

Big Data and the Privacy Implications

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Information and Privacy
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February 7,
2018

Who is the Information and Privacy Commissioner?

- **Brian Beamish** appointed by Ontario Legislature (March 2015)
- 5 year term
- reports to **Legislature**, not government or minister
- ensures independence as government “watchdog”



Ontario's Legislative Framework

Public Sector	Health Sector	Private Sector
<p>Government e.g. ministries, agencies, hospitals, universities, cities, police, schools, hydro</p> <p><i>Freedom of Information and Protection of Privacy Act</i> (FIPPA)</p> <p><i>Municipal Freedom of Information and Protection of Privacy Act</i> (MFIPPA)</p>	<p>Individuals, organizations delivering health care e.g. hospitals, pharmacies, labs, doctors, dentists, nurses</p> <p><i>Personal Health Information Protection Act</i> (PHIPA)</p>	<p>Private sector businesses engaged in commercial activities</p> <p><i>Personal Information Protection and Electronic Documents Act</i> (PIPEDA)</p>
<p>IPC/O oversight</p>	<p>IPC/O oversight</p>	<p>Privacy Commissioner of Canada oversight</p>

Big Data and Government

- governments want to **share, link, analyze data** across agencies to obtain new insights, to support
 - policy development
 - system planning
 - resource allocation
 - performance monitoring
- sometimes called **data integration**
- **benefits** may be compelling
 - higher quality evidence
 - better public policy
 - better use of money
 - fraud detection

Big Data and Government

- but we worry about uses of PI that are
 - unexpected
 - invasive
 - inaccurate
 - discriminatory
- goes against expectation that governments collect PI **directly** from us, don't share with other agencies
- unfortunately, ON government has approached big data in piecemeal fashion
 - new *Child, Youth, Family Services Act, 2017*

We Need Legislative Reform!

- current law (*FIPPA*) treats government institutions as **silos**; indirect collection, sharing/linking across government not envisioned
- need **single dedicated unit** in Ontario to
 - collect PI across government
 - link records securely
 - de-identify
 - make **de-identified data** available to public bodies
- this is *PHIPA* approach [s. 55.9]
- avoids **replicating databases, profiles** of sensitive PI across government

We Need Legislative Reform!

- key features of centralized model
 - **ethical review** at outset [independent?]
 - **transparency** [is public ok with purpose, methodology, algorithm?]
 - **oversight** by independent regulator [IPC; order-making, audit, inspection powers]
- IPC now in discussions with Ontario government about legislative reform

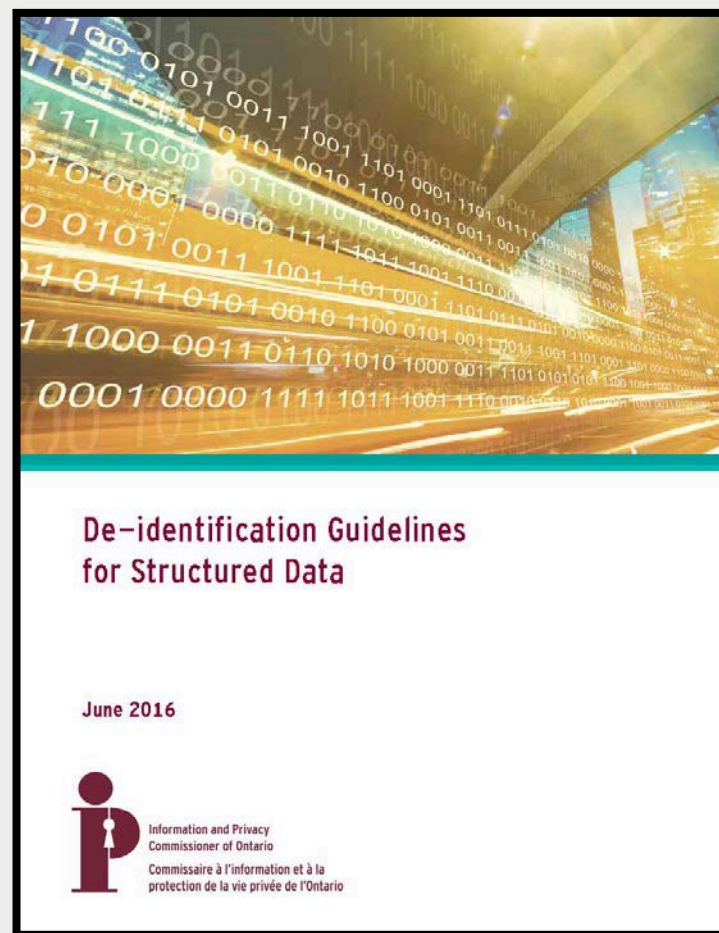
Big Data Guidance



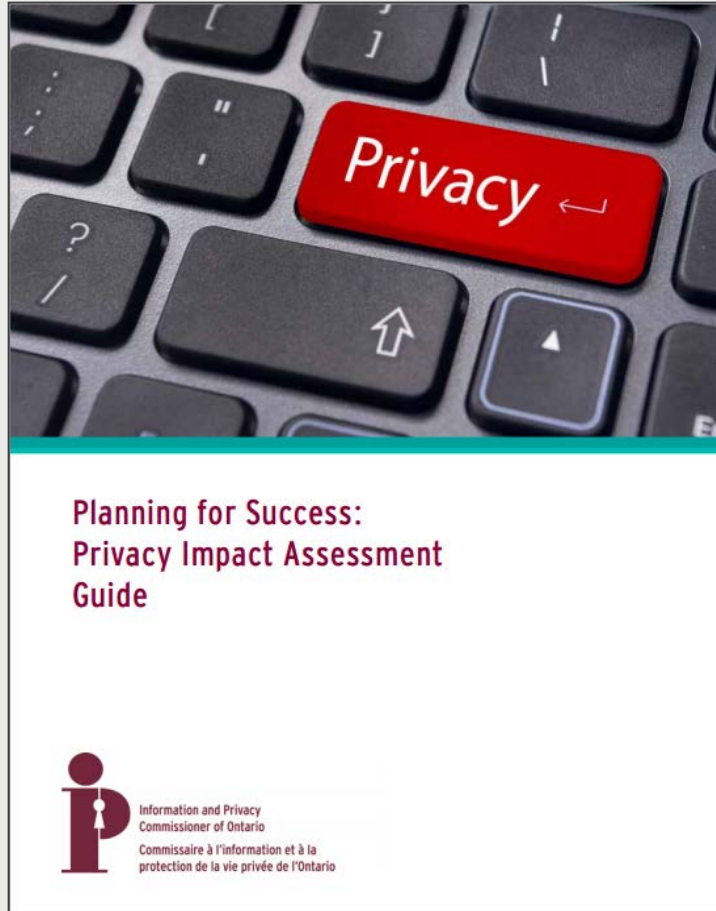
- key issues, best practices when conducting **big data projects** involving PI
- considerations at each stage:
 - collection
 - integration
 - analysis
 - profiling

De-identification

- risk-based, step-by-step process to assist organizations to de-identify
- key issues when publishing
 - release models
 - types of identifiers
 - re-identification attacks
- IPC wins **global privacy award** for excellence in research [International Conference of Data Protection and Privacy Commissioners, Hong Kong 2017]



Planning for Success: Privacy Impact Assessment Guide



- tools to identify privacy impacts and risk mitigation strategies
- step-by-step advice on how to conduct a PIA
- not required by legislation, but considered privacy best practice



Questions?

HOW TO CONTACT US

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