COMMUNITY ORIENTED POLICING SERVICES
U.S. DEPARTMENT OF JUSTICE

COPS MORE: Redeployment by Arrest

Introduction

Two years ago, arrest processing in the Gotham City Police Department meant transporting a prisoner to a central location in downtown Gotham, manually fingerprinting and capturing arrest data, taking the arrestee's photograph, and then transporting the prisoner to court for arraignment. The backup of prisoners caused delays and officers have, on occasion, spent as much as 10 hours processing an arrest! The arrest processing procedures consisted of manually fingerprinting and photographing a suspect, entering the suspect's information into the department's centralized booking system, and then transporting the prisoner to the District Attorney to complete the booking process. On average, Gotham police officers spent 8 hours per arrest completing the procedures required to process an arrested suspect.

The Gotham City Police Department applied for a MORE grant to purchase an arrest processing system, including video conferencing, Live Scan fingerprinting, photo imaging, warrant checks, and automated arrest data processing.

Required Redeployment

Line 1 - Entry Level salary of SWORN police officer	1.	$30,000
Line 2 - Fringe benefits of SWORN police officer	2.	$ 8,500
Line 3 - Add lines 1 and 2	3.	$38,500
Line 4 - Multiply line 3 by .75	4.	$28,875
Line 5 - Enter figure on line 4 or $25,000, whichever is less	5.	$25,000
Line 6 - Total cost of item, system or group of like items	6.	$10,000,000
Line 7 - Federal amount requested Can be no more than 75% of total item cost (line 6)	7.	$7,500,000
Line 8 - Divide line 7 by line 5	8.	**300 FTEs**

Actual Redeployment

The formula used to calculate the estimated or actual redeployment for this grant would be:

Time savings per arrest

Travel time to central booking	1.5 hours
Report writing and mug shots	.5 hours
Pro-rated travel time to fax & re-fingerprint rejected prints	.5 hours
Travel time for affidavit issuance	1.5 hours
Total Time Savings	**4.0 hours**

136,800 arrests per year (September 1998-September 1999)
136,800 x 4 hrs. saved = 547,200 hrs. saved
547,200 hrs. saved / 1824 hrs. = **300 FTEs redeployed**

With the help of a COPS MORE grant, the Gotham City Police Department has now completely decentralized its arrest processing system. The GCPD's arrest processing system is now composed of five major automated components, including Live Scan fingerprinting, photo imaging, warrant checks, automated arrest data processing, and video conferencing. The Live Scan units, photo imaging, video conferencing equipment, and the upgraded on-line

booking system were purchased in 1997 and were completely operational in September 1998. Operationally, Live Scan has eliminated the need to manually ink and record an arrestee's fingerprints. It generates computerized files of an individual's prints by guiding the user through the process and rejecting poor quality prints as they are generated, eliminating "bad prints" and the need to for reprinting suspects. The prints are then transmitted to the Department of Criminal Justice Services at the state capital for further analysis, and to central records for storage. The photo imaging and warrant system takes, stores, and retrieves images for each of the city's five prisoner holding facilities. All precincts throughout the city have the ability to display and print the photos. Video conferencing is used in each of the precincts, eliminating the need to travel to the District Attorney's office to complete the arrest affidavit.

Redeployment Summary

With the installation of the automated components that comprise the department's decentralized booking function, it now takes approximately 4 hours to process an arrest.

Before the decentralization afforded by the MORE technology, officers had to transport arrestees to a centralized booking facility for arrest processing. After the implementation of the technology, officers no longer spend an inordinate amount of time travelling (sometimes in city or rush hour traffic) to and from the precinct to the centralized booking facility. Based on calculated averages of a sample of officers across all the affected precincts, **1½ hours per arrest** are saved through the elimination of travel time to the central booking facility.

Prior to the implementation of the on-line booking system, officers were required to complete multiple written reports that often captured duplicative information. Additionally, the processing time for mug shot photographs added time to the booking process. With the implementation of an on-line booking system and digital mug shot processing, the time to process an arrest has been reduced by **30 minutes per arrest** by eliminating duplicative paperwork and reducing the time spent taking and developing photographs.

Prior to Live Scan, three fingerprint cards were inked and then faxed to the state capital. Some precincts did not have a fax machine that would provide the level of graphic detail required to transmit the prints, also resulting in travel time that is no longer needed. If prints sent to the state capital were rejected, the arresting officer was required to reprint the arrestee and go through this process again. If an arrestee had been moved to a different holding facility, time was spent tracking the arrestee down. Based on the proportion of prints that required travel to an upgraded fax machine (approximately 1/5 of all arrestee prints), and the proportion of prints that required reprinting due to rejection at the state capital (approximately ¼ of all arrestee prints), an average of **30 minutes per arrest** are saved through this automated booking technology.

The last step in the booking process involved transporting arrestees to the District Attorney's Office for issuing arrest affidavits. The video conferencing equipment installed as part of the upgraded arrest processing function has virtually eliminated all travel between the precinct and DA's office for issuing arrest affidavits as all arrestee questioning is now conducted in the local precinct via video teleconferencing. The video teleconferencing component of the arrest processing system has yielded an average officer time savings of **1½ hour per arrest**.

With the implementation of Live Scan, along with the other components of the system, an offender is printed and photographed automatically, data is entered directly into the booking system from the precinct (paperless reporting), and the arrest affidavit is completed via video-teleconferencing. Redeployment occurs by eliminating the need to perform routine multiple prints, waiting time for receiving confirmation from the state capital, in reprinting rejected prints, taking manual photographs, and most importantly, by reducing travel time to and from the precinct to the central booking facility and the District Attorney's Office. In sum, the new technology has permitted the Gotham City Police Department to save police officer arrest processing time citywide.

Calculation

Redeployment Requirement = 300 FTEs, based on an awarded amount of $7,500,000 ($7,500,000/$25,000 maximum allowable per FTE = 300 FTE)

Time savings per arrest	
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300 FTEs redeployed into community policing since the equipment became fully operational in September 1998

Unanticipated Time Savings

Because both mug shots and fingerprints are now stored electronically in a centralized citywide database, detectives who formally used to scour through paper files for hours on end can now search the fingerprint and mug shot archives during the investigative process. Based on a survey conducted of the detectives in the detective bureau, detectives are now saving an average of 1 hour per search. **Time savings of 1 hour per search**

1 hour per either fingerprint or mug shot search x 300,000 searches per year citywide (September 1998-September 1999) = 300,000 hrs. saved 300,000 hrs. saved / 1824 hrs. = **164.5 FTEs of unanticipated time savings for detectives**

TOTAL FTEs Redeployed: 300 + 164.5 = 464.5

Redeployment Tracking

The Gotham City Police Department must now come up with a plan to track redeployment once their system becomes operational. Using the guidelines provided in the Redeployment Tracking Q&A Fact Sheet provided by the COPS Office, the department prepares the following tracking plan.

"The Gotham City Police Department was awarded a grant to purchase and implement a new arrest processing system to significantly reduce the time spent by police officers processing arrestees. Prior to the implementation of the new system, the department documented the time spent by randomly sampling 25 officers (across the department) and tracking their time during each phase of the arrest process, which includes: the transport time, fingerprint processing time, time spent completing several required paper reports, and the time spent in the issuance of arrest affadavits by the prosecuting attorney (includes transport and holding time). This entire process averaged 8 hours across the 25 sampled arresting officers. With the installation of the multiple component arrest processing system, we estimated that this time would be reduced by 50 percent. In order to validate these estimates, we waited until all components of the arrest processing system were fully operational, which was approximately 18 months after receiving the grant award. We then ran the same time tests for each of the components of the arrest process on another sample of 25 arresting officers on a quarterly basis for one year after becoming fully operational with the arrest processing and booking system."

The quarterly time test employed by the Gotham City P.D. takes into consideration the potential improvements in efficiencies to be experienced by the members of the department. Simply put, as officers become familiarized with the automation and the new arrest processing system, the time saved could presumably increase. By sampling 25 officers each quarter, and tracking/documenting their activities during the arrest process, the Gotham City P.D. is in a good position to then come up with a reasonable average for the number of hours saved per arrest, which could then be applied to the total number of arrests per year.

The following is the formula used to determine the actual time savings department-wide (formula would need to be applied quarterly, at minimum, with each subsequent sample time test period):

Total hours of time saved per arrest =
+ Total of transportation time saved
+ Booking/mug-shots
+ Fingerprinting
+ Issuance of arrest affadavits

Total time saved x number of arrests for the quarter
= number of hours saved/COPS standard (1824 hrs)
= number of FTEs redeployed

In this case, assuming they met their projected levels, they would save 4 hours per arrest x 34,200 arrests in the quarter, resulting in 136,800 hours saved or 75 FTEs redeployed in the quarter. This process would need to be repeated until the full year is complete, which would then yield the total time savings/redeployment that would be reported to the COPS Office.