CONTENTS

	Contributors	page ix
	Editors' Introduction	xi
Pa	rt I. Conceptual Framework	1
0	Monitoring, Datafication, and Consent: Legal Approaches to Privacy in the Big Data Context Katherine J. Strandburg	5
2	Big Data's End Run around Anonymity and Consent Solon Barocas and Helen Nissenbaum	44
0	The Economics and Behavioral Economics of Privacy Alessandro Acquisti	76
4	Changing the Rules: General Principles for Data Use and Analysis Paul Ohm	96
6	Enabling Reproducibility in Big Data Research: Balancing Confidentiality and Scientific Transparency Victoria Stodden	112
Part II. Practical Framework		133
6	The Value of Big Data for Urban Science Steven E. Koonin and Michael J. Holland	137
0	Data for the Public Good: Challenges and Barriers in the Context of Cities Robert M. Goerge	153
8	A European Perspective on Research and Big Data Analysis Peter Elias	173

9	The New Deal on Data: A Framework for Institutional Controls Daniel Greenwood, Arkadiusz Stopczynski, Brian Sweatt, Thomas Hardjono, and Alex Pentland	192
1	Engineered Controls for Dealing with Big Data Carl Landwehr	211
•	Portable Approaches to Informed Consent and Open Data John Wilbanks	234
Par	t III. Statistical Framework	253
P	Extracting Information from Big Data: Issues of Measurement, Inference and Linkage Frauke Kreuter and Roger D. Peng	257
B	Using Statistics to Protect Privacy Alan F. Karr and Jerome P. Reiter	276
4	Differential Privacy: A Cryptographic Approach to Private Data Analysis Cynthia Dwork	296