Operation Safe Storage  
Charlotte-Mecklenburg Police Department

Executive Summary:

Scanning:

- Charlotte-Mecklenburg experienced a 28% increase in commercial burglaries in 2005.
- Burglaries at mini warehouse storage facilities accounted for 7% of total commercial burglaries.
- Burglaries at mini warehouse storage facilities often involved multiple units.
- The Burglary Unit commander decided to use detailed analysis and a problem solving approach on these burglaries.

Analysis:

- Detectives on the project team did a detailed analysis of burglary reports from FY05.
- Detectives found no significant correlation between the presence of the mini warehouse storage facilities and crime in the surrounding neighborhoods and no patterns in what was stolen from the units.
- Detectives found there were a number of mini warehouse storage facilities that did not have problems; they decided to visit each of the 75 facilities in Charlotte-Mecklenburg to see if the difference could be attributed to any policies or security practices.
- One of the most effective security measures appeared to be the use of disc
locks on the individual storage units.

Response:

- CMPD initiated a test study using disc locks at three sites; one site already used the locks and had no problems; CMPD purchased the disc locks for the other two locations.
- Members of the project team also began developing a “Best Practices” guide to be distributed to owners and managers of mini warehouse facilities.
- Recommendations include background checks on renters; limiting access to the facilities; renter education, and use of the disc locks

Assessment:

- 58.3% reduction in the number of burglary incidents at the three test locations;
- 68.9% decrease in the number of individual units burglarized
Operation Safe Storage

Scanning:
In the summer of 2005, Charlotte-Mecklenburg Police Captain Andy Leonard was analyzing burglary reports to see if he could identify the causes for a dramatic increase in commercial burglaries in Charlotte and the unincorporated areas of Mecklenburg County. Capt. Leonard was particularly interested in identifying locations that had multiple burglaries or types of businesses that had a high incidence of offenses. One of the trends that caught his attention was burglaries at mini storage warehouse locations. A check of the department’s records management system revealed that there had been 99 case reports in the period from July 1, 2004 to June 30, 2005; 45 of those cases had occurred during calendar year 2005. A number of the case reports involved burglaries of multiple units at the same storage facility; the burglary of each individual unit counts as one burglary for UCR purposes. There was an average of 3.5 victims per case report which meant that there were over 330 incidents reported to UCR in FY05. One case report indicated that over 60 units had been broken into during one incident.

Capt. Leonard believed that the most effective way to address the burglary problem was to take the “how to eat an elephant” approach and address one segment of the problem at a time. To that end, he decided to undertake a more detailed analysis of the mini storage warehouse burglaries to see if there were particular problem locations, patterns in what was stolen, or other information that could be useful in formulating a plan to reduce the incidence of this type of burglary. The year end crime statistics for 2005 validated the need to target storage unit burglaries. In calendar year 2005, there were 4,589 reported
commercial burglaries, a 28.2% increase over the 3,580 reported incidents in 2004. Mini storage warehouse burglaries potentially represented 7% of the total commercial burglaries so any reduction of these incidents would positively impact the city’s overall crime rate.

Capt. Leonard formed a team to conduct the analysis; the team leader was Jim Wilson, a sergeant in the Burglary Unit, who would be joined by Detectives Eric Rost and Dan Cunius who have extensive experience in data analysis as a part of the problem solving process.

Analysis:

Detectives Cunius and Rost began their analysis by reviewing all 99 of the offense reports related to mini warehouse burglaries in FY05. By reading each report, they determined that 71 of them actually involved burglaries of storage units at 28 different locations with a total of 291 units having been burglarized. They found two incidents with 65 and 34 units respectively which indicated that the burglars had spent a substantial amount of time on the properties in order to burglarize that significant a number of units. They found that the remaining 28 reports dealt with burglaries of the business offices at mini warehouse facilities or were reports that had been misclassified.
During the last 6 months of 2005, there were an additional 39 reports from 21 locations with a total of 247 storage units burglarized. Four of these incidents involved large numbers of units (36, 26, 26 and 20) broken into at one time.

The detectives searched for similar projects that had targeted storage unit burglaries, either at the local or national level. They found one small project at one location in Charlotte that had used the principles of CPTED (Crime Prevention through Environmental Design) and one project in San Diego that had targeted a warehouse used by military personnel who had to store furniture when going to sea on extended tours of duty. They were unable to locate a project that addressed mini storage warehouses on a more global scale.

Cunius and Rost used the Internet and the Yellow Pages to determine the number of mini warehouse facilities located in the Charlotte-Mecklenburg Police Department’s jurisdiction. The search indicated that there are 75 such facilities with 58 within Charlotte’s city limits and another 17 in the unincorporated areas of the city. They mapped all of the locations and overlaid them against the crime “hotspots” in the city. The goal was to evaluate the mini storage locations that were having problems to determine whether there was any correlation between problems at the storage facilities and crime in the surrounding areas, especially given the commonly held perception that the presence of a mini storage facility in a particular area can be a catalyst for criminal activity. No direct correlations could be found; however, in several locations, the mini storage warehouse locations showed up as a crime “hotspot” for the area.
Detectives assigned to this project also analyzed all of the reports to see if there were any patterns in what was stolen from the burglarized storage units. They did not identify any patterns for a number of reasons. Some of the units that were broken into were empty. The burglaries were reported by the storage facilities which then had to notify individual renters that the storage units had been broken into and they should contact the police to complete the report regarding the contents of their units. In many cases victims never contacted CMPD and those that did often could not remember what was in their units. This resulted in highly unreliable estimates of the value of the stolen property. There also did not appear to be any significant trends in the types of goods that victims self reported as missing although a number of reports did reference electronics, tools, and lawn equipment.

While the analysis of the mini storage warehouse data raised a number of questions, it did clearly show that, while there were some locations that had significant problems, there were a good number of the mini warehouses that did not have problems with burglaries. The marked contrast led Cunius and Rost to wonder if there were security measures used by those locations not experiencing problems that made the difference in whether they were ultimately victimized. To that end, the detectives decided to visit each of the 75 mini warehouse facilities to review their security procedures and see if they could determine what made the difference in the victimization rates among these facilities.

Over the several months required to visit all 75 facilities and analyze the data, the officers developed a sense of a number of measures that could reduce the likelihood of
victimization. One security measure they discovered that appeared to have a significant impact on reducing breaking and entering at these facilities was the use of disc locks. The detectives identified one location that required their customers to use disc locks and, while there had been some crime on the property, there had been no successful breaking and entering of storage units secured with the disc locks. The officers were personally able to attest to the strength of the disc locks. One of the officers had been involved in executing a search warrant in a case that required them to disable a disc lock. It had taken 30 minutes to remove the lock so the officers felt that most burglars would not have the time or patience to break into units secured by a disc lock.

Response:

In the spring of 2006, the project team presented their findings to Chief Darrel Stephens. Chief Stephens was willing to test the officers’ hypothesis that disc locks could make a significant difference in victimization rates. Chief Stephens authorized Cunius and Rost to identify two problem locations that would be willing to test the use of the disc locks. He further agreed that CMPD would pay for the locks for the two initial locations.

The detectives decided to ask the managers at mini storage locations located at 1515 East Sugar Creek Road and 4500 Monroe Road to use the disc locks with their customers. They also decided to use the location on Bob Beatty Road, which already required the use of the locks, as a third test location. Two of the locations readily agreed to participate in the test but the manager of one of the two targeted problem locations was initially
reluctant to participate. She felt that burglars who were unable to remove the locks would damage the doors of the mini warehouses to enter them, ultimately costing the business money. The officers were able to talk with personnel at the corporate headquarters for this business and they agreed that that particular franchise would participate.

While the test was occurring, the project team also began compiling information on what they considered to be the best practices for security at mini storage facilities with the goal of compiling a “Best Practices Guide” to be distributed to every mini warehouse facility in CMPD’s jurisdiction. The information came from the 75 site visits, from a crime prevention program initiated by MiniCo, and discussions with the North Carolina Self Storage Association, a state wide trade association for mini warehouse businesses.

The guide is still in development but will include a number of prevention strategies to include:

- Conducting background checks on potential renters-officers have found storage units where renters were storing stolen property and attracting undesirable people to the facility, units where the renter was running a business from the unit, and one unit which a prostitute was using as a residence. The background checks would help managers better control the activity on their lots. In Charlotte-Mecklenburg, mangers of these facilities can conduct arrest checks for free on the Sheriff’s Office website.
- Requiring mangers on site at mini storage warehouse facilities during the hours
that renters have access to the property

- Limiting renters’ access to the facility to designated hours; managers of some facilities have indicated this could be problematic for some of their renters have indicated this could be problematic because they rent to businesses such as lawn care companies that need access to their equipment very early in the morning. This could be overcome by gated access to the facility with renters being given individualized trackable access codes. For indoor storage facilities, each renter could be limited to access for only the floor where his storage unit is located
- Using surveillance cameras at warehouse facilities
- Improve lighting at storage facilities
- Use of disc locks; tie renters insurance or waving of the insurance deductible to the use of a disc lock; require renters to obtain a disc lock from the business with the lock included in the price of the rent
- Give police officers access codes for the gates at storage facilities
- Educate renters to place valuable items in boxes and label them “kitchen” or “bathroom” and to inventory the items they place in the mini warehouses

Once the Best Practices Guide is completed, a robbery detective and an officer from the patrol division where the facility is located will visit each of the 75 mini warehouse storage facilities to encourage mangers to adopt as many of the best practices as feasible. The project team is considering developing “Operation Safe Storage” signage that would
be distributed to those facilities implementing the best practices so that patrons would
know the facility partners with police in crime prevention measures.

The detectives also built a partnership with the North Carolina Self Storage Association,
the trade association for mini storage facilities throughout the state. The Association has
indicated an interest in having CMPD do a booth at their annual convention to make their
best practices information available to storage facilities across the state.

**Assessment:**

The primary assessment of this project has been a comparison of the reported burglaries
at the three test locations during the one year period before the disc locks were installed
on the storage units as compared to the year following their installation. The project trial
began on July 1, 2006. The following table details the results:

<table>
<thead>
<tr>
<th>Location</th>
<th>July 1, 2005-June 30, 2006</th>
<th>July 1, 2006-June 30, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>1515 East Sugar Creek Rd.</td>
<td>9 incidents with 46 units</td>
<td>1 incident with 4 units</td>
</tr>
<tr>
<td>4500 Monroe Road</td>
<td>3 incidents with 73 units</td>
<td>4 incidents with 33 units</td>
</tr>
<tr>
<td>9400 Bob Beatty Road</td>
<td>No incidents</td>
<td>No incidents</td>
</tr>
</tbody>
</table>

There was a 58.3% reduction in the number of incidents at the test locations and a 68.9%
number of units broken into at the test locations. One of the incidents at the Monroe
Road location occurred on March 8, 2007 and involved entry into 26 separate storage
units. In this incident, none of the disc locks were defeated by the suspects who damaged
the actual doors to the units to gain entry.
While there was a significant decrease in the number of incidents and the number of individual units broken into at the three test locations, there was a 39.2% increase in burglaries at mini storage warehouses not using the locks and a 44.5% increase in the number of storage units burglarized. During the period from July 1, 2005 to June 29, 2006, there were 51 incidents involving burglaries of 274 units at non-test locations. From July 1, 2006 to June 30, 2007, there were 71 incidents involving burglaries of 396 units. The project team believes that the use of the disc locks was the primary factor influencing the decrease in burglaries at the test locations.

CMPD believes that efforts to increase the use of disc locks, distribution of the Best Practices Guide though personal visits to each storage facility, and more education of storage unit renters can decrease the incidence of mini storage warehouse units. The end result will be a reduction in the commercial burglary rate in Charlotte-Mecklenburg and reduced property loss for the citizens who use mini warehouse storage facilities.

**Agency and Officer Information**

- The project was implemented by CMPD’s Burglary Unit.
- All officers at the Charlotte-Mecklenburg Police Department have received training in problem oriented policing.
- No additional incentives are given to officers engaging in problem solving; problem solving is a critical component of the work of every officer.
● Officers use their past training in the SARA model in this project. They looked for other projects dealing with the problem but found very little that was applicable.

● No issues were identified with the problem solving model.

● Members of the project team were given time to work on the project but none of them were relieved of their regular duties. There were no resources beyond the department’s budget.

● Contact Person:

  Capt. Andy Leonard

  Charlotte-Mecklenburg Police Department-North Division

  10430 Harris Oaks Boulevard, Suite R

  Charlotte, North Carolina

  704-432-3806

  704-432-3804 (fax)

  gleonard@cmpd.org