

1106-J1-2776

Erik Bates* (ewbates@stanford.edu), 137 Running Farm Lane, Apt. 110, Stanford, CA 94305, and **Anthony Gusman, Stephanie Sanchez** and **Sarah Verros**. *Long-term crime forecasting and setting crime reduction targets.*

We investigate the potential of the Los Angeles Police Department to forecast future crime rates along time scales of months to years. Department officials set annual crime reduction goals based on a constant percent decrease from the previous year's citywide crime levels. While this procedure may accurately reflect a general decline in total crime, it does not consider any long-term trends or seasonality in crime data. The potential consequences include inaccurate performance assessments and non-optimal allocation of department resources. This study develops models that extract long-term and seasonal components in Los Angeles crime rates and use the extracted components to forecast future crime rates. The resulting predictions are compared against both historically observed crime rates and the projections made with the department's percent decrease methodology. (Received September 16, 2014)