Systems to their fullest capability as described to us by police officials in other jurisdictions, it would contribute to correcting many of the inadequacies we noted as part of this evaluation. However, the cost benefit of utilizing the systems to this capacity in Philadelphia needs to be analyzed. The Controller's Office did not conduct an in-depth study of cost benefits or determine the availability of potential funding for the Police Department. Therefore, we do not express an opinion on the feasibility of expanding the use of these systems more than currently employed.

Police officials in the other cities have asserted that utilizing more automation in the recordkeeping process yielded many advantages. Among the cities using the MDC Systems to automate the preparation of police reports, three advantages stood out. First, these systems prevented or significantly reduced the possibility of altering a previously submitted police report. Changes to a case could only be implemented through supplemental reports with the original report still kept intact. Second, these systems eliminated or minimized the officers' or their supervisors' involvement in the UCR coding process. A consistent belief held by officials in other city police departments with the automated reports is that patrol officers should not have to be concerned about UCR coding. Also, by removing officers and their superiors from the UCR process, improper influence can be minimized. Third, automated systems provide more reliability and control over the reports than a manual paper file. If a department cannot locate a report, it could adversely affect a criminal proceeding or expose the City to legal liability if the case involves actions of its officers.

Conclusions

Police management appears to be committed to compiling and reporting accurate crime statistics so that it can better fight crime and provide reliable information to the UCR Program. The current Police Commissioner has taken many positive steps to correct a system he inherited from prior administrations, including attempting to change the culture and attitude of the entire Department toward crime statistics. The results of this evaluation show that more changes are still needed to meet the rate of accuracy in crime statistics desired by the FBI. The Police Department needs to assess the risks present in its system to capture and accurately record transactions, as well as produce reliable reports. Movement toward using its MDC systems to do more than just request and receive data in squad cars can provide the Department with increased accuracy in classifying and scoring of police reports, while at the same time enable patrol officers to place themselves back in service quicker. It can also aid in more efficiently compiling statistics by eliminating redundancies in the current system. Police management must also take stock of the Department's current organization structure and the methods for assigning authority and responsibility. It must eliminate the potential for conflicts of interest that may interfere with the production of reliable and accurate crime statistics.

Recommendations

We urge the Police Department to continue its quest for more accurate crime statistics. To improve the overall accuracy of these statistics and the efficiency, in which they are compiled, we recommend the Police Commissioner:

- Consider acquiring software that would enable patrol officers to prepare police reports electronically. Such software would reduce the risk of coding errors and enable the Department to upload data electronically to the main INCT System. [2901.01]
- Use the INCT System to generate data needed to prepare monthly UCR Program reports instead of re-entering crime data into a separate computer system. [2901.02]
- Increase attention in UCR training to the problematic coding and scoring inaccuracies identified in the report. [2901.03]
- Reemphasize to supervisors charged with reviewing police reports their responsibility for performing a quality review of the reports. [2901.04]
- Require the QAB to contact complainants and other witnesses on a more regular basis to verify facts recorded in police reports. [2901.05]
- Consider the feasibility of telephonically interviewing Emergency-911 callers on a periodic basis to determine if patrol officers may be deliberately failing to take police reports. Contact attorneys representing the City to pursue any necessary Court approvals for making such calls. [2901.06]

To help ensure the integrity of data until such time that police reports can be prepared and coded electronically, the Police Commissioner should:

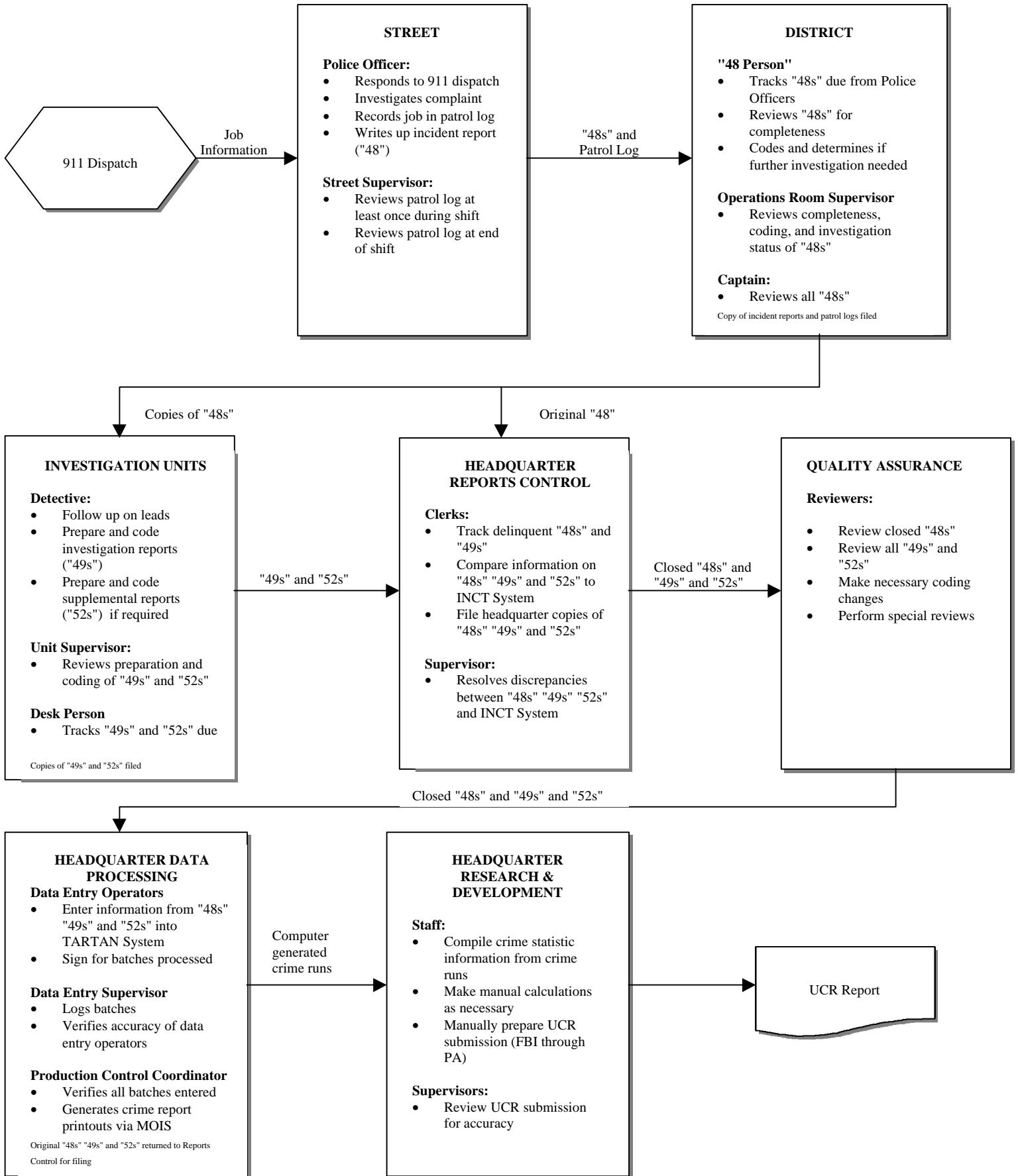
- Consider centralizing the process of manually coding reports to eliminate any real or perceived corruption of data, and provide for more reliable and consistent application of crime coding. [2901.07]
- Restrict district personnel that might have a personal interest in the crime rates from having physical access to blank police reports to reduce the opportunity for someone to downgrade a crime. [2901.08]
- Compel officers who prepare and review police reports to sign their names as required by Police regulations. [2901.09]

To reduce the risk of losing police reports under the existing manual-produced reporting system, the Police Commissioner should:

- Require the use of logs for tracking police reports removed from files to prevent loss of paperwork. Logs should indicate who moved reports, when the reports were taken out, and when reports were returned to the file. [2901.10]
- Track the movement of Police paperwork between units by utilizing transmittal forms. [2901.11]

To increase public confidence in crime data and to monitor improvement in the benchmark identified, the Police Commissioner should request that crime data be audited by either the Controller's Office or some other independent audit organization at least once every three years. [2901.12]

CRIME STATISTICS PROCESS



**STATISTICAL METHODOLOGY FOR EVALUATING ACCURACY
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COMPILATION OF CRIME DATA

To determine the accuracy of recorded 1998 Part I criminal offenses reported under the UCR Program by the Philadelphia Police Department, we used an automated statistical database program to compile offenses from copies of TARTAN data files obtained from the Department's Information Systems Division. These data files contained information about the 1998 criminal offenses — both Part I and Part II — including DC number, when and where the incidents occurred, who and/or what was involved, crime code, source of data, and when it was processed into the Department's crime files.

We compiled Part I and Part II criminal offenses by individual codes and grouped them by Police District. Also included in this compilation were the unfounded offenses, which represented only 0.2 percent of the total offenses. Consequently, we grouped them by code without regard to district.

In a similar manner, we also compiled the non-criminal incidents. We grouped the founded incidents by code within Police District. Those incidents labeled as unfounded were again grouped simply by code because of their insignificance. We obtained these non-criminal incidents from the Police Department's INCT System.

Our examination of the Police data files revealed 28,270 DC numbers that the Department did not associate with either a criminal offense or non-criminal incident (unclassified items). To ensure these items received sampling coverage, we included them in the population.

In total, we accounted for 1,973,806 cases of criminal offenses, non-criminal incidents, and unclassified items. Additionally, 1,543 cases were also depicted in the files as unfounded. The total cases were spread amongst 358 classifications of offenses and incidents including a classification titled "Other Items Not Included in Crime Count" for the 28,270 DC numbers identified as being unclassified. We then split all the classifications among the 26 different districts throughout the City. Classifying the cases in this manner we organized the data into a frequency table that consisted of 28 rows (representing cases by the 26 Police districts, an unfounded category, and a category of unclassified offenses and incidents) and 358 columns (representing the various crime categories). In total, the table contained 10,024 cells.

We reconciled the DC numbers for the compiled statistics back to the Department's CAD System file, which contained the DC number for each Police dispatch that occurred in 1998. We then reconciled the compiled Part I criminal offenses forward to the monthly Return A Form prepared and filed for 1998 under the UCR Program by the Police Department. During the forward reconciliation process into the monthly Return A Form, we noted that the Police Department inadvertently failed to include one criminal homicide, and double-counted 73 motor vehicle thefts. Based only on the reconciliation work, the Department had overstated the "Offenses Reported or Known to Police" by a net sum of 72 offenses. Additionally, we noted that the reported unfounded amounts were overstated by 11 instances (refer to Table 1 on page 4 of the Objectives, Scope, and Methodology section of this evaluation report).

DETERMINATION OF SAMPLE SIZE

The characteristic of the 1,973,806 cases that was of interest was the rate of inaccurately accounting for a case. Cases could be inaccurately accounted for if they were (1) inappropriately classified and/or scored, or (2) wrongly left out of the crime count. Henceforth, we shall find it convenient to refer collectively to this characteristic as the "inaccuracy rate". Because of budgeting and staffing constraints, we could not examine 100 percent of all police reports filed during 1998. Nor could we sample reports from each of the 358 offense and incident classifications within the Police Department's RMS. Such a sample would have yielded thousands of police reports to examine requiring staff and hours far in excess of those available to the City Controller's Office. Therefore, a sampling approach was deemed necessary to provide a reliable estimate of the overall inaccuracy rate.

There are various ways to sample from a population. One of the simplest is to take a simple random sample, which means that each of the cases would have an equal chance of being selected for inclusion in the sample. However, a reasonable criticism of an overall inaccuracy rate estimate obtained from such a sampling plan would be that the sample could well not be representative of the entire collection of cases, even though the sample cases were chosen at random. For example, if a simple random sample size, of say 1,000 cases, were taken from the population of cases, without restriction, it is within the realm of possibility that all 1,000 cases might come from a single type of crime or from a single police district.

Accordingly, in designing the sampling plan, we chose to consider the structure of the collection of cases, where structure was determined by one or more factors that contribute to the heterogeneity of the cases. (In an unstructured or homogeneous population, such as pills or tablets identically labeled, simple random sampling would be acceptable for drug testing.) We identified two factors that appeared to contribute to the presence of heterogeneity in the crime data. The first was the crime category and the second was the police district.¹⁸

We had good reason to believe that the inaccuracy rate varied from crime type to crime type and from district to district. For example, as part of our evaluation, we had determined that the Police Department's own internal audit group, QAB, found differences in the inaccuracy rates between districts during its review of 1998 cases.

Because of these differences, we arranged the population of cases into strata before sampling. Stratification is a standard sampling tool that is used when populations are heterogeneous with respect to a characteristic of interest. It is a sampling technique that takes into account heterogeneity within the population. It improves inference procedures by producing a gain in precision in the estimates of the population characteristic being studied. Stratification divides a heterogeneous population into subpopulations or strata, each of which is internally homogeneous. If each stratum is homogeneous, a precise estimate of the stratum characteristic can be obtained from a small random sample in that stratum. These estimates can then be combined into a precise overall estimate of the characteristic for the entire population.

¹⁸ Another factor might be time: one might expect crime to be present at different levels — high, medium, or low — during certain periods of the year, and it may be argued that this factor should possibly influence the sampling plan. Budgetary constraints, however, did not allow us to incorporate time as a stratifying factor for this evaluation.

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The above practical and statistical considerations caused us to stratify the population of cases. We first grouped the districts, and then combined the crime categories. We did this to make the groups as homogeneous as possible regarding their inaccuracy rates. Such groupings do not guarantee that any particular Police district or any particular type of crime will be individually represented in the resulting sample of cases, but does ensure the groups are represented. We believe this sampling methodology adequately achieved our evaluation objectives.

To group the districts, we used the results from the Police Department's independent internal police audit of cases, conducted by its QAB, as stratification guidelines. That audit of 23 Police districts (districts 77, 90, and 92 were omitted) was a 100 percent audit and review of police reports, with each district being audited for a single week during the first three months of 1998. It led to an "inaccuracy rate" for each Police district during that review period. Based upon the QAB's audit, we combined the 26 Police districts into three reasonably homogeneous groups, which we called "high" risk, "medium" risk, and "low" risk groups. The high risk group consisted of the 5th, 6th, and 9th districts, whose inaccuracy rates fell in the range of 1.0-1.5 percent; the medium risk group consisted of the 2nd, 4th, 17th, 22nd, 25th, 35th, and 39th districts, whose inaccuracy rates fell in the range of 0.44-0.99 percent; and the low risk group, consisting of the 1st, 3rd, 7th, 8th, 12th, 14th, 15th, 16th, 18th, 19th, 23rd, 24th, and 26th districts, whose inaccuracy rates fell in the range of 0-0.43 percent. We further assumed that the 77th, 90th, and 92nd districts, which had not been covered by the police audit, fell into the low risk category. We chose these ranges of inaccuracy rates to ensure that none of the three groups of Police Districts would be too large or too small in number.

We then grouped the crime classifications. Again, relying on the independent audit work of the QAB, we found that it had identified "problematic" classifications. It discovered that district personnel had classified more serious Part I criminal offenses within a number of non-criminal and lesser offense classifications. These classifications are shown below in Table 6.

Table 6: Problematic Classifications of Non-criminal Incidents Identified by the QAB

Classification	Might actually be
Hospital case	Aggravated assault, rape, robbery
Lost property	Theft, burglary, robbery
Lost tags	Theft
Missing property	Theft, burglary
Minor disturbance	Aggravated assault, robbery, theft
Vandalism	Attempted theft, attempted burglary
Information	Any classification
Investigation of injuries	Aggravated assault
Investigation of person	Any classification

Using this information, we combined the 358 classifications of offenses and incidents into 14 reasonably homogeneous risk groups. These groups consisted of: (1) All Part I except larceny-thefts, (2) Larceny-thefts, (3) Simple assaults, (4) Vandalism/criminal mischief, (5) All other investigation of persons, (6) Routine investigations of persons (7) Hospital cases, (8) Other investigations, (9) Lost and found property, (10) Disturbances, disorder, minor inside, (11) Disturbances, disorder, minor outside, (12) Informational requests, (13) All other offenses and

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incidents, and (14) Unclassified offenses and incidents. In grouping the offenses, we excluded cases involving the dispersion of disorderly crowds without incident and radio assignments categorized by officers as unfounded. We did not include these two classifications of incidents, which accounted for 585,667 cases for three reasons. First, written investigation reports did not always exist for these incidents. In cases involving the dispersion of disorderly crowds without incident, the Police Department did not require its officers to complete investigative reports. In cases involving unfounded radio assignments, investigative reports for such incidents were not required until November 1998. Second, to identify complainants who could have confirmed the classification of a disorderly crowd incident or unfounded nature of an assignment would have required the Controller's Office to identify callers in the 911 data base. Under Commonwealth of Pennsylvania Law, this information may not be viewed unless a court order is obtained. We concluded that at this time, it would not be cost beneficial to obtain the identities of these callers and then make contact with them. Finally, we believe that, in the absence of written reports or in making contact with individuals who made the 911 calls, the evidence to substantiate the Department's classifications of the above type incidents in its files would be inconclusive.

We organized the results of the district and crime classification groupings, into a table with four rows (representing the three categories of Police districts and an unfounded category) and 14 columns (representing the various crime categories). In total, the 56 (= 4 x 14) cells contained in the table accounted for 1,389,682 cases.¹⁹ A cell entry in the table represented the number of cases in that row category of Police districts and column category of crime type.

To determine an appropriate sample size for each cell population within the table, we needed to assign the individual cells with an estimated rate of inaccuracy. Without these individual cell inaccuracy rates, it would be difficult to select an appropriate sample size for each cell within budgetary constraints. We used the results of the QAB internal audit to estimate this cell rate. The QAB audit provided us with the frequency of miscoded cases for each cell. However, in order to turn a cell miscoding frequency into an inaccuracy rate, it was necessary to know the number of cases investigated for that cell by the QAB. Because these numbers were not readily available, we had to develop a reasonable proxy for those numbers. We accomplished this by taking the annual crime count total for each cell in the table and dividing it by 52 to yield a weekly average crime total for that cell. Dividing the miscoded cases for each cell (as found by the QAB audit) by the weekly average crime total for the cell gave us the estimated inaccuracy rates. The inaccuracy rates we calculated ranged from 0.03 percent to 36.01 percent. We then assigned each cell with an inaccuracy rate using the calculated estimated inaccuracy rates and the following criteria:

- (1) Any cell in the table with an estimated QAB audit inaccuracy rate of greater than 5.0 percent was assigned a cell inaccuracy rate of 1.50 percent.
- (2) Any cell with an estimated QAB audit inaccuracy rate between 1.0 percent and 5.0 percent was assigned a cell inaccuracy rate of 0.75 percent.
- (3) Any cell with an estimated QAB audit inaccuracy rate smaller than 1.0 percent was assigned a cell inaccuracy rate of 0.45 percent.

¹⁹ This amount consisted of the 1,973,806 non-duplicated cases in the Police Department's INCT and TARTAN database files (page 29), plus 1,543 unfounded cases (page 29), and excluded the 585,667 cases involving the dispersion of disorderly crowds without incident and radio assignments (page 32).

- (4) Any cell with an estimated QAB audit inaccuracy rate of zero was assigned a cell inaccuracy rate of 0.10 percent to provide some (small) coverage in the sample for those cells.
- (5) A separate cell inaccuracy rate for the unfounded cases was assessed at 0.10 percent.

In making the assigned cell inaccuracy rates, we had no reason to believe that they would not be reasonable or fair given the results of the independent QAB internal audit. For all the cells, these inaccuracy rate assessments were quite low and conservative, giving the Police Department the benefit of any doubt regarding inaccuracy rates. Table 7, shown on the following page, shows the population of each cell together with the assigned inaccuracy rate (*italic* print). For ease of presentation, the table has been inverted so that the Police districts and unfounded cases are displayed as the columns, and the crime classifications are shown in the rows.

Using the population values and assigned inaccuracy rates for each cell in Table 7, we determined the sample size for each cell. The formula to determine sample size is derived from the following equation where n represents the sample size, p , which lies between 0 and 1, represents the cell inaccuracy rate, and q is equal to $1-p$. If p is unknown, then a $(1-a) \times 100\%$ confidence interval for p when the population size N is finite is given by

$$p \pm z_{a/2} \sqrt{\left(1 - \frac{n}{N}\right) \frac{pq}{n}},$$

where \hat{p} is a sample estimate of p , a is the *significance level*,²⁰ and $z_{a/2}$ is the upper $(a/2)$ -percentile of the standard normal distribution. The factor $\left(1 - \frac{n}{N}\right)$ is called the *finite population correction*, which does not have much effect on sample size determination if N is large. The above confidence interval can be expressed as $p \pm d$ where

$$d = z_{a/2} \sqrt{\left(1 - \frac{n}{N}\right) \frac{pq}{n}}$$

is called the *margin of error*.²¹ Solving for n , given values of a and d , yields

$$n = \frac{n_0}{1 + \frac{n_0}{N}}, \text{ where } n_0 = \frac{z_{a/2}^2 pq}{d^2} \text{ for any cell.}$$

The desired sample size is then given by

$$n^* = [n] + 1,$$

²⁰ Significance level is the risk or probability of rejecting the null hypotheses that $p = 0$ using sample data when in fact it is true; usually preset at 5.0% or 1.0%.

²¹ A margin of error indicates how closely we can reproduce from a sample the results that we would obtain if we were to evaluate the complete universe.

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Table 7: Cell Populations, Assigned Inaccuracy Rates, and Sample Sizes

		Districts				Totals,
		High	Medium	Low	Unfounded	
Classification groups		5 th , 6 th , 9 th	2 nd , 4 th , 17 th , 22 nd , 25 th , 35 th , 39 th	1 st , 3 rd , 7 th , 8 th , 12 th , 14 th , 15 th , 16 th , 18 th , 19 th , 23 rd , 24 th , 26 th , 77 th , 90 th , 92 nd	All districts	
Part I Offenses	1. All Part I except larceny-thefts¹	5,539 <i>0.10</i> 5	19,551 <i>0.10</i> 5	32,011 <i>0.10</i> 5	976 <i>0.10</i> 5	58,077 20
	2. Larceny-thefts	10,638 <i>0.75</i> 32	13,908 <i>0.45</i> 20	25,412 <i>0.10</i> 5	66 <i>0.10</i> 5	50,024 62
	3. Simple assaults	1,654 <i>0.75</i> 32	5,949 <i>0.75</i> 32	9,781 <i>0.75</i> 32	78 <i>0.10</i> 5	17,462 101
Part II Offenses	4. Vandalism/criminal mischief	2,271 <i>1.50</i> 62	6,459 <i>1.50</i> 63	12,386 <i>1.50</i> 63	11 <i>0.10</i> 4	21,127 192
	5. All other investigation of persons	37,534 <i>0.10</i> 5	87,772 <i>0.10</i> 5	174,603 <i>0.10</i> 5	4 <i>0.10</i> 3	299,913 18
	6. Routine investigations of persons	25,598 <i>0.45</i> 20	47,067 <i>0.45</i> 20	85,985 <i>0.45</i> 20	19 <i>0.10</i> 4	158,669 64
Non-criminal Incidents	7. Hospital cases	4,747 <i>0.75</i> 32	16,155 <i>0.75</i> 32	29,398 <i>0.45</i> 20	0 <i>N/A</i> 0	50,300 84
	8. Other investigations	32,230 <i>0.45</i> 20	91,735 <i>0.45</i> 20	172,692 <i>0.45</i> 20	0 <i>N/A</i> 0	296,657 60
	9. Lost and found property	1,877 <i>1.50</i> 62	3,014 <i>1.50</i> 62	6,004 <i>1.50</i> 63	0 <i>N/A</i> 0	10,895 187
	10. Disturbances, disorder, minor inside	5,541 <i>0.75</i> 32	32,196 <i>0.75</i> 32	45,501 <i>0.45</i> 20	0 <i>N/A</i> 0	83,238 84
	11. Disturbances, disorder, minor outside	4,730 <i>0.10</i> 5	24,785 <i>0.45</i> 20	48,815 <i>0.45</i> 20	0 <i>N/A</i> 0	78,330 45
	12. Informational requests	1,428 <i>0.10</i> 5	7,859 <i>0.75</i> 32	11,379 <i>0.45</i> 20	0 <i>N/A</i> 0	20,666 57
	13. All other offenses and incidents	24,807 <i>0.45</i> 20	64,365 <i>0.45</i> 20	126,493 <i>0.45</i> 20	389 <i>0.10</i> 5	216,054 65
	14. Unclassified offenses and incidents²	2,286 <i>0.10</i> 5	10,095 <i>0.10</i> 5	15,889 <i>0.10</i> 5	0 <i>N/A</i> 0	28,270 15
Total population, samples and inaccuracies		160,880 337	430,910 368	796,349 318	1,543 31	1,389,682 1,054

¹Includes: Criminal homicide, Forcible rape, Robbery, Aggravated assault, Burglary, and Motor vehicle theft

²Represents selections from the population of cases with DC numbers found in Police data files, but not included in the tally of criminal offenses and incidents.

Population Assigned inaccuracy rate Sample Size

where $[n]$ denotes the integer part of n . The value of n_0 shows the sample size computed without taking into account the finite population correction factor. For large N , n_0 should be very close to n , and in that case it should not matter whether the correction factor is included in the computation. To determine n^* for each cell, we set values for p and chose values of a and d .

The example shown below, in which we use row two, column one Table 7, illustrates the application of the above formula to determine sample size. Dr. Izenman applied the formula to each cell to compute the sample sizes presented in Table 7. Based on our request, he used a *significance level* (a) of 5.0 percent and a *margin of error* (d) equal to 3.0 percent. Then, $z_{a/2} = z_{0.025} = 1.96$, and

$$n_0 = \frac{(1.96)^2(0.0075)(0.9925)}{(0.03)^2} = 31.7732,$$

then

$$n = \frac{31.7732}{1 + \frac{31.7732}{10,638}} = 31.68$$

The sample to be taken for that cell is, therefore, $n^* = 32$.

EVALUATION OF SAMPLE RESULTS

Based on the sample results, we determined a point estimate and a confidence interval for the overall inaccuracy rate of the 1998 Police Department crime cases. We also projected rates of case inaccuracies for each of the overall classification and district strata. Finally, we estimated the consequences of the inaccuracies for the population of Part I criminal offenses. In projecting the sample results, we used a weighted average inaccuracy rate in our computations to account for the stratified approach utilized in designing our sample. We explain the methodology for each projection below and use Table 8 to summarize the overall inaccuracy rate and inaccuracy rates by strata. Table 9 presents specific calculations referred to throughout the Findings and Recommendation section of the report, including those that deal with our estimate of the consequences of the inaccuracies on the population of Part I criminal offenses.

Overall Inaccuracy

To determine a point estimate and a confidence interval for the overall inaccuracy rate of the 1998 crime cases, we first computed the estimated rate of inaccuracy (\hat{p}_i) for each of the individual subpopulations (cells). We did this by computing

$$\hat{p}_i = \frac{x_i}{n_i}$$

where x_i represented the frequency of the inaccuracies for a particular cell (Table 8) and n_i corresponded to the number of cases sampled and reviewed for the cell (Table 7). For example, the rate of cell inaccuracy for larceny-thefts (row two), of the medium risk districts (column two) is given by $2/20 = 10$ percent. We summarize the number of inaccuracies discovered by the FBI for each cell and the computed estimated rates of inaccuracy in Table 8. Details of the inaccuracies can be found in Appendix III.

We then computed the weighted average point estimate of the overall inaccuracy rate for the population of size N subdivided into strata. For example, the i th stratum (cell) contains N_i items (cases). Then, $N = \sum_i N_i$. For this evaluation, there were 14 crime classification groups (14 rows) x four risk groups (four columns) which equaled 56 cells, and $N = 1,389,682$. The classical stratified estimator of p is a weighted average of the cell inaccuracy rates and is given by the formula:

$$\hat{p}_{st} = \sum_{i=1}^{56} W_i \hat{p}_i, \text{ when } W_i = \frac{N_i}{N}, \text{ and}$$

where \hat{p}_i is the rate of inaccuracy in the i th cell of the table. For the i th cell, W_i is the relative size of that cell and operates in the formula as a weight applied to \hat{p}_i . W_i refers to the i th *cell weight*.

By way of illustration, and again using larceny-thefts (row two) for the medium risk districts (column two) as an example, we computed the overall weighted inaccuracy rate \hat{p}_{st} as follows:

1. We determined W_i for the i th cell by dividing N_i (the number of cases in the i th cell — in our illustration 13,908) by N (the total number of cases, which is 1,389,682). Hence, $13,908/1,389,682 = 0.0100$.
2. For the i th cell, we calculated \hat{p}_i by dividing x_i (the number of inaccuracies) by n_i (the sample size). This calculation of $2/20$ yielded a value of 10.00 percent (see Table 8 for all these calculated values).
3. We then multiplied W_i by \hat{p}_i , which gave us 0.0010 (not shown in the Table).
4. We added up all 56 of the products $W_i \hat{p}_i$ to get \hat{p}_{st} .

Using this methodology, our estimate of the overall inaccuracy rate p over all N (1,389,682 cases) was:

$$\hat{p}_{st} = 0.0205,$$

or 2.05 percent. Projecting this estimated inaccuracy rate across the entire 1,389,682 cases yielded a point estimate of the number of inaccurately classified crime cases as

$$(1,389,682) \times (0.0205) = 28,489.$$

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Table 8: Frequencies and Rates of Cell Inaccuracies and Weighted Estimated Inaccuracy Rates for Each Strata

		Districts				Weighted estimates of classification inaccuracy ³ %
		Frequency of inaccuracies Rates of cell inaccuracies (%)				
		High	Medium	Low	Unfounded	
Classification groups						
Part I	1. All Part I except larceny-thefts¹	0 0.00	0 0.00	0 0.00	0 0.00	0.00
	2. Larceny-thefts	0 0.00	2 10.00	0 0.00	0 0.00	2.78
Part II	3. Simple assaults	1 3.13	8 25.00	2 6.25	1 20.00	12.40
	4. Vandalism/criminal mischief	0 0.00	1 1.59	1 1.59	0 0.00	1.42
	5. All other investigations of persons	0 0.00	0 0.00	0 0.00	0 0.00	0.00
	6. Routine investigation of persons	1 5.00	0 0.00	0 0.00	0 0.00	0.81
Incidents	7. Hospital cases	0 0.00	0 0.00	1 5.00	N/A	2.92
	8. Other investigation	0 0.00	0 0.00	0 0.00	N/A	0.00
	9. Lost and found property	0 0.00	3 4.84	0 0.00	N/A	1.34
	10. Disturbances, disorder, minor inside	0 0.00	0 0.00	2 10.00	N/A	5.47
	11. Disturbances, disorder, minor outside	0 0.00	0 0.00	0 0.00	N/A	0.00
	12. Informational requests	0 0.00	0 0.00	1 5.00	N/A	2.75
	13. All other offenses and incidents	1 5.00	1 5.00	0 0.00	0 0.00	2.06
	14. Unclassified offenses and incidents²	4 80.00	2 40.00	2 40.00	N/A	43.24
Weighted estimates of district inaccuracy⁴(%)		2.74	2.41	1.73	1.01	
Overall estimate of weighted inaccuracy rate (%)						2.05

¹This category group includes criminal homicide, forcible rapes, robbery, aggravated assaults, burglary, and motor vehicle theft.

²Represents selections from the population of cases with DC numbers found in Police data files, but not included in the tally of criminal offenses and incidents.

³Estimated standard errors for each of the 14 row categories: (1) 0.00%, (2) 1.91%, (3) 3.61%, (4) 1.05%, (5) 0.00%, (6) 0.81%, (7) 2.92%, (8) 0.00%, (9) 0.76%, (10) 3.76%, (11) 0.00%, (12) 2.75%, (13) 1.60%, and (14) 16.39%.

⁴Estimated standard errors for each of the four column categories: (1) 1.14%, (2) 0.97%, (3) 0.66%, and (4) 1.01%.

Legend: N/A = not applicable because there were no cases to sample.

An approximate 95% confidence interval for the overall inaccuracy rate p when the population size N is subdivided into 56 strata is given by:

$$\hat{p}_{st} \pm 1.96 \sqrt{\sum_{i=1}^{56} W_i^2 \left(\frac{\hat{p}_i \hat{q}_i}{n_i - 1} \right)}, \quad W_i = \frac{N_i}{N}, \quad \hat{q}_i = 1 - \hat{p}_i.$$

Therefore, for this evaluation, an approximate 95 percent confidence interval on p is given by:

$$0.0205 \pm (1.96)(0.0050),$$

which results in:

$$(0.0107, 0.0304),$$

or from 1.07 percent to 3.04 percent. Multiplying the endpoints of this confidence interval by N (1,389,682) gives an approximate 95 percent confidence interval for the number of inaccurately classified crime cases, that is from 14,870 to 42, 246.

Overall Individual Classification and District Strata Inaccuracy Rates

We computed the overall individual classification and district strata inaccuracy rates using the same methodology. A brief illustration follows and the resulting computations are displayed in Table 8.

Classification (Rows) Inaccuracy Rates

Inaccuracy rates for each crime category were computed as explained above, but now the i th cell weight W_i was computed by dividing N_i by the sum of the N_i for that particular crime category (row). For instance, larceny-theft cases in the Police Department's files totaled 50,024 (Table 7). Of that total, 13,908 (Table 7) applied to the medium risk districts. Dividing 13,908 by 50,024 (13,908/50,024) yielded a cell weight W_i of 0.2780. Multiplying the cell inaccuracy rate \hat{p}_i (10.00 percent) by this cell weight results in the product $W_i \hat{p}_i$ (0.0278). The four column values of $W_i \hat{p}_i$ for larceny-thefts were added together to yield 2.78 percent, representing an overall estimate of the inaccuracy rate for the group. This computation was repeated for each of the 14 crime classification groups (see Table 8). We also computed estimated standard errors for these 14 point estimates. These are presented as a footnote to Table 8.

District (Column) Inaccuracy Rates

We computed the point estimates of the inaccuracy rates for each district group (columns) also using the methodology described above. However, the i th cell weight was computed by dividing N_i by the column total in which that cell appeared. Using larceny-thefts in the medium grouped district column to illustrate, we took the 13,908 cases (Table 7) and divided this by the column total of 430,910 (Table 7) cases (13,908/430,910). This calculation produced a cell

weight W_i of 0.0323. We multiplied this i th cell weight W_i by the i th cell inaccuracy rate \hat{p}_i (10.00 percent) to arrive at $W_i\hat{p}_i$ of 0.0323. Then the 14 row values of $W_i\hat{p}_i$ were added together to get the estimated column inaccuracy rate of 2.41 percent. We repeated these computations for each of the columns (see Table 8 for the resulting estimates) and also computed the estimated standard error (shown in the footnotes to Table 8).

Other Calculations

Table 9, presented on pages 40-42, shows the calculations for additional estimates cited in the findings and recommendation section of this report. These estimates have been developed with the assistance of Alan J. Izenman, Ph.D.

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Table 9: Calculations of Various Report Cited Estimates

<p>Interval estimate of inaccurately unclassified offenses and incidents for row 14 of Tables 7 and 8 = 11,336-13,112 cases</p>	<p>A 95% confidence interval for p, which is the true inaccuracy rate is given by:</p> $\hat{p}_{st} \pm 1.96 \sqrt{\sum_{i=1}^{56} W_i^2 \left(\frac{\hat{p}_i \hat{q}_i}{n_i - 1} \right)}$ $= 0.4324 \pm (1.96)(0.0160)$ $= 0.4324 \pm 0.0314$ $= 0.4010 \text{ (40.1 percent) to } 0.4638 \text{ (46.38 percent).}$ <p>For 28,270 cases, the confidence interval translates into</p> $0.4010 \times 28,270 \text{ cases to } 0.4638 \times 28,270 \text{ cases} = 11,336 \text{ to } 13,112 \text{ cases.}$																																											
<p>Interval estimate of rate that Part I crimes are undercounted = 10-28 percent.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center; border-bottom: 1px solid black;"> <table style="margin: auto;"> <tr> <td style="text-align: center;">Unfounded</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Cases</td> <td></td> <td></td> <td></td> </tr> </table> </td> <td style="width: 5%;"></td> <td style="width: 10%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td style="padding: 2px;">All Part I except larceny-thefts</td> <td style="text-align: center; padding: 2px;">58,077</td> <td style="text-align: center; padding: 2px;">-</td> <td style="text-align: center; padding: 2px;">976</td> <td style="padding: 2px;">=</td> <td style="text-align: center; padding: 2px;">57,101</td> <td rowspan="2" style="font-size: 3em; vertical-align: middle;">}</td> <td rowspan="2" style="vertical-align: middle;">From Table 7</td> </tr> <tr> <td style="padding: 2px;">Larceny-thefts</td> <td style="text-align: center; padding: 2px;">50,024</td> <td style="text-align: center; padding: 2px;">-</td> <td style="text-align: center; padding: 2px;">66</td> <td style="padding: 2px;">=</td> <td style="text-align: center; padding: 2px;">49,958</td> </tr> <tr> <td style="padding: 2px;">Total Part I Crimes</td> <td style="text-align: center; padding: 2px;">108,101</td> <td style="text-align: center; padding: 2px;">-</td> <td style="text-align: center; padding: 2px;">1,042</td> <td style="padding: 2px;">=</td> <td style="text-align: center; padding: 2px;">107,059</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">$W_1 = \frac{57,101}{107,059} = 0.5333601$</td> <td style="width: 5%;"></td> <td style="width: 45%; padding: 2px;">$\hat{p}_1 = \frac{10}{32} = 0.3125$</td> <td rowspan="2" style="font-size: 3em; vertical-align: middle;">}</td> <td rowspan="2" style="vertical-align: middle;">See Table 2</td> </tr> <tr> <td style="padding: 2px;">$W_2 = \frac{49,958}{107,059} = 0.4666398$</td> <td></td> <td style="padding: 2px;">$\hat{p}_2 = \frac{3}{63} = 0.047619$</td> </tr> </table> $\hat{p}_{st} = W_1 \hat{p}_1 + W_2 \hat{p}_2$ $= (0.5334)(0.3125) + (0.4666)(0.0476)$ $= 0.1666875 + 0.0222101$ $= 0.1888976 \sim 0.1889 = 18.89\%, \text{ or approximately } 19\%.$ <p>A 95% confidence interval for p_1, which is the true inaccuracy rate of Part I crimes only, is given by</p> $0.1889 \pm 1.96 \sqrt{W_1^2 \left(\frac{\hat{p}_1 \hat{q}_1}{n_1 - 1} \right) + W_2^2 \left(\frac{\hat{p}_2 \hat{q}_2}{n_2 - 1} \right)}$ $= 0.1889 \pm 1.96 \sqrt{(0.5334)^2 \left[\frac{(0.3125)(0.6875)}{31} \right] + (0.4666)^2 \left[\frac{(0.0476)(0.9524)}{62} \right]}$ $= 0.1889 \pm 1.96 \sqrt{0.0021309931}$ $= 0.1889 \pm (1.96)(0.0462) = 0.1889 \pm 0.0906$ $= (0.0983, 0.2795) = (9.83\%, 27.95\%), \text{ or approximately } 10\% \text{ - } 28\%.$		<table style="margin: auto;"> <tr> <td style="text-align: center;">Unfounded</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Cases</td> <td></td> <td></td> <td></td> </tr> </table>	Unfounded				Cases							All Part I except larceny-thefts	58,077	-	976	=	57,101	}	From Table 7	Larceny-thefts	50,024	-	66	=	49,958	Total Part I Crimes	108,101	-	1,042	=	107,059			$W_1 = \frac{57,101}{107,059} = 0.5333601$		$\hat{p}_1 = \frac{10}{32} = 0.3125$	}	See Table 2	$W_2 = \frac{49,958}{107,059} = 0.4666398$		$\hat{p}_2 = \frac{3}{63} = 0.047619$
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Table 9: Calculations of Various Report Cited Estimates (continued)

	<p>100.00% Total Part I crimes that should be recorded in data files <u>-18.89%</u> Estimated weighted rate of unrecorded Part I crimes (see above) <u>81.11%</u> Estimated weighted percent of recorded Part I crimes</p> <p>Total Part I crimes recorded in Police files $\frac{107,059}{81.11\%} = 131,992$ Estimated weighted percent of recorded Part I crimes 81.11%</p> <p><u>Computation of lower and upper limit estimates:</u></p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%; text-align: center;"><u>Lower Estimate</u></th> <th style="width: 15%; text-align: center;"><u>Upper Estimate</u></th> </tr> </thead> <tbody> <tr> <td>Estimate of Part I crimes that should have been recorded based on review of written police reports</td> <td style="text-align: center;">131,992</td> <td style="text-align: center;">131,992</td> </tr> <tr> <td>Standard error percentages</td> <td style="text-align: center;">x <u>9.83%</u></td> <td style="text-align: center;">x <u>27.95%</u></td> </tr> <tr> <td>Interval limits</td> <td style="text-align: center;"><u>12,975</u></td> <td style="text-align: center;"><u>36,892</u></td> </tr> </tbody> </table> <p>Or approximately 13,000-37,000 crimes.</p>		<u>Lower Estimate</u>	<u>Upper Estimate</u>	Estimate of Part I crimes that should have been recorded based on review of written police reports	131,992	131,992	Standard error percentages	x <u>9.83%</u>	x <u>27.95%</u>	Interval limits	<u>12,975</u>	<u>36,892</u>
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<p>Estimated percent of unreported crimes including noted discrepancies = 36 percent</p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">$W_1 = \frac{57,101}{107,059} = 0.5333601$</td> <td style="width: 20%;">$\hat{p}_1 = \frac{19}{41} = 0.4634$</td> <td rowspan="2" style="width: 10%; text-align: center; vertical-align: middle;">} Table 4</td> </tr> <tr> <td>$W_2 = \frac{49,958}{107,059} = 0.4666398$</td> <td>$\hat{p}_2 = \frac{19}{79} = 0.2405$</td> </tr> <tr> <td colspan="3"> $\hat{p}_{stl} = W_1 \hat{p}_1 + W_2 \hat{p}_2$ $= (0.5334)(0.4634) + (0.4666)(0.2405)$ $= 0.2471777 + 0.1122173$ $= 0.359395 \sim 0.3594 = 35.94\%, \text{ or approximately } 36\%.$ </td> </tr> </table>	$W_1 = \frac{57,101}{107,059} = 0.5333601$	$\hat{p}_1 = \frac{19}{41} = 0.4634$	} Table 4	$W_2 = \frac{49,958}{107,059} = 0.4666398$	$\hat{p}_2 = \frac{19}{79} = 0.2405$	$\hat{p}_{stl} = W_1 \hat{p}_1 + W_2 \hat{p}_2$ $= (0.5334)(0.4634) + (0.4666)(0.2405)$ $= 0.2471777 + 0.1122173$ $= 0.359395 \sim 0.3594 = 35.94\%, \text{ or approximately } 36\%.$						
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Table 9: Calculations of Various Report Cited Estimates (continued)

	<p>A 95% confidence interval for p_{UI}, which is the true inaccuracy rate for potentially unreported Part I crimes only, is given by</p> $0.3594 \pm 1.96 \sqrt{W_1^2 \left(\frac{\hat{p}_1 \hat{q}_1}{n_1 - 1} \right) + W_2^2 \left(\frac{\hat{p}_2 \hat{q}_2}{n_2 - 1} \right)}$ $= 0.3594 \pm 1.96 \sqrt{(0.5334)^2 \left[\frac{(0.4634)(0.5366)}{40} \right] + (0.4666)^2 \left[\frac{(0.2405)(0.7595)}{78} \right]}$ $= 0.3594 \pm 1.96 \sqrt{0.002278538}$ $= 0.3594 \pm (1.96)(0.0477) = 0.3594 \pm 0.0935$ $= (0.2659, 0.4529) = (26.59\%, 45.29\%).$																			
	<p>100.00% Total Part I crimes that potentially should be recorded in data files <u>-35.94%</u> Estimated weighted rate of potential unrecorded Part I crimes (see above) <u>64.06%</u> Estimated weighted percent of recorded Part I crimes</p>																			
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<p>Interval estimate of possible additional underreported Part I crimes due to asserted discrepancies = 31,000-39,000</p>	<p><u>Computation of lower and upper interval estimates:</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%; text-align: center;"><u>Lower Estimate</u></th> <th style="width: 15%; text-align: center;"><u>Upper Estimate</u></th> </tr> </thead> <tbody> <tr> <td>Estimate of potential Part I crimes that should have been recorded</td> <td style="text-align: center;">167,123</td> <td style="text-align: center;">167,123</td> </tr> <tr> <td>Standard error percentages (<i>from above</i>)</td> <td style="text-align: center;"><u>x 26.59%</u></td> <td style="text-align: center;"><u>x 45.29%</u></td> </tr> <tr> <td>Potential interval limits for Part I crimes that should have been recorded based on review of written police reports and discrepancies noted as part of telephonic interviews with complainants and witnesses</td> <td style="text-align: center;">44,438</td> <td style="text-align: center;">75,690</td> </tr> <tr> <td>Interval limits for Part I crimes that should have been recorded based only on review of written police reports (<i>from page 41</i>)</td> <td style="text-align: center;"><u>(12,975)</u></td> <td style="text-align: center;"><u>(36,892)</u></td> </tr> <tr> <td>Difference in interval limits due to noted discrepancies</td> <td style="text-align: center;"><u>31,463</u></td> <td style="text-align: center;"><u>38,798</u></td> </tr> </tbody> </table> <p style="text-align: center;">Or approximately 31,000-39,000 additional crimes</p>			<u>Lower Estimate</u>	<u>Upper Estimate</u>	Estimate of potential Part I crimes that should have been recorded	167,123	167,123	Standard error percentages (<i>from above</i>)	<u>x 26.59%</u>	<u>x 45.29%</u>	Potential interval limits for Part I crimes that should have been recorded based on review of written police reports and discrepancies noted as part of telephonic interviews with complainants and witnesses	44,438	75,690	Interval limits for Part I crimes that should have been recorded based only on review of written police reports (<i>from page 41</i>)	<u>(12,975)</u>	<u>(36,892)</u>	Difference in interval limits due to noted discrepancies	<u>31,463</u>	<u>38,798</u>
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POLICE CASES WITH INACCURACIES

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
1	2-1	Larceny-theft	Burglary	Ex-boyfriend entered the complainant's residence and took her belongings. Since he did not have permission to enter or have "legal access," burglary is the proper classification.	—	—
2	2-2	Larceny-theft	Robbery	Offender knocked the complainant to the ground and took her purse. If the offender had simply snatched the purse from her grasp, larceny-theft would be appropriate. However, since more force was used than necessary to just snatch the purse, the crime should be a strong-arm robbery.	—	—
3	3-1	Simple assault	Aggravated assault	Offender head-butted the complainant and threatened her with a knife and a baseball bat. The presence of the weapons in the commission of the offense makes the crime an aggravated assault.	1	—
4	3-2	Simple assault	Aggravated assault	A group of five females assaulted complainant with beer bottles. The bottles qualified as weapons; thus aggravated assault is the appropriate classification.	1	—
5	3-3	Simple assault	Aggravated assault	Offender threw a bottle through the back window of complainant's pick-up truck, injuring people inside of the truck. The bottle qualified as a weapon and the proper classification is aggravated assault.	1	—
6	3-4	One simple assault	Three simple assaults	Police scored as one simple assault. Three females involved in the scuffle – the complainant, the complainant's sister, and another female. Since the aggressors and victims can not be determined, count the number of persons assaulted as the number of offenses.	—	—
7	3-5	One simple assault	Two simple assaults	Police scored as one simple assault. Husband and wife involved in a confrontation with no clear aggressor and victim. Count number of persons assaulted as the number of offenses.	—	—
8	3-6	One simple assault	Two simple assaults	Police scored as one simple assault. Offender struck the complainant and the complainant's child. There are two victims so score as two simple assaults.	—	—
9	3-7	One simple assault	Two simple assaults	Police scored as one simple assault. Two females were fighting and no aggressor or victim could be determined. Count the number of persons assaulted as the number of offenses.	—	—
10	3-8	One simple assault	Two simple assaults	Police scored as one simple assault. Complainant and husband involved in a shoving match. Since aggressor and victim can not be determined, score one offense for each assault.	—	—

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Effect on Part I Crimes	
		Per Police Department	Per FBI		Increase	Decrease
11	3-9	Two simple assaults	One aggravated assault and three-simple assaults	When the defendant broke free of restraints at the hospital, a struggle ensued between the defendant and the police officers. One officer broke her right hand, which is an injury requiring classification as an aggravated assault. Police scored as two simple assaults. The aggravated assault involved the officer who broke her hand in the struggle. The other three victims were the two other police officers and the nurse that were involved in the confrontation.	1	
12	3-10	One simple assault	Two aggravated assaults & two simple assaults	Female arrested for running at police and threatening them with a knife. The presence of the knife requires classification as an aggravated assault. Police scored as one simple assault. The two aggravated assaults resulted from the offender threatening the two police officers with a knife. The police responded to a fight between the offender and her stepfather. Thus, the two simple assaults.	2	—
13	3-11	Simple assault-unfounded	One simple assault	Police unfounded a simple assault. There is no evidence in the officers' narratives to support that the incident did not occur. Simple assaults understated by one.	—	—
14	3-12	Two-simple assaults	One-simple assault	Police incorrectly scored the same incident twice. Thus simple assaults overstated by one	—	—
15	4-1	Vandalism/criminal mischief	Larceny-theft	Complainant parked his car and noticed on the following day that his driver side mirror was missing. Nothing in the report indicates that vandalism occurred, and thus it should be categorized as a theft of motor vehicle parts and accessories.	1	—
16	4-2	Vandalism/criminal mischief	Aggravated assault	Offender broke into an arcade game, stole money from the machine, and then was detained by the store manager until the police arrived. The offender attempted to stab the store manager with a pen while being held. The pen should be considered a weapon for UCR purposes. The most serious crime should be recorded, which is the attempted aggravated assault	1	—
17	6-1	Routine investigation of persons	Disturbance, disorder, minor outside	Male was stopped for causing a disturbance on the highway. The incident report was properly coded as a minor disturbance (outside); however, the code in the INCT is an investigation of persons.	—	—
18	7-1	Hospital cases	Burglar alarm (defective)	Incident report is properly coded as a defective burglar alarm; however, the INCT indicates a hospital case.	—	—

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Effect on Part I Crimes	
		Per Police Department	Per FBI		Increase	Decrease
19	9-1	Lost and found property	Larceny- theft	Report indicated that unknown person stole his license plate. No evidence was in report to indicate that the plate was lost; therefore, proper classification is larceny-theft.	1	—
20	9-2	Lost and found property	Truancy	Incident report is properly coded as truancy; however, the INCT indicates lost and found property.	—	—
21	9-3	Lost and found property	Hospital cases	Investigative report coded the incident as a hospital case; however, the INCT indicated lost and found property.	—	—
22	10-1	Disturbance, disorder, minor inside	Disturbance, disorder, minor outside	Incident report is coded as a disturbance (outside); however, the INCT indicates a disturbance (inside).	—	—
23	10-2	Disturbance, disorder, minor inside	Disturbance, disorder, minor outside	Incident report is coded as a disturbance (outside); however, the INCT indicates a disturbance (inside).	—	—
24	12-1	Informational request	Auto theft	Unknown person took the complainant's vehicle. While the report mentions that the vehicle will be reported stolen later, there is no referenced DC number. Since the vehicle was stolen, it must be classified as motor vehicle theft.	1	—
25	13-1	Harassment	Simple assault	Former employee made threatening phone calls to the complainant. Intimidation, hazing, and similar offenses should be recorded as simple assaults.	—	—
26	13-2	Harassment	Simple assault	Offender constantly called and threatened complainant. Intimidation, hazing, and similar offenses should be recorded as simple assaults.	—	—
27	14-1	Contempt of court (Also unclassified)	Aggravated assault	Offender tried to strike complainant with an automobile. The vehicle qualified as a weapon and the proper classification is aggravated assault (other dangerous weapon).	1	—
28	14-2	Unclassified	One robbery	The Police tracking file included a robbery, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	1	—
29	14-3	Unclassified	One-larceny-theft	The Police tracking file included a theft, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	1	—

Case Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
30	14-4	Unclassified	One simple assault	The Police tracking file included a simple assault, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	—	—
31	14-5	Unclassified	One simple assault	The Police tracking file included a simple assault, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	—	—
32	14-6	Unclassified	One simple assault	The Police tracking file included a simple assault, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	—	—
33	14-7	Unclassified	One vandalism/ criminal mischief	The Police tracking file included a vandalism, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	—	—
34	14-8	Unclassified	One-vandalism/ criminal mischief	The Police tracking file included a vandalism, which did not appear in their reporting file. Review of paperwork indicates that the crime occurred and should have been reported.	—	—
Total increase (decrease) in Part I crimes					13	—

POLICE CASES WITH DISCREPANCIES

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Potential Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
1	3-13	Simple assault	Aggravated assault	Report indicated that female tripped complainant and that complainant received small cut on back of head. Complainant's mother alleged that her son needed four stitches due to the altercation and that the police were aware of the injuries (present at hospital). Aggravated assault is the proper classification due to the nature of the injury.	1	—
2	3-14	One-simple assault	Two-aggravated assaults	Report indicated that physical altercation between complainant and offender. Complainant's mother alleged that she informed the police that offender pulled out a knife and threatened her and her child. No mention of the knife or the wife as a second victim contained in the report. The proper classification would be aggravated assault due to the weapon. Police scored as one simple assault. Report does not mention second victim. Proper scoring is two aggravated assaults.	2	—
3	4-3	Vandalism/criminal mischief	Larceny-theft	Report described a vandalism of the complainant's car. The complainant alleged that she told police that a CD player was taken from the trunk of the car. The more serious crime, larceny-theft, should have been recorded.	1	—
4	4-4	Vandalism/Criminal mischief	Burglary	Report indicated that unknown vandal damaged the door to a business. The complainant alleged that the door was damaged near the lock, as if someone were trying to enter. He stated he told the police his belief. The classification of burglary, which includes attempts, should be used.	1	—
5	4-5	Vandalism/criminal mischief	Larceny-theft	Report indicated that front passenger window was broken and that nothing was taken. Complainant alleged that a bag with a recruitment binder in it was taken from the vehicle. The larceny-theft classification should be used. Incident is a theft from motor vehicle.	1	—
6	4-6	Vandalism/criminal mischief	Larceny theft	Report described vandalism to a car, which included a broken window. Complainant alleged that a portable CD player was taken from the car and that he told the police about the theft. The proper classification is larceny-theft.	1	—
7	4-7	Vandalism/criminal mischief	Larceny theft	Report indicated that car was vandalized. Complainant alleged that a screwdriver was used unsuccessfully on the driver's side door lock. He further stated that a car window was broken and the radio and airbag were stolen. He also noted that the police were aware of these facts and that the dashboard was clearly damaged from the thefts. This incident should be classified a larceny-theft.	1	—

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Potential Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
8	4-8	Vandalism/ criminal mischief	Larceny theft	Report indicated that rear window of the car was broken, but that no items were taken. Complainant alleged that the glove compartment was gone through, cassette tapes were stolen, and it appeared as if the offender tried to take the car speakers. Since the tapes were stolen, larceny-theft is the proper classification.	1	—
9	4-9	Vandalism/ criminal mischief	Burglary	Report indicated that the front window to the store was broken and that nothing was taken from the store. Complainant alleged that he informed police that an unknown amount of cigarettes were taken. Due to the unlawful entry and commission of theft, the incident should be classified as a burglary.	1	—
10	8-1	Fires reported to police	Larceny- theft	Report indicated that a car had caught on fire and was a burned-out shell. Complainant agreed, but also alleges that the license plate was stolen from the vehicle. The theft of the license plate makes incident a larceny-theft.	1	—
11	9-4	Lost and found property	Larceny theft	Report described lost property including cash and credit cards. Complainant alleged she informed police that her wallet was removed from her pocketbook while she was at a café, credit cards and cash were stolen, and the wallet was placed back in the pocketbook. Since the complainant was convinced that theft occurred, the incident should be classified as a larceny- theft.	1	—
12	9-5	Lost and found property	Larceny theft	Report indicated that a black bag containing keys, glasses, and identification was lost in area. Complainant alleged that a man riding by on bike snatched her purse. The proper category is larceny-theft. It is not a robbery because the offender simply grabbed the purse.	1	—
13	9-6	Lost and found property	Burglary	Report indicated that the complainant's MAC card was missing and was last seen inside her residence. Complainant is legally blind and alleged that she heard someone entered her home, whom she thought was her daughter. When she came downstairs, she found the house was ransacked and her MAC card was stolen. She kept her pin number with her card, and the bank informed her that money had been withdrawn from her account. Since someone entered her home (whether or not the door was locked) and committed a theft, burglary is the appropriate classification.	1	—

POLICE CASES WITH DISCREPANCIES

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Potential Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
14	9-7	Lost and found property	Larceny-theft	Report indicated that a cellular phone was lost. Complainant alleged that phone was stolen from his car. However, the complainant also noted that there were no signs of forced entry into the car. The complainant believed the item to be stolen, therefore the incident should be reported as a theft. If police work determined the claim to be baseless, then the incident should have been unfounded.	1	—
15	9-8	Lost and found property	Larceny theft	Report indicated husband noticed license plate missing off wife's car. Complainant alleged the tag was in the back window and that someone broke into the car to get the tag. Incident should be classified as a theft.	1	—
16	9-9	Lost and found property	Larceny theft	Report indicated that complainant discovered his license plate and sticker missing from his car. Complainant stated that the corner with the sticker was cut from the license plate. Since plate was cut, the incident should be classified as a theft.	1	—
17	9-10	Lost and found property	Larceny theft	Report indicated that \$150 was missing from complainant's handbag. Complainant alleged that while at a beauty salon, she went to the restroom. When she went to pay, she noticed that the money was gone. The complainant claims that a witness saw someone go into her handbag. A witness observing someone going into her bag is evidence that a theft occurred. Classification should be theft.	1	—
18	9-11	Lost and found property	Larceny theft	Report indicated that wallet, credit card, driver's license, insurance, and registration cards were missing. Complainant alleged that while in a supermarket, an unknown man helped her reach an item. She also felt a "bump" but thought it was her cart. When she went to checkout, she noticed the wallet was gone. Once home, she called the credit card company and was informed that hundreds of dollars of charges had been made. The use of the card in conjunction with the above events is evidence of a theft.	1	—
19	9-12	Lost and found property	Larceny-theft	Report indicated that while at a restaurant, the complainant noticed a credit card and \$50 missing from her pocketbook. Complainant alleged that a witness saw the offender take the items. Further, the complainant alleged that the officer did not want to take a report on the incident. Classification should be theft, since there was a witness.	1	—

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Potential Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
20	9-13	Lost and found property	Burglary	Report indicated only that complainant found her purse missing. Complainant alleged that a man who had done work at her house fixing things had a set of keys to her home. When she returned from synagogue, she noticed numerous items missing including money, jewelry, cassette recorder, phone, and answering machine. Additional items were taken from her car. Incident should have been classified as a burglary since there was unlawful entry with intent to commit a theft.	1	—
21	9-14	Lost and found property	Larceny-theft	Report indicated that a cell phone was missing and that no signs of forced entry were evident. Complainant is paralyzed and alleged that he told the police that his friend took the cell phone while his back was turned. Complainant believed that a theft occurred, so unless unfounded, it should have been reported as a theft.	1	—
22	9-15	Lost and found property	Larceny theft	Report indicated that a cell phone is missing from the complainant's home. Complainant alleged that the cell phone and clothing were reported stolen out of the trunk of his car. Complainant believed the items were stolen, the correct classification is theft.	1	—
23	10-3	Disturbance, disorder, minor inside	Simple assaults	Report described a domestic situation between husband and wife. Complainant alleged that her husband during the confrontation hit her. Complainant further claimed that she had previous injuries, which were made worse. The husband striking the wife should be classified as simple assault.	—	—
24	10-4	Disturbance, disorder, minor inside	Cruelty to animals	Report indicated that complainant sought assistance in getting in touch with a doctor at an animal hospital. Upon arrival, complainant's dog was lying on the floor, deceased. Complainant removed pet and was advised by the police. Complainant alleged her husband saw the doctor drag the dog up the steps by its neck. The doctor said, "Here's your dog". According to the complainant, the dog's body was still warm and the doctor spent an unusual amount of time downstairs. Considering that the police advised the complainant, cruelty to animals appears to be a more appropriate classification.	—	—
25	10-5	Disturbances, disorder, minor inside	Simple assault	Report indicated that complainant was involved in a dispute with her son and granddaughter, over her granddaughter's boyfriend. Complainant stated that her son struck her granddaughter in the eye. The physical altercation should be classified as a simple assault.	—	—

POLICE CASES WITH DISCREPANCIES

Item Number	Classification Group Case	UCR Classification		Basis for FBI's Conclusion	Potential Effect on Part I Crime	
		Per Police Department	Per FBI		Increase	Decrease
26	10-6	Disturbances, disorder, minor inside	Aggravated assault	Report indicated that there was an on going dispute between complainant and offender. Complainant alleged that offender took her cane and began beating her with it. The cane would qualify as a weapon and the incident should be classified as an aggravated assault.	1	—
27	11-1	Disturbance, disorder, minor outside	Simple assault	Report indicated that a male comes to complainant's house and gets others to fight her. Complainant's mother alleged that the offender and other females followed her daughter in a car. When she came to a red traffic light, the females jumped out of the car and attacked her daughter. Simple assault is the appropriate classification, since the daughter was physically attacked.	—	—
28	11-2	Disturbance, disorder, minor outside	Aggravated assault	Report indicated the occurrence of a minor altercation over work arrangements. Complainant alleged that he and the offender worked for the same store. The complainant was a security guard, and he asked the offender to open his bags before leaving the store. After a verbal altercation with the offender, the complainant was waiting on the bus stop with a friend. The offender allegedly approached them and then physically attacked the complainant. The complainant further alleged that the offender pulled out a gun and began striking the complainant with the butt of the weapon. The presence of the weapon would require the aggravated assault classification.	1	—
29	12-2	Informational requests	Failing to stop after accident	Report indicated that complainant's bike brushed a parked vehicle and no parties needed assistance. Complainant and complainant's mother alleged that while riding his bike complainant was hit by a car, which left the scene. Two young witnesses verified the account to police and provided the striking vehicle's tag number. According to complainants, police took no further action. Failing to stop after accident classification is more appropriate than informational request.	—	—
Total potential increase (decrease) in Part I crime because of discrepancies					25	—
Total increase (decrease) in Part I crime because of inaccuracies (from Appendix III)					13	—
Total potential increase (decrease) in Part I crime					38	—