

## Predictive Policing a Success in Santa Cruz, Calif.

Brian Heaton | October 8, 2012



Burglaries are down in the iconic beach community of Santa Cruz, Calif., and police are crediting the drop in crime to the use of [predictive policing](#) technology.

The Santa Cruz Police Department compared crime statistics from the first six months of 2012 to the same timeframe in 2011 when the advanced [analytics and prediction](#) technology wasn't being used. Without adding more officers to the streets or changing beats and shift times, the results were a 19 percent reduction in property theft.

Zach Friend, press information officer and crime analyst for the Santa Cruz PD, said the program's success really started being noticed a few months after the department installed the system as a pilot project in July 2011. Crime data is pumped into a database and a complex computer algorithm predicts hotspots around the city where officers can expect illegal activity to occur.

Once officers got comfortable using data generated from the sophisticated computer algorithm, crime started going down and some arrests were made because of correct predictions.

For example, in August, an officer was out at 12:30 a.m. driving into a zone that the predictive technology told him to check out. He noticed two people attempting to steal

a car and arrested them. Until alerted by the police, the car's owner had no idea the vehicle had been tampered with.

### 3 Tips When Considering Predictive Technology

- **Make sure it integrates.** The technology needs to integrate with your current patrol patterns and work with your department's structure. Know that it works before getting too involved.
- **Involve frontline officers.** The officers using the data need to know this is not a replacement for them or their abilities. Be sure to include them as a part of the planning process as opposed to making it a top-down managerial decision.
- **Remember that it's just a tool.** Predictive analytics is a tool for creating additional efficiencies. Its effectiveness is dependent on the investment made in using it.

*Source: Zach Friend, press information officer and crime analyst for the Santa Cruz Police Department*

"To me, that's the perfect example of the success of the program — preventing the crimes before they occur in the first place," Friend said.

Predictive policing technology is becoming widespread among local law enforcement agencies in the U.S. Los Angeles and Chicago have been using crime stats and analytic tools for a few years now. Other cities such as Rialto, Calif., are just starting their own programs.

### Initial Changes

The Santa Cruz PD bumped its predictive policing program from an experimental phase to full operation in July 2012. In addition to property theft, the system is now used to predict gang activity and street crimes for specialty units in the department.

When officers in one of the specialty units access the system, they can check off selections to run predictive analyses just in their specific area, without the inclusion of property theft data. While statistics on the accuracy of these predictions aren't available

yet, Friend said the predictive technology has been able to focus the efforts of those units even further.

In addition, the system is now automated. When the technology was initially deployed, 10 maps featuring the predictive algorithm's crime hot spot findings were manually generated by Friend on a daily basis. Now 15 maps are produced, and supervisors log in to the system prior to briefings and print out a one-page sheet that lists the predicted crime locations for the day.

The information can be accessed online by any officer and the data is refreshed hourly, giving users almost real-time statistical views. Friend said data generated by the system can be accessed by in-car computers and smartphones, but the department hasn't upgraded its equipment yet so it's unable to accommodate it.

Friend believes technology upgrades are inevitable, however.

"A lot of the younger officers that are coming up are very adept with technology and have an expectation that the technology they use at home will be used ... on the job," Friend said.

"I think [predictive technology] systems like this will be widely adopted, especially by younger generations of officers that are very comfortable with having data in their cars, having maps and the interactivity," he added.

While the predictive crime maps are useful, Friend said there aren't any plans to share them with the public. Although the Santa Cruz PD has been using a mobile app to share maps of overall crime, the department views the predictive data as internal tactical information.

<http://www.govtech.com/public-safety/Predictive-Policing-a-Success-in-Santa-Cruz-Calif.html>