Crime Mapping and Crime Prevention

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FOREWORD

This book emerged from the Drug Market Analysis Program (DMAP) sponsored by the National Institute of Justice (NIJ) in five cities across the country. The DMAP aimed for an improved understanding of the dynamics of local drug markets through computer mapping coupled with analytical techniques. In Jersey City, NJ, for example, the project team established a computer mapping capability for the police department, analyzed data on the city's drug markets from a variety of sources, and conducted a successful field test aimed at disrupting local markets. Having established a computer mapping system, they quickly discovered other uses for computer mapping that included crime maps, maps of citizen calls, and maps to assist investigations. In short, any data with addresses could be mapped.

The versatility of computer mapping brings both positive and negative features. On the positive side, it adds a tool for better understanding of crime and its prevention. Analysts can look more closely at crime clusters and crime displacement. Careful mapping can show whether enforcement efforts have been effective and whether areas with crime concentrations are receiving proper attention. Interestingly, computer mapping may also show that crime is not a problem in an area. On the negative side, computer mapping requires us to pay more attention to the analysis that goes into a map's creation, which, in turn, requires more attention to crime prevention theory. It is my belief that theory has been frequently overlooked in computer mapping — a deficiency that is addressed in several of the chapters of this book.

It is clear from NIJ's research efforts that interest is growing in computer mapping among several diverse groups. Crime analysts are interested because of their support role in strategic and tactical operations in law enforcement agencies. Police managers want timely and accurate information for more rapid deployment of personnel, and they want follow-up and assessments of their crime prevention efforts. Computer mapping aids in these aims. Geographers have interests in the distributions, patterns, and relationships of crime, and they strive for new tools to connect crime characteristics and physical surroundings. Finally, criminologists have interest in crime mapping as a means of developing and verifying crime prevention theories.

What I also find of value in the contributions to this book is the range of analytical power that can be achieved with spatial analysis and mapping. On its most basic level, computer maps provide simple descriptions of crime events on a geographic basis, usually emphasized by shading the high- and low-density areas. These maps are simple, straightforward applications that are essential to the everyday work of crime analysis and crime prevention. At the other extreme are maps produced from sophisticated analytical schemes steeped in appropriate theory, in which the geographic area is a part of the spatial analysis and the aim is to show how crime moves or is displaced.

In response to the interest in computer mapping, we have established the Crime Mapping Research Center within NIJ for the purpose of contributing to both applied and basic research in the area of the analytical mapping of crime. The contributors to this book played a part in the foundation of this center. As currently envisioned, the center will fill a void by developing stronger analytical tools for computer mapping.

In summary, I recommend this book to anyone with an interest in computer mapping and its application to crime prevention. The contributions are from leading researchers and practitioners in the field who offer a number of insights on this important subject.

Jeremy Travis
Director,
U.S. National Institute of Justice

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We owe a debt of gratitude to many people who have helped us to conceptualize, develop and produce this edited volume. While we cannot name here all of those we have spoken to, or asked advice from, or who kindly offered their time to improve this effort, we want at the outset to identify a few of those who have helped us in particular to produce this work. Perhaps our greatest debt is to Craig Uchida (now at the Office of Community Oriented Policing), who, as Director of Research of the National Institute of Justice, developed the Drug Market Analysis Program with its emphasis on crime mapping. He not only encouraged our efforts but played a pioneering role in bringing computer mapping technologies to criminal justice.

We also want to thank others at the Institute who have supported our efforts, including Richard Titus, who monitored our grant for development of the manuscript, and Nancy La Vigne, the Director of the Center for Computer Mapping. A particular debt is owed to the Director of the National Institute of Justice, Jeremy Travis, who has placed computer mapping on the criminal justice agenda and has taken the time not only to review our publication but to provide a Foreword to it.

Along with contributing author Phil Canter, we want to acknowledge the memory of Kai Martensen, who was an inspiration and mentor to many professionals in the criminal justice field. His professional career of over four decades was devoted to advancing the police profession, including the use of analysis and computer technologies.

Among many who supported our efforts, we especially want to thank Michael Maltz for providing advice and consultation on a diverse set of issues, both historical and technical; Daniel Salem for providing thoughtful assistance; and Joan Peterschmidt for support in organizing the manuscript and preparing the index. Finally we want to thank Ronald Clarke, the editor of the Crime Prevention Studies Series, and Richard AUinson of Criminal Justice Press for their interest in developing a volume devoted to computer mapping issues.

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