



A R I Z O N A S T A T E U N I V E R S I T Y

2011 Multi-City Report on Crime and Disorder in Convenience Stores

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Executive Summary

As part of the Bureau of Justice Assistance's *Smart Policing Initiative*, the Glendale Police Department and the Center for Violence Prevention and Community Safety (CVPCS) at Arizona State University (ASU) found that convenience stores -- particularly Circle K's -- disproportionately contributed to crime and disorder in the city of Glendale. CVPCS staff reached out to other law enforcement agencies in the Phoenix metropolitan area, and in June 2011, they authored a report based on 2010 data from four cities: Glendale, Mesa, Phoenix and Tempe. The 2010 report revealed that, when compared to other convenience stores Circle K's, were disproportionately responsible for crime and disorder, regardless of their neighborhood or city.

This report provides an update to the 2010 report, using 2011 data from those same four cities. This report also explores the degree to which convenience stores are eligible for liquor license revocation, per Arizona Revised Statute 4-101.29. The findings reported here are consistent with the earlier report.

1. Circle K dominates the store locations that are the most responsible for crime and disorder across the four cities. In Glendale, the top 10 generators of crime and disorder are all Circle Ks. In Mesa, Phoenix, and Tempe, 8 of the top 10 generators of crime and disorder are Circle Ks.
2. The most common incidents at high-crime convenience stores involve property crimes, disorder, and welfare checks. Violent crimes were more prevalent in Phoenix, compared to convenience stores in the other cities.
3. Circle K stores are disproportionately responsible for convenience store crime in each city. For example, Circle Ks represent 23% of convenience stores in Glendale, but those stores are responsible for 75% of convenience store crime incidents.
4. Crime patterns at Circle K stores are not explained by general crime trends in the surrounding area. In each city, low-crime convenience stores are located nearby high-crime Circle Ks.
5. Arizona Revised Statute 4-101.29 permits the Arizona Liquor Board to revoke a store's liquor license if three (3) or more acts of violence take place at the store within a 30 day period. Our analysis identified 18 convenience stores across the four cities that potentially meet the criteria for liquor license revocation. 15 of those 18 stores are Circle Ks.
6. There are a number of potential responses to this problem. These include: passing a city ordinance governing convenience store crime (e.g., Mesa's ordinance); using civil abatement strategies; implementing an evidence-based police strategy such as problem-oriented policing (e.g., Glendale); and pursuing liquor license revocation with the Arizona Liquor Board.

1. Background and Problem

In 2009, the Glendale Police Department (GPD) received funding from the Bureau of Justice Assistance (BJA) through the *Smart Policing Initiative* to address high crime areas. Subsequent analysis conducted by GPD and Arizona State University (ASU) found that convenience stores—particularly Circle K’s--disproportionately contributed to crime and disorder. To address convenience store crimes, the Glendale Police Department educated leadership from the Circle K convenience store corporation on safer business practices and conducted recurring surveillances and stings at hot spot Circle K locations.

As part of the project ASU began to hear from other local law enforcement agencies regarding similar issues with respect to convenience stores in their community. Faculty and staff from the Center for Violence Prevention and Community Safety (CVPCS) at Arizona State University (ASU), in turn, reached out to valley police departments and requested official data to more systematically examine this potential problem. In June 2011, CVPCS staff authored a report based on 2010 data from four cities: Glendale, Mesa, Phoenix and Tempe. The 2010 report revealed that when compared to other convenience stores Circle K’s were disproportionately responsible for crime and disorder, regardless of their neighborhood or city (for a copy of the report see <http://cvpcs.asu.edu/products/crime-convenience-stores>).

An informal working group comprised of Glendale, Mesa, Phoenix, and Tempe Police Departments and ASU’s CVPCS faculty and staff was established to further understand the scope and nature of the problem. At the most recent meeting the working group recommended that a similar report be produced using 2011 data to determine whether existing trends persisted. This report presents our findings for 2011 convenience store crime in the Phoenix Metropolitan area.

2. Methodology

Data for this report were obtained from four police departments: Glendale, Mesa, Phoenix, and Tempe. Similar to the previous report we requested 2011 Call Aided Dispatch System (CAD) data because it contains calls for service (CFS), officer initiated, and official report data. Traditionally, efforts to measure crime by place have often been restricted to police crime reports. However, a number of researchers have argued that official crime data are perhaps inappropriate for such studies (Mazerolle et al. 2000; Sherman et al. 1989; Sherman and Weisburd 1995; Skogan 1990). Two major reasons have been noted. First, official police records substantially underreport, and perhaps distort, less serious crimes. Scholars maintain this is largely because, once called, police officers are more likely to handle such incidents informally (Sherman 1986; Skogan 1990). For example, Black (1980), in his observational study of police officers in Boston, Chicago, and Washington, DC, found that only about 40 percent of minor complaints are officially recorded (see also Sherman 1986). The second weakness of official crime data is that the mean number of official offenses recorded at the neighborhood level is often too low to generate a sufficient amount of statistical power. Therefore, the

probability of finding a significant effect is decreased substantially (Mazerolle et al. 2000; Sherman and Weisburd 1995; Weisburd and Green 1995). Accordingly, using CAD data provides a more accurate view of neighborhood-level problems, reduces measurement bias, and increases statistical power.

To increase the comparability between communities we collapsed different types of records into twelve basic categories: (1) violent, (2) property, (3) drug, (4) alcohol, (5) vehicular accidents, (6) sex crime, (7) administrative, (8) disorderly conduct, (9) traffic violation, (10) warrant, (11) welfare check,¹ and (12) other. Six of the categories were omitted for the sake of this report because they were most likely unrelated to the operation of convenience stores. For example, some stores are located in convenient locations where official police activity takes place at that address, but has little to do with the store itself. Specifically, police officers might pull over traffic violators and ask those who are in traffic accidents to pull over in the parking lot of the store. They might transfer arrestees, process paper work, or conduct other tasks that might be attributed to the address belonging to a convenience store, but in fact the store itself was uninvolved in the event. As a consequence, for this report we only included in the analysis those incidents that were categorized as violent (e.g., robbery, assault), property (e.g., theft), drug (e.g., use, sales), sex crime (e.g., prostitution), disorderly conduct, and welfare checks. References to incidents or crime in this report are based on these six measures.

3. Findings

The discussion of findings below is divided into six sections. The first section describes the context of the study by detailing the number and type of convenience stores in each community. The second section provides findings on the convenience stores that are most responsible for crime and disorder in each city. Third, we provide information on the types of crime and disorder found at the convenience stores. Fourth, we provide findings on the contribution of Circle K to convenience store crime and disorder in each city. Fifth, we discuss possible alternative reasons for the disproportionate amount of crime and disorder that takes place at Circle K stores. Sixth, we assess whether convenience stores in each city are eligible for liquor license revocation under Arizona Revised Statute 4-101.29.

A. The Context

Table 1 shows that Circle K operates a large proportion of the convenience stores in each of the four study cities. For example, Circle K represents about one-third of all convenience stores in Phoenix, Mesa and Tempe, and about one-quarter of convenience stores in Glendale. Glendale varies from the other two cities in that they have a larger proportion of independently owned stores (i.e., “mom and pop” stores that are not owned and operated by a large corporation).

¹ This category refers to checking on welfare of a person such as a clerk or employee.

Table 1: Convenience Stores in Glendale, Mesa and Tempe in 2011– by Type

Store Type	Glendale	Mesa	Phoenix	Tempe
Circle K	15	46	116	27
AM/PM-Arco	2	8	16	7
Quik Trip	2	14	14	6
Shell	2	12	9	9
7-11	1	10	34	7
Chevron	1	14	19	6
Valero	0	13	6	3
Independent	42	39	96	16
Total	65	156	310	81

B. Incidents of Crime and Disorder by Store Location

Table 2 shows the top ten (10) generators of crime and disorder for each of the four cities – by store and street address. The analyses indicate that Circle K dominates the store locations that are the most responsible for crime and disorder across the four cities. In Glendale, the top 10 generators of crime and disorder are all Circle Ks. In Mesa, Phoenix, and Tempe, 8 of the top 10 generators of crime and disorder are Circle Ks.

C. Types of Crime and Disorder by Store Location

Tables 3a, 3b, 3c, and 3d show the number of crime and disorder incidents by location, crime type, and city. The findings show that, in general, property crimes, disorder, and welfare checks comprised the majority of incidents responded to by the police at the high crime convenience stores in each city. These stores were also characterized, but to a lesser extent, by violent crime, drug crime (e.g., drug sales), and sex crime (e.g., prostitution). A deviation from this trend was found in Phoenix where violent crime was more prevalent.