a multi-city report on crime & disorder in convenience stores
2011 Multi-City Report on Crime and Disorder in Convenience Stores

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The opinions expressed here are those of the authors. Any comments or questions pertaining to this document should be directed to Charles Katz at the Center for Violence Prevention and Community Safety at (602) 496-1470.

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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, 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 Statue 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).

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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

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

### 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.
<table>
<thead>
<tr>
<th>Glendale</th>
<th>Mesa</th>
<th>Tempe</th>
<th>Phoenix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Store</strong></td>
<td><strong>Location</strong></td>
<td><strong>Total Incidents</strong></td>
<td><strong>Store</strong></td>
</tr>
<tr>
<td>Circle K</td>
<td>5880 W Camelback Rd</td>
<td>525</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>4306 W Maryland Ave</td>
<td>445</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>7428 N 51st Ave</td>
<td>243</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>5102 W Camelback Rd</td>
<td>238</td>
<td>QT</td>
</tr>
<tr>
<td>Circle K</td>
<td>5907 W Bethany Home</td>
<td>190</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>6305 W Maryland Ave</td>
<td>190</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>4648 W Bethany Home</td>
<td>188</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>6937 N 75th Ave</td>
<td>181</td>
<td>7-Eleven</td>
</tr>
<tr>
<td>Circle K</td>
<td>6002 W Grand Av</td>
<td>158</td>
<td>Circle K</td>
</tr>
<tr>
<td>Circle K</td>
<td>9002 N 47th Ave</td>
<td>148</td>
<td>Circle K</td>
</tr>
</tbody>
</table>
### Table 3a: Glendale

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Disorder</th>
<th>Drug</th>
<th>Property</th>
<th>Sex Crime</th>
<th>Violent</th>
<th>Welfare Check</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5880 W Camelback Rd</td>
<td>Circle K</td>
<td>134</td>
<td>5</td>
<td>341</td>
<td>8</td>
<td>12</td>
<td>25</td>
<td>525</td>
</tr>
<tr>
<td>4306 W Maryland Ave</td>
<td>Circle K</td>
<td>60</td>
<td>9</td>
<td>341</td>
<td>3</td>
<td>10</td>
<td>22</td>
<td>445</td>
</tr>
<tr>
<td>7428 N 51st Ave</td>
<td>Circle K</td>
<td>18</td>
<td>0</td>
<td>210</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>243</td>
</tr>
<tr>
<td>5102 W Camelback Rd</td>
<td>Circle K</td>
<td>36</td>
<td>1</td>
<td>175</td>
<td>1</td>
<td>8</td>
<td>17</td>
<td>238</td>
</tr>
<tr>
<td>5907 W Bethany Home Rd</td>
<td>Circle K</td>
<td>51</td>
<td>0</td>
<td>115</td>
<td>2</td>
<td>9</td>
<td>13</td>
<td>190</td>
</tr>
<tr>
<td>6305 W Maryland Ave</td>
<td>Circle K</td>
<td>18</td>
<td>1</td>
<td>147</td>
<td>1</td>
<td>9</td>
<td>14</td>
<td>190</td>
</tr>
<tr>
<td>4648 W Bethany Home</td>
<td>Circle K</td>
<td>5</td>
<td>2</td>
<td>162</td>
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<td>7</td>
<td>12</td>
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<td>6937 N 75th Ave</td>
<td>Circle K</td>
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<td>0</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>19</td>
<td>181</td>
</tr>
<tr>
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<td>Circle K</td>
<td>10</td>
<td>2</td>
<td>132</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>158</td>
</tr>
<tr>
<td>9002 N 47th Ave</td>
<td>Circle K</td>
<td>18</td>
<td>0</td>
<td>113</td>
<td>1</td>
<td>6</td>
<td>10</td>
<td>148</td>
</tr>
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</table>

### Table 3b: Mesa

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Disorder</th>
<th>Drug</th>
<th>Property</th>
<th>Sex Crime</th>
<th>Violent</th>
<th>Welfare Check</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>330 E Broadway Rd</td>
<td>Circle K</td>
<td>136</td>
<td>5</td>
<td>42</td>
<td>0</td>
<td>9</td>
<td>57</td>
<td>249</td>
</tr>
<tr>
<td>809 E Southern Ave</td>
<td>Circle K</td>
<td>7</td>
<td>0</td>
<td>86</td>
<td>0</td>
<td>1</td>
<td>81</td>
<td>175</td>
</tr>
<tr>
<td>1145 W Main St</td>
<td>Circle K</td>
<td>59</td>
<td>6</td>
<td>32</td>
<td>0</td>
<td>9</td>
<td>62</td>
<td>168</td>
</tr>
<tr>
<td>414 S Stapley Dr</td>
<td>Quik Trip</td>
<td>45</td>
<td>5</td>
<td>17</td>
<td>2</td>
<td>4</td>
<td>93</td>
<td>166</td>
</tr>
<tr>
<td>417 S Dobson Rd</td>
<td>Circle K</td>
<td>58</td>
<td>3</td>
<td>69</td>
<td>0</td>
<td>6</td>
<td>29</td>
<td>165</td>
</tr>
<tr>
<td>2815 E University Dr</td>
<td>Circle K</td>
<td>22</td>
<td>1</td>
<td>32</td>
<td>0</td>
<td>4</td>
<td>61</td>
<td>120</td>
</tr>
<tr>
<td>2005 W Broadway Rd</td>
<td>Circle K</td>
<td>47</td>
<td>0</td>
<td>49</td>
<td>0</td>
<td>1</td>
<td>22</td>
<td>119</td>
</tr>
<tr>
<td>815 S Dobson Rd</td>
<td>7-Eleven</td>
<td>30</td>
<td>8</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>26</td>
<td>119</td>
</tr>
<tr>
<td>1203 E Southern Ave</td>
<td>Circle K</td>
<td>19</td>
<td>5</td>
<td>47</td>
<td>0</td>
<td>3</td>
<td>41</td>
<td>115</td>
</tr>
<tr>
<td>1560 W Main St</td>
<td>Circle K</td>
<td>14</td>
<td>1</td>
<td>61</td>
<td>1</td>
<td>5</td>
<td>29</td>
<td>111</td>
</tr>
</tbody>
</table>

### Table 3c: Phoenix

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Disorder</th>
<th>Drug</th>
<th>Property</th>
<th>Sex Crime</th>
<th>Violent</th>
<th>Welfare Check</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2535 W Camelback Rd</td>
<td>Quik Trip</td>
<td>23</td>
<td>4</td>
<td>293</td>
<td>2</td>
<td>33</td>
<td>44</td>
<td>399</td>
</tr>
<tr>
<td>2640 W Van Buren St</td>
<td>Circle K</td>
<td>11</td>
<td>2</td>
<td>216</td>
<td>0</td>
<td>31</td>
<td>34</td>
<td>294</td>
</tr>
<tr>
<td>699 E Buckeye Rd</td>
<td>Circle K</td>
<td>14</td>
<td>0</td>
<td>232</td>
<td>1</td>
<td>12</td>
<td>28</td>
<td>287</td>
</tr>
<tr>
<td>2401 E Van Buren St</td>
<td>Shell</td>
<td>33</td>
<td>6</td>
<td>115</td>
<td>5</td>
<td>45</td>
<td>81</td>
<td>285</td>
</tr>
<tr>
<td>1540 E Broadway Rd</td>
<td>Circle K</td>
<td>7</td>
<td>2</td>
<td>221</td>
<td>0</td>
<td>22</td>
<td>14</td>
<td>266</td>
</tr>
<tr>
<td>2041 W Van Buren St</td>
<td>Circle K</td>
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<td>1</td>
<td>202</td>
<td>2</td>
<td>23</td>
<td>27</td>
<td>265</td>
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<tr>
<td>2515 W Glendale Av</td>
<td>Circle K</td>
<td>3</td>
<td>2</td>
<td>207</td>
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<td>264</td>
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<td>1001 N 16th St</td>
<td>Circle K</td>
<td>16</td>
<td>0</td>
<td>177</td>
<td>0</td>
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<td>19</td>
<td>237</td>
</tr>
<tr>
<td>5350 N 27th Ave</td>
<td>Circle K</td>
<td>6</td>
<td>3</td>
<td>180</td>
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<td>25</td>
<td>20</td>
<td>237</td>
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<tr>
<td>5202 S Central Av</td>
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<td>0</td>
<td>199</td>
<td>1</td>
<td>19</td>
<td>9</td>
<td>231</td>
</tr>
</tbody>
</table>
D. The Contribution of Circle K to Convenience Store Crime and Disorder

The size and impact of the crime and disorder problem at Circle Ks is demonstrated in Table 4. For example, Circle Ks represent just under one-quarter of all convenience stores in Glendale, but those Circle K stores account for 76% of all incidents at convenience stores. Circle Ks represent about one-third of convenience stores in Mesa, but account for 53% of incidents at Mesa convenience stores. The trend is similar in Tempe. In Phoenix Circle K's represent 37% of convenience stores but they account for 68% of incidents at Phoenix convenience stores.

Table 3d: Tempe

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Disorder</th>
<th>Drug</th>
<th>Property</th>
<th>Sex Crime</th>
<th>Violent</th>
<th>Welfare Check</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>119 W University Dr</td>
<td>Circle K</td>
<td>101</td>
<td>2</td>
<td>22</td>
<td>4</td>
<td>13</td>
<td>37</td>
<td>179</td>
</tr>
<tr>
<td>1101 S Rural Rd</td>
<td>Circle K</td>
<td>51</td>
<td>0</td>
<td>67</td>
<td>4</td>
<td>13</td>
<td>24</td>
<td>159</td>
</tr>
<tr>
<td>15 W Southern Ave</td>
<td>Circle K</td>
<td>37</td>
<td>1</td>
<td>15</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>77</td>
</tr>
<tr>
<td>2196 E Apache Blvd</td>
<td>Circle K</td>
<td>27</td>
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<td>18</td>
<td>1</td>
<td>12</td>
<td>19</td>
<td>77</td>
</tr>
<tr>
<td>1734 E Apache Blvd</td>
<td>Shell</td>
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<td>14</td>
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<td>11</td>
<td>67</td>
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<td>11</td>
<td>59</td>
</tr>
<tr>
<td>2111 W University Rd</td>
<td>Quik Trip</td>
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<td>12</td>
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<td>3</td>
<td>9</td>
<td>54</td>
</tr>
<tr>
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<td>Circle K</td>
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<td>17</td>
<td>0</td>
<td>6</td>
<td>16</td>
<td>52</td>
</tr>
<tr>
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<td>19</td>
<td>1</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>47</td>
</tr>
</tbody>
</table>

E. The Possibility of Confounding Factors

One possible explanation for Circle K stores being disproportionately responsible for crime and disorder might be related to their location. In other words, Circle K's might be found at locations or in communities where crime is more likely to occur. To examine this issue we mapped the locations of convenience stores in each community and examined the crime and disorder at Circle K's and surrounding convenience stores. A visual inspection of the maps presented in Appendix A shows that, in general, convenience stores located near Circle K's experience substantially less crime and disorder, particularly in Glendale and Tempe. This
suggests that even when taking into consideration the location of the convenience store, Circle Ks generate more crime and disorder.

F. Repeated Acts of Violence and Qualification for Liquor License Revocation

Arizona Revised Statue 4-101.29 permits the Arizona Liquor Board to suspend or revoke a convenience store’s liquor license if three (3) or more acts of violence take place at the store within a 30-day period. We conducted analysis of this issue through the above described data. Below we present the convenience stores that potentially met the state’s definition of being involved in three (3) acts of violence within a 30-day period. We would like to emphasize that these stores potentially meet the standard because we relied on CAD/RMS data for the analysis. Further analysis by each agency would be required to verify and determine whether the event actually involved violence and whether there is written documentation of this event. With this caveat in mind we present these findings below.

Table 4a shows that, during 2011, four (4) Glendale convenience stores experienced three violent crimes in a 30-day period (specific dates of violent incidents are shown). All four of the Glendale convenience stores that met the criteria for liquor license revocation were Circle K stores. Table 4b shows that only one (1) Mesa convenience store, a Circle K, reported three violent crimes in a 30-day period in 2011. In Tempe, as shown in Table 4c, three (3) Circle K stores and one (1) Shell reported three or more violent crimes over a 30-day period. Analysis illustrated that the City of Phoenix had nine (9) stores that reported three or more violent crimes over a 30-day period. As shown in Table 4d, seven (7) of these stores were Circle K’s, one (1) was a Quik Trip, and one (1) was a Shell (Note: we used a different format for the Phoenix table because of the large number of incidents at these locations; see Appendix B for more detail on the dates of violent incidents at those locations).

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2 ARS 4-101.29 applies to any business with a liquor license, including bars, restaurants and convenience stores.
Table 4a: Glendale convenience stores that reported 3 or more violent crimes in a 30-day period

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Date of violence</th>
<th>Date of violence</th>
<th>Date of violence</th>
<th>Date of Violence</th>
</tr>
</thead>
</table>

Table 4b: Mesa convenience stores that reported 3 or more violent crimes in a 30-day period

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Date of violence</th>
<th>Date of violence</th>
<th>Date of violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2815 E University Dr</td>
<td>Circle K</td>
<td>10/14/2011</td>
<td>10/14/2011</td>
<td>11/9/2011</td>
</tr>
</tbody>
</table>

Table 4c: Tempe convenience stores that reported 3 or more violent crimes in a 30-day period

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Date of violence</th>
<th>Date of violence</th>
<th>Date of violence</th>
<th>Date of violence</th>
<th>Date of violence</th>
</tr>
</thead>
</table>
Table 4d: Phoenix convenience stores that reported 3 or more violent crimes in a 30-day period

<table>
<thead>
<tr>
<th>Address</th>
<th>Store</th>
<th>Number of Violent Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2401 E Van Buren St</td>
<td>Shell</td>
<td>40</td>
</tr>
<tr>
<td>535 W Camelback Rd</td>
<td>QuikTrip</td>
<td>33</td>
</tr>
<tr>
<td>2640 W Van Buren St</td>
<td>Circle K</td>
<td>26</td>
</tr>
<tr>
<td>5350 N 27th Ave</td>
<td>Circle K</td>
<td>20</td>
</tr>
<tr>
<td>1540 E Broadway Rd</td>
<td>Circle K</td>
<td>17</td>
</tr>
<tr>
<td>2041 W Van Buren St</td>
<td>Circle K</td>
<td>16</td>
</tr>
<tr>
<td>5202 S Central Ave</td>
<td>Circle K</td>
<td>14</td>
</tr>
<tr>
<td>2515 W Glendale Ave</td>
<td>Circle K</td>
<td>12</td>
</tr>
<tr>
<td>699 E Buckeye Rd</td>
<td>Circle K</td>
<td>11</td>
</tr>
</tbody>
</table>

4. Conclusions and Recommendations

These analyses indicate that Circle K’s within the four jurisdictions studied are unique when compared to other convenience stores in that: 1) they are disproportionately and regularly used in the commission of crime and 2) the prevalence of criminal activity at these locations has resulted in a substantial public nuisance. Additionally, when compared to 2010, our findings in 2011 do not vary in three of the four jurisdictions. Notably, criminal activity at Circle Ks in Glendale decreased substantially at 8 of the 10 most active stores (though crime still remained unacceptably high). The changes in Glendale were likely a result of the comprehensive problem-oriented policing strategy they implemented in 2011 (funded through the Bureau of Justice Assistance’s Smart Policing Initiative). Overall, these findings suggest that local governments might consider increasing the resources at their disposal to curb crime and disorder at convenience stores that pose the greatest threat to public safety.

Aside from the threat to public safety, the sheer amount of crime and disorder at Circle K’s has a substantial financial impact in two ways. The first is the amount of police resources expended on Circle Ks. Prior analysis of our Glendale data indicated that each call requires about 23 minutes of officer time. On average Glendale police officers are paid about $46.26 per hour. When we used this information to calculate the cost of officer time related to crime and disorder, the top ten convenience stores (all of which are Circle Ks) cost the City of Glendale about $44,438 a year in officer time alone. The second financial impact is associated with the costs of victimization. A recent report by the Urban Institute calculated the cost of crime, by crime type, in U.S. dollars. For example, they reported that each violent crime costs $199,818.\(^3\) As noted in this report the top ten active stores were associated with 77 violent crimes, which

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cost about $15.4 million. This figure does not include other types of crime and disorder such as property crime, sex crime, and drug sales and use.

Based on the findings presented in this report, we propose a number of recommendations for cities (and law enforcement agencies) in the Phoenix metropolitan area. First, we recommend that valley communities review the Mesa city code relating to crime in convenience stores. The Mesa city code, which passed in July 2011, provides a reasonable process for identifying and responding to those convenience stores that place the community at highest risk. A second recommendation is to use civil crime abatement strategies to fine those stores where crime is especially high and where stores are contributing to high crime rates in the neighborhoods where they are located. Third, cities should explore the adoption of an evidence-based practice such as Problem Oriented Policing (POP), which was found to be effective in curbing convenience store crime in Glendale.\(^4\) For more information on the Glendale Smart Policing Initiative and its impact on crime at Circle K’s, see White and Balkcom (2012).\(^5\)

Last, we would encourage cities to continue to collaborate with one another to determine which strategies are most effective in addressing convenience store crime and share this information with law enforcement agencies throughout the nation. A fourth recommendation is that police agencies develop a monitoring system for identifying those establishments where three or more violent events take place over a 30-day period. Our analysis, for example, showed that repeated acts of violence as defined by ARS 4-101.29 are largely restricted to Circle Ks. These stores should be closely monitored and alcohol license revocation should be exercised swiftly for those stores that attract and perpetuate chronic levels of violence.

\(^4\) Analysis by White and Balkcom (2012) determined that three of six target stores in Glendale experienced a decline in crime as a consequence of the Glendale SPI project. The crime decline at the three “impact stores” was likely tied to Operation Not-so-Convenient arrest patterns. For example, 72 percent of the arrests made during Operation Not-so-Convenient operations occurred at the three stores that experienced a decline. The remaining 28 percent of arrests occurred at the other three target stores. The effectiveness of Operation Not-so-Convenient suppression and enforcement at the impact stores likely sent a strong deterrent message to would-be thieves. The three impact stores were also much more compliant with CPTED requests, compared to the other target stores. In particular, all three impact stores immediately removed beer from the floor, while the other stores did not. Impact stores also were receptive to increasing store staff, and those store personnel were more likely to quickly report trespassing and loitering to police. In short, effective CPTED management was tied to store-level differences in crime.

\(^5\) http://cvpcs.asu.edu/sites/default/files/content/projects/Glendale%20Research%20Brief%20Final.pdf
5. List of Appendices

A. Maps of Convenience Stores in:
   1. Glendale
   2. Mesa
   3. Phoenix
   4. Tempe

B. Phoenix convenience stores that reported 3 or more violent crimes in a 30-day period
Number of Incidents at Convenience Stores in Glendale, 2011

Total Number of Incidents
- 0
- 1 - 13
- 14 - 28
- 29 - 52
- 53 - 243
- 244 - 525
- Circle K

APPENDIX A
Number of Incidents at Convenience Stores in Mesa, 2011

Total Number of Incidents
- ▲ 0
- ● 1 - 18
- ○ 19 - 41
- ◆ 42 - 80
- □ 81 - 120
- ★ 121 - 249
- □ Circle K
Number of Incidents at Convenience Stores in Tempe, 2011

Total Number of Incidents

- ▲ 0
- ● 1 - 12
- ○ 13 - 28
- ◼ 29 - 47
- ◻ 48 - 77
- ◼ 78 - 179

Circle K

APPENDIX A
## Appendix B: Phoenix convenience stores that reported 3 or more violent crimes in a 30-day period, and number of violent incidents per specified day

<table>
<thead>
<tr>
<th>535 W Camelback Rd</th>
<th>2640 W Van Buren St</th>
<th>699 E Buckeye Rd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QuikTrip</strong></td>
<td><strong>Circle K</strong></td>
<td><strong>Circle K</strong></td>
</tr>
<tr>
<td>7/14/2011</td>
<td>5/26/2011</td>
<td></td>
</tr>
<tr>
<td>7/31/2011</td>
<td>6/2/2011</td>
<td></td>
</tr>
<tr>
<td>8/15/2011</td>
<td>6/22/2011</td>
<td></td>
</tr>
<tr>
<td>8/29/2011</td>
<td>11/14/2011</td>
<td></td>
</tr>
<tr>
<td>10/3/2011</td>
<td>12/7/2011</td>
<td></td>
</tr>
<tr>
<td>10/4/2011</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11/13/2011</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11/18/2011</td>
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<td></td>
</tr>
<tr>
<td>11/24/2011</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11/29/2011</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12/2/2011</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Location</td>
<td>Location</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2/8/2011</td>
<td>Shell</td>
<td>1540 E Broadway Rd</td>
</tr>
<tr>
<td>5/2/2011</td>
<td>1</td>
<td>12/22/2011</td>
</tr>
<tr>
<td>Date</td>
<td>Circle K</td>
<td>Date</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>2/14/2011</td>
<td>1</td>
<td>1/14/2011</td>
</tr>
<tr>
<td>2/19/2011</td>
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<td>1/30/2011</td>
</tr>
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<td>12/4/2011</td>
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<tr>
<td></td>
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<td>12/14/2011</td>
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</tbody>
</table>
About the Center for Violence Prevention & Community Safety

Arizona State University, in order to deepen its commitment to the communities of Arizona and to society as a whole, has set a new standard for research universities, as modeled by the New American University. Accordingly, ASU is measured not by whom we exclude, but by whom we include.

The University is pursuing research that considers the public good and is assuming a greater responsibility to our communities for economic, social, and cultural vitality. Social embeddedness – university-wide, interactive, and mutually-supportive partnerships with Arizona communities – is at the core of our development as a New American University.

Toward the goal of social embeddedness, in response to the growing need of our communities to improve the public's safety and well-being, in July 2005 ASU established the Center for Violence Prevention and Community Safety. The Center’s mission is to generate, share, and apply quality research and knowledge to create "best practice" standards.

Specifically, the Center evaluates policies and programs; analyzes and evaluates patterns and causes of violence; develops strategies and programs; develops a clearinghouse of research reports and "best practice" models; educates, trains, and provides technical assistance; and facilitates the development and construction of databases.

For more information about the Center for Violence Prevention and Community Safety, please contact us using the information provided below.

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