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The co-authors would like to acknowledge that this document was originally produced in September 2014 with the purpose of examining the patrol workload of the Palm Springs Police Department. The materials included do not represent the opinions of the City of Palm Springs, the Palm Springs Police Department or the Center for Criminal Justice Research. Moreover, the document is not exhaustive.

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Alberto Franz, Chief of Police  
Palm Springs Police Department  
200 S Civic Drive  
Palm Springs, CA 92262  

September 15, 2014.

Dear Chief Franz,

Transmitted herein is the final report for the Palm Springs Police Department, Resource Constraint Study. The objective of this research was to assess patrol workload, specifically: non-discretionary patrol activity (out-of-service time), the impact of special events, and services provided to special populations. We also calculated citizen-to-officer ratios using an adjusted population base that accounts for overnight visitors and temporary residents. Several recommendations are offered.

We would like to thank staff, as well as representatives from other City departments, community stakeholders, and research volunteers for their assistance and cooperation during this study. Their time, effort and insight were invaluable.

Sincerely,

Gisela Bichler, Ph.D.  
Professor, Department of Criminal Justice  
Director, Center for Criminal Justice Research  

cc: Captain Dennis Graham
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## Table of Contents

**Results in Brief**  
Section 1: Activity-based Workload  
  - Patrol Activity  
  - Social Problems  
  - Pool Parties  
Section 2: Population-based Service Demands  
  - Impact of Special Events  
  - Hotel Occupancy and Temporary Residents  
  - Citizen-to-Officer Ratios  
Section 3: Recommendations  
Appendix A: Calculating Service Time  
Appendix B: Properties under Tribal Control  
Appendix C: References
Results in Brief
(3 pages, 6 findings)

This report examines several inter-related resource issues facing the Palm Springs Police Department. A broad set of data were drawn upon to generate a comprehensive assessment of patrol workloads. Computer aided dispatch (CAD) records shed light on out-of-service time commitments and historical crime patterns; systematic social observations and interviews with randomly selected officers contextualize the constraints imposed on department resources that occur due to high profile, special events; and data retrieved from stakeholder archives (e.g., occupancy tax records and event promotions materials) help to forecast emerging service demands.

This document is divided into three sections. Section 1 reports on a detailed workload analysis that includes an assessment of patrol activity, comparison of service demands raised by critical social problems, and a review of the security concerns associated with special events, specifically pool parties. Section 2 analyzes emerging service demands by carefully considering the impact of special events, hotel occupancy trends, and hidden populations. Section 3 presents recommendations about staffing levels, suggestions to support workload analysis within the agency, and strategies to form problem-oriented policing teams. Below the major findings of this report are listed in summary form.

Finding 1 CAD data revealed that officers spend a minimum of 46,463 hours per year responding to crime incidents and public service demands.

- About 22.4% out-of-service time (OST) involves crime incidents.
- Only 15 locations account for 13% of all OST.
- Workloads are relatively steady throughout the year; however there is a 10.6% increase in the average number of incidents handled from 2012 to 2014.
- Service demands peak between 7:00 and 18:59.
- Response times are within an acceptable range.

The PSPD is busy throughout the year and their workloads are steadily increasing. Presently, they are managing to keep response times within an acceptable range. However, this may not continue. To improve the agency’s ability to monitor workloads the CAD data elements should be examined to ensure that the time stamps are accurate, priority rankings are appropriate, and that it is easy to distinguish between citizen- and officer-initiated activities (this will support oversight of officer use of discretionary time and community policing initiatives).
Finding 2  OST-based staffing estimates indicate that the PSPD does not have enough officers permanently assigned to patrol duties. At a minimum, 67 officers are needed to respond to calls-for-service. By our estimates this means that 4 additional officers are needed to deal with existing service demands. However, this does not permit the implementation of community policing. To support community policing and officer-initiated problem solving, the actual number of officers assigned to patrol duties should be closer to 118.

Finding 3  Incidents related to four different social problems were extracted from the CAD data—vagrancy, trespassing, public intoxication, and mental health calls (5150).

- There is a projected 88% increase in the amount of time spent handling vagrancy issues since 2012. This surpasses all other social problems.
- Only 15 locations account for about 15% of incidents of social problems; 4 locations commonly deal with all types of problems.
- Most calls-for-service (CFS) are generated by the public. Vagrancy issues peak during the day and are highest from January to May.

A public/private partnership with dedicated resources is needed to address this growing public concern. Several pairs of officers exhibit a high degree of experience with these issues and they would be best equipped to staff a problem-oriented policing team.

Finding 4  Effective oversight of major special events requires considerable police resources. Day clubs are growing in popularity and this means that the pool party phenomenon is likely to continue. Using the pool parties associated with the Coachella Music Festival as a case study, we found several areas in need of improvement.

- Special events are heavily promoted on social media. The collective reach of this mechanism extends globally into the millions of people. This is an untapped resource that can be used by the City and PSPD to communicate behavioral expectations to potential guests and to advertise positive public/private partnerships.
- Observations of security personnel found inconsistencies in their performance. Vigilance declines as crowds get larger and serious security risks accrue. There is room for the PSPD to take a leadership role in pre-event planning through a public/private
partnership with the major security firms and event organizers working in Palm Springs.

- Officers are working a lot of extra shifts throughout the year to keep up with the service demands generated by special events, even when the events are staffed with private security. Continuing to rely on officers to do extra or extended shifts is not going to be feasible in the long run. More or dedicated PSPD special event staff are needed that do not have regular patrol duties.

**Finding 5** It is difficult to estimate the daily population of visitors, overnight guests, and temporary and permanent residents.

- Throughout the year, the City hosts major events, some with international appeal, drawing up to several hundred thousand people.
- The lodging industry is multifaceted and during peak season, stands to contribute upwards of 36,000 people.

Public/private partnerships with major stakeholders including prominent event organizers and sponsors, security firms, and the Agua Caliente Band of Cahuilla Indians are essential to support crowd control and alcohol management. A special unit should be assigned with developing a proactive, community-oriented approach to ensuring safety and security during events.

**Finding 6** Citizen-to-officer ratios for projected low and peak population levels suggest that the PSPD is understaffed. To reach the national average for a city of 50,000 and 99,999 people, 12 additional sworn personnel are needed. However, this may not mean 12 additional patrol officers; special units may facilitate the development of a force multiplier effect if they are capable of generating effective public/private partnerships.

The remainder of this report provides a detailed description of the analyses conducted which led us to these findings and summary recommendations. Where possible, we included information about model policing strategies and resources that may be of use to the PSPD. Further, the list of recommendations presented at the conclusion of this document offer additional suggestions.
Section 1: Activity-based Workload

Understanding the existing workload shouldered by patrol officers of the Palm Springs Police Department required drawing upon information from several sources: calls-for-service, interviews with randomly selected patrol officers, and systematic social observations. This section of the report examines three central issues related to patrol activity: out-of-service time, handling of social problems, and the impact of special events, specifically pool parties. It is important to note that not all of the items recorded in the computer aided dispatch system (CAD), were used for this report. Three exclusionary factors were applied.

First, we did not include CAD recorded incidents falling beyond the scope of the report; this includes attending fire calls, stake-outs, and special details. These types of activities are not part of regular patrol.

Second, open messages associated with shift briefings are purely for information purposes and do not relate to specific incidents: these items were removed.

And finally, incidents associated with extreme time values were removed. Incidents lasting greater than 10 hours are likely to be atypical cases requiring overtime, or the time recorded is an anomaly generated by faulty time-stamps due to the default settings of the CAD system. Similarly, negative or minus time is not plausible, i.e., an officer clears the scene before the incident is assigned to them. Either way these values are not typical and our aim is to examine average workloads. Including these extreme values would have skewed the results.

Police Activity

The Palm Springs Police Department’s records indicate that officers deal with approximately 50,777 issues annually. Partitioning these activities into six month increments permits a comparison of historical activity levels with the first half of 2014.

Table 1 reports that on average, 11.1% of incidents handled by PSPD are crime-related. More incidents are recorded during the January-June period than the second half of the year. Over the course of the study period, the proportion of crime incidents is declining. This trend is caused by a slight decline in crime incidents and an increase in the handling of patrol/administrative issues. On average, 2 officers attend each call.

Subsequent analysis requires time-related information, i.e., when the incident occurred, when an officer arrived on scene, and when the call was cleared. About 1% of incidents were excluded from this analysis. Most of these were excluded due to missing times—Patrol/Admin with excessive or strange response times (e.g., minus time).
Table 1. Number of Activities Recorded for Each Time Period

<table>
<thead>
<tr>
<th>Study Periods</th>
<th>Usable Data (% incidents included for detailed analysis)</th>
<th>No. of Incidents (used)</th>
<th>% Crime-related Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Crime Patrol / Admin. Total</td>
<td></td>
</tr>
<tr>
<td>Jul. – Dec. 2013</td>
<td>98.9</td>
<td>2,730 22,697  25,427</td>
<td>10.7</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>99.2</td>
<td>2,785 22,240  25,025</td>
<td>11.1</td>
</tr>
</tbody>
</table>

* Partial data: this period includes events recorded from Jan. 1, 2014 to Jun. 4, 2014. Since it is not a full 6 month period the values will be slightly lower than other periods.

**Response Times**

Assessing how quickly patrol officers are able to respond to citizen-initiated concerns is useful to investigate how the public may perceive patrol workload. This also tells us how demanding or involved the citizenry are in requesting services. Citizen-initiated policing is triggered when a member of the public places a call-for-service (referred to as **reactive** policing). If an incident was officer-initiated (**proactive**) they would have been on scene when assigned the call.

We used a 10 second threshold to differentiate citizen and officer generated incidents. If the response time was 0-10 seconds, the incident was classed as **officer-initiated**, and all responses above 10 seconds were deemed **citizen-initiated**. This threshold accounts for situations wherein an officer took a few seconds to contact dispatch and register an issue they were investigating. For instance, this slight response time may occur when an officer sees something suspicious during a routine patrol. They place an initial call to dispatch when they see something that draws their attention, and once the vehicle is parked, they radio again. Estimating that this process takes 10 seconds is somewhat arbitrary.

As several officers could attend a single call, the fastest response was used in the calculations provided in Table 2(a). These values approximate the response rates for the first officer on scene. Looking at the average response time for priority 1 calls, officers from the PSPD are on scene within about 6 and a half minutes.

The number of officers responding to citizen-initiated calls-for-service was consistent across all study periods. On average, three officers attended priority 1 calls and two officers attended all other calls.
Table 2(a). Response Times of First Officer on Scene for Citizen-Initiated Activities\(^1\)

<table>
<thead>
<tr>
<th>Incident Priority</th>
<th>Crime</th>
<th>Patrol / Admin.</th>
<th>Avg. Response Time</th>
<th>Incidents (repeated from prior table)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^1\)Citizen-initiated CAD activity includes all incidents when the fastest response time is >11 seconds.

\(^2\)This time period did not include any extreme incidents which may account for the differences found comparing this time period to other study periods.

**Sensitivity Analysis**

CAD systems often have default settings that may distort the timestamp that is assigned to an incident. To check for this we removed all extreme response time values (recall that any time calculation beyond 10 hours, the time allotted for a shift, were already removed). Only 52-80 extreme response times (outliers) exist in any given study period. Given that this is equal to or less than 0.31% of incidents, excluding these responses should not materially alter the overall response rates. However, by comparing Tables 2(a) and 2(b), the effect of these additional outliers is clearly apparent.

Removing the unusually long response times, that are likely to be a byproduct of CAD default settings, brings the response times more in line with general expectations. Priority 1 crimes are responded to in less than 6 minutes and officers are on scene for priority 1 patrol activities within about 5 minutes. Averaging reaction time for all citizen-initiated activity suggests that PSPD typically responds in 6 minutes, 42 seconds. This level of performance is relatively consistent over the past 2.5 years.

Table 2(b). Recalculation of Response Times for the First Officer on Scene for Citizen-Initiated Activities Excluding Extreme Values\(^*\)

<table>
<thead>
<tr>
<th>Incident Priority</th>
<th>Crime</th>
<th>Patrol / Admin.</th>
<th>Avg. Response Time</th>
<th>No. Cases Excluded (&gt;1 hr)</th>
<th>% Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Jan. – Jun. 2014*</td>
<td>5:34</td>
<td>7:43</td>
<td>10:14</td>
<td>4:54</td>
<td>5:56</td>
</tr>
<tr>
<td>Jul. – Dec. 2012</td>
<td>5:47</td>
<td>8:49</td>
<td>9:45</td>
<td>5:04</td>
<td>5:40</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>5:31</strong></td>
<td><strong>8:19</strong></td>
<td><strong>9:29</strong></td>
<td><strong>4:59</strong></td>
<td><strong>5:42</strong></td>
</tr>
</tbody>
</table>

\(^*\)Extreme scores include all response times over one hour.
Using the San Diego Police Department as a point of reference, it appears that PSPD is performing well (compare Tables 2 and 3). The average response times for all priority levels are well within range of the SDPD standards. However, the presence of extreme values may suggest the need to adjust CAD settings or priority assignments. **Extending the priority system by adding a critical emergency and priority 4 (e.g., for all “past crimes” and details) would enable analysts to produce more accurate response times and improve monitoring of service delivery.**

Table 3. Comparison of PSPD Response Time Estimates to San Diego Police Department

<table>
<thead>
<tr>
<th>Call Priority</th>
<th>San Diego Patrol Officer Response Times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Emergency</td>
<td>6:03</td>
</tr>
<tr>
<td>Priority 1</td>
<td>11:01</td>
</tr>
<tr>
<td>Priority 2</td>
<td>22:08</td>
</tr>
<tr>
<td>Priority 3</td>
<td>62:00</td>
</tr>
<tr>
<td>Priority 4</td>
<td>67:08</td>
</tr>
</tbody>
</table>


**Service Demands**

The amount of patrol time spent dealing with calls-for-service is commonly referred to as out-of-service time (OST). When an officer is “out-of-service” it means that they are occupied with an issue that requires attention. Thus, they are unable to respond to a new call-for-service. You can think of this as being away from your desk and unavailable to answer the phone.

Assessing the proportion of OST is critical to establishing the constraints facing a police department. If too much time is taken up with OST:

1. there are no officers free to do proactive, community policing or to cultivate positive relations with the public (i.e., helping a tourist with directions);
2. fatigue levels will rise and this may put officers at risk for work-related injury and greater use of sick leave;
3. morale will decline and this will contribute to staff turnover; and,
4. it is likely that the amount of overtime will increase, thereby straining the departmental budget (i.e., officers have little time to process required paperwork within their regular shift).
Out-of-Service Time

On average, during a 6 month period, the PSPD spends 5,040 hours dealing with crime issues. As reported in Table 4, this accounts for approximately 22.4% out-of-service time.

Table 4. Total OST for the Full Study Period

<table>
<thead>
<tr>
<th>Study Periods</th>
<th>Crime (hrs:min.)</th>
<th>Patrol / Admin. (hrs:min.)</th>
<th>% Time Dealing with Crimes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 MONTH AVG.</td>
<td>5,040:28</td>
<td>17,425:36</td>
<td>22.4</td>
</tr>
</tbody>
</table>

*Only 4 days in June 2014 are included: this time period does not include a full 6 months of data.

Summing the service time for all attending officers, Table 5 shows that on average, each incident they responded to consumed at least 51 minutes of officer time. Officers spent less time on each call-for-service in 2014 than 2012. Improved efficiency may reflect any number of operational changes (e.g., repositioning of units or reallocation of officers across shifts) or community factors (e.g., changes in traffic patterns and parking availability or major development projects).

Table 5. Average OST per Incident for All Officers

<table>
<thead>
<tr>
<th>Study Periods</th>
<th>No. of Incidents</th>
<th>Avg. Time Per Incident (hrs:min:sec)</th>
<th>Total OST (hrs:min:sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crime</td>
<td>Patrol / Admin.</td>
<td>Total</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>2,785</td>
<td>22,240</td>
<td>25,025</td>
</tr>
</tbody>
</table>

*Only 4 days in June 2014 are included: this time period does not include a full 6 months of data.

High Demands

Service demands fluctuate. At times certain locations will require more attention, i.e., during a major special event. Activity levels also tend to vary by time of day, day of the week, and season. The set of analyses presented below sought to determine whether the PSPD faces variation in service demands by premise and time.

High Service Premises. Table 6 reports the amount of dedicated PSPD attention that specific addresses received during the first half of 2014. Repeating this analysis for 2013 and 2012 generated
similar results. All of the addresses listed in black text are ranked in the top 15 service generating properties in all years examined. The properties highlighted in red appear in the top 15 in 2014 only. These represent emerging issues. However, this does not mean they were historically low service properties. Rather, it shows that the total services required were not enough to warrant a top 15 ranking in the two prior years.

These 15 properties use at least 13% of all OST and they generate about 10% of all incidents recorded in the CAD system. Yet, these 15 places are less than 1% of all the addresses the PSPD attends to.

On average, one hour of officer time is spent dealing with each of these incidents. Given that these figures are based on half a year’s data, it is reasonable to assume that the actual amount of time spent at these properties is double the total values reported at the bottom of the table.


<table>
<thead>
<tr>
<th>Address</th>
<th>Nature of Facility</th>
<th>Personnel Time Spent (hrs:min:sec)</th>
<th>No. Incidents</th>
<th>Avg. Time Per Incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>5601 E Ramon Rd</td>
<td>Shopping Center</td>
<td>292:25:29</td>
<td>322</td>
<td>0:54:29</td>
</tr>
<tr>
<td>401 E Amado Rd</td>
<td>Spa Resort Casino</td>
<td>247:19:08</td>
<td>239</td>
<td>1:02:05</td>
</tr>
<tr>
<td><strong>150 S Indian Canyon Dr</strong></td>
<td>Hard Rock Hotel</td>
<td><strong>224:15:42</strong></td>
<td>130</td>
<td><strong>1:43:30</strong></td>
</tr>
<tr>
<td>3400 E Tahquitz Canyon Way</td>
<td>PS International Airport</td>
<td>213:59:03</td>
<td>121</td>
<td>1:46:06</td>
</tr>
<tr>
<td>2323 N Palm Canyon Dr</td>
<td>Bahama Hotel &amp; Apts.</td>
<td>194:36:32</td>
<td>143</td>
<td>1:21:39</td>
</tr>
<tr>
<td>1150 N Indian Canyon Dr</td>
<td>Medical Center</td>
<td>185:49:01</td>
<td>184</td>
<td>1:00:36</td>
</tr>
<tr>
<td>277 N Avenida Caballeros</td>
<td>PS Convention Center</td>
<td>180:06:10</td>
<td>41</td>
<td>4:23:34</td>
</tr>
<tr>
<td>1717 E Vista Chino</td>
<td>Shopping Center</td>
<td>174:50:55</td>
<td>211</td>
<td>0:49:43</td>
</tr>
<tr>
<td>266 S Palm Canyon Dr</td>
<td>The Village Pub</td>
<td>162:11:04</td>
<td>125</td>
<td>1:17:51</td>
</tr>
<tr>
<td>449 E Arenas Rd</td>
<td>Apartment Building</td>
<td>160:42:06</td>
<td>163</td>
<td>0:59:09</td>
</tr>
<tr>
<td><strong>400 S Sunrise Way</strong></td>
<td>Sunrise Park/ PS Stadium</td>
<td><strong>130:11:55</strong></td>
<td>176</td>
<td><strong>0:44:23</strong></td>
</tr>
<tr>
<td>660 S Palm Canyon Dr</td>
<td>Motel 6</td>
<td>128:23:11</td>
<td>82</td>
<td>1:33:56</td>
</tr>
<tr>
<td>425 S Sunrise Way</td>
<td>Shopping Center</td>
<td>126:48:51</td>
<td>212</td>
<td>0:35:53</td>
</tr>
<tr>
<td><strong>595 E Palm Canyon Dr</strong></td>
<td>Motel 6</td>
<td><strong>115:01:11</strong></td>
<td>67</td>
<td><strong>1:43:00</strong></td>
</tr>
<tr>
<td>321 E Arenas Rd</td>
<td>Shopping Center</td>
<td>114:48:45</td>
<td>175</td>
<td>0:39:22</td>
</tr>
<tr>
<td><strong>TOP 15 TOTAL</strong></td>
<td></td>
<td><strong>2,651:29:03</strong></td>
<td><strong>2,391</strong></td>
<td><strong>1:02:29</strong></td>
</tr>
<tr>
<td>% FOR STUDY PERIOD</td>
<td></td>
<td>13.11%</td>
<td>10.07%</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: The addresses highlighted in red were high service properties in 2014 but they were not ranked in the top 15 for 2013 or 2012.
About 33% of the high service premises are hotels, a fact that is not surprising given the plethora of hotels and motels in Palm Springs. The PS Convention Center consumes a lot of police time, but again, this is expected given the number of special events it hosts each year. **What does stand out from this list are the 4 shopping plazas, the medical center and Sunrise Park.**

**Peak Service**

Temporal patterning can unduly constrain certain shifts. To examine whether workloads are evenly shared among patrol officers, we looked to see if the volume of incidents was consistent over the course of a day and throughout the week. Figure 1 illustrates that patrol officers working during the day between the hours of 7:00 and 18:59 field over 60% of the crime CFS. Similarly, this 12 hour period also has a higher volume of recorded patrol and administrative activity.

**Figure 1. Distribution of Incidents by Time of Day**

On average, the volume of activity remains relatively constant throughout the week; although a slight increase occurs as the weekend arrives. This pattern is consistent across all three study periods.

Figure 2 shows that activity levels peak on Friday. This weekday pattern is consistent for all three study periods. Sunday normally has fewer CFS.
Examining the monthly trend in total incidents captured in CAD data suggests a slight upward trend over the 29 months examined (Figure 3). This is a 10.6% increase. Each year, some months have more activity, but there are no distinct seasonal patterns evident. Seasonal patterns may emerge if a longer period of time is examined. Clearly evident in this image is that even though the general perception is that the hot summer months are less active, there is ample work for the PSPD.
Estimating Optimal Staffing Levels from OST

There are several methods available to anticipate the number of patrol officers needed to handle service demands—per capita approaches use the residential population, staffing estimates can be generated by command staff in consideration of public safety needs, and workload-based analysis. Workload-based analysis is recommended by the Commission on Accreditation for Law Enforcement Agencies because it accounts for actual work demands and performance objectives. Calls-for-service (CFS) recorded by agency computer aided dispatch systems is the principal metric used in the calculation of workloads. Most dispatch systems are unable to accurately record the amount of time each officer dedicates to dealing with an assignment. Typically time is under-recorded. For this reason, all estimates based on CFS are conservative.

The estimation process used in this report was based on out-of-service time that was calculated from CFS. There are two reasons for this decision: (1) the number of officers assigned to special details varied; and, (2) many staffing changes occurred during the study period (e.g., promotions, retirements, and new hires). These factors made it difficult to calculate how much time each officer had available for patrol in each year examined. Several years of data were necessary. Historical trends are important to consider as the City of Palm Springs is in a boom/growth cycle and the demands of the prior year is not necessarily going to tell us much about the trajectory of future service needs.

**Process**

Figure 4 outlines the process used to estimate the optimal staffing level. The process begins in step 1 by calculating the total amount of out-of-service time used in a calendar year. Since only partial data were available for 2014, this value was generated by calculating the total OST and then, doubling this value. Total OST was calculated by:

\[
\text{Total OST} = \text{Summing for all officers (Time/date each assigned call is cleared - time/date officer is enroute).}
\]

Several types of calls were excluded from this assessment: dispatch messages and briefings, fire related activities, and special details. Also, additional patrol activity, required to monitor special events and other major activities, was not included in this estimation process unless a call-for-service for a specific kind of incident was generated (e.g., assault).

Step 2 produces an average OST per day and shift. This value (which is still in hours of time) is converted into the number of officer shifts needed to cover a year of service demands (Step 3). This value is adjusted to reach a saturation level. Saturation levels account for developing situations and organizational structure. As much of patrol work falls under the classification of first responder,
we must maintain reserved resources to deal with emergency situations. Step three also factors for the number of police units (e.g., policing teams that are assigned to different beats). The next step in the process estimates the number of officer positions needed to deal with service demands. This number is adjusted to account for contractual time off (e.g., sick days and vacation time), as well as work-related obligations (e.g., training and court days).

**Figure 4. Overview of Staffing Level Estimation Process**

2014 Estimates

Figures 5 and 6, along with their accompanying text, walk through this estimation process in greater detail. The values used in the model are for 2014. We begin with the total estimate of OST for 2014 (recall that value was estimated by doubling the partial OST total generated from Jan. 1, 2014 – Jun.4 2014). OST for 2014 was estimated to be 47,626 hours, 45 minutes, and 20 seconds. Dividing this total by 365 (days in the year), leaves us with a daily average of just over 130 hours of OST per shift.

The final task exhibited in Figure 5 is to calculate the average number of hours of OST per hour, per shift. This requires dividing the 130 hours across 8 hours per shift. While patrol officers work a 10 hour shift, there are only 8.5 hours available for patrol activity (lunch break and briefing time must be subtracted). In addition, we factored in half an hour for report writing. This leaves a maximum of 8 hours available to respond to calls-for-service.
Figure 5. Calculating Daily Out-of-Service Time (OST) Per Shift Using 2014 Values, Steps 1 and 2

Step 1. Sum Out-of-Service Time (OST) for CAD recorded activities: crime, patrol and administrative tasks.

47,626:45:20

Step 2(a). Divide total OST by the number of days per year (365) to obtain OST per day.

130:29:03

Step 2(b). Divide OST per day by number of hours per shift (8)* to obtain OST per hour per shift.

16:18:38

*While patrol officers work a 10 hour shift, we estimated there are only 8 hours available for patrol activity (a lunch break, briefing time, and a half hour for report writing must be subtracted).

The final calculation in this sequence is the daily out of service time required to handle incidents, per hour for each shift (16:18:38 or 16 hours, 18 minutes, and 38 seconds). The next procedure involves using this value to estimate the number of officer “shifts” needed to cover a year of service demands.

Shifts can be converted into staffing levels required to handle typical work assignments. Moving on to Figure 6, OST per hour, per shift was divided by 48 minutes to calculate how many officer shifts would be needed to cover a year of service. At a minimum, 20 officer shifts are needed to cover service demands in 2014.

The next procedure accounts for the number of administrative units supported by the police department. According to Department materials, the PSPD maintains: two patrol divisions, a bike division concentrated on the downtown core, a K-9 unit that also supports the Palm Springs International Airport, a traffic division, a unit dedicated to AB-109 enforcement, an animal control unit, and school resource officers. Regular staffing of these units requires several overlapping shifts. This adds 8 officer shifts, resulting in a total of 28 officer shifts.
Figure 6. Calculating Optimal Patrol Operations Staffing Levels Using 2014 Values, Steps 3 and 4

Step 3(a). Divide hourly OST p/shift [step 2(b) prior figure] by 48 minutes to get the saturation level (# officer shifts needed to cover a year of service demands).*

20.2 (rounded to 20)

Step 3(b). Add "1" to reach saturation level for each watch, in each administrative unit, to include a buffer for higher than expected workload.

20+1(2 divisions + bike + K9 + traffic + AB109 + animal control + CSR) = 28 officer shifts

Step 4. Multiply recommended staffing level by relief factor of 2.4* to generate total staffing requirements.

minimum number of patrol officers needed: 67

*Dividing 8 hours of available patrolling time by 10 hours (480 minutes by 600 minutes) generates a rate of 48 minutes per hour available for patrol activity.

^The relief factor accounts for non-patrol functions such as training, court appearances, and leave.

The final step in the estimation sequence is to build in a relief factor. We use the industry standard of 2.4. By multiplying 28 officer shifts by 2.4 to account for non-patrol functions such as training, court-appearances and leave, we arrive at the minimum number of officers needed to respond to the expected service demands of 2014. **A minimum of 67 officers need to be assigned to patrol duties.**

To reconfigure this estimation process so that it supports a community policing model, Step 3(a) is adjusted. Instead of dividing by 48 minutes, we divide by 24 minutes. Dividing by 24 minutes generates an estimate based on allocating 40% of a shift to responding to calls-for-service. This leaves half of their time open for officer-driven activity. Increasing the amount of discretionary time available to officers is generally done to encourage more opportunity for officers to develop positive interactions with citizens and to support local problem-solving. We then proceed through the remaining calculations in the same
fashion. To support community policing, 118 officers are needed for patrol assignments.

**Comparison**

Table 7 compares suggested to observed staffing levels for three years (2012-2014). Two models offer suggested minimum staffing levels for patrol assignments, supporting either a minimum staffing (a skeleton crew) or a community-policing model.

The recommended minimum number of officers dedicated to patrol duties averages to low of 66 officers and a maximum of 114. Over the last three years, the average number of officers attending CFS was 70.

**The trajectory of staffing levels suggests a decline from 2012. Our estimates advocate that the existing staffing level is below the recommended minimum. Thus, the PSPD is in need of at least 4 officers.**

**Table 7. Staffing Levels**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total OST Time</th>
<th>Suggested Patrol Officer Staffing</th>
<th>Existing Patrol Officer Staffing*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Minimum Staffing</td>
<td>Community Policing Model</td>
</tr>
<tr>
<td>2014*</td>
<td>47,626:45:20</td>
<td>67</td>
<td>118</td>
</tr>
<tr>
<td>2013</td>
<td>44,904:02:00</td>
<td>65</td>
<td>110</td>
</tr>
<tr>
<td>2012</td>
<td>46,861:10:09</td>
<td>67</td>
<td>115</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>46,463:59:10</strong></td>
<td><strong>66</strong></td>
<td><strong>114</strong></td>
</tr>
</tbody>
</table>

* Estimates of existing officer staffing are based on a count of the personnel at the rank of officer who attended at least one call for service during the calendar year. This does not take into consideration actual assignments, extended leaves, promotions, or transfers. As such, these figures may not match official records.

A note of caution is warranted. These estimates do not account for co-response to fires and other emergencies, nor do these estimates account for special events requiring extra patrol or S.W.A.T. All special details are excluded. These estimates are staff levels needed simply to respond to daily service demands. If we were to consider the service demands posed by these items, then the dedicated patrol staff should be at a level more consistent with the community policing model.
Social Problems

High rates of homelessness can increase service demands on City Departments, particularly the first responders—Fire, Ambulance and Police. The effect of these service demands are exacerbated when agencies are not adequately equipped to address the needs of this special population, particularly when comorbidity exists, i.e., an individual suffers from mental illness and has a drug dependency problem. To enable the PSPD to engage in an intelligent public discussion of this community issue, we were tasked with investigating how much patrol time was used helping vagrants.

To provide a broader context for understanding the impact that vagrancy calls have on police resources, these service demands are compared with several other social issues: trespassing, mental health subject, and public intoxication. While it is not suggested that homeless individuals generate these types of CFS, we know some degree of comorbidity is likely given the results of the 2013 Riverside County Homeless Census (2013 RCH Census).

Census

On the morning of January 23, 2013, a census was completed of homeless across Riverside County. According to the 2013 RCH Census, 60 adults reside in the public areas of Palm Springs. This is about 3.5% of the homeless population within Riverside County (est. 1,673 documented transients in Riverside County). Estimates suggest that 36% of homeless individuals in Palm Springs suffer from some kind of mental health condition, 48% have a chronic illness (e.g., hepatitis, heart disease, or diabetes), 32% deal with a physical disability, and at least 20% are substance abusers. About 75% of these individuals are chronically homeless (County of Riverside, 2013).

The actual total number of homeless or potentially homeless staying in Palm Springs is likely to be much higher than this estimate. An additional 72 transient individuals were sheltered\(^1\) at the time of the census, bringing the total number of potential homeless in Palm Springs to 132. Neighboring cities support many more people: 65 unsheltered and 18 sheltered homeless reside in Cathedral City; and, 9 unsheltered and 20 sheltered individuals live in Desert Hot Springs. Moreover, the census estimates that the Coachella Valley as a whole is home to 883 homeless individuals, 47.5% of which did not have shelter on the day of the census (County of Riverside, 2013).

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\(^1\) Sheltered individuals include people that are sleeping in emergency shelters, transitional housing, safe haven programs, or residing temporarily in a lodging facility (hotel or motel) using a voucher from a social service agency. Unsheltered individuals live in public spaces.
An important service provider in this region is Roy's Desert Resource Center (a.k.a. Roy's). Located North of Interstate 10, in the City of Palm Springs, Roy’s offers shelter and support services for individuals and families. The facility is able to accommodate up to 90 individuals each night and residents can remain for a maximum of 120 days based on their progress at the Center. Palm Springs has two pick-up/drop-off locations with scheduled evening pick-up times:

(1) About ¼ block South of the intersection of W Racquet Club Road and North Palm Canyon Drive on the East side of the street

(2) 100 feet South of the Sunline Bus Stop at the intersection of N Farrell Drive and E Vista Chino.

A range of services are offered, including: housing placement, health services, food, living skills training, budgeting instruction, case management, community referrals, access to benefits, advocacy, employment assistance, access to education, mental health and substance abuse services, clothing services, and bus passes and other transportation. With only 90 beds and limited resources, Roy’s is not able to address the needs of everyone. To better understand the level at which the needs of homeless are unmet, we turn to information captured by the Palm Springs Police Department. As first responders, police officers often fill the gaps in social services.

**Incidents**

Policing activities pertaining to four different social problems were extracted from the CFS data files—vagrancy, trespassing, public intoxication, and mental health calls (5150). Table 8 describes the number of incidents and number of police officers attending these calls during each year. The general trend suggests that since 2012, social issues are drawing more police resources. Recall that the 2014 figures are for half of the year.

**Table 8. Number of Activities Recorded for Each Time Period**

<table>
<thead>
<tr>
<th>Periods</th>
<th>All Incidents</th>
<th>Social Issues</th>
<th>% Incidents Social Issues</th>
<th>Officer Actions (attending)</th>
<th>Resources (time spent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. – Jun. 2014*</td>
<td>23,578</td>
<td>1,783</td>
<td>7.6%</td>
<td>3,732</td>
<td>1,711:40:15</td>
</tr>
</tbody>
</table>

*Jan. – Jun. 2014 is a partial year and the annual total for the number of incidents, officer actions, and resources consumed is likely to be double. Recall that the actual number of incidents may be higher: we excluded incidents if the reported “response time” was greater than an hour, the service time was greater than 10 hours, or the incident recorded as a message, special detail, or fire-related issue.
Forecasts

Figure 7 illustrates how much officer time each of these social problems use annually. The annualized estimates for 2014 simply double the amount of time officers spent on dealing with these issues Jan. 1 to Jun. 4, 2014. This assumes that the second half of the year generates a similar volume of service demands as the first half.²

Looking across time there is a projected upward trend for three social problems: vagrancy, trespassing, and public intoxication. What is alarming is the dramatic increase in time that the PSPD spends dealing with issues coded as vagrancy. This service demand is projected to increase 88% from 2012.

Figure 7. Forecast of Social Problems for 2014

² This assumption is consistent with the analysis reported in the first section of this report.
The light grey portion of the bars report the total amount of time officers spend on issues the community reports on (reactive) and the dark grey indicates officer generated (proactive) activity. Proactive activity includes all incidents wherein officers take the initiative to look into something. Clearly evident in this graphic is that citizens generate most of the calls-for-service. These social problems are of great concern to the public.

Presently, we do not know what is contributing to this increase. Since the increase is not consistent across social problems, the likelihood that they are related is called into question. Comorbidity may not be a significant issue. Analyzing the narrative contained in police reports for these incidents or collecting more data during these encounters might reveal what factors are contributing to this trend.

Table 9 reports the percent of incidents occurring throughout the day using 6 hour increments. These time periods were used because the PSPD has overlapping shifts, e.g., day, swing, and graveyard. This complicates how shift-based analyses are conducted. Red highlighting draws attention to the largest percent of cases and dark grey to the second most common time. Light grey and white cells experience the lowest percentage of calls. Incident counts are provided for vagrancy calls to help translate percent values into workload.

Vagrancy CFS occur most often during the day, with a greater percent falling between 7 a.m. and the end of the lunch hour. A similar pattern is found for trespassing and mental health calls. Public intoxication differs: a greater percent of these social problems occur at the end of the day.

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Vagrancy</th>
<th>Trespassing</th>
<th>Mental Health</th>
<th>Public Intoxication</th>
<th>Time of Day Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 to 6:59</td>
<td>2.6 (199)</td>
<td>1.6</td>
<td>2.2</td>
<td>3.0</td>
<td>9.4</td>
</tr>
<tr>
<td>7:00 to 12:59</td>
<td><strong>23.5 (1,815)</strong></td>
<td>4.7</td>
<td>6.0</td>
<td>2.4</td>
<td><strong>36.6</strong></td>
</tr>
<tr>
<td>13:00 to 18:59</td>
<td>17.2 (1,330)</td>
<td><strong>5.8</strong></td>
<td><strong>7.9</strong></td>
<td>4.7</td>
<td><strong>35.5</strong></td>
</tr>
<tr>
<td>19:00 to 0:59</td>
<td>5.1 (394)</td>
<td>3.1</td>
<td>5.2</td>
<td><strong>5.2</strong></td>
<td><strong>18.5</strong></td>
</tr>
<tr>
<td><strong>Issue Total</strong></td>
<td><strong>48.3 (3,738)</strong></td>
<td><strong>15.2</strong></td>
<td><strong>21.2</strong></td>
<td><strong>15.3</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Note: Percentages are calculated based on 7,740 incidents.
Day of the Week

Each type of incident occurs with greater frequency on different days of the week (See Table 10). Vagrancy incidents are more prevalent during the early part of the week and there is some overlap with mental health CFS. Trespassing calls are relatively consistent throughout the week, with a slight increase Thursdays and Fridays. Mental health issues and public intoxication calls occur more frequently on weekends.

Table 10. Percent of Incidents Occurring by Weekday

<table>
<thead>
<tr>
<th>Day of the Week</th>
<th>Vagrancy</th>
<th>Trespassing</th>
<th>Mental Health</th>
<th>Public Intoxication</th>
<th>Day Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>8.8</td>
<td>2.0</td>
<td>3.4</td>
<td>2.0</td>
<td>16.2</td>
</tr>
<tr>
<td>Tuesday</td>
<td>7.9</td>
<td>2.1</td>
<td>2.7</td>
<td>1.7</td>
<td>14.4</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8.8</td>
<td>2.0</td>
<td>2.8</td>
<td>1.9</td>
<td>15.5</td>
</tr>
<tr>
<td>Thursday</td>
<td>8.0</td>
<td>2.4</td>
<td>3.0</td>
<td>1.7</td>
<td>15.1</td>
</tr>
<tr>
<td>Friday</td>
<td>6.2</td>
<td>2.3</td>
<td>3.5</td>
<td>2.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Saturday</td>
<td>5.0</td>
<td>2.2</td>
<td>2.9</td>
<td>3.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Sunday</td>
<td>3.7</td>
<td>2.2</td>
<td>2.9</td>
<td>2.7</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Note: Percentages are calculated based on 7,740 incidents.

Seasonality

Seasonal patterns are displayed in Table 11. With the exception of mental health issues, incidents increase from January and peak in April. This peak can be partly explained by the co-occurrence of several major events that attract thousands of people to the area who are intent on consuming alcohol. Temperatures are also reported to examine whether vagrancy calls vary by season. The pattern found supports the hypothesis that during the hot summer months, homeless shift to different locations or communities. This suggests that even though 75% of PS vagrants are chronically homeless, they are adaptable to changing circumstances.

Table 11. Percent of CFS by Month for Social Problems Compared to Temperature

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Avg. Max. Temperature</th>
<th>Vagrancy</th>
<th>Trespassing</th>
<th>Public Intoxication</th>
<th>Mental Health</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>70.8</td>
<td>4.4%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>2.2%</td>
<td>9.3%</td>
</tr>
<tr>
<td>February</td>
<td>74.0</td>
<td>4.8%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>2.5%</td>
<td>10.4%</td>
</tr>
<tr>
<td>March</td>
<td>80.4</td>
<td>5.1%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>2.4%</td>
<td>10.8%</td>
</tr>
<tr>
<td>April</td>
<td>87.7</td>
<td>6.3%</td>
<td>2.0%</td>
<td>1.8%</td>
<td>2.2%</td>
<td>12.2%</td>
</tr>
<tr>
<td>May</td>
<td>95.7</td>
<td>5.6%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>2.0%</td>
<td>11.1%</td>
</tr>
<tr>
<td>June</td>
<td>103.7</td>
<td>3.5%</td>
<td>1.2%</td>
<td>1.1%</td>
<td>1.8%</td>
<td>7.6%</td>
</tr>
<tr>
<td>July</td>
<td>108.1</td>
<td>3.1%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>6.8%</td>
</tr>
<tr>
<td>August</td>
<td>107.3</td>
<td>2.9%</td>
<td>0.9%</td>
<td>0.8%</td>
<td>1.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>September</td>
<td>101.9</td>
<td>2.9%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>1.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>October</td>
<td>91.2</td>
<td>3.6%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.2%</td>
<td>6.7%</td>
</tr>
<tr>
<td>November</td>
<td>78.5</td>
<td>3.1%</td>
<td>0.9%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>December</td>
<td>69.2</td>
<td>3.2%</td>
<td>0.8%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Note: Monthly temperatures are averages for the month for an extended time period (1981-2010). Source the Western Regional Climate Center, at the Desert Research Institute, (http: www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?caplms+sca).
Table 12. Number of Incidents by Address

<table>
<thead>
<tr>
<th>Address</th>
<th>No. Incidents</th>
<th>No. of Social Problems</th>
<th>% of All Incidents of Social Problems</th>
<th>Place Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>425 S Sunrise Wy</td>
<td>221</td>
<td>4</td>
<td>2.86%</td>
<td>Shopping Center</td>
</tr>
<tr>
<td>1717 E Vista Chino</td>
<td>163</td>
<td>4</td>
<td>2.11%</td>
<td>Shopping Center</td>
</tr>
<tr>
<td>401 E Amado Rd</td>
<td>123</td>
<td>2</td>
<td>1.59%</td>
<td>Casino</td>
</tr>
<tr>
<td>5601 E Ramon Rd</td>
<td>116</td>
<td>4</td>
<td>1.50%</td>
<td>Shopping Center</td>
</tr>
<tr>
<td>1150 N Indian Canyon Dr</td>
<td>111</td>
<td>3</td>
<td>1.43%</td>
<td>Medical Center</td>
</tr>
<tr>
<td>449 E Arenas Rd</td>
<td>108</td>
<td>4</td>
<td>1.40%</td>
<td>Apartment building</td>
</tr>
<tr>
<td>321 E Arenas Rd</td>
<td>86</td>
<td>2</td>
<td>1.11%</td>
<td>Shopping Center</td>
</tr>
<tr>
<td>611 S Palm Canyon Dr</td>
<td>79</td>
<td>2</td>
<td>1.02%</td>
<td>Shopping Center</td>
</tr>
<tr>
<td>366 S Palm Canyon Dr</td>
<td>60</td>
<td>3</td>
<td>0.78%</td>
<td>Rite Aid</td>
</tr>
<tr>
<td>2465 E Palm Canyon Dr</td>
<td>38</td>
<td>2</td>
<td>0.49%</td>
<td>Shopping Center</td>
</tr>
<tr>
<td>150 S Indian Canyon Dr</td>
<td>27</td>
<td>2</td>
<td>0.35%</td>
<td>Hard Rock Hotel</td>
</tr>
<tr>
<td>300 S Calle El Segundo</td>
<td>24</td>
<td>2</td>
<td>0.31%</td>
<td>Apartment building</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,156</strong></td>
<td><strong>2.8</strong></td>
<td><strong>14.94%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 12 shows the number of incidents per address, the number of different social problems observed, and the type of place associated with each address. These addresses are the top 15 problematic locations and they make up less than 1% of all addresses that requested PSPD services to deal with a social problem (2,027 addresses). The four locations highlighted in red are of concern since they are associated with a high service demand for all four types of social problems. The two addresses highlighted in grey are also concerning since they are associated with 3 types of social problems. While additional analysis of the spatial patterning is required, this degree of concentration generally indicates that the locations offer resources that attract vagrancy, i.e., bus stops or social services. By identifying key issues that are root causes of the calls for service one can begin to treat the source of the problem.

**Implications**

Homelessness is a consequence of many different factors and it is often associated with substance abuse, financial strain, and mental health issues. In order to lower the need for police to intervene in these types of situations the root cause of the problems must be addressed. In some cases this may call for the City and service providers to partner with one another in order to tackle associated problems instead of isolated situations. These
types of problem-oriented policing strategies have been used with success in other communities.

For example, in Fort Lauderdale FL, a dramatic increase in homelessness was observed (2002). An investigation into the City’s response plan revealed that social services were being provided by different organizations and agencies. Due to the lack of communication between the police and service providers involved, information was not getting out to the homeless population. A great deal of resources and funding was wasted and the homeless remained underserved. The solution in this case was for agencies to create partnerships to work together to pool resources, and get more information out to the homeless population about social services that were available to them.

In Colorado Springs, the Police Department found themselves dealing with a large encampment of up to 500 individuals, with few resources to handle it (2010). A unit was formed with three officers, Homeless Outreach Team (HOT). These officers met with advocacy groups (who had previously filed suits against the department for simply cleaning out encampments), as well as shelters, and various service providers, to generate a wrap-around service provision that was able to address the unique needs of individuals. By partnering with other agencies, a small group of police officers coordinated with other service providers to help the homeless individuals: establish permanent housing, reunite with family, access social services, and obtain physical and mental healthcare.

These two case studies are examples of how a problem-oriented policing approach can be used to change the cycle of homelessness that comes from just simply enforcing new or current laws (see Figure 8). The key to reversing the cycle of decline in both case studies was to develop a team capable of coordinated service provision. Law enforcement is uniquely positioned to champion such an initiative. Police officers have first-hand knowledge of the complexity of community problems as they are repeatedly called for different reasons to deal with the same individuals and places. During the course of regular duties, officers establish working relationships with representatives from different City departments and social service organizations. Additionally, they have the legal authority to enforce City bylaws and the capacity to respond 24 hours a day, seven days a week.
Figure 8. Cycles of Homelessness and Coordinated Service Provision

(a) Cycle of Decline

- Needs are unmet (e.g., shelter, social services)
- Disadvantage increases (through fines, incarceration, & relocation)
- Negative contact with police
- Deviant activity to meet needs (due to lack of socially accepted resources)

(b) Reversing the Cycle of Homelessness

- Needs are assessed & plan launched
- Coordinated response
- Disadvantage decreases
- Police as case workers

Launching POP

The key to launching an effective problem-oriented policing (POP) initiative is twofold. First it is critical that a group of stakeholders initiate a coordinated and thorough investigation into the extent of the problem. This information is essential to developing a package of solutions and it also establishes a baseline from which to measure the effectiveness of the response after implementation. Second, in-house experts must be identified. Experienced and knowledgeable leadership is critical to maximizing the impact of a suite of interventions. One simple way to identify a group of police officers that are likely to have detailed knowledge of specific community problems is to examine their working relationships based on CFS activity.

The PSPD has a standing policy that two officers must attend certain types of calls. (This policy was put in place for officer safety.) Extracting all incidents wherein two officers attended, we identify temporary working relationships. If we aggregate this information for the entire study period, a network of officer CFS activity emerges.

Figure 9 illustrates working relationships constructed from about 2.5 years of CFS activity (Jan. 1, 2012 – Jun. 4, 2014). Combining all years, 117 different police officers (and fire service personnel) jointly rendered services for these incidents. These images represent the working partnerships formed when dealing with a total of 7,769 incidents (because the amount of time used to respond was not examined this total is higher than the analysis reported above). To remain in the network, pairs of officers must
have worked together on at least 5 CFS for the study period. Circles represent officers and lines are the working partnerships. The unconnected circles identify personnel whom have not co-attended at least 5 incidents with other officers for the call type.

Line width varies by the number of calls pairs of officers attended together; this reflects strong working partnerships. The black lines indicate that the pair of officers attended at least 25 CFS together for that social problem within the 2.5 year study period.

Figure 9. Pairs of Officers Attending 5 or more Social Problem CFS, Jan. 1 2012 – Jun. 4 2014

Vagrancy Calls

Trespass

Public Intoxication

5150 Mental Health
Variation in symbol size reflects connectivity with many different pairs of officers: people with larger symbols work with many others. The statistic used here is called betweenness centrality. Betweenness centrality is akin to an average or mean but it is used for social networks. People with high scores are considered to be central brokers, positioned between many others and thus, they are able to control the flow of information throughout a network. In this analysis, these calculations were based on all working partnerships (this includes all joint activity that amounts to less than 5 CFS during the study period). These officers are best positioned to accumulate information across the entire network and they are also best positioned to diffuse information.

Putting these two pieces of information together we see that when it comes to vagrancy issues, there is a strongly connected group of officers, centered on BARRONL. There is another group, JOELA and CHADN, that have co-attended many calls, yet they do not work often with other officers on vagrancy issues. These two clusters may have dissimilar experiences, perhaps they represent different shifts. Pooling from these two groups would provide the strongest in-house expertise on vagrancy issues. A team comprised of these officers would be best positioned to craft solutions, as well as meet with individuals from other agencies to lead collaborative efforts to address each social problem.

The two officers with the most central positioning are BARRONL and KEVINL. These individuals are best positioned to get “the word out” when new policing tactics are implemented.

Comparing the officer working relationships for the different social problems reveals that a small group of officers jointly handle CFS for all four social problems. These officers are: GILV, MERRITC, BARRONL, ANTHONYH, JOELA, CHADN, and MICHAELHE. The officers best positioned to broker information throughout the entire network are: TOMB, BARRONL, KEVINL, MERRITC, ANTHONYP, and GilV.

Brokerage is important. Operations within a police department, like all other agencies, are aided (or hindered) by word-of-mouth transmission of information. Changing policy must come from command directives, but ensuring the most central change agents within the agency are tuned into the new protocol, will speed the diffusion of practices amongst the rank and file. These central brokers are also critical sources of information about what is going on as they pool information from different cliques or groups of officers.
Resources

The Office of Community Oriented Policing Services and the Center for Problem-Oriented Policing offer several useful guidebooks on issues related to the social problems discussed here. Additional resources include:


These resources are available free of charge and they are accompanied with many other materials that are designed to support problem solving efforts.
Pool Parties

The popularity of pool parties has increasingly grown throughout the Palm Springs area. It has become a way for hotels and motels to increase their occupancy rates throughout the “low” seasons. For the most part, hotels will have a weekly DJ that provides music and entertainment for guests. The hotels also host special event DJs that attract much more attention and larger crowds. One of the most concentrated periods of pool party festivities is during the Coachella Music Festival (see Table 13). In the middle of this schedule, the Tachevah Block Party occurred.

Table 13. Official Pool Parties during the Coachella Music Festival 2014

<table>
<thead>
<tr>
<th>DATE</th>
<th>DAY</th>
<th>TIME</th>
<th>HOTEL</th>
<th>POOL PARTY</th>
<th>ENTRANCE</th>
<th>ENTERTAINMENT / DJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/10/2014</td>
<td>Thursday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $40</td>
<td>Dirty South</td>
</tr>
<tr>
<td>4/11/2014</td>
<td>Friday</td>
<td>3:00-9:00 PM</td>
<td>The Saguaro</td>
<td>The Saguaro Desert Weekender</td>
<td>RVSP, FREE</td>
<td>FKA TWIGS, Kingdom, Total Freedom, Prince William, P. Morris</td>
</tr>
<tr>
<td>4/11/2014</td>
<td>Friday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $40</td>
<td>A-Trak</td>
</tr>
<tr>
<td>4/12/2014</td>
<td>Saturday</td>
<td>12:00-6:00 PM</td>
<td>The Saguaro</td>
<td>The Saguaro Desert Weekender</td>
<td>RVSP, FREE</td>
<td>Kindness DJ</td>
</tr>
<tr>
<td>4/12/2014</td>
<td>Saturday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $100</td>
<td>Disclosure</td>
</tr>
<tr>
<td>4/12/2014</td>
<td>Saturday</td>
<td>12:00-6:00 PM</td>
<td>Ace Hotel</td>
<td>Desert Gold 2014</td>
<td>RVSP, FREE</td>
<td>Fausto Bahia, Zakmatic, DJ Open1One, ZutZut</td>
</tr>
<tr>
<td>4/12/2014</td>
<td>Saturday</td>
<td>11:00 AM</td>
<td>Riviera</td>
<td>Bikini Bar VIP Pool Party</td>
<td>Free</td>
<td>DJ Garth Trinidad, Mateo Senolia</td>
</tr>
<tr>
<td>4/12/2014</td>
<td>Saturday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Chiki Bar VIP Pool Party</td>
<td>Free</td>
<td>DJ Shasta</td>
</tr>
<tr>
<td>4/13/2014</td>
<td>Sunday</td>
<td>1:00-7:00 PM</td>
<td>The Saguaro</td>
<td>The Saguaro Desert Weekender</td>
<td>RVSP, FREE</td>
<td>DJ Harvey</td>
</tr>
<tr>
<td>4/13/2014</td>
<td>Sunday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $100</td>
<td>David Guetta</td>
</tr>
<tr>
<td>4/13/2014</td>
<td>Sunday</td>
<td>12:00-6:00 PM</td>
<td>Ace Hotel</td>
<td>Desert Gold 2014</td>
<td>RVSP, FREE</td>
<td>DJ Nombre Apellido, Late Nite Howl, Yesco, Los Macuanos, NRML DJ’s</td>
</tr>
<tr>
<td>4/13/2014</td>
<td>Sunday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Bikini Bar VIP Pool Party</td>
<td>Free</td>
<td>Lindsay Harper Band</td>
</tr>
<tr>
<td>4/13/2014</td>
<td>Sunday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Chiki Bar VIP Pool Party</td>
<td>Free</td>
<td>DJ Shasta</td>
</tr>
<tr>
<td>4/16/2014</td>
<td>Wednesday</td>
<td>6:00 - 10 PM</td>
<td>Tachevah 2014 Block Party</td>
<td>Free</td>
<td>City of PS, Aqua Caliente Band of Chuilla Indians, and Goldenvoice.</td>
<td></td>
</tr>
<tr>
<td>4/17/2014</td>
<td>Thursday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $60</td>
<td>Skrillex</td>
</tr>
<tr>
<td>4/18/2014</td>
<td>Friday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $100</td>
<td>Martin Garrix</td>
</tr>
<tr>
<td>4/18/2014</td>
<td>Friday</td>
<td>12:00-6:00 PM</td>
<td>Ace Hotel</td>
<td>Desert Gold 2014</td>
<td>RVSP, FREE</td>
<td>Canyon Cody, Gozar, DJ Ethos</td>
</tr>
<tr>
<td>4/19/2014</td>
<td>Saturday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $125</td>
<td>Tiestlo</td>
</tr>
<tr>
<td>4/19/2014</td>
<td>Saturday</td>
<td>12:00-6:00 PM</td>
<td>Ace Hotel</td>
<td>Desert Gold 2014</td>
<td>RVSP, FREE</td>
<td>Chico Sonido, Kali Uchis, Freak City DJ’s</td>
</tr>
<tr>
<td>4/19/2014</td>
<td>Saturday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Bikini Bar VIP Pool Party</td>
<td>Free</td>
<td>Social Club</td>
</tr>
<tr>
<td>4/19/2014</td>
<td>Saturday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Chiki Bar VIP Pool Party</td>
<td>Free</td>
<td>DJ Shasta</td>
</tr>
<tr>
<td>4/20/2014</td>
<td>Sunday</td>
<td>12:00-6:00 PM</td>
<td>Hard Rock Hotel</td>
<td>LED Dayclub</td>
<td>Ticket - $40</td>
<td>Showtek</td>
</tr>
<tr>
<td>4/20/2014</td>
<td>Sunday</td>
<td>12:00-6:00 PM</td>
<td>Ace Hotel</td>
<td>Desert Gold 2014</td>
<td>RVSP, FREE</td>
<td>Jamz, Juan Wauters, Clubz, Habibi, NRML DJ’s</td>
</tr>
<tr>
<td>4/20/2014</td>
<td>Sunday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Bikini Bar VIP Pool Party</td>
<td>Free</td>
<td>The Heavy Guilt</td>
</tr>
<tr>
<td>4/20/2014</td>
<td>Sunday</td>
<td>12:00 PM</td>
<td>Riviera</td>
<td>Chiki Bar VIP Pool Party</td>
<td>Free</td>
<td>DJ Shasta</td>
</tr>
</tbody>
</table>
Event Promotion

The promotion of special events involves a relationship between promoters, agents, bands, clubs, hotels, and/or concert venues to arrange performances. The marketing of the event involves advertising, attracting the public, and revenue growth objectives (see Figure 10). Event promotions have come to involve a large social and multi-media component (e.g., TV, announcements on the radio, flyers, articles, live events, etc.). Many of the social media sites that promoters use are Facebook, Instagram, Twitter, YouTube, Myspace, or website blogs.

Social media sites allow for the promotion of events that no other outlet can provide. Different websites will advertise information about an event, photos of past events, links to purchase their tickets, and advertising information for other promoters. Facebook and Twitter contain the main sites while Instagram has a majority of photos that have their names attached to them (put into a “hashtag” format which can lead to multiple photos from other users of Instagram). YouTube can also be a way of promoting their music since this website contains music videos of performers. The promotion of events and how many people that it can reach depends on the popularity of the act and who may be collaborating for the act.

Figure 10. Social Media Honeycomb (Functionality vs. Implications of Functionality)

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3 Another popular way to market an event is the “pay-to-play” technique which involves the performer/s buying tickets to their own show, and a promoter will sell them. Relationships between a music promoter and a company can go both ways; the music promoter can pay for a venue out of their own pocket while the company can make compensation from door and bar sales. Other ways promoters advertise is to have flyers posted outside of the venue hosting the event, or they put them under the windshield of parked cars.
The impact of promotions through social media is difficult to measure. Without question the advertising power will extend far beyond the Southern California region. It is inevitable that the increasing popularity of pool parties in Palm Springs and booking of famous DJs will continue to draw larger and larger crowds. Below is a list of some of the top DJs that have performed in Palm Springs, along with their popularity as measured by social media. This provides a sense of how large their audience is, and potentially, the size of crowd they could attract to an event (values updated Sept. 15th, 2014).

**Disclosure**
Following: 1.1 million Facebook likes. 290,000+ Instagram followers. Total Events: Upcoming world tour includes 35 dates. Played in PS on April 12, 2014 at the LED Day Club, Hard Rock Hotel.

**David Guetta**
Following: 56.5 million Facebook likes. 1.5 million Instagram followers. Total Events: Upcoming world tour includes 23 dates. Played in PS on April 13, 2014 at the LED Day Club, Hard Rock Hotel.

**Skrillex**
Following: 18.6 million Facebook likes. 1.5 million Instagram followers. Total Events: Upcoming world tour includes 39 dates. Played in PS on April 17, 2014 at the LED Day Club, Hard Rock Hotel.

**Martin Garrix**
Following: 8.1 million Facebook likes. 1.4 million Instagram followers. Total Events: Upcoming world tour includes 15 dates. Played in PS on April 18, 2014 at the LED Day Club, Hard Rock Hotel.

**Tiesto**

**Showtek**
Following: 1.9 million Facebook likes. 148,000+ Instagram followers. Total Events: Upcoming world tour includes 12 dates. Played in PS on April 20, 2014 at the LED Day Club, Hard Rock Hotel.

To better understand the event culture and social messages transmitted by these social media outlets we examined the websites of pool party hosting hotels listed in Table 13. While the hotels themselves have relatively high ratings, their pool parties did not receive high grades on Yelp (see Table 14).
Table 14. Analysis of Event Pages from Selected Hotels Hosting Pool Parties

<table>
<thead>
<tr>
<th>Popularity of Pool Party Event Page (as of 05/08/14)</th>
<th>Hotels.com Rating (1 to 5 scale)</th>
<th>Yelp Rating (1 to 5 scale)</th>
<th>No. of Facebook Likes</th>
<th>No. of Twitter Followers</th>
<th>No. of Instagram Followers</th>
<th>No. Posted Pool Party Photos</th>
<th>Drinking Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Rock Hotel</td>
<td>3.9</td>
<td>3</td>
<td>35,056</td>
<td>1,835</td>
<td>N/A</td>
<td>20</td>
<td>95.0%</td>
</tr>
<tr>
<td>Ace Hotel</td>
<td>4.1</td>
<td>3.5</td>
<td>22,817</td>
<td>36,300</td>
<td>40,028</td>
<td>33</td>
<td>57.6%</td>
</tr>
<tr>
<td>Riviera Hotel</td>
<td>3.6</td>
<td>3</td>
<td>8,885</td>
<td>2,847</td>
<td>N/A</td>
<td>16</td>
<td>87.5%</td>
</tr>
<tr>
<td>Saguaro Hotel</td>
<td>4</td>
<td>3.5</td>
<td>5,382</td>
<td>918</td>
<td>N/A</td>
<td>28</td>
<td>60.7%</td>
</tr>
</tbody>
</table>

The marketing potential of social media varied from a low of 5,382 Facebook likes to a high of 35,056. The number of Twitter followers of the PS pool party scene as of May 8, 2014 also varied from a low of 918 people to a high of 36,300. Instagram was popular among party goes attending events at the Ace hotel.

We also analyzed photos that were posted online with hashtags indicating they were of pool parties in Palm Springs. No drug use, lewd acts or fighting was depicted. Yet, of the 97 pictures of Palm Springs Pool Party festivities, 71% depicted alcohol consumption.

**Saguaro Example**

Mass marketing on social media, combined with the promotional activity of music/entertainment providers can generate large crowds. For example, during the Coachella event in April 2013, the Saguaro Hotel hosted multiple special guests including DJs, entertainers, and notable attendees (e.g., celebrities, reality stars, models, etc.). In addition, the hotel also hosts popup stores and activities for the guests.

The first weekend’s attendance drew a total of 6,000 attendees with the highest attendance rate being Saturday with 3,500 people. The second weekend hosted a total of 3,600 attendees. Throughout the two weekends, the promoter Hello Stranger, estimated that they sent an initial 188,529 e-mails to VIP and industry guests to market the event. In the promoter’s media recap report, they estimated that they reached a total of 8,333,970,543 media impressions through print and online outlets. These impressions include people who read popular magazines in print (i.e., Star Magazine and NY Daily News) along with other online news outlets such as, Yahoo! News online, LA Times, and Radar Online.

The explosion of the events online creates a higher turnout rate as shown by the example of the Saguaro pool party. As a part of inviting the individuals for the entertainment, the promoters should also be aware of the safety of the guests.
Safety Audit

Safety audits conducted by twelve researchers were analyzed for security issues observed during the site reviews. Each of the 14 researchers managed a minimum of two observations at hotels hosting pool parties and day clubs during the Coachella Music Festival. The facilities observed were the: Ace, Hard Rock, Riviera, and Saguaro. Observations were also conducted at the Tachevah Block Party. In total, the research team conducted more than 40 hours of observations.

Each safety audit completed by each researcher contained information regarding observed good practices and/or issues associated with security working in the events held in the hotels or the block party. The safety audits used a standardized observation instrument with 28 items covering general impressions, behavior of security personnel at various locations/times, behavior of guests, amenities, and crowd/security interactions.

A summary of findings from the safety audits are reported in Table 15.

<table>
<thead>
<tr>
<th>Observed Behaviors</th>
<th>Facility Hosting Pool Party</th>
<th>TBP*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Good Practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security personnel at entrance/exits</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Visible security inside facility/ around pool</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Security visible patrolling outside/parking</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Friendly demeanor and helpful</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Private security in uniform</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Addressed issues immediately</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Thorough bag &amp; person check at entrance/during re-admittance (i.e., ID, wristbands)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Multiple security agencies/ organizations visible</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Visible surveillance cameras and other mechanisms to enhance security</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Security Concerns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security presence declined late in the event (i.e., only 3-4 walking around when the crowd was at its maximum)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Security presence declined outside the venue over time</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lack of security presence near the bar and other vulnerable areas like restrooms</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Security personnel appeared distracted or lacked attention while completing tasks</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Property, ID &amp; wristband checks were not consistent/ decline in vigilance as crowds increased</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Allowed women or unticketed people in for free</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Visible/ blatant drug use and no security response</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Not all entrances/exits are covered by security</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Noticeable absence of security devices (i.e., surveillance cameras)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*TBP = Tachevah Block Party
These observations revealed that there are a few issues that need to be addressed for future events.

1) The security presence near vulnerable locations (i.e., the restrooms and parking lots) must be strengthened.

2) Discourage repeated in/out of the venue by reconfiguring layouts and access to restrooms.

3) Management oversight of security by entrances and exits is needed to discourage security from allowing preferred genders to enter events for free. For example, if a group of women, waiting in line to enter an event, see security allow another group of women to enter the event for free, they will expect the same special treatment.

4) Avoid negative stereotyping when admitting guests. All guests must be checked equally.

5) Rotate security personnel after certain hours because the security guards will become fatigued and less vigilant over time. Add visible cameras to improve entry/exit screening.

An anonymous survey of recent pool party guests confirmed what the observers recorded, there was an appreciable decline in wristband and bag checks throughout the event. This raises serious concerns about underage drinking, guests bringing illegal drugs and weapons into the event. Security need to be monitored and regularly refreshed to ensure vigilant screening occurs throughout the event, not just at the beginning.

Several private security agencies were observed to work in Palm Springs.

**O’linn Security** services gated communities, construction sites, special events, and hotel events. Like most security companies the founders of this company worked previously in law enforcement and use their experience to build a better business ([http://olinnsecurityinc.com/security-services/](http://olinnsecurityinc.com/security-services/)).

**BowerEvents** provide security for any business needs, but also offer party planning if needed. The CEO and Vice President of Bower both have over twenty years of law enforcement experience and have used it to build a business model that is effective yet professional ([http://bowerevents.com/wp-content/uploads/2013/06/Bower_Events_brochure.pdf](http://bowerevents.com/wp-content/uploads/2013/06/Bower_Events_brochure.pdf)).

**American Force Private Security Inc.** is the largest company serving Palm Springs. They are a member of California Association of Licensed Security Agencies, Guards, and Associates. American Force provides services for schools, gated communities, hotels, malls, sporting events, and special events ([http://www.americanforceprivatesecurityinc.com/special-events-parties-security-services.htm](http://www.americanforceprivatesecurityinc.com/special-events-parties-security-services.htm)).
Each company has different models and beliefs of how security should be provided. Some believe they should be numerous and present to act a deterrent. Others believe they should be professional and make guests feel safe and comfortable without being omnipresent. This is very similar to the disagreement in philosophies of state and local law enforcement. However, no matter what philosophy an individual security agency practices they are held by the same standards and have to meet all the same requirements. These requirements can be set by City and the PSPD.

**Officer Interviews**

Interviews were conducted with Officers from Palm Springs Police Department to better understand the service demands and policing activities associated with special events in general, and specifically, the issues associated with policing pool parties during the Coachella Music Festival. Four officers were interviewed in regards to their workload and the events that occur in the area.

Officers were asked about extra shifts, duties, planning, training and procedures, pre-event planning, and workload effects. All officers interviewed had worked additional hours to cover these special events and responding to calls-for-service at the hotels hosting pool parties. Interviews were conducted in person, away from the station during breaks.

**Extra shifts**

All respondents indicated that they frequently worked extra shifts or overtime because of special events. Most indicated this happened on a bi-monthly or weekly basis. Extra duty assignments are reported to continue throughout the year, though the late spring is busier. The volume of extra work has been consistent for at least 3 years.

Event patrolling usually involved overtime or work during scheduled days off. The length of extra shifts is variable—4 hours to 12 hours depending on the size of the event. Advanced warning is common for large events but only a week of lead time is typical for smaller events.

**Duties**

The primary activities that officers are involved with when patrolling special events are: crowd control, traffic control, and maintaining the peace in an environment with a lot of alcohol consumption. They also attend to a lot of noise complaints. While policing special events, 3 out of 4 officers indicated they remain on the same post or assignment for the duration of their shift/festival.
Planning

When asked who was involved in pre-event planning and event management officers reported they work with California Highway Patrol and other agencies in the Coachella Valley. While the security personnel of one hotel property were mentioned, the officers did not report any public/private partnerships nor did they describe much pre-event planning.

Training

Officers also reported that all sworn personnel receive crowd control training—MACAN.

Procedures

Each respondent offered insight into the procedures implemented and security protocol established for patrolling large events.

During these events we are mainly looking for people under the influence [...]. Noise calls. Like right now we have Splash House going on, it’s at 3 different hotels so we are constantly going from hotel to hotel because of the music. That’s one of the biggest things we have to deal with. Last Saturday they took 15 calls between the 3 hotels. So we have to hire people just to deal with that, patrol can’t deal with that we’re too tight with staff.

[Respondent 1]

Separate radio channel for large events designated just to the events. We have event briefings. [Respondent 2]

[We get] mutual aid with other agencies. A Command post is set up. [Respondent 3]

With a special event your scope changes from city-wide to only dealing with the event. Everybody working the event is supplemental so that we don’t take [personnel] from patrol.

[Respondent 4]

Workload Effects

With regard to the level of resource strain officers are feeling. One officer summarized the situation this way:

We are usually busy covering other shifts because were short that no one signs up for it because they are so worn out from the other stuff. It kind of makes it hard.

They are pulling people from the detective bureau to do patrol because there are just not enough people to do patrol. Last week for two nights I stayed until 9 because there weren’t enough people, we are just trying to fill in the void. It’s hard to get people hired because we don’t have the staff to do the hiring. Dispatch was short 4 people: staff were working 12s and overtime.

[Respondent 1; emphasis added]
Section 2: Population-based Workload

Another way to assess police workloads is to examine citizen-to-officer ratios. This can be a challenge for destination cities such as Palm Springs that attract a high number of visitors and temporary residents (staying several months). The economy in Palm Springs is greatly supported by tourism and the City annually hosts many large festivals drawing 100,000’s of people. With over 150 lodging facilities the service industry creates a lot of opportunity for employment in the area. Snowbirds also flock to the city during the winter months, occupying long term vacation rentals (often on a private lease with the owner) or they live in their own home which is left vacant during the summer. These extra people and special events they attend are vital to the local economy; however, they can also strain the resources of the City.

This section of the report examines the resource constraints imposed on the police department from special events and temporary residents. We conclude this section with a comparison of Palm Springs citizen-to-officer ratios calculated with an adjusted population base.

Impact of Special Events

Detailed headcounts are not available for most events. This makes it difficult to estimate the potential influx of visitors that each activity may bring. Figure 11 provides a timeline of some of these annual events. While some of the larger, annual events have implemented counting methods, it is important that as the City continues to expand its ability to host events that a consistent mechanism be developed to better estimate resource demands.

Figure 11. Timeline of Selected Annual Events

- PSIFF (135,000)
- Humana Challenge (100,000)
- Modernism Week (48,000+)
- Dinah Shore (15,000)
- BNP Paribas Tennis Tourney (370,000+)
- Tour de PS (30,000+)
- Frank Sinatra Celebrity Golf Tourney
- White Party (30,000)
- PS Film Noir Festival (50,000)
- Coachella Fest (200,000+)
- Stagecoach (50,000)
- Ind. Day Celebration (weekly; Thursdays)
- Villagefest Street Fair
- Splash House Pool Party 1 (2,500)
- Splash House Pool Party 2 (2,500)
- PS Int. Short Film Festival (25,000)
- Greater PS Pride (50,000)
- Colors of Christmas
- 50th Annual Golf Cart Parade
- PSFF (135,000)
- Dinah Shore (15,000)
- Splash House Pool Party 1 (2,500)
- Ind. Day Celebration (weekly; Thursdays)
- Villagefest Street Fair
- Splash House Pool Party 2 (2,500)
- PS Int. Short Film Festival (25,000)
- Greater PS Pride (50,000)
- Colors of Christmas
- 50th Annual Golf Cart Parade
Since it was not possible to generate visitor estimates with any degree of scientific rigor, this section of the report examines some important security considerations. It concludes with suggestions on how to focus pre-event planning details so that the PSPD can maximize its involvement with event planners while not imposing significant resource constraints on the Department. We begin with a brief discussion of crowd psychology.

**Crowd Psychology**  
Security and police personnel must be cognizant of the cultural norms of the crowd and employ tactics that best fit them. This means that police tactics for managing the event should be modified when necessary and all security and police personnel must be able to communicate their intentions, differentiate between groups and individuals within the crowd, and avoid any discrimination of use of force.

Situational factors will influence the effectiveness of crowd monitoring, screening and management tactics, i.e., poor lighting, obstructed view of certain areas (bushes), easy entrance egress from the area, or no place to put belongings. Other circumstances will foster violence, such as extreme temperatures, excessive alcohol consumption, overcrowding, competition for space, reputation of the event, presence of triggers and perceived aggressiveness by police/security, and reactions to previous violent antagonism (e.g., Adang, 2011; Sousa and Madensen, 2011).

When deciding how to adjust crowd management strategies it is important to consider how crowds are comprised. Most include subgroups of people with varying objectives and irrespective of type (physical or psychological crowds) participants are still capable of individual decision-making (Reicher, 2011).

1. **Physical crowds** do not have a common idea or goal, i.e., shoppers at a grocery store. While they are present in the same space, each person (or group) has their own objectives and they have no links or connection to strangers in the vicinity.

2. **Psychological crowds** have a common idea or goal such as protesters or people at a sporting event. This common mindset facilitates a connection to others in the area, even if they are strangers. Though more united in perspective, subgroups remain.
Figuring out how to ensure that collective behavior does not escalate from non-violent to aggressive (e.g., singing, chanting and taunting, or using obscene or threatening gestures) and beyond to destructive and violent activity (see Figure 12), requires building a crowd management approach that is sensitive to the nature of the group and the event, prior to the start of festivities. One framework shown to be successful in building event-specific policing strategies is dialogue policing. Dialogue policing involves five fundamental elements. A critical topic of this pre-event planning is alcohol control (see Figure 13).
**Alcohol**

Managing alcohol use is a critical component to keeping special events under control. Complicating the problem is that people drink privately before traveling to the event. This may occur at a residence prior to arriving at the venue, in the parking lot while attending the festivity, or in a hotel room adjacent to the event space. Private consumption of alcohol makes it difficult for bar staff to monitor consumption.

Pre-event planning must include a discussion between security, police, and organizers to establish security priorities, review alcohol serving protocols, and review enforcement strategies. Many strategies are recommended to strengthen alcohol management at special events (e.g., Lyne and Galloway, 2011; Sousa and Madensen, 2011).

1. Promote event in a way that clearly illustrates that alcohol is not the primary entertainment.
2. Sanitize the venue to discourage bad behavior and improve safety (i.e., remove all objects/debris that could be turned into projectiles; grease light poles to discourage climbing; and remove excess furniture/landscaping to open passageways and sightlines).
3. Inform attendees well in advance that they cannot bring their own drinks and that the event is licensed and servers can deny alcohol to anyone.
4. Provide and promote non- and low alcoholic drinks, i.e., free sodas for designated drivers, and make sure alcohol sale outlets do not outnumber the food outlets.
5. Providing free/low cost food and water to reduce and slow alcohol intake. Hydration stations are a must in Palm Springs.
6. Enforce alcohol restrictions by searching guests. Limit in and out activities to reduce instances of tailgating or drug consumption in hotel rooms.
7. Restrict the size of bags and other personal belongings that can be brought into the event.
8. Stop serving alcohol 30 minutes to an hour prior to the end of the event.
9. All serving and security staff should be trained to identify levels of inebriation, as well as, how to check identification.
10. Limit the size and composition of drink containers (plastic preferred), and limit the number of drinks a person can order at a time.
11. Establish family and alcohol free areas (if expecting this demographic).
12. Ensure that at least part of the security team is highly visible and active. The suggested ratio for small venues is 1 security guard per 75 guests and for large venues 1 per 200 attendees.
13. Ensure officers are dressed in “soft” uniforms rather than riot gear and develop an off premise arrest processing space to reduce crowd interference.
14. Monitor and enforce the law on intoxication.
15. Provide safe areas for intoxicated patrons, such as chill zones, for people to sober-up before leaving.
16. Establish a taxi rank with security supervision.
17. Conduct post-event evaluations to determine any flaws, as well as to see how well they worked.
**Force Multipliers** Extending the reach of the PSPD requires working with sponsors, event planners and other key stakeholders during pre-event planning and enlisting the assistance of event organizers and their security personnel during the event.

Outreach is costly. Thus, it is critical that the PSPD use information to strategically identify organizations and events to concentrate on. By using the social network that forms among different groups due to common activity, it is possible to extend the impact of strategic outreach through information interactions among groups involved in the events.

Figures 14 and 15 demonstrate how a network, generated from examining who sponsored or co-organized 37 different events. Recording only the top 30 sponsors (listed first or depicted with the largest icons/logos), it would take little effort to generate this type of social network.

**Figure 14. Pairs of Sponsors Jointly Involved With Different Palm Springs Annual Events**

![Diagram: Social Network](image)

*Note: Symbol size reflects betweenness centrality with larger symbols identifying the most central organizations. Line width reflects the number of events that pairs of organizations sponsor.*
Figure 15 identifies organizations that are central to several major events occurring on a regular basis in Palm Springs. Each circle represents a different sponsor listed as contributing to at least one of the 37 special events examined. The lines connecting pairs of organizations indicate the number of events both groups jointly participate in. Red lines show which sponsors are most closely connected to each other through their multiple activities in Palm Springs. Rather than reaching out to all sponsors, the PSPD could maximize the effect of their efforts by partnering with the named groups. Expanding on existing practices and incorporating more private/public partnerships to support the operations of special events would significantly improve crowd management and reduce public safety concerns.

**Figure 15. Major Annual Events that Share Sponsors / Organizers**

Note: Symbol size reflects betweenness centrality with larger symbols identifying the most central events. Line width reflects the number of sponsors in common among pairs of events.
Of the 30 events examined, 24 are illustrated in Figure 15 because they share sponsors. Where thicker lines exist between pairs of events, more sponsors/organizers are shared. The events illustrated with larger symbols share sponsors with different events. This network of sponsor connectivity suggests that by working closely with individuals and organizations associated with these events, the PSPD will maximize its potential effect on all events. Through word of mouth and joint ventures, the sponsors can spread the organizational culture regarding safety and security that the PD constructs.

**Tribal Stakeholders**

The Agua Caliente Band of Cahuilla Indians play a huge role in the culture and economy of Palm Springs. Their land accounts for 31,610 acres of property, making it the City’s largest collective land owner (www.aguacaliente.org, 2014). By owning and leasing a large portion of land for commercial (1,175 leases) and residential (7,671 subleases and 11,118 time shares) uses, the Agua Caliente Band of Cahuilla Indians are essential stakeholders and they represent an important element that may be integrated into PSPD policing efforts. For example, at least 64 apartment and condo complexes are on land owned by the Band (see Appendix B). This means that there is an existing communication structure that can be harnessed to facilitate greater public/private dialogue.

**TOP Units**

The *Anaheim Police Department* maintains a Resort Area Policing Team [also referred to as the Tourist Oriented Policing (TOP) detail]. This unit significantly influences the planning and event operations of all major activities occurring in Anaheim while providing patrol and code enforcement services to the resort area. Officers liaise with the tourist industry, meeting with persons from the hospitality and amusement industries. The unit also provides training and engages in problem-oriented policing initiatives. Its primary mandate is to ensure that Anaheim remains a safe place to vacation and host conventions. Partnering with the private sector and working with event organizers is essential to identifying safety risks and enacting interventions before problems materialize. This unit can be contacted at 714.765.3438.

Through consultation with Tamara Madensen, Director of the Crowd Management Research Council, at the University of Las Vegas, the *Las Vegas Metropolitan Police Department*
developed a series of pre-event outreach strategies, officer training standards, and event protocol to enhance crowd management and reduce provocations that could trigger violence. By building proven crowd management techniques into standard protocol ensures that all officers are equipped to handle emerging crowd-related problems. Their Tourist Safety Unit concentrates their efforts on resolving property crime and other related problems. Working with private security, the LVMPD extended their resources (referred to as a force multiplier effect) by authorizing private security to arrest and cite for minor violations (this includes filing all paperwork necessary for prosecution by the district attorney). For information contact Dr. Tamara Madensen at Tamara.Madensen@unlv.nevada.edu or 702.895.0248.

Other notable Tourist Oriented Policing programs are operated by major destination cities.

**Miami Florida Metro-Dade Police Department** formed the first Tourist Oriented Policing unit, dedicated to working with the Federal Aviation Administration and airlines operating from the Miami International Airport to reduce safety and security threats to tourists.

**Orlando Florida Police Department** and the **Orange County, Florida Sheriff’s Department** maintain a special unit dedicated to liaise with the hospitality industry to provide outreach, problem solve and implement Crime Prevention Through Environmental Design (CPTED).

**Honolulu Police Department** has thoroughly integrated tourist oriented policing strategies into its daily operations, particularly in its Waikiki division. Since tourists outnumber residents at a rate of about 2 to 1, the HPD must rely on a broad set of public/private partnerships with business improvement associations (e.g., Waikiki Improvement Association), condo associations, community groups and tourism-related organizations. Since any victimization of a tourist can significantly impact the reputation of the City, one of the most critical partnerships is with the Visitor Aloha Society of Hawaii (VASH) and the Rotary Club of Honolulu. Recognizing that it is not possible to prevent all tourist-related crimes, this working group offers victim support: visiting victims in the hospital, assisting family members, upgrading hotel rooms, offering transportation
vouchers and clothes, facilitating contact with consulates to replace passports, and working with airlines to postpone travel arrangements. By extending the Aloha Spirit, the group’s objective is to aid in healing which will ensure a return visit.

**New York City Police Department** entered into a public/private partnership to address safety and security issues in Times Square. The partnership includes three organizations: the Time Square Business Improvement District, the Area Police Security Liaison (APPL) and the Midtown Community Court. Using a small property tax assessment, a multi-million dollar fund is generated that supports projects to improve the physicality of the area (e.g., lighting), support a team of private security officers, and operate a large sanitation team, primarily staffed from individuals from a drug and alcohol rehabilitation program. The APPL is a standing group of NYPD and private security firms. The Midtown Community Court handles misdemeanor arrests and dispute mediation. It imposes community service oriented sanctions and links offenders to drug counselors, job training, and health clinics.

**Resources**

The Office of Community Oriented Policing Services and the Center for Problem-Oriented Policing offer several useful guidebooks on issues related to the special events and policing in destination cities. These freely available resources include:


Hotel Occupancy and Temporary Residents

The hospitality industry is a key contributor to the local economy. Estimates for the 2013-14 (fiscal year) suggest that one million guests stayed at local hotels/motels and an additional 600,000 visitors use other lodging facilities. Internet booking sites, such as Yelp and Expedia, list more than 150 lodging facilities (hotels, motels and inns). The industry’s annual earning is estimated around $180 million a year. Less documented, but no less important, the City is also home to seasonal residents. Affectionately called, Snowbirds, many people live in Palm Springs during the winter. Accounting for these temporary residents requires making a series of assumptions about how the seasonal vacation lets and occassional use homes are populated.

This section of the report examines available data to estimate how many additional people are present in Palm Springs. Using Transient Occupancy Tax and Census counts of seasonal housing units, this part of the report concludes with revised population estimates. These figures are used to calculate citizen-to-officer ratios that are compared to national standards.

**TOT Revenue**

The largest revenue source for the City is the Transient Occupancy Tax (TOT), levied per room night on short-term visitors who stay 28 consecutive days or less (Palm Spring Treasury, 2014, p. 2-3). Through a special room tax, about 12% of the earning is allotted to the city’s revenue and the contribution is the largest source of the city’s revenue. As illustrated in Figure 16, this source provided 23% the revenue collected during FY2012-13. In addition, it is the third largest sector employing more than 3,000 people.

**Figure 16. Employment Distribution By Sector and Revenue Generated for Palm Springs, FY 2012-13**

![Pie charts showing Employment Distribution By Sector and Revenue Generated for Palm Springs, FY 2012-13](image)

The industry’s main source of income comes from renting out lodging facilities. The amount of the TOT collected can show the hospitality industry’s annual earning from the renting. The estimated earning figure can be found by multiplying the TOT rate to the annual TOT amount. For example, the city collected $19 million during FY2012-13 and the amount is a fraction of the total TOT collected. Since Palm Springs applies two different TOT rates, the estimated earnings can be found by multiplying the amount to either 11.5% or 13.5% ($19 million x 11.5% or $19 million x 13.5%). The estimated range for FY 2012-13 is from $222 million to $261 million.

TOT provided more than $19 million dollars during FY2012-13 and Figure 17 shows that TOT revenues have steadily increased since the economic downturn in FY2008-09 and it is expected to exceed $20 million in FY2013-14.

**Occupancy Rates** The occupancy rate in Palm Springs varies throughout a year but peaks during March and April. Since the TOT revenue is based on a tax per room, the largest amount of revenues collected should correlate to the highest occupancy rates. The highest monthly average TOT revenues from FY2006 to 2013 occurred in March and April (both around $2.1 million).
Most people likely rent rooms during these two months and this finding suggests that more people are likely to stay in Palm Springs during March and April. The average occupancy level from FY2006-13 also confirms this trend in the amount of TOT collected, having to reach 69% in March and 62% in April (see Figure 18). In the past 13 years, most visitors rented out rooms during March and April. Recent data support this trend continuing in FY2013-14—80% in March and 73% in April.

Estimated number of visitors can be calculated by the monthly occupancy level and estimated total number of rooms in Palm Springs (see Figure 19). The number of people per day can be estimated by multiplying the sum of rooms by the monthly occupancy rate per month. For example, the estimated daily visitors during the month of March were 12,711. This was calculated by multiplying the 80% monthly occupancy rate to the sum of rooms at 15,944. Since many people visit Palm Springs as a group and share a room, the figure is the minimum number of visitor based on the number of rooms rented and it will multiply by estimated number of users.
Figure 19. Estimated Number of People per Day based on Monthly Occupancy Level FY 2013-14

Source for Occupancy Data: Smith Travel Research, the Desert Sun articles & Monthly Measures from Visit Greater Palm Spring bureau. The figure for October was estimated from an average calculated from Figure 18.

Calculation Notes: Estimated 15,728 rooms in Palm springs x Occupancy Level x Estimated No. of People in a Room. In total, 180 facilities in Palm Springs were reviewed and the number of rooms was calculated to be 15,728 as of June 5, 2014. The list of facilities reviewed is available upon request.

Hidden Residents

It should be noted that these estimates only account for licensed lodging facilities. The rise in popularity of private rental properties and the increasing use of forums such as Airbnb and Home Exchange [www.airbnb.com and www.homeexchange.com] suggest that there may be many more properties hosting overnight guests than are captured by TOT estimates. For instance, a search of private rooms and entire home/apartments on Airbnb.com generated 296 vacation rentals for the day searched and an additional 1,000+ units were available on other days in Palm Springs. These vacation rentals can range from 43 to 1,100 dollars plus other fees. These rentals can go from one bedroom to a seven bedroom, with a minimum two-day rental. On special occasions, such as the Coachella festival, Stagecoach weekends, or holidays, the minimum stay is four days.

Private holiday rentals may be more popular among people that intend to stay for longer terms. Often called “Snowbirds”, individuals whom are unable to maintain a vacation home, regularly make arrangements to stay for extended periods in an adopted “second home.” These temporary residents are not counted in census estimates or TOT estimates, yet they require City resources. To estimate the number of additional residents this phenomenon adds, we used Census 2010 data to estimate the
number of unoccupied seasonal and vacation units that might be rented each month.

This calculation involved two steps. First, we assumed that at most, 80% of the available vacation and seasonal units are occupied at any time. Then, using TOT population estimates, monthly projections were created for seasonal and vacation unit occupancy. Setting March as the maximum, the monthly occupancy projections were generated for TOT population estimates. For example, in March 2014 we estimated a low occupancy of 12,598. Using this figure as a benchmark, November’s population of 9,154 is 72.6% of March. We assumed that the vacation rental occupancy would be at the same level. It follows that to estimate the seasonal vacation occupancy for November, we multiply the number of units available (5,914) by 72.6% to produce an estimated number of 4,297 people based on single occupancy. Given that September through April are the most desirable time for seasonal residents based on average temperature, the snowbird population was only calculated for these months. This process was repeated to generate values for peak occupancy which assumed each unit was occupied by two people.

**Est. Population**

Figure 20 illustrates the projected daily residential population in Palm Springs for the 2013-14 fiscal year. It should be noted that these figures estimate the daily population for low level residency, meaning each temporary resident (hotel/motel stay or vacation unit) was occupied by 1 person.

As described above, these population estimates were generated from several sources. To calculate the expected number of snowbirds and long term temporary residents (renting monthly accommodation from private individuals) we used the number of vacant and seasonal use housing units from the 2010 census recorded for two zip codes (92262 and 92264). In Figure 20 these estimates are depicted in red. Hotel occupancy tax was used to estimate the number of overnight visitors on an average day per month. Light grey bars show these estimates based on single occupancy. The base population, shown in dark grey takes the 2013 residential population (45,712) and adds 6.8% which is the growth trend assessed.
Figure 20. Estimated Daily Population by Month FY 2013-14, Based on Single Occupancy of Temporary Lodging

The population estimates reported in Figure 20 are the low values. This means that the projected number of snowbirds and hotel/motel guests is based on single occupancy. To account for the likelihood that most people travel to Palm Springs with at least one other person, we also repeated the estimation process for double occupancy (high values). While these values are still likely to be much lower than the true value, these calculations generate conservative estimates.

Table 16 reports these both sets of population estimates. Unfortunately, it is not possible to include the number of visitors present that attend events or those that work in the City but live elsewhere. Thus, the actual daily population is likely to be considerably higher. These values are conservative projections for individuals spending the night.

Table 16. Estimated Number of Daily PS Citizens* per Month, FY 2013-14

<table>
<thead>
<tr>
<th></th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>64,028</td>
<td>63,839</td>
<td>67,456</td>
<td>71,053</td>
<td>75,768</td>
<td>72,994</td>
<td>78,310</td>
<td>82,793</td>
<td>85,890</td>
<td>82,793</td>
<td>70,193</td>
<td>65,129</td>
<td>73,354</td>
</tr>
</tbody>
</table>

*PS Citizens are defined as people sleeping over in Palm Springs. Low estimates are based on single occupancy of lodging units and high estimates are for double occupancy.
Citizen-to-Officer Ratios

Destination cities face many challenges associated with a fluid population base. In addition to coping with a regular influx of visitors and snowbirds, Palm Springs also must accommodate a radically different social climate that large groups of visitors bring (i.e., motorcycle clubs versus bicyclists). The additional service demands generated by visitors and temporary residents, particularly when their activities are associated with special events is to calculate citizen-to-officer ratios. However, these calculations can be tricky for destination cities that do not have an existing framework capable of generating reliable headcounts.

Using the procedures described above, we projected population estimates for the 2013-14 fiscal year. These estimates, for low and peak visitors, are relatively conservative given our use of single and double occupancy figures. These adjusted population estimates were used to calculated citizen-to-officer ratios.

**Low Level**

By dividing the population by the number of sworn officers (we used a value of 89 as this was the number of sworn officers listed on the PSPD directory), we arrive at citizen-to-officer ratios for low and high population estimates reported in Table 17. It is clearly evident that the PSPD does not have enough sworn personnel to achieve the national standard for cities of this size. The commonly accepted ratio for cities with a residential population between 50,000 and 99,999 is 1.8 (e.g., Reaves, 2010; Wilson and Weiss, 2012). During periods of peak population (January-April), the Palm Springs ratio is facing a deficiency with ratios of 1.0 and 1.1.

### Table 17. Projected Monthly Citizen-to-Officer Ratios for FY 2013-14.

<table>
<thead>
<tr>
<th>Month</th>
<th>Estimated Population</th>
<th>Citizen-to-Officer Ratio per 1,000 pop.*</th>
<th>Required Sworn Officer Staffing (to meet national avg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low Pop.</td>
</tr>
<tr>
<td>July</td>
<td>56,447</td>
<td>64,028</td>
<td>1.6</td>
</tr>
<tr>
<td>August</td>
<td>56,353</td>
<td>63,839</td>
<td>1.6</td>
</tr>
<tr>
<td>September</td>
<td>62,525</td>
<td>67,456</td>
<td>1.4</td>
</tr>
<tr>
<td>October</td>
<td>59,959</td>
<td>71,053</td>
<td>1.5</td>
</tr>
<tr>
<td>November</td>
<td>62,317</td>
<td>75,768</td>
<td>1.4</td>
</tr>
<tr>
<td>December</td>
<td>60,930</td>
<td>72,994</td>
<td>1.5</td>
</tr>
<tr>
<td>January</td>
<td>63,588</td>
<td>78,310</td>
<td>1.4</td>
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<tr>
<td>February</td>
<td>65,830</td>
<td>82,793</td>
<td>1.4</td>
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<tr>
<td>March</td>
<td>67,378</td>
<td>85,890</td>
<td>1.3</td>
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<tr>
<td>April</td>
<td>65,830</td>
<td>82,793</td>
<td>1.4</td>
</tr>
<tr>
<td>May</td>
<td>59,530</td>
<td>70,193</td>
<td>1.5</td>
</tr>
<tr>
<td>June</td>
<td>56,997</td>
<td>65,129</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>61,474</strong></td>
<td><strong>73,354</strong></td>
<td><strong>1.5</strong></td>
</tr>
</tbody>
</table>

*Citizen-to-officer ratio is based on 89 sworn officers.
High Level

Reversing the equation to solve for $X$, it was possible to determine the number of sworn personnel needed to generate a 1.8 ratio on a monthly basis. The final column of Table 17 reports these staffing levels. The first number reported is for low population times and the maximum value is for peak (high) population levels. A number of additional officers are needed to bring the PSPD sworn officer staffing closer to the national average (1.8 per 1,000 citizens). While offering overtime hours to officers in order to cover the extra service demands generated by special events is a reasonable tactic for addressing this shortfall, it will not be an efficient use of resources in the long run. Based on the estimated population, the PSPD is understaffed throughout the year. Expecting officers to relinquish time with their families throughout the year can only result in fatigue, diminished moral, and over extended budgets.

The degree to which the City supports a community policing model is contingent upon the anticipated expansion in special events, growth in residential population (temporary and permanent), and economic development plans. For instance, on February 19, 2014 the city council approved the building of a 6.37-acre residential unit to be built housing 39 lots. City council also approved the construction of a 35,672 square foot establishment of condominiums to be built in Palm Springs. Aside from residential units being built two hotel constructions have been approved since the start of the 2014-year by the Palm Springs City Council. A 200-room Dolce Hotel on the corner of Alvarado Rd. and Amaro Rd. will be constructed under Praetor Investments, LLC. The second hotel that was approved will be a 185-room Kimpton Brand Hotel to include rooms, restaurants retail and additional uses. Perhaps the greatest development project that Palm Springs will see in the near future is the City of Palm Springs Downtown Revitalization Project approved with funds from Measure J. The Downtown Revitalization Project will create areas for concerts, festivals, outdoor events, along with retail, hotels and office space. Roads will be built to create greater access to the many establishments that will be part of this revitalization project. With more construction and reconstruction projects coming to Palm Springs in the near future, this City will expand not only its visiting population, but also its resident population.
Section 3: Recommendations

An interesting finding is that the projected number of sworn personnel needed to raise the citizen-to-officer ratio to the national standard are relatively consistent with some of the estimates generated by the OST model that are required to support a community policing framework. Given that these calculations use entirely different data sources serves to enhance the credibility of the results. Looking at workload from two completely different perspectives generated consistent findings.

It takes time to adjust the resources of a law enforcement agency. Thus, given the findings of this report, it is critical that the PSPD invest some time to reconfiguring existing resources and launch initiatives to extend its capacity.

This relatively lengthy set of analyses generated a number of recommendations that may improve the efficiency and effectiveness of patrol activity.

1. Increase staffing levels to promote community policing and officer-initiated problem solving.

2. Reallocate some existing officers to support specialized units that will facilitate greater tourist-oriented policing focused on the management special events and lead the development of a coordinated approach to addressing special populations, i.e., homeless and those with only temporary shelter.

3. Investigate opportunities to extend resources by partnering with private security firms, Tribal Security and Law Enforcement, property managers, and event planners. These partnerships will have a force multiplier effect.

4. Work with the City and event planners/hosts to develop a reliable and efficient method of counting the number of visitors attending events.

5. Work with the City, hospitality industry, and Agua Caliente Band of Cahuilla Indians to develop a mechanism to monitor and oversee the private lodging market (seasonal lets and private vacation stays).

6. Initiate a more detailed investigation to the 15 properties generating the highest level of calls for social problems and the properties using the greatest overall amount of out-of-service time. The focus of this inquiry should be into uncovering the root causes.

7. Modify the computer aided dispatch system so as to more easily monitor officer- and citizen-initiated incidents, response times, and service demands.
Appendix A: Calculating Service Time

Selecting only police calls (the system also includes Fire Department activity), the CAD data required additional file cleaning, case reclassification and database reconstruction to permit a time use analysis. The procedure followed is described briefly below.

Once we excluded all dispatch and administrative messages, incidents were separated into five time periods of 6 month intervals. With the exception of Jan. 1, 2014 to Jun. 4, 2014 which is only five months. From this, two sets of files were generated: responding unit files include a record for each person that attended a recorded incident; and, incident files average time scores for each recorded incident.

1. **Responding Unit Files.** In addition to reclassifying incidents by the description and departmental code (crime versus administrative/patrol), five time codes were generated:
   i. **Time in Queue** = (time officer was enroute) – (time the officer was assigned the incident).
   ii. **Travel Time** = (time officer was arrived) – (time the officer was enroute).
   iii. **Time to Respond** = (time officer was arrived) – (time assigned).
   iv. **Time in Service** = (time call was cleared) – (time officer arrived on scene).
   v. **Total Officer Time** = (time call was cleared) – (time officer was enroute).

   Extreme times were eliminated, this includes any time over 10 hours (in queue, travel, response, and service). Negative time was classified as missing. These incidents were not used for time use calculations. In total, less than 1 percent of incidents were excluded. While this will not materially alter the overall trends described in this report, where issues may exist, sensitivity analyses were conducted and noted. Due to these data cleaning protocol, the total incidents reported here will not match crime counts and incident counts reported by the Palm Springs Police Department in other documents.

2. While most variables in the incident files were simple to consolidate from the incident description, a few calculations merit description.
   i. **Fastest Response Time** = shortest response time among all attending officers.
   ii. **Average Response Time** = average response time across all attending officers.
   iii. **Total Service Time** = sum of time all officers spent on the incident.
   iv. **Number Attending** = total number of officers involved in dealing with the incident.
Appendix B: Properties under Tribal Control

Below is a list of some of the condos and residential homes that are located in Palm Springs on Indian lease land.

1. Bellamonte PSL 282/284 Fey PUD PS
2. Beverly Vista PSL 213
3. Biarritz Estates PSL 271 condo PS
4. Biltmore Private Lease condo PS
5. Caballeros Estates condo PS
6. Camelot Villas PSL 175 Fey condo PS
7. Canyon Country Club Colony PSL 47 Fey condo PS
8. Canyon Country Club Estates PSL 47 Fey condo PS
9. Canyon Country Club Resort PSL 47 & PSL 47 A Fey condo PS
10. Canyon Estates PSL 122/123 Fey PUD PS
11. Canyon View Estates Limited PSL 53 Fey PUD PS
12. Canyon Vista Fey PUD PS
13. Canyon West Estates PSL 221 Fey PS
14. Canyon Heights private lease condo PS
15. Canyon Sands PSL 127 and PSL 133 condo PS
16. Canyon South 1, 2, 3 condo PS
17. Canyon West PSL 221 Fey PUD PS
18. Casa Sonora PSL 145 condo PS
19. Casa Verde PSL 224 Fey condo PS
20. Cathedral Canyon Country Club PSL 147 condo PS and CC
21. Centre Court PSL 207 PS
22. Deauville PSL 245 condo PS
23. Desert Dorada PSL 154, PSL 196, 208 and 235
24. Desert Princess PSL 269 condo CC
25. Diplomat PSL 129 condo PS
26. Esprit PSL 274 condo PS
27. Estadoss South Fey condo PS
28. Fairways PSL 147 and PSL 150 condo PS
29. Greenhouse East PSL 211 condo PS
30. Greenhouse West PSL 158 Fey condo PS
31. Kings Point condo PD
32. La Palme condo PS
33. Los Cocos PSL 105 condo RM
34. Los Compadres PSL 175 Fey condo PS
35. Mission Hills Country Club PSL 121 condo RM
36. Mountain View Villas Fey condo PS
37. Oasis Resort PSL 104B and PSL 146 condo PS
38. Palm Regency PSL 233 Fey condo PS
39. Palomino PSL 374 condo PS
40. Park Andrea PSL 227 Fey PUD PS
41. Playa Del Sol PSL 206 PUD PS
42. Plaza Villas PSL 236 condo PS
43. Ramon Estates PSL 216 Fey condo PS
44. Rancho La Paz (portions) condo PS
45. Rancho Estates North and South PSL 215 PUD RM
46. Ridgeview Village PSL 236 and PSL 277 condo PS
47. Rimcrest PSL 16 condo PS
48. Rio Del Sol PSL 239 Fey PUD CC
49. Rose Garden PSL 232 and PSL 241 condo PS
50. Saddle Rock Estates condo PS
51. Saddle Rock Gardens condo PS
52. Smoketree Racquet Club PSL 204 Fey condo PS
53. St. Tropez Villas condo PS
54. Sungate PSL 251 and PSL 254 condo PS
55. Sunrise Palms PSL 287 condo PS
56. Sunshine Villas PSL 220 condo PS
57. Terra Vita PSL 371 Fey condo PS
58. Tierra Hermosa PSL 234 Fey condo PS
59. Ventana Del Sol PSL 186D condo PS
60. Villa Alejo PSL 160 Fey condo PS
61. Villa Caballeros PSL 306 condo PS
62. Village Racquet Club PSL 369 condo PS
63. Vista Mirage PSL 198 Timeshare PS
64. Mesquite Greends (New Mesquite) PSL 219 condo PS

Source: Simmons, 2010.
Appendix C: References


Community Redevelopment Agency of the City of Palm Springs (2010). Five Year Implementation Plan.

County of Riverside (2013). Riverside County 2013 Homeless Count and Subpopulation Survey. Count of Riverside, Department of Public Services.


**Additional Resources**


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