Crime, Law & Economics Workshop Penn Law

Jeffrey Brantingham **Wednesday February 6, 2013** 4:30-6:00 pm | Faculty Lounge, Silverman 144

The Los Angeles Predictive Policing Experiment

The term *predictive policing* refers broadly to the use of data analysis to inform the allocation of police resources. Not surprisingly, the vagueness of this definition allows many different data analysis programs to be called predictive policing. Here I define predictive policing as a formal process that (1) uses data to assign explicit probabilities to *future* crime events in space and time, (2) presents crime event probabilities in a *useable* framework to law enforcement decision makers, and (3) leads to resource *deployment* patterns conditioned on crime probabilities. For predictive policing to be effective it also must hold that (4) the accuracy of predictions be evaluated and (5) law enforcement be *willing* to act on probabilistic information. Here I outline the behavioral and mathematical architecture underlying our approach to predictive policing. I then review the results of the Los Angeles Predictive Policing Experiment, a real-time single-blind field deployment of predictive policing in multiple divisions of the LAPD. The experiment establishes a predictive accuracy six-times random and more than two-times that achievable by a dedicated crime analyst. The experiment also underscores the critical importance of officer 'buy-in' for successful real-world deployments.

P. Jeffrey Brantingham is Professor of Anthropology at UCLA. He directs the UC Mathematical and Simulation Modeling of Crime project (UC MaSC), which is focused on bridging the gap between the mathematical and social sciences in the study of crime (see http://paleo.sscnet.ucla.edu). Brantingham is also co-founder of *PredPol – The Predictive Policing Company* which is delivering real-time predictive policing to law enforcement agencies nationally and internationally (see http://www.predpol.com).