Police using analytics to predict crime

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FORT MYERS, Fla. -- It sounds like something out of a science fiction movie. Soon, when Ft Myers Police officers start their shift, they will look at a map of the city and a computer program will tell them where to patrol.

It will be a precise location, determined by a mathematical equation that is designed to predict where a crime will occur.

That's worth repeating. This is a computer that aims to predict the future, to stop crime.

And new Ft. Myers Police Chief, Derrick Diggs says it "absolutely" works. He says he used predictive policing in his last job, as the Toledo Police Chief. He says it was one of a number of crime initiatives that helped bring crime rates down. "That's how we determined where to deploy our officers," Chief Diggs says. "Where would they go, how would they perform their duties."

And he believes predictive policing can work in Ft. Myers, eventually.

To see the process in action now, we went to the Orange County Sheriff's Office in Orlando, where Major Jeff Stonebreaker runs the department's predictive policing program.

"It's not a silver bullet. Very few things are", he says. "But it's one of the tools we try to use to be intelligence led, to be preventative when we can and maximize the use of our resources."

Orange County uses a [program called Predpol](#). The software uses an algorithm with ten years of crime data; when and where incidents happened, placing an emphasis on recent crimes to calculate a prediction. The mathematical models are similar to what's used to predict earthquake aftershocks.

The crime predictions update for every shift, morning to night. Deputies can access the program from a laptop in their patrol car, and on a map, they will see several red boxes show up in their patrol zone.

"The box is literally a 500 square foot area," Major Stonebreaker says. "And so they're saying, based on all the years of records management information, that we're scouring through, we think this is where you're next likely to have a problem."

Other programs get even more detailed in their algorithms. Some take the locations of bus stops, night clubs, and even the weather into consideration when predicting where crime is going to happen. Major Stonebreaker says only crimes, dates, and locations are recorded, not victim or suspect information. That, he says, makes it impossible to use the data for profiling.

Some state highway patrol agencies are now using similar software, to predict where accidents will happen on the road. The Indiana State Police makes their map public.

"I'd even trade in catching bad guys for being able to stop crimes from occurring. That's one less victim and one less life that's been disrupted by a crime," he says.

But measuring success for this kind of program is tough.

"That's a great question," Major Stonebreaker says. "How do you measure the crimes you prevent?"

Major Stonebreaker says most of the time, the red squares pop up in locations where deputies already know crime is most likely. But he says the data is useful because it narrows the deputies focus.

In Ft Myers, the focus is wider. "We know that violent crime is way out of whack for a community this size. It's totally unacceptable," Chief Diggs says.

Before Chief Diggs implements predictive technology, he says he has to repair a fractured relationship between his department and the community. He will initially work on a community violence prevention program, where his department will work with citizen groups, social workers, and churches in a combined effort to fight violence.

"You still are not going to know those neighborhoods as well as the people who live in those neighborhoods," Chief Diggs says. "And we know that. So we have to have a partnership. We have to be able to work together. And they have to be able to support us. When something goes wrong in that neighborhood, when crime occurs, they have to be willing to step forward, let us know what's going on, so we can mutually help make that community safer."

Unfortunately there's no equation to predict how long that will take.