Airport Crime: Chicago O'Hare post-9/11

Brian F. Kingshott, Grand Valley State University
Brian R. Johnson, Grand Valley State University

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Since 11th September 2001 there has been a raft of measures brought in to make airports and commercial airlines a more difficult target to reach. We have witnessed an increase in both the range of technologies and personnel deployed to ensure passenger safety. Although primarily designed to thwart terrorism, one of the secondary outcomes of these increased security measures has been the reduction of property-related offences, particularly larceny and motor vehicle theft, at U.S. airports. Brian R. Johnson and Brian F. Kingshott examine the changes in the number of reported property crimes at Chicago O’Hare, pre- and post-9/11.
of Air Marshals, improved airport perimeter access controls, and enhanced security measures throughout U.S. airports, including the background checks of all airport employees. The Act also limited ticket holders into airport terminals and required the inspection of all individuals and property before entry into secured areas of the airport. With the Homeland Security Act passed on 25th November 2002, the newly created TSA was placed within the Department of Homeland Security (DHS).

The Research Site
Chicago-O'Hare International is owned and operated by the City of Chicago, whose Airport System is responsible for both O'Hare and Midway Airports. They are one of 10 airports in the United States that are city-owned. O'Hare is classified by the Federal Aviation Administration (FAA) as a "Category X" airport. These airports (a total of 19 in the U.S.) are considered to be the largest, have a high volume of traffic, and are the most at-risk airports for terrorist attacks, and therefore have enhanced security programmes. In 2005, operating revenues at O'Hare exceeded US$92 million. Over 70 million individuals used O'Hare for travel, comprising 972,000 flight operations ("Chicago Airport", 2005). The airport complex can be considered a city unto itself. It covers approximately 7,700 acres and has more than 10,000 parking spaces. It also features many bars, hotels, restaurants and shops. Within this complex, the TSA oversees passenger security checkpoints, while the Chicago Police Department is responsible for the balance of the airport security.

Immediately following the 9/11 attacks, O'Hare underwent some extreme changes in their security operations. The National Guard, police and federal agents were used as a stopgap measure to improve security. Later, in May 2002, National Guard Troops were phased out of security-related duties and replaced by increased numbers of police personnel. In addition to their increased numbers, the Chicago Police have also become more 'high-profile' to the public. Examples of their increased visibility include using Segway Human Transporters to patrol the terminals and the establishment of public information kiosks in the terminals ("City of Chicago", 2007).

One of the greatest increases in security is the presence of TSA employees that began taking over screening operations in August 2002. In the post-9/11 O'Hare security setting, 1621 federal TSA screener/employees are now responsible for security and screening-related activities in the terminal ("Review of TSA", 2006).

O'Hare has also employed increased security-related technologies since 9/11. In 2004 alone, the airport received $59 million from the federal government to improve their baggage screening in two of its terminals (TSA Pledges, 2004; "TSA to step up", 2004). Additionally, part of the Airport's five-year Capital Improvement Plan includes improvements in the in-line Explosive Detection Systems (EDS) in some of its terminals. Other technologies that are omnipresent at O'Hare as mandated by the TSA since 9/11, include explosive detection systems (EDS) that use CT (Computer Tomography) and Explosives Trace Detection (ETD) equipment. More in-depth physical screening measures and Positive Passenger Bag Matches (PPBM) instituted in January 2002 have also increased the perception of increased guardianship at the airport.

Arguably, all of these increased security measures should have reduced the number of property crimes at O'Hare post-9/11. In order to examine this issue, data regarding property crimes at O'Hare were obtained from the City of Chicago Police Department. This Uniform Crime Report data provided information on the type and frequency of crimes reported to the police by month and year for the period, 1999 through 2005 at O'Hare. To control for any changes in passenger volume that could affect the amount of crime to some degree, passenger volume information was also obtained from the City of Chicago's Department of Aviation for the same time period.

In order to determine if the reduction of crime post 9/11 at O'Hare was not an artefact...at O'Hare, larceny has shown a 193% decrease, while motor vehicle theft has experienced a 203% decrease since 9/11..."

Table 1
Descriptive Statistics
O'Hare International Airport/City of Chicago

<table>
<thead>
<tr>
<th>Type of crime</th>
<th>Pre-9/11 yearly average</th>
<th>Post 9/11 yearly average</th>
<th>Pre/post-9/11 percentage change</th>
<th>Crime rate per 1 million pre-9/11</th>
<th>Crime rate per 1 million post-9/11</th>
<th>Crime rate change since 9/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larceny</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>O'Hare</td>
<td>809</td>
<td>419</td>
<td>-193.10%</td>
<td>11.441</td>
<td>5.822</td>
<td>-196.56%</td>
</tr>
<tr>
<td>Chicago</td>
<td>109098</td>
<td>92477</td>
<td>-17.97%</td>
<td>38066.603</td>
<td>31908.264</td>
<td>-19.30%</td>
</tr>
<tr>
<td>Vehicle Theft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O'Hare</td>
<td>75.742</td>
<td>37.25</td>
<td>-203.22%</td>
<td>1.071</td>
<td>.5172</td>
<td>-207.16%</td>
</tr>
<tr>
<td>Chicago</td>
<td>31653</td>
<td>23330</td>
<td>-35.68%</td>
<td>11044.403</td>
<td>8049.724</td>
<td>-37.20%</td>
</tr>
</tbody>
</table>

1 (x = 70698096 passengers per year pre-9/11)  
2 (x = 72047615 passengers per year post-9/11)  
3 (x = 2865977 city residents pre-9/11)  
4 (x = 2898215 city residents post-9/11)
of the decrease of overall crime in the City of Chicago, UCR data for the entire City of Chicago for the period 1999-2005 was also collected. Two time periods were established pre- and post-9/11. Pre-9/11 data included the period 1st January 1999 through 30th September 2001. The post-9/11 data, meanwhile, included the time period 1st January 2002 through to 31st January 2005.

Findings

Summary statistics including the average number of crimes per year, percent changes, crime rates, and crime rate changes are shown in Table 1. The review of the yearly averages for larceny and motor vehicle theft at O'Hare, pre- and post-9/11, show that both crimes have seen large reductions. Larceny, for example, has shown a 193% decrease, while motor vehicle theft has experienced a 203% decrease since 9/11.

When compared to the number of reported crimes in the entire City of Chicago, even though the city has also experienced decreases in these crimes, O'Hare has shown far more significant reductions in reported larcenies and auto theft. Table 1 also shows the crime rate (per million) pre- and post-9/11 for both O'Hare and the City of Chicago, based on the ratio of reported crimes to population averages. Crime rates per million, pre- and post-9/11 for both the city and airport, have decreased during the period of analysis. However, O'Hare experienced larger changes in the crime rate than the city.

Figure 1 shows that both the city and airport have experienced decreases in reported crimes for the crime of larceny since 9/11. Figure 1 also shows that the City itself had a higher number of reported larcenies pre- and post-9/11 than O'Hare. Figure 1 also shows the immediately after 9/11, reported larcenies at O'Hare experienced a sharp drop.
The larceny crime rate has also remained relatively stable and lower than its pre-9/11 numbers.

To gain further insight into the changes in crime pre- and post-9/11 at O'Hare, Figure 1 shows a graphic representation of the crime rate for larceny in the City of Chicago (per million residents) and O'Hare (per 100,000 passengers) for the period 1st January 1999 to 31st January 2005. Some of the trends that can be identified include:

1. the City of Chicago has a higher crime rate for larceny in both the pre- and post-9/11 periods;
2. larceny crime rates decreased at both the city and airport post-9/11;
3. the airport experienced a significant drop in larcenies post-9/11, relative to the city of Chicago; and
4. the larceny crime rate at O'Hare has remained stable and consistently lower than its pre-9/11 levels.

Discussion & Conclusion

The hypothesis for this study took the assumption that larceny and auto theft has decreased at O'Hare because of the increase in security measures since 9/11. When comparing the larceny and auto theft rates between the city and airport, the findings also show that there was a greater reduction in the frequency of these crimes at the airport, relative to the city, ceteris paribus, reinforcing the general conclusion that increased guardianship in the form of security-related activities has served to reduce property crime at O'Hare. This study also found that the increased presence of security had both an initial and residual effect in reducing crime. Larceny and auto theft immediately dropped after 9/11 and have remained below their pre-9/11 rates.

The findings from this study also support some of the existing research that provides insight on how increased security leads to reduction in crime. Verkuil (2006) argues that the presence of security personnel gives the public a reassuring feeling that the government is in charge, giving a greater degree of legitimacy to the role of security in the airport, and therefore serving as a physical and visual deterrent to crime.

Cook (1980) proposes that the presence of the criminal justice system has a "large civilizing influence" while Cloninger (1994) identifies that an increased police presence can reduce criminal activities including specific crimes such as subway robberies in New York City (Chaiken, Lawless & Stevenson, 1974). This research also supports earlier studies involving changes in property crime after a terrorist attack.

Trivizas & Smith's (1997) study of luggage theft in railway and subway stations in London also found that there was a sharp but not long lasting decline in luggage thefts after a terrorist incident. DiTelia & Schargrodsky's (2004) research supported these findings, concluding that an observable police presence (high profile policing activities), following a terrorist attack served to reduce property crime in those areas adjacent to where the police were deployed.

As with all exploratory research, the findings should be interpreted with some caution. First, it cannot be discounted that the increased diligence on the part of travellers at O'Hare has led to the drop in reported crime, exclusive of the increase in security. Changes in the crime rate at O'Hare could also be an artefact of other intervening variables including the failure of travellers since 9/11 to report crimes to the police, or simply the fact that since 9/11 crime has dropped off at O'Hare for no reasons related to increased security at all. On their face, however, these findings imply that the increased presence of security, exclusive of the fact that there are even more flyers travelling though O'Hare 9/11, has had a positive effect of reducing the number of larcenies and auto theft. Therefore, these findings suggest that instead of simply existing because of the increase in security, the government is in charge, giving a greater degree of legitimacy to the role of security in the airport...