

Protecting Critical Infrastructure

Series Editors: Simon Hakim · Erwin A. Blackstone · Robert M. Clark

Robert M. Clark

Simon Hakim *Editors*

Cyber- Physical Security

Protecting Critical Infrastructure at the
State and Local Level

 Springer

Protecting Critical Infrastructure

Volume 3

Series editors

Simon Hakim, Philadelphia, PA, USA

Erwin A. Blackstone, Philadelphia, PA, USA

Robert M. Clark, Cincinnati, OH, USA

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Robert M. Clark · Simon Hakim
Editors

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and Local Level



Editors

Robert M. Clark
Cincinnati, OH
USA

Simon Hakim
Department of Economics
Temple University
Philadelphia, PA
USA

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Cybersecurity challenges have become one of the defining issues of our time. These challenges include denial of service, theft and/or manipulation of data. Damage to critical infrastructure through cyber-based attacks will have a significant impact on national security, the economy, and the livelihood and safety of governments and individual citizens throughout the world. We, therefore, dedicate this book to the men and women, including the authors of the manuscripts in this volume, who have devoted their lives and careers to protecting society against these cyber threats. We would like to extend a special acknowledgment to the men and women of the US Government Accountability Office (US GAO), who provide an enormous service to the citizens of the United States and the world through their objective and insightful studies. We have utilized many of their cyber-security studies as background for this book.

Robert M. Clark
Simon Hakim

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This book focuses on the vulnerabilities of state and local services to cyber-threats and suggests possible protective action that might be taken against such threats. Cyber-threats to U.S. critical infrastructure are of growing concern to policymakers, managers and consumers. Information and communications technology (ICT) is ubiquitous and many ICT devices and other components are interdependent; therefore, disruption of one component may have a negative, cascading effect on others. Cyber-attacks might include denial of service, theft or manipulation of data. Damage to critical infrastructure through a cyber-based attack could have a significant impact on the national security, the economy, and the livelihood and safety of many individual citizens. Traditionally cyber security has generally been viewed as being focused on higher level threats such as those against the internet or the Federal government. Little attention has been paid to cyber-security at the state and local level. However, these governmental units play a critical role in providing services to local residents and consequently are highly vulnerable to cyber-threats. The failure of these services, such as waste water collection and water supply, transportation, public safety, utility services, and communication services, would pose a great threat to the public. Featuring contributions from leading experts in the field, this volume is intended for state and local government officials and managers, state and Federal officials, academics, and public policy specialists.

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