

**ONTARIO
SUPERIOR COURT OF JUSTICE
(DIVISIONAL COURT)**

B E T W E E N:

CORPORATION OF THE CANADIAN CIVIL LIBERTIES ASSOCIATION
and LESTER BROWN

Applicants

and

TORONTO WATERFRONT REVITALIZATION CORPORATION, CITY OF
TORONTO, HER MAJESTY IN RIGHT OF ONTARIO as represented by the
MINISTER OF INFRASTRUCTURE, HER MAJESTY IN RIGHT OF
CANADA as represented by the MINISTER OF COMMUNITIES AND
INFRASTRUCTURE, AND THE ATTORNEY GENERAL OF CANADA

Respondents

APPLICATION under sections 2 and 6(1) and 6(2) of the *Judicial Review Procedure Act*, R.S.O. 1990, c. J.1, as amended, and sections 2, 7, 8 and 24 of the *Charter of Rights and Freedoms*.

AFFIDAVIT OF SARA BANNERMAN

I, SARA BANNERMAN, of Ottawa, Ontario, MAKE OATH AND SAY:

1. I am Canada Research Chair in Communication Policy and Governance and an Associate Professor of Communication Studies at McMaster University in Hamilton, Ontario. I conduct research in and teach communication policy and governance. I also direct McMaster's Communications Governance Observatory. I have published two books on international copyright: *International Copyright and Access to Knowledge* (Cambridge University Press, 2016) and *The Struggle for Canadian Copyright: Imperialism to Internationalism, 1842-1971* (UBC Press, 2013). I have also published numerous peer-reviewed articles and book chapters on international copyright, privacy, and other topics in new media, traditional media, and

communications theory. Until July 2019, I will hold the position as co-Vice Chair of the Law Section of the International Association for Media and Communication Research (IAMCR). My full curriculum vitae is Exhibit “1” to this affidavit.

2. In January 2019, a McMaster Ph.D. candidate, Angela Orsach, and I published “Privacy and Smart Cities: A Canadian Survey”. The report was funded by the Office of the Privacy Commissioner of Canada, and McMaster University under the Canada Research Chairs Program. A copy of the report is Exhibit “2” to this affidavit.

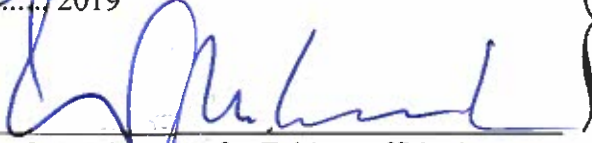
3. As we say in the Introduction to the report:

This report presents the findings of a national survey of Canadians about smart-city privacy conducted in October and November 2018. Our research questions were: How concerned are Canadians about smart-city privacy? How do these concerns intersect with age, gender, ethnicity, and location? Moreover, what are the expectations of Canadians with regards to their ability to control, use, or opt-out of data collection in smart-city context? What rights and privileges do Canadians feel are appropriate with regard to data self-determination, and what types of data are considered more sensitive than others?

4. The report concludes that Canadians are concerned about their privacy in the development of smart cities. Other findings include the indication that many Canadians desire broader protection and control over their personal data. I stand by the report’s contents and conclusions as accurate. They are further supported by my work and research in my areas of scholarship, as described in paragraph 1.

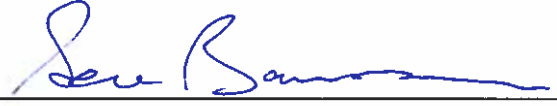
5. I have signed an Acknowledgement of Expert's Duty. It is Exhibit "3" to this affidavit.

SWORN BEFORE ME at the City of
Ottawa, in the Province of Ontario on June
.....^{30th} 2019



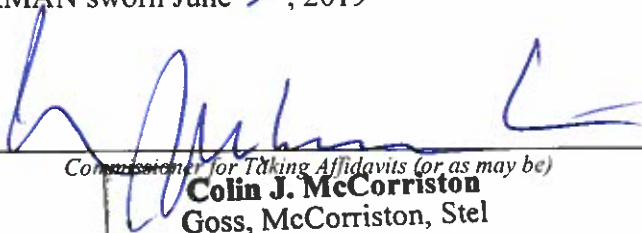
Commissioner for Taking Affidavits

Colia J. McCorrison
Goss, McCorrison, Stel
203-2430 Bank Street
Ottawa, ON K1V 0T7
T: 613-738-0023 F: 613-738-1294



SARA BANNERMAN

This is Exhibit "1" referred to in the Affidavit of SARA
BANNERMAN sworn June 3rd, 2019



Commissioner for Taking Affidavits (or as may be)

Colin J. McCorrison
Goss, McCorrison, Stel
203-2430 Bank Street
Ottawa, ON K1V 0T7
T: 613-738-0023 F: 613-738-1294

Sara Bannerman
Department of Communication Studies and Multimedia
Togo Salmon Hall, Room 302
McMaster University
1280 Main St. W.
Hamilton, ON
CANADA
L8S4L8

EDUCATIONAL BACKGROUND:

2009	PhD	Carleton University, School of Journalism and Communication
2004	M.A.	Carleton University, School of Journalism and Communication
1998	B. Music	Queen's University, School of Music

CURRENT STATUS AT McMASTER:

2015-present	Associate Professor, Dept. of Communication Studies & Multimedia
2011–2015	Assistant Professor (tenure-track), Dept. of Communication Studies & Multimedia

PROFESSIONAL ORGANIZATIONS:**Current:**

International Studies Association (ISA), member
Canadian Communications Association (CCA), member
International Association for Media and Communication Research (IAMCR), member
Association of Internet Researchers (AIR), member

Past:

Association littéraire et artistique internationale, member
International Communication Association (ICA), member
International Association for the Study of Popular Music, member
Canadian Law and Society Association, member

EMPLOYMENT HISTORY:**Academic:**

- 2009-11 SSHRC Postdoctoral fellow, Regulatory Institutions Network, Australian National University
Supervisor: Peter Drahos, Professor in Law and Director of the Centre for the Governance of Knowledge and Development
- 2009-10 Fulbright Visiting Scholar, Elliott School of International Affairs, George Washington University
Supervisor: Susan Sell, Director of the Institute for Global and International Studies

Consultations:

- 2011 International Development Research Centre
Contracted by the ICT4D section of IDRC to co-author a chapter discussing the ICT4D section's projects related to intellectual property rights.

SCHOLARLY AND PROFESSIONAL ACTIVITIES:**Grant and Personnel Committees:**

- 2016-2017 Social Sciences and Humanities Research Council (SSHRC) Insight Development Grants Committee, Member
- 2013-2016 Federation for the Humanities and Social Sciences, Awards to Scholarly Publications Program (ASPP), Publications Committee, Member

Executive Positions:

- 2017-2021 Governing Board Member, International Society for the Theory and History of Intellectual Property (ISHTIP)
- 2015-2019 Co-Vice Chair of Law Section of the International Association for Media and Communications Research (IAMCR)
- 2012-14 Outgoing Chair of Emerging Scholars' Network of the International Association for Media and Communications Research (IAMCR)
- 2008-12 Co-Chair, Emerging Scholars' Network at the International Association for Media and Communication Research (IAMCR)

Journal Referee:

- 2019 Peer reviewer, *Social Media & Society*
- 2018 Peer reviewer, *International Journal of Communication*
- 2017 Peer reviewer, Centre for International Governance Innovation book project: *Canada in International Law @ 150: Our Past, Present and Future*
- 2017 Peer reviewer, *Canadian Journal of Higher Education*
- 2017 Peer reviewer, *Poetics*
- 2017 Peer reviewer, *International Journal of Communication*
- 2016 Peer reviewer, *International Communication Gazette*
- 2016 Peer reviewer, *Law & Policy*
- 2016 Peer reviewer, *Online Information Review*
- 2016 Peer reviewer, *New Media & Society* (x3)
- 2016 Peer reviewer, *International Journal of Communication*
- 2016 Peer reviewer, *Prelidium*
- 2015 Peer reviewer, *New Media & Society* (x2)
- 2015 Peer reviewer, Cambridge University Press
- 2014 Peer reviewer, Palgrave UK
- 2013 Peer reviewer, *SCRIPTed*
- 2012 Peer reviewer, *Wi: Journal of Mobile Media*
- 2012 Peer reviewer, *Intellectual Property for the 21st Century: Interdisciplinary Perspectives on Intellectual Property Law*. Courtney B. Doagoo, Mistrale Goudreau, Madelaine Saginur and Teresa Scassa, eds., Toronto: Irwin Law, forthcoming late 2013 or early 2014. (Book Arising from University of Ottawa Workshop on Multidisciplinary Approaches to Intellectual Property law, Fall 2012).
- 2012 Peer reviewer, *McMaster Journal of Communication*
- 2012 Peer reviewer, *New Media & Society*
- 2011 Peer reviewer, *Prometheus*
- 2011 Peer reviewer, *New Media & Society*
- 2010 Peer reviewer, *Global Media Journal - Canadian Edition*
- 2009 Peer reviewer, *Journal of the Canadian Historical Association*.

External Grant Reviews:

- 2016 National Science Centre (Narodowe Centrum Nauki – NCN), Poland
Prelidium Grant proposal peer review

AREAS OF INTEREST:

communication policy and law; copyright; privacy; crowdfunding; international communication policy; Internet law and policy; media law and regulation, cultural funding, networked governance.

HONOURS:**Academic Awards**

- 2009 Senate Medal for Outstanding Academic Achievement, Carleton University
- 2008 Dallas Smythe Award, International Association for Media and Communications Research (awarded for the paper "Berne Buster: Canada and the Berne Convention, 1887-1908")
- 2005-8 Canada Graduate Scholarship - Social Sciences and Humanities Research Council
- 2007-8 Dean of Graduate Studies Academic Excellence Scholarship for Domestic Students, Carleton University
- 2004-7 Domestic Tuition Scholarship - Carleton University
- 2004-7 Departmental Scholarship - Carleton University
- 2005 Ontario Graduate Scholarship, Government of Ontario (declined)
- 2004-8 Various Carleton University awards, grants, and bursaries for conference travel

Community Awards

- 2019 Canadian Association of University Teachers (CAUT) Dedicated Service Award, presented by MUFA
- 2009-10 Fulbright Eco-Leadership Award (grant for project conducted in partnership with George Washington University students and community to expand GWU's community garden)
- 2007 Graduate Students' Association Honour Award for Outstanding Commitment and Dedication to Carleton and the Graduate Community, Carleton University (award established in 2001 in order to recognise those graduate students who have demonstrated outstanding commitment and dedication to Carleton, and the graduate community specifically. Four are handed out each year.)

COURSES TAUGHT:**Undergraduate:****McMaster University Department of Communication Studies and Multimedia**

- 2018-18 CMST 3II3 Communication and the Politics of Intellectual Property
- 2017-18 none (research leave)

2016-17	none	
2015-16	CMST 3I03	Communication Policy and Law
	CMST 3II3	Communication and the Politics of Intellectual Property
	CMST 4P03	Media and Social Activism
	CMST 3B03	Practical Aspects of Media Production
2014-15	CMST 3I03	Communication Policy and Law
	CMST 3II3	Communication and the Politics of Intellectual Property
	CMST 4P03	Media and Social Activism
2013-14	CMST 3B03	Practical Aspects of Media Production
	CMST 3I03	Communication Policy and Law
	CMST 3II3	Communication and the Politics of Intellectual Property
2012-13	CMST 2K03	Political Economy of the Media
	CMST 3II3	Communications and the Politics of Intellectual Property
	CMST 4P03	Media and Social Activism
2011-12	CMST 2K03	Political Economy of the Media
	CMST 2DD3	Media Organizations
	CMST 3I03	Communications Policy and Law
	CMST 4P03	Media and Social Activism

Carleton University Department of Law

2009 Summer LAWS 3202 Intellectual Property

University of Ottawa Department of Communication

2009 Winter CMN3182 Policy Studies
 CMN3165 Media Industries

Carleton University School of Journalism and Communication

2007 Winter MCOM 2302 Communication Policy: Institutions and Practices

Graduate:**McMaster University Department of Communication Studies and Multimedia**

2018-19	CSMM 718	Critical Approaches to Communication Policy & Law
2017-18	none	(research leave)
2016-17	CSMM 799	Pro-Seminar
2016-17	CSMM 700	Communication Research Methods
2015-16	CSMM 700	Communication Research Methods
2014-15	CSMM 700	Communication Research Methods
2013-14	CSMM 700	Communication Research Methods
2013-14	CSMM 707	Communications Theory and Ethics
2012-13	CSMM 707	Communications Theory and Ethics
2011-12	CSMM 707	Communications Theory and Ethics

LIFETIME RESEARCH FUNDING:**External:**

2018-2020	Social Sciences and Humanities Research Council Insight Development Grant (\$53, 896)
	• Title: <i>Algorithmic Imperialism and Canadian Cultural Policy</i>
2018-2019	Office of the Privacy Commissioner of Canada Contributions Program grant (\$29 000 + \$5 091.44 top up funding)
	• Title: <i>The Privacy Implications of Smart Cities</i>
2016-21	Canada Research Chair (Tier 2)
2013-15	Social Sciences and Humanities Research Council Insight Development Grant (\$74,638 + \$2 000 in additional funds from McMaster University)
	• Title: <i>International Copyright: A History of Access to Knowledge</i>
	• This grant enabled me to produce the book <i>International Copyright and Access to Knowledge</i> (Cambridge University Press, forthcoming November 2015)
2011	Mellon Postdoctoral Fellowship (declined) (\$45 000 + \$8 500 research allowance; one-year postdoctoral fellowship at McGill University)
2011	Berlin Law in Context Research Network Postdoctoral Fellowship (declined) (approx. \$29 670; 9-month postdoctoral fellowship under the "Rechtskulturen: Confrontations Beyond Comparison" program of the Forum Transregionale Studien, affiliated with the Faculty of Law at Humboldt University, Berlin and the Wissenschaftskolleg zu Berlin)
2009-10	Fulbright Award (\$15 000) 9-month postdoctoral fellowship at George Washington University)

2009-11 Social Sciences and Humanities Research Council Postdoctoral Fellowship (\$38 000/year for 2 years + \$5000 research fund; two-year postdoctoral fellowship at the Australian National University)

Internal:

2018 McMaster Office of Community Engagement (\$1000)
 2018 McMaster Institute for Globalization and the Human Condition Seed Grant (\$2000, collaborator)
 2016 McMaster Arts Research Board Travel Grant (\$1528)
 2015 McMaster Arts Research Board Travel Grant (\$895)
 2014 McMaster Arts Research Board Travel Grant (\$1 240)
 2013 McMaster Arts Research Board Travel Grant (\$1 654)
 2013 McMaster Arts Research Board Travel Grant (\$1 400)
 2012 McMaster Arts Research Board Scholarly Publications Grant (\$1 000)
 2012-14 Arts Research Board Research Grant (\$7 000)
 2012 McMaster Arts Research Board Travel Grant (declined)

LIFETIME PUBLICATIONS:

Peer Reviewed

Books

International Copyright and Access to Knowledge. Cambridge: Cambridge University Press, 2016.

- This book was peer reviewed based on the book proposal and sample chapters.
- **Review:** Mercado, Zachary. "Book Review: International Copyright and Access to Knowledge, Sarah [sic] Bannerman, Cambridge University Press," *Northern Ireland Legal Quarterly* 68, no 4 (2017).

The Struggle for Canadian Copyright: Imperialism to Internationalism, 1842-1971. Vancouver: UBC Press, 2013 (294 pages).

Reviews: Chow, Cindy. Review of *The Struggle for Canadian Copyright: Imperialism to Internationalism, 1842-1971*, by Sara Bannerman. *Saskatchewan Law Review* 77 no. 1 (2014): 119-121.

Martin, Claude. Review of *The Struggle for Canadian Copyright: Imperialism to Internationalism, 1842-1971*, by Sara Bannerman. *Canadian Journal of Communication* 40 no. 4 (2014)(3 pages).

Parker, George L. Review of *The Struggle for Canadian Copyright: Imperialism to Internationalism, 1842-1971*, by Sara Bannerman. *Papers of the Bibliographical Society of Canada* 52 no. 2 (2014): 457-459.

- Cited in Factum of the Attorney General Of Canada, Intervener in

Keatley v. Teranet, Supreme Court of Canada, 2018

Contributions to Books

- “A Sustainable Development Agenda for the World Intellectual Property Organization: Networked Governance and Public-Private Partnerships.” Chapter 8 in *The Cambridge Handbook of Public-Private Partnerships, Intellectual Property Governance, and Sustainable Development* pp. 157-175 Margaret Chon, Pedro Roffe, and Ahmed Abdel-Latif, eds. Cambridge: Cambridge University Press, 2018.
- “Remodeling Global Intellectual Property,” Chapter 6 in *Kritika: Essays on Intellectual Property*, pp. 132-158 Peter Drahos, Gustavo Ghidini, Hanns Ullrich, eds. Cheltenham: Edward Elgar, 2018.
- Oxford Research Encyclopedia of Communication*. s.v. “Copyright.” Oxford: Oxford University Press, 2016 (8743 words).
- “The World Intellectual Property Organization and Traditional Knowledge.” Chapter 3 in *Indigenous Intellectual Property: A Handbook of Contemporary Research* Matthew Rimmer, ed. Cheltenham: Edward Elgar, 2015: 83-105.
- de Beer, Jeremy and **Sara Bannerman**. “Access to Knowledge as a New Paradigm for Research on ICTs and Intellectual Property Rights.” Chapter 3 in *Connecting ICTs to Development: The IDRC Experience*. Heloise Emdon, Laurent Elder, Ben Petrazzini and Richard Fuchs, eds. New York: Anthem Press, 2013: 75-90. (This chapter was written under contract for IDRC. I was given a previous draft written by an unnamed author, which I entirely rewrote and added to. Jeremy de Beer then revised the draft I wrote, adding sections and making other significant revisions. The chapter was peer reviewed extensively by numerous members of IDRC staff in a non-blind iterative process.)
- “Copyright: Characteristics of Canadian Reform.” Chapter 1 in *Canadian Copyright and the Digital Agenda: From Radical Extremism to Balanced Copyright*, Michael Geist, ed. Toronto: Irwin Law, 2010: 17-44.
- quoted in parliament by Liberal MP Scott Simms: Canada. House of Commons. Debates of the House of Commons, 40th Parliament—Third Session. Edited Hansard. no. 092 Tuesday November 2, 2010.
- “The WIPO Development Agenda Forum and Prospects for Taking into Account Different Levels of Development.” Chapter 2 in *Implementing WIPO's Development Agenda*, Jeremy de Beer, ed. Waterloo: Wilfred Laurier University Press/Centre for International Governance Innovation/International Development Research Centre, 2008: 24-33. Reprinted as Chapter 7 in *Global Perspectives on Media in the Swirl*. Edited by Ravi K Dhar and Pooja Rana. London: Pentagon Books, 2012.
- “The Development Agenda at WIPO: Where is Canada?” Chapter 10 in *Innovation, Science and Environment: Canadian Policies and*

Performance 2008-2009. Edited by Glen Toner. Montreal: Published for the School of Public Policy and Administration, Carleton University by McGill-Queen's University Press, 2008: 190-208.

“Copyright and the Global Good? An Examination of “the Public Interest” in International Copyright Regimes.” In *Intellectual Property Rights and Communications in Asia: Conflicting Traditions*. Edited by Pradip Ninan Thomas and Jan Servaes. New Delhi: Sage, 2006: 58-78. Reprinted as Chapter 6 in *Public Interest and Law: Theory and Practice*. Edited by A. Sabitha. Hyderabad: Amicus Books, 2009.

Journal Articles

“Relational Privacy and the Networked Governance of the Self.” *Information Communication & Society*, published online May 29, 2018 (8000 words).

Morin, Jean-Frédéric, Omar Serrano, Mira Burri, and **Sara Bannerman**. “Rising Economies in the International Patent Regime: From Rule-breakers to Rule-changers and Rule-makers.” *New Political Economy* 23 no. 3 (2018): 1-19.

- As the fourth author, I provided the research and some of the writing for the section on Japan (one of five case studies in the article), as well as input into the overall direction and arguments of this article, and overall editing and wording.

“Development and International Copyright: A History.” *WIPO Journal* 8 no. 1 (2016): 11-22. (This article was an invited contribution to a special issue that was peer reviewed by the General Editor of the journal.)

Bannerman, Sara and Blayne Haggart. “Historical Institutionalism in Communication Studies.” *Communication Theory* 25 no. 1 (2015): 1-22. (Blayne Haggart and I are equal co-authors in this article.)

“Crowdfunding Culture.” *Wi: Journal of Mobile Culture* 6 no. 4 (2012). (23 pages).

“The World Intellectual Property Organization and the *Anti-Counterfeiting Trade Agreement* Threat (WIPO and the ACTA Threat).” *International Journal of Technology Policy and Law* 1, no. 1 (2012): 3-14. Also published as PIJIP Research Paper No. 4. Washington, DC: Washington College of Law, 2010.

“Same-Sex Marriage, Social Cohesion, and Canadian Values: A Media Analysis.” *Canadian Journal of Communication* 36, no. 4 (2011), pp. 599-617.

“Canadian Copyright: History, Change, and Potential.” *Canadian Journal of Communication* 36, no. 1 (February 2011): 31-49.

de Beer, Jeremy and **Sara Bannerman**. “Foresight into the Future of the World Intellectual Property Organization’s Development Agenda.” *World Intellectual Property Organization Journal* 1, no. 2, (2010): 211-231. (The article discusses a research project led by Jeremy de Beer, who is therefore the primary author. Sara Bannerman is the author of the first half of the article, giving background and setting out research results.)

Not Peer Reviewed**Contributions to Books**

Morin, Jean-Frédéric and **Sara Bannerman**. “Tigers and Dragons at the World Intellectual Property Organization (WIPO).” Chapter 12 in *Rising Powers in Multilateral Institutions* Dries Lesage and Thijs Van de Graaf, eds. Basingstoke: Palgrave Macmillan, 2015:219-237. (Morin is the primary author of this article. Bannerman drafted the section on Japan, which has been edited by Morin.)

“Middle Powers and International Copyright History: the case of Canada.” Chapter in *Copyright Future: Copyright Freedom*. Sydney: Sydney University Press, 2011, pp. 79-96.

Journal Articles

“Canadian Copyright Reform: Consulting with Copyright’s Changing Public.” *Intellectual Property Journal* 19, no. 2 (April 2006): 271-296. Reprinted as Chapter 7 in *Copyright Infringement: New Mystifications*. Edited by Veena Audinharayana. Hyderabad: Amicus Books, 2009. Reprinted as Chapter 6 in *Copyright Law Reforms: Global Depiction*. Edited by Audhi Narayana Vavili. Hyderabad: Amicus Books, 2008.

- This book was reviewed by the editor/editorial board of the journal.

Other

Bannerman, Sara. “Canada’s glaring failure to regulate Facebook. *Policy Options*, 1 May 2019. Available at <https://policyoptions.irpp.org/magazines/may-2019/canadas-glaring-failure-regulate-facebook/>

Bannerman, Sara. “Canadians are rightly worried about invasion of privacy in smart cities.” *The Conversation*, 6 February 2019. (750 words). Available at <https://theconversation.com/canadians-are-rightly-worried-about-invasion-of-privacy-in-smart-cities-110091>

Bannerman, Sara and Charnjot Shokar. *Brief to the House of Commons Standing Committee On Industry, Science And Technology Statutory Review Of The Copyright Act: Intermediary Copyright Enforcement*. October 11, 2018. (1069 words). Available at <https://www.ourcommons.ca/Committees/en/INDU/StudyActivity?studyActivityId=9897131>

Tawfik, Myra, Pascale Chapdelaine, **Sara Bannerman**, Olivier Charbonneau, Carys Craig, Lucie Guibault, Ariel Katz, Meera Nair, Graham Reynolds,

- Teresa Scassa, and Samuel E. Trosow *Brief submitted by Canadian scholars in intellectual property law to the Standing Committee on Industry, Science and Technology Statutory Review of the Copyright Act*. October 22, 2018. (4208 words). Available at <https://www.ourcommons.ca/Committees/en/INDU/StudyActivity?studyActivityId=9897131>
- Bannerman, Sara and Charnjot Shokar. "Why Canada's response to the Facebook scandal has been so weak." *The Conversation*, 28 March 2018. Republished in *Canadian Press*, 29 May 2018; *Winnipeg Free Press* p. A7, 12 June 2018; *NationalPost.com* 29 May 2018.
- Bannerman, Sara. "Preventing social media from interfering in Canadian elections." *The Conversation*, 20 March 2018. Republished in:
- *Macleans.ca*, 21 March 2018
 - *National Post (online edition)*, 21 March 2018
 - *Canadian Press*, 21 March 2018
 - *Winnipeg Free Press*, 23 March 2018
 - *Halifax Chronicle Herald*, 23 March 2018
- Bannerman, Sara. "Why is Melanie Joly ignoring the crisis in Canadian journalism?" *The Conversation*, 5 October 2017. Republished in:
- *Canadian Press*, 6 October 2017.
 - *Toronto Star* 10 October 2017, p. A15
 - *J-Source* 10 October 2017, available at <https://j-source.ca/article/melanie-joly-ignoring-crisis-canadian-journalism/>
 - *Hamilton Spectator*, 12 October 2017, p. A11
 - *Waterloo Region Record*, 12 October 2017, p. 12.
 - *Winnipeg Free Press*, 14 October 2017, p. 15.
- Bannerman, Sara. "Why universities can't be expected to police copyright infringement," *The Conversation*, 21 August 2017. Republished in:
- *NationalPost.com*, 22 August 2017. Available at: <http://nationalpost.com/pmnl/news-pmnl/why-universities-cant-be-expected-to-police-copyright-infringement>
 - *Canadian Press*, 33 August 2017.
- Review of *Emergence and Empire: Innis, Complexity, and the Trajectory of History* by John Bonnett. *The University of Toronto Quarterly* 85 no. 3 (Summer 2016): 466-468.
- Review of *The State of Copyright: The Complex Relationships of Cultural Creation in a Globalized World*, by Debora J. Halbert. *The IP Law Book Review* 5 no. 2 (2015): 15-18.
- Review of *Dominion and Agency: Copyright and the Structure of the Canadian*

- Book Trade 1867-1918*, by Eli MacLaren. *Canadian Literature*, 26 April 2013.
- Review of *Fan Fiction and Copyright: Outsider Works and Intellectual Property Protection*, by Aaron Schwabach. *New Media & Society* 15 no. 5 (2013): 803-805.
- “Op-Ed: The A2K problem: copyright, accessibility and the future of copyright in Canada.” *The Hill Times*, 27 January 2011, p. 28.
- “Op-Ed: We Should Copyright the Canadian way.” *The Hill Times*, 25 October 2010, p. 42.
- quoted by Liberal MP Scott Simms during second reading of Bill C-32, The Copyright Modernization Act, asking whether government agrees with Bannerman statement “Bill C-32 includes some made-in-Canada solutions on narrow issues but, on broader issues, abandons made-in-Canada solutions in favour of a more American maximalist approach.” Canada. House of Commons. *Debates of the House of Commons, 40th Parliament—Third Session. Edited Hansard*. no. 092 Tuesday November 2, 2010.
- “The Ins and Outs of the Public Domain [Review of the four books *Terms of Use: Negotiating the Jungle of the Intellectual Commons*, *The Public Domain: Enclosing the Commons of the Mind*, *The Global Idea of “the Commons”*, and *The Future of the Public Domain: Identifying the Commons in Information Law*].” *Global Media Journal -- Canadian Edition* 2, no. 1 (2009): 167-173.
- Review of *Intellectual Property: The Law in Canada*, by Daniel Gervais & Elizabeth Judge. *Canadian Journal of Communication* 32, no. 1 (2007): 143-145.
- Review of *In the Public Interest: The Future of Canadian Copyright Law*, edited by Michael Geist. *Canadian Journal of Communication* 31, no. 2 (2006): 474-475.

Accepted for Publication:

- Canadian Communication Policy and Law*. Toronto: Canadian Scholars’ Press, Inc. (CSPI), under contract; expected publication spring 2020. [NOT YET FINAL FORM]
- Bannerman, Sara and Angela Orasch. “A Strange Approach to Information, Network, Sharing, and Platform Societies.” Chapter in *Shifting Power Structures: Information, Technology and Control in a Changing World* Blayne Haggart, Kate Henne, and Natasha Tusikov, eds. Palgrave MacMillan (8059 words).
- Review of *Chokepoints: Global Private Regulation on the Internet*, by Natasha Tusikov. *Studies in Social Justice* 13 no. 1 (2019), forthcoming (1067 words).

Submitted for Publication:

- Bannerman, Sara. "Copyright." In *Mass Communications in Canada*, Mike Gasher, David Skinner, and Natalie Coulter, eds. Ninth edition. Oxford University Press, forthcoming (350 words).
- Bannerman, Sara. "Crowdfunding Music and the Democratization of Capital." *Canadian Journal of Communication* submitted September 2018 (9000 words)

Unpublished Documents:**Technical Reports**

- Bannerman, Sara** and Angela Orasch. *Privacy and Smart Cities: A Canadian Survey*. January 2019. Available at <https://smartcityprivacy.ca>
- Bannerman, Sara**, David Fewer, Keri Greiman, and Angelao Orasch. *Sidewalk Toronto Digital Governance*. Briefing note for the Ontario Government. October 21, 2018 (1302 words).
- Adusei, Poku, **Sara Bannerman**, Sisule F. Musungu and Heba Wanis. *The WIPO Development Agenda and the Role of IP in Open Collaborative Innovation and Creativity in Africa*. OpenAIR (Open African Innovation Research and Training Project) Working Paper. Cape Town: University of Cape Town (UCT) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2012. (29 single-spaced pages; Sara Bannerman is the author of approx. 7 pages of this working paper which is presently privately available in draft form and which is expected to eventually be released publicly or published).
- Intellectual Property Issues in ICT4D*. Ottawa: International Development Research Centre, 2007 (100 pages).

INVITED PRESENTATIONS AT MEETINGS:

- "Algorithmic imperialism and fake news." Invited talk at Digital Media Research Centre, Queensland University of Technology, Australia, September 7 2018.
- "Intellectual Property and the Sustainable Development Agenda." Keynote talk at the IP and Sustainable Development Conference, Queensland University of Technology, Australia, September 6 2018.
- Sara Bannerman and Angela Orasch. "A Strange Approach to the Information, Network, and Platform Society." Invited presentation at the Knowledge and Power in the Global Political Economy: A Multidisciplinary Perspective workshop, Balsillie School of International Affairs, Waterloo, ON, May 16-18, 2018.

-
- “Roundtable: Global Media Policy of the Future.” Invited participant at the annual conference of the International Association for Media and Communication Research (IAMCR), Cartagena, Colombia, 19 July 2017.
- “Reading ‘The Times’ over Tea: On Trade Marks, Newspapers and Ordinary Englishmen.” Invited presenter and discussant for paper by Megan Richardson and Julian Thomas at the annual conference of the International Society for the Theory and History of Intellectual Property (ISHTIP), 13 July 2017.
- “International Copyright and Access to Knowledge.” Invited presentation at “Intellectual Property and Global Development: 50 Years After the Stockholm IP Conference”, Texas A&M University, 31 March-1 April 2017. (DECLINED)
- “International Copyright and Access to Knowledge.” Invited lecture at Brock University, St. Catharine’s, 16 February 2017.
- “The World Intellectual Property Organization: Building Partnerships for Sustainable Development.” Invited paper presented at book workshop titled “Public-Private Partnerships, Global Intellectual Property Governance and Sustainable Development,” International Centre for Trade and Sustainable Development, Geneva, 1 July 2016.
- “International Copyright and Access to Knowledge.” Invited lecture at Ryerson University’s School of Creative Industries, Toronto, 29 March 2016.
- “Downloading Development.” Invited presentation to International Development Conference 2016, University of Toronto Scarborough, 7 February 2016.
- “International Copyright and Access to Knowledge.” Invited lecture at McMaster University speaker series, Hamilton, ON, 3 February, 2016.
- “WIPO: Access and Development in Historical Perspective.” Invited paper presented at WIPO DA+10 Dialogue (World Intellectual Property Organization Development Agenda after ten years Dialogue), International Centre for Trade and Sustainable Development, Geneva, 18-19 September 2014.
- “Canadian Copyright: Imperialism to Internationalism.” Invited talk presented at the Communication Studies Department, Huntington University, Sudbury, Ontario, 14 October 2013.
- “Foundation: The Origins of Multilateral Copyright and Access to Knowledge.” Invited paper presented at George Washington University Copyright History Symposium, George Washington University, Washington DC, USA, 30 March 2012.
- “Copyright History, Copyright Future: Canadian international copyright history and the future of international copyright.” Paper presented at the Copyright History: Copyright Freedom conference, Old Parliament House, Canberra, Australia, 27-28 May 2009.
- “Canadian Copyright History.” Invited talk in celebration of World Book and

Copyright Day at the Department of Canadian Heritage Copyright Policy
Branch, Ottawa, Ontario, 23 April 2009.

ADMINISTRATIVE RESPONSIBILITIES:**Department:**

2018-2019 CSMM Appointments Committee

2018-2019 CSMM Chair Selection Committee

2018-2019 CSMM Events Committee

2018-2019 CSMM Executive Committee

2018-2019 CSMM Grad Committee

2018-2019 CSCT Grad Committee

2018-2019 IGHC Advisory Committee

2017-2018 On Research Leave

2016-2017 CSMM Acting Chair, July 18-22 2017

2016-2017 CSMM Chair's Advisory member

2016-2017 CSMM Grad Chair

2016-2017 CSMM Graduate Admissions & Review Committee chair

2016-2017 CSMM/ECS PhD Co-Chair / Co-Director

2016-2017 CSMM CMST Appointments Committee member

2016-2017 CSMM Instructional Committee chair

2016-2017 CSMM Internship Committee member

2016-2017 CSMM CSMM Tenure & Promotion Committee member

2015-2016 CSMM CMST Appointments Committee member

2015-2016 CSMM Curriculum Committee member

2015-2016 CSMM Graduate Admissions & Review Committee member

2015-2016 CSMM Internship Committee member

2015-2016 CSMM Publicity Committee member

2015-2016 CSMM CSMM Tenure & Promotion Committee member

2014-2015 CSMM Graduate Admissions & Review Committee member

2014-2015 CSMM Graduate Scholarships Committee member

2014-2015 CSMM Internship Committee member

2014-2015 CSMM Public Relations / Publicity Committee member

2014-2015 CSMM CMST Appointments Committee member

2013-2014 CSMM Graduate Admissions & Review Committee member

2013-2014 CSMM Internship Committee member

2013-2014 CSMM Appointments Committee member

2013-2014 CSMM Chair's Advisory Committee member (T2)

2012-2013 CSMM Curriculum Committee/Working Group member

2012-2013 CSMM Graduate Admissions & Review Committee member

2012-2013 CSMM Events Committee member

2012-2013 CSMM Appointments (Hiring) Committee member

2012-2013 CSMM Initiated web site improvement project

2012-2013 CSMM Wrote departmental contribution to *Advance* newsletter

2011-2012 Library liaison/coordinator

Faculty:

2018-2019 Humanities Student Research Ethics Committee, Member

2018-2019 Academic Planning Committee, Member

2018-2019 Graduate Curriculum and Planning Committee, Member

2017-2018 On Research Leave

2017-2020 Institute for Globalization and the Human Condition, Advisory Committee
Member

2016-2017 Dean's Ad Hoc University Scholar Selection Committee

2015-2018 Humanities Student Research Ethics Committee, Chair

2015-2016 Steering Committee of Cultural Studies & Critical Theory Program, Member

2015-2017 Dean's Advisory Committee on Research, Member

2014-2017 Humanities Representative to the Social Sciences (elected)

University:

2018-2019 Graduate Council, Member

2018-2019 Program Structure Working Group, Member

2016-present MUFA, Faculty Council, Member for Communication Studies & Multimedia
Department

2014-2017 Provost's Committee on Copyright, Member

2012-2017 McMaster University Faculty Association (MUFA) Observer on McMaster
Copyright Committee

OTHER RESPONSIBILITIES:

Lambda Scholarship Foundation, board member, 2019-present

Workshop Organizing

- 2018 Co-organizer of half-day workshop “Digital Democracy” at McMaster University, Hamilton, 15 Sept. 2018. Approx. 15 presenters.
- 2017 Co-organizer of day-long workshop “The Computable Self and the Politics of Data” at McMaster University, Hamilton, 10 March 2017 with keynote speaker Nora Young, host of the CBC Radio program “Spark” and 15 presenters
- Funding from McMaster Faculty of Humanities (\$5000), McMaster Department of Communication Studies and Multimedia (\$1000), McMaster Software & Engineering (\$200), McMaster Institute on Globalization and the Human Condition (\$100), Asper Chair in Communication (\$500), myself (\$500)

Networked Communications Governance Newsletter

- Compiled by research assistants, this weekly newsletter alerts Canadian communication scholars to recent news, press releases, tribunal and court decisions, and upcoming announcements and events related to communications policy and governance.

Interviews and media

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- Orasch, Angela. “Seeing the smart city: Mapping technologies in Canada.” *The Conversation* April 4, 2019. [Op-ed by McMaster PhD candidate Angela Orasch, my co-applicant in the project discussed in this op-ed.]
- Arsenault, Chris. “Green paradise or data-stealing dystopia? Toronto smart city sparks debate.” Reuters. March 11, 2019.
- Wray, Sarah. “Canadians concerned about smart city privacy but open to public uses of data.” *SmartCitiesWorld.net* February 11, 2019.”
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Bannerman, Sara. Live interviews on CBC Radio One morning shows regarding fake news, October 10, 2018.

- Thunder Bay - Superior Morning
- CBC KW with Craig Norris
- Cape Breton (Sydney) - Information Morning
- Gander - Central Morning
- Windsor Morning
- Daybreak Kamloops
- Whitehorse - A New Day
- Vancouver --The Early Edition
- Kelowna - Daybreak South
- Prince George / Prince Rupert - Daybreak North
- Saskatoon Morning
- Radio Canada International

Laux, Sara. “McMaster researchers explore the intersection of privacy and smart city technology.” *BrighterWorld.McMaster.ca* July 18, 2018.

St Denis, Jen. “Mysterious election quiz on Facebook raises red flags for Vancouver voters.” (Quoting Sara Bannerman). *TheStar.com* April 23, 2018. Available at <https://www.thestar.com/vancouver/2018/04/23/mysterious-election-quiz-on-facebook-raises-red-flags-for-vancouver-voters.html>

Bannerman, Sara. Live interviews on CBC Radio One morning shows regarding Canadian House of Commons Standing Committee on Access to Information, Privacy and Ethics study on Breach of Personal Information Involving Cambridge Analytica and Facebook, April 18, 2018.

- London Morning with Julianne Hazlewood
- CBC KW with Craig Norris
- Information Morning (Saint John) with Hance Colburne
- Information Morning (Fredericton) with Terry Seguin
- West Coast Morning (Corner Brook) with Bernice Hillier
- Information Radio (Winnipeg) with Marcy Markusa
- The Trailbreaker (Yellowknife) with Loren McGinnis
- Windsor Morning with Tony Doucette
- Daybreak North (Prince George / Prince Rupert) with Robert Doane and

Carolina DeRyk

- Daybreak South (Kelowna) with Chris Walker
- Daybreak Kamloops with Shelley Joyce
- A New Day (Whitehorse) with Sandi Coleman

McNeil, Mark. "Elections Loom, and we need a handle on social media." (Q&A with Sara Bannerman). *Hamilton Spectator* April 16, 2018, A5.

Bannerman, Sara. Live interviews on CBC Radio One morning shows regarding privacy social media, and elections. March 28, 2018.

- Superior Morning (Thunder Bay)
- Island Morning (Charlottetown) with host Mitch
- CBC KW with Craig Norris
- London Morning with Julianne Hazlewood
- Information Morning (Halifax) with host Normally
- Quebec AM (Quebec City) with Susan Campbell
- Central Morning (Gander) with Leigh Anne Power
- The Trailbreaker (Yellowknife) with Loren McGinnis
- On the Island (Victoria) with Gregor Craigie
- Daybreak Kamloops with Shelley Joyce
- The Morning Edition (Regina) with Zarqa Nawaz
- Saskatoon Morning with Leisha Grebinski
- The Early Edition (Vancouver) with Stephen Quinn

Bannerman, Sara. Commentator on "Politics in the Age of Data Mining" segment, on TVO's *The Agenda with Steve Paikin*, March 23, 2018. Available at <https://tvo.org/video/programs/the-agenda-with-steve-paikin/politics-in-the-age-of-data-mining>

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- Windsor Morning with Tony Doucette
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- Central Morning (Gander) with Leigh Anne Power
- Information Radio (Winnipeg) with Marcy Markusa
- On the Island (Victoria) with Gregor Craigie
- The Morning Edition (Regina) with Zarqa Nawaz
- A New Day (Whitehorse) with Sandi Coleman
- Saskatoon Morning with Leisha Grebinski
- The Early Edition (Vancouver) with Stephen Quinn

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Quoted in Bianchini, Elisabetta, "Bell announces 5\$ price hike for Internet," *Humber Et-Cetera*, 3 February 2017.

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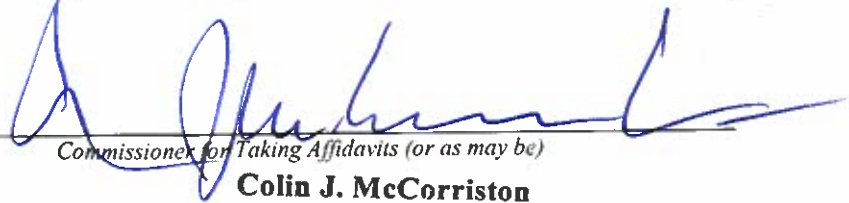
<http://newbooksincommunications.com/2014/02/11/sara-bannerman-the-struggle-for-canadian-copyright-imperialism-to-internationalism-1842-1971/>

Occasional Contributor to *InfoJustice.org*, a site run by the Program on Information Justice and Intellectual Property at the American University, Washington College of Law, and dedicated to issues related to international IP, open access initiatives, and efforts to expand access to knowledge-based goods.

<http://infojustice.org/archives/author/sara-bannerman>

Occasional Contributor to *GlobalMemo.org*, a site monitoring elections and appointments in the UN system. <http://globalmemo.org/contributors/>

This is Exhibit "2" referred to in the Affidavit of SARA
BANNERMAN sworn June 3rd, 2019



Commissioner for Taking Affidavits (or as may be)

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Privacy and Smart Cities: A Canadian Survey

By Sara Bannerman and Angela Orasch¹

Introduction

This report presents the findings of a national survey of Canadians about smart-city privacy conducted in October and November 2018. Our research questions were: How concerned are Canadians about smart-city privacy? How do these concerns intersect with age, gender, ethnicity, and location? Moreover, what are the expectations of Canadians with regards to their ability to control, use, or opt-out of data collection in smart-city context? What rights and privileges do Canadians feel are appropriate with regard to data self-determination, and what types of data are considered more sensitive than others?

What is a smart city?

A 'smart city' adopts digital and data-driven technologies in the planning, management and delivery of municipal services. Information and communications technologies (ICTs), data analytics, and the internet of things (IoT) are some of the main components of these technologies, joined by web design, online marketing campaigns and digital services. Such technologies can include smart utility and transportation infrastructure, smart cards, smart transit, camera and sensor networks, or data collection by businesses to provide customized advertisements or other services. Smart-city technologies "monitor, manage and regulate city flows and processes, often in real-time" (Kitchin 2014, 2).

In 2017, a framework agreement was established between Waterfront Toronto, the organization charged with revitalizing Toronto's waterfront, and Sidewalk Labs, parent company of Google, to develop a smart city on Toronto's Eastern waterfront (Sidewalk Toronto 2018). This news was met with questions and concerns from experts in data privacy and the public at large regarding what was to be included in Sidewalk Lab's smart-city vision. How would the overall governance structure function? How were the privacy rights of residents going to be protected, and what mechanisms, if any, would ensure that protection?

The Toronto waterfront is just one of numerous examples of smart-city developments. Many municipalities in Canada have begun to develop smart-city initiatives. In 2018, the Canadian federal government launched a "Smart City Challenge", offering prizes of \$50 million, \$10 million, and \$5 million dollars to fund Canadian cities' top proposals to apply technological solutions to local governance issues (Infrastructure Canada 2018). This intergovernmental program has encouraged the creation of such projects across the country. As of today, almost all major cities in Canada have adopted some level of smart-city planning (Bannerman et al. 2019).

¹ This study was funded by the Office of the Privacy Commissioner of Canada (OPC). The views expressed herein are those of the project researchers and do not necessarily reflect those of the OPC. This research was undertaken, in part, thanks to funding from the Canada Research Chairs program and McMaster University. The authors wish to thank Keri Greiman, David Fewer, Teresa Scassa, Nicole Goodman, Blayne Haggart, Clifton van der Linden, Charles Breton, Earl Washburn, Maureen Smith, Natasha Tusikov, Chranjot Shokar, Emmanuel Appiah, Sumana Naidu, Ian Steinberg, Peck Sangiambut, and Jean-Noé Landry. Any errors are our own.

Personal and collective privacy is one of the most salient problems associated with smart-city initiatives. In April of 2018, the Privacy Commissioner of Canada sent an open letter to the Canadian Minister of Infrastructure and Communities, calling on the federal government to ensure that privacy concerns were seriously considered as part of the winning proposals for the Smart City Challenge Project. This letter was signed by all 13 Provincial and Territorial Privacy Commissioners (Beamish et al. 2018).

Smart-city technologies move quickly from development to adoption, often outpacing the social and political deliberations necessary to consider their effects in detail. As smart-city projects continue to develop across Canada, social research is necessary to gauge public opinion, to consider legal and legislative options, and to examine the social context in which such technologies operate. Given the emergent status of smart cities, this research comes at an important moment. As best practices and path dependencies emerge, it is important to consider the consequences of incorporating technologies into the fabric of city life.

Method

During October 23 to November 1 2018, we conducted an online survey of Canadians about their attitudes towards privacy in a smart-city context. Participants were recruited by EKOS Research Associates, drawn as a random stratified sample from a probability panel database and recruited using emailing scripts. The panel is based on the socio-demographic statistical parameters of the most recent Canadian census (2016). The survey itself was rim-weighted for location, gender, and age and was conducted in English and French. The final research sample was 1011 individuals ($n = 1011$). The sample of people surveyed is considered representative of Canadians as a whole, accurate to within a margin of error of ± 3.08 , 19 times out of 20. It is representative of demographic subgroups with a reduced level of confidence. The margin of error is within 5 or less, 19 times out of 20, for Canadians identifying as men and women; for university-educated Canadians; for Canadians who are employed or unemployed; and for Canadians not identifying as a visible minority or Indigenous person, as a person with disabilities, or as an LGBT Canadian. The margin of error for Canadians from any province, any age group, for high-school-educated Canadians, and for college-educated Canadians ranges from ± 5.01 to ± 12.45 19 times out of 20.

Survey findings

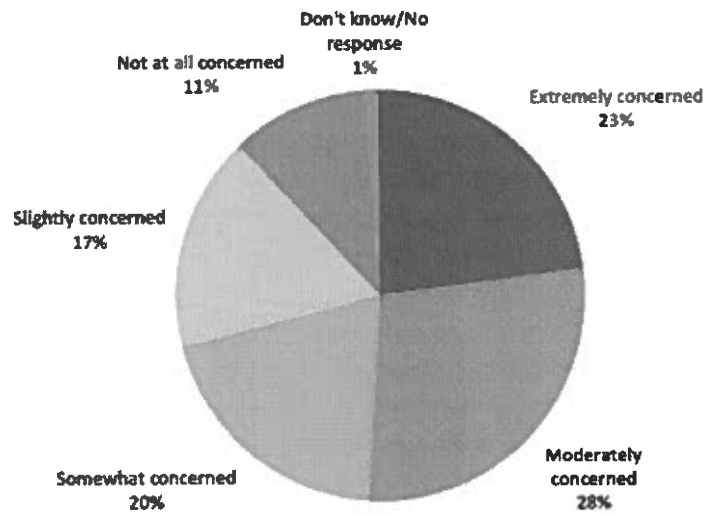
Overall privacy concern

The preliminary question of the survey asked respondents, "How concerned are you about your privacy in the context of the growing uses of smart-city technologies?" Responses were measured on a 5-point Likert scale, from "Extremely concerned" to "Not at all concerned". The survey found that 88 percent of Canadians are concerned on some level about their privacy in the smart-city context, with 23 percent being extremely concerned, 29 percent saying they are moderately concerned, and 19 percent somewhat concerned. In general, these responses demonstrate a strong level of concern in the privacy issues surrounding smart cities.

The findings also suggest a few interesting demographic findings. Participants age 65 and up were less concerned than those from other age groups (35 percent were "not at all" or "slightly" concerned, compared

with 28 percent on average). Our finding that older participants are less concerned about smart-city privacy is consistent with some studies that have also shown less concern among older adults about privacy, sometimes due to a lower level awareness of the privacy risks associated with new technologies (Elueze and Quan-Haase 2018; Advocis and The Financial Advisors Association of Canada 2006).

HOW CONCERNED ARE YOU ABOUT YOUR PRIVACY IN THE CONTEXT OF THE GROWING USES OF SMART CITY TECHNOLOGIES...



University-educated Canadians who participated in our survey were also more likely (33 percent) than average (28 percent) to say they were “not at all” or “slightly” concerned, while college-educated participants were less likely (23 percent) than the average Canadian (28 percent) to say they were “not at all” or “slightly” concerned. Participants who self-identified as visible minorities or Indigenous were more concerned with privacy in the smart city than average (19 percent were “not at all” or “slightly” concerned, compared with 28 percent on average).²

Past research suggests that visible minorities and Indigenous people, as well as college educated working class people, are subjected to greater levels of surveillance by public or workplace authorities (Eubanks 2018; Gangadharan 2017; Arora and Scheiber 2017; Arora 2018; Maréchal 2015). They may therefore be less likely to be unconcerned about surveillance in a smart-city context.

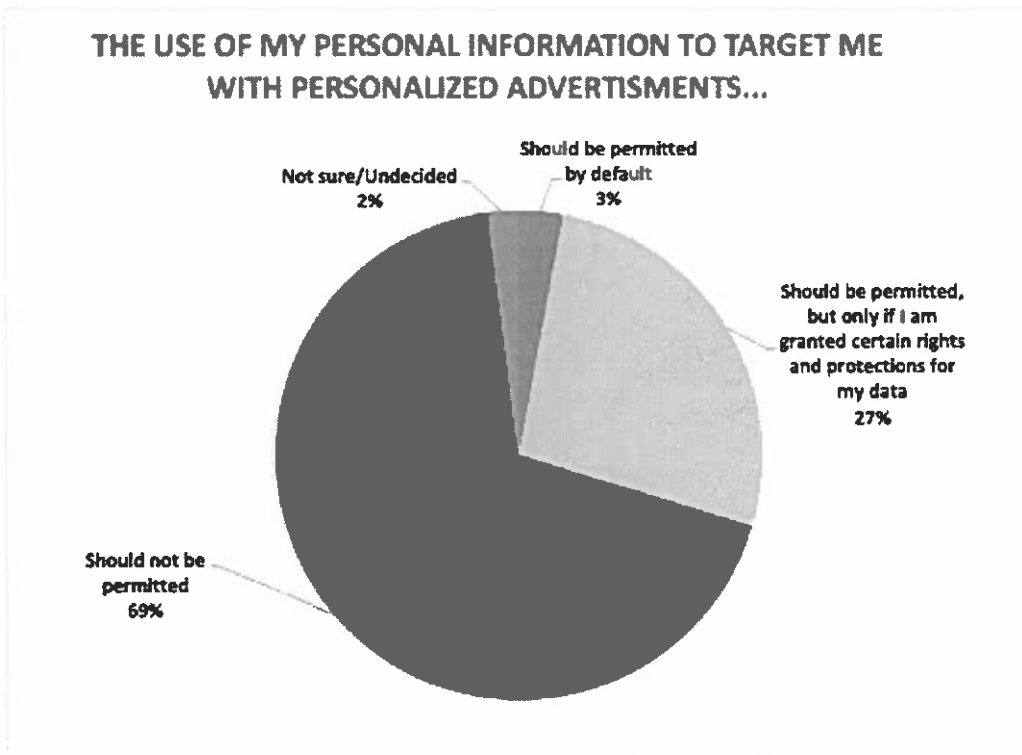
Uses of data in a smart-city context

Our survey sought to examine Canadians’ attitudes towards particular uses of personal information in a smart-city context, focussing on six specific uses of personal information: in targeted advertisements, for behaviour modification, in traffic and transit planning, in policing and crime prevention, the sale of data, and in private businesses. Personal information was defined as “any personally-identifiable information.” The survey questions sought to gauge whether certain uses of personal information in a smart-city context were considered more sensitive than others.

² Results are not considered representative of Canadians who are visible minorities or Indigenous people as a whole; the margin of error is +/- 9.85 for this group 19 times out of 20.

Targeted advertisements

Sixty-nine percent of Canadians felt that the use of their personal information to target them with personalized advertisements should not be permitted. A further 27 percent felt that use of their personal information for targeted advertising should be permitted, but only if they were granted certain rights and protections in their data. Only three percent felt that the collection of data for targeted advertisements should be permitted by default. Only three percent felt that the collection of data for targeted advertisements should be permitted by default.



Participants under the age of 35 (4 percent), and Canadians who identified as men (4 percent), were significantly more likely than average (3 percent) to say that the use of their personal information to target them with ads should be permitted by default. Participants under the age of 35 (36 percent), university-educated Canadians (34 percent), Canadians who are employed (31 percent), and LGBTQ participants (39 percent), were significantly more likely than average (27 percent) to say that the use of their personal information

to target them with ads should be permitted but “only if I am granted certain rights and protections for my data.” Participants age 65 and up (82 percent), and unemployed Canadians (74 percent), were more likely than average (69 percent) to say that the use of their personal information to target them with ads should not be permitted.

These findings are consistent with previous studies that indicated that young people are more permissive about their personal information, as well as with studies that show young people care about privacy and want to control their personal information (Hoofnagle et al. 2010; Agosto and Abbas 2017).

The stronger level of concern among participants age 65 and up is consistent with previous studies that show respondents' higher levels of concern about the use of their personal information by banks to sell insurance products (Advocis and The Financial Advisors Association of Canada 2006). While persons over 65 may be less concerned about privacy in general, they may be more concerned about the use of personal information to target them with unscrupulous sales and marketing practices.

Our results are also consistent with studies that have found that women are more concerned about privacy, as compared with men (Youn and Hall 2008; Jensen, Potts, and Jensen 2005; Bartel Sheehan 1999).

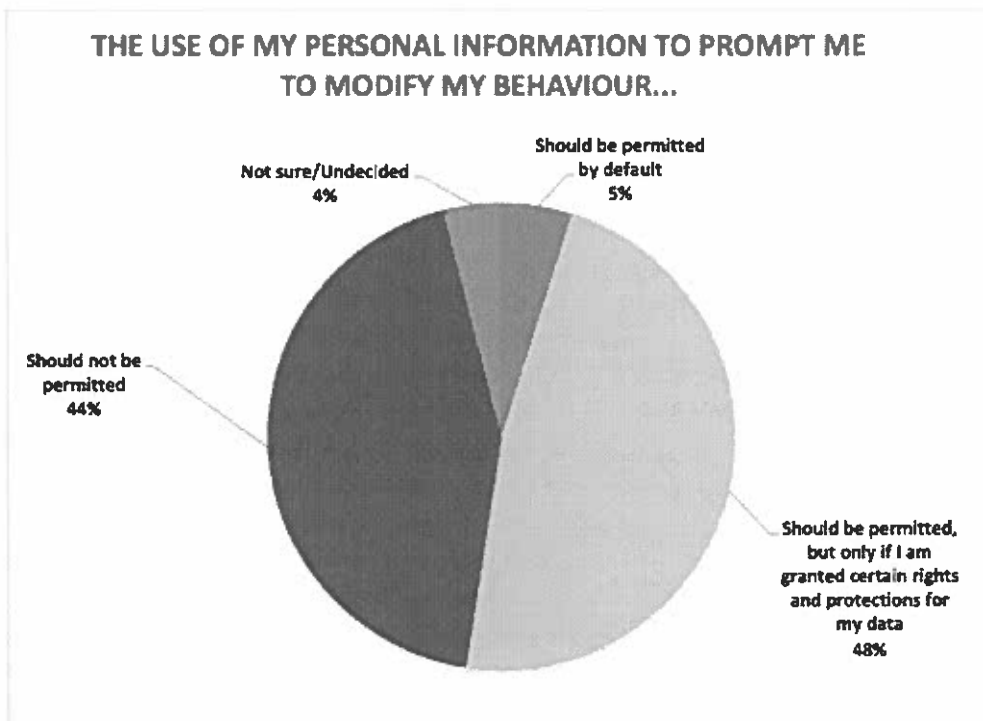
Unemployed Canadians were more likely (74 percent) than average (69 percent) to say that the use of their personal information to target them with ads “should not be permitted,” rather than permitting such uses if they are granted certain rights and protections for their data. People with lower incomes may have lower confidence that privacy rights and protections will actually serve to protect their privacy (Eubanks 2014, 2018).

Behaviour modification

Second, the survey examined attitudes towards the use of personal information to prompt an individual to modify their behaviour. To demonstrate how personal information could be used to prompt an individual to modify their behaviour, the survey question noted that:

your transit use or location data could be analyzed, and you could then receive personalized messages prompting you to use transit or to park in less congested areas. Your hydro use data could be analyzed, and you could receive prompts to use less hydro, or to use hydro in off-peak hours. Your activity data could be analyzed, and then you could be prompted to engage in healthier behaviours.

Respondents were asked to complete the sentence “Use of my personal information to prompt me to modify my behaviour...” and were given the options “should be permitted by default,” “should be permitted, but only if I am granted certain rights and protections for my data,” “should not be permitted,” and “not sure / undecided.”



Forty-eight percent of Canadians felt that the use of their personal information to prompt them to modify their behaviour should be permitted, but only with the granting of certain rights and protections. A further 44 percent felt that this should not be permitted at all, suggesting there is a strong aversion to the use of personal information for behavior modification, especially if individual rights and access over that data is not granted. Only 5 percent saw use of personal information for behaviour modification as something that should be permissible by default.

University educated (58 percent) and employed Canadians (52 percent), participants under 35 (56 percent), and LGBTQ participants (61 percent) were more likely to say that the use of their personal information for behaviour modification prompting should be permitted only with certain rights and protections than to say that

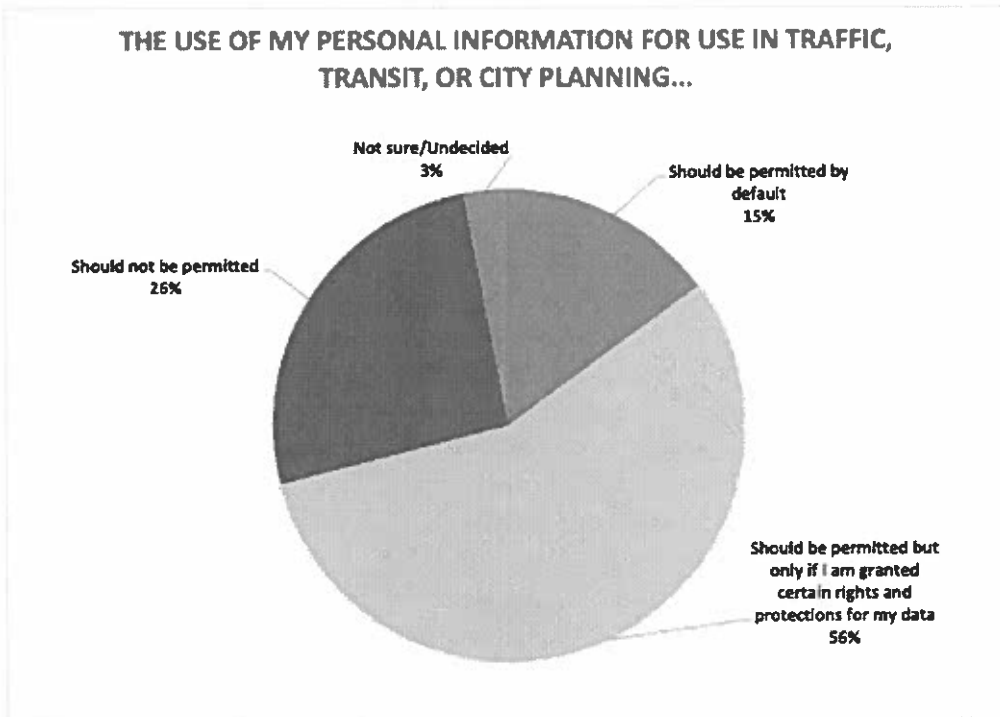
such use should not be permitted outright. College-educated participants (50 percent), unemployed Canadians (41 percent), and participants over 65 (49 percent), were more likely to say that this use should not be permitted at all.

As with the previous question about targeted advertisements, these results may suggest a stronger level of confidence in privacy rights and protections by younger participants, university-educated and employed Canadians, as compared to college-educated participants and unemployed Canadians. The greater willingness of LGBTQ participants to conditionally permit, rather than outright reject, behaviour-modification uses may reflect greater confidence in rights and protections, and/or a greater dependence on, or familiarity with, technologies for managing identity, disclosure, and personal connections and relationships (Blackwell et al. 2016).

Traffic and Transit Planning

The survey examined attitudes regarding the use of personal information for traffic, transit, or city planning. The survey question noted that “web, smartphone app or social media activity data could be used to analyze traffic and transit activity, and to predict future trends.”

There seemed to be a generally lower level of concern regarding this type of data collection, especially if individuals were granted rights and protections over the personal information collected. The greatest number of Canadians (57 percent) felt that the use of personal information for traffic, transit, and city planning was permissible with protections and rights granted to them over their data, while 24 percent felt that such uses should not be permissible at all. However, 17 percent felt that this kind of use should be permitted by default—a higher number than the previous two categories, suggesting a slightly lower level of privacy concern.



Participants over the age of 65 (21 percent), men (18 percent), university educated Canadians (19 percent), and unemployed Canadians (20 percent), as well as participants from Alberta (23 percent), were more likely than average (15 percent) to say that such use should be permitted by default, whereas participants under the age of 35 (66 percent), employed Canadians (61 percent), and participants in Ontario (60 percent) were more

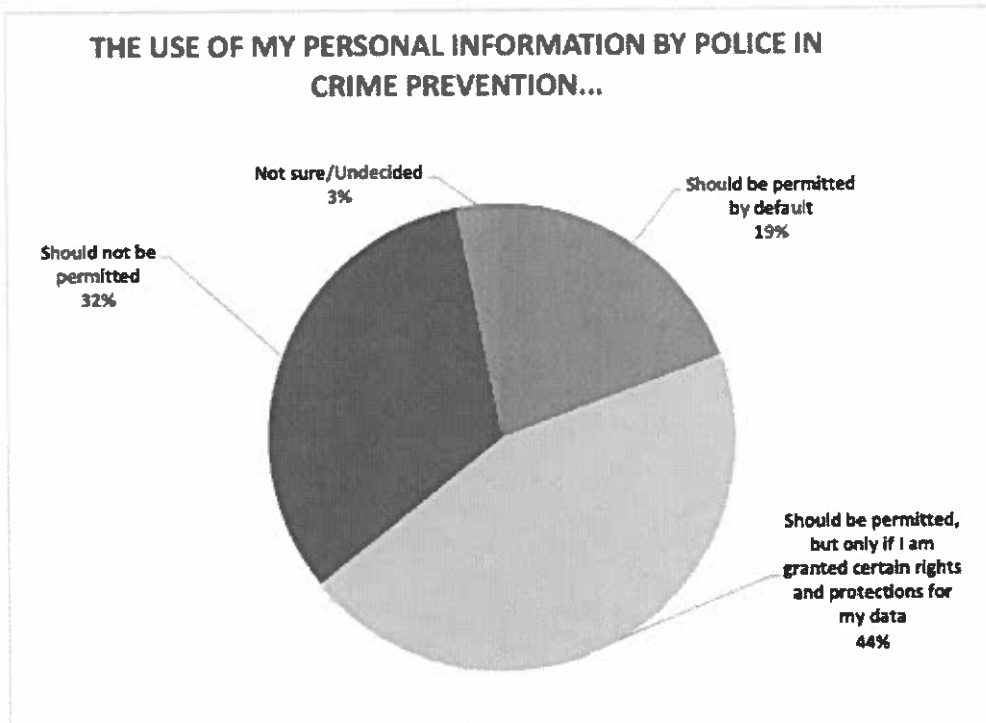
likely to permit such uses if rights and protections were granted. High school-educated participants (30 percent) were more likely to say such uses should not be permitted at all.

We see here the same lower level of concern and greater confidence in “certain rights and protections” among younger participants and university-educated Canadians as was revealed in previous questions. Interestingly, while employed Canadians, as in previous questions, were more willing to share their data on condition of “certain rights and protections,” here, this corresponds with a *lower* level of permissiveness than the average Canadian--a lower willingness than average to share this data by default (as opposed to a lower likelihood of saying that such use should not be permitted, as compared with average Canadians, as was the case with previous questions). In other words, employed Canadians are less permissive than average, with a higher expectation or desire for data rights and protections, when it comes to the use of their data for public services like traffic, transit and city planning.

Unemployed Canadians were more likely than average to say that use of their personal information for traffic, transit and city planning should be permitted by default, also a change from previous questions, on which they were more likely to say such uses should not be permitted. This may represent a greater trust in public authorities, or to a habituation to surveillance by public authorities, and lower confidence that rights and protections would be useful to protect individual privacy.

Policing

Noting that “police services can use personal data collected via web, smartphone app or social media activity to predict future behaviours of individuals or groups, and to take actions to prevent crime,” the survey asked respondents to complete the sentence “Use of my personal information by police in crime prevention...” Again, respondents were given the options “should be permitted by default,” “should be permitted, but only if I am granted certain rights and protections for my data,” “should not be permitted,” and “not sure / undecided.”



The majority of Canadians felt that their personal information should either not be collected by police for use in crime prevention (32 percent), or should only be collected if certain rights and privileges were afforded to individuals over this data (44 percent). The number of Canadians who felt that default permission was acceptable totalled only 19 percent. This suggests a strong level of concern regarding this type of

data collection in the smart-city context.

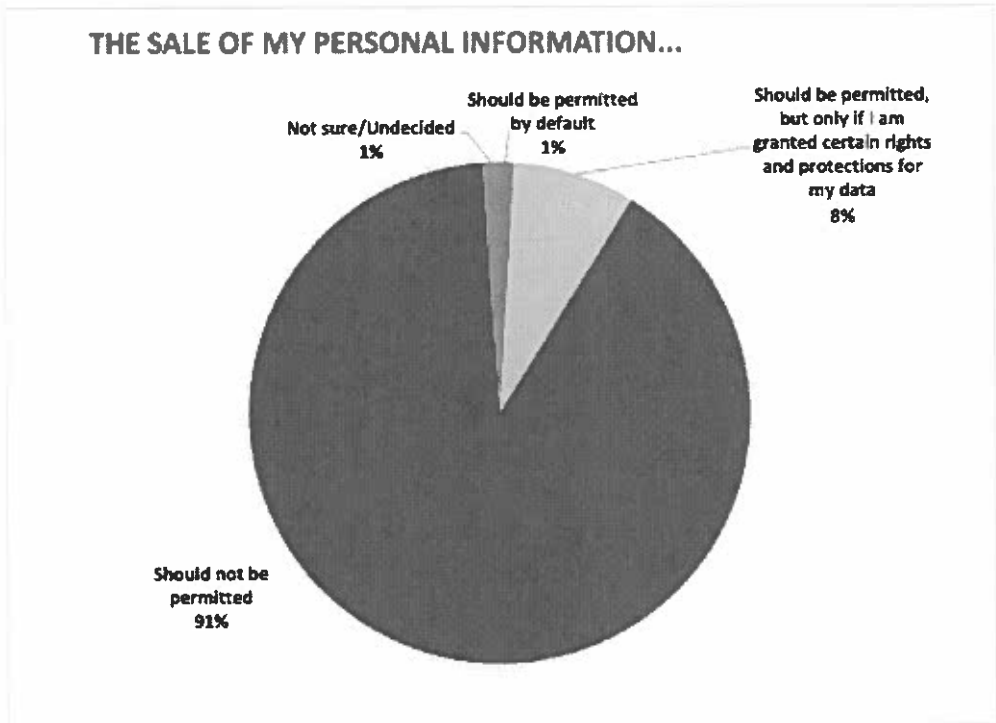
Participants who identified as visible minorities and Indigenous people objected in greater number (together, 42 percent) to the collection of personal information for policing.³ Men objected to this type of data collection more than women; forty percent of men (compared to 25 percent of women) said it “should not be permitted.” Women were more likely to say that such uses should be permitted by default (22 percent), or should be permitted if certain rights and protections were granted (46 percent).

This result is interesting because it contrasts with research that shows that women, in most contexts, are more concerned about privacy than men (Youn and Hall 2008; Jensen, Potts, and Jensen 2005; Bartel Sheehan 1999). It also indicates possible strong objections of visible minorities and Indigenous peoples to over-surveillance and targeting by police services, though further research is necessary to verify this finding.

Sale of Data

Ninety-one percent of our sample, a clear majority, felt that the sale of their personal information should not be permitted. The survey explained that, “For example, your personal information could be sold by government or businesses to other businesses or data brokers.” Only eight percent felt that the sale of their personal information should be permitted with certain rights and privileges afforded to the individual. This demonstrates a high degree of public concern over data sales.

Men (9 percent) were slightly more likely than women (6 percent) to accept the sale of their data with certain rights and privileges, as were university educated participants (14 percent) as compared to participants with high school or less (6 percent) or the average Canadian (8 percent).

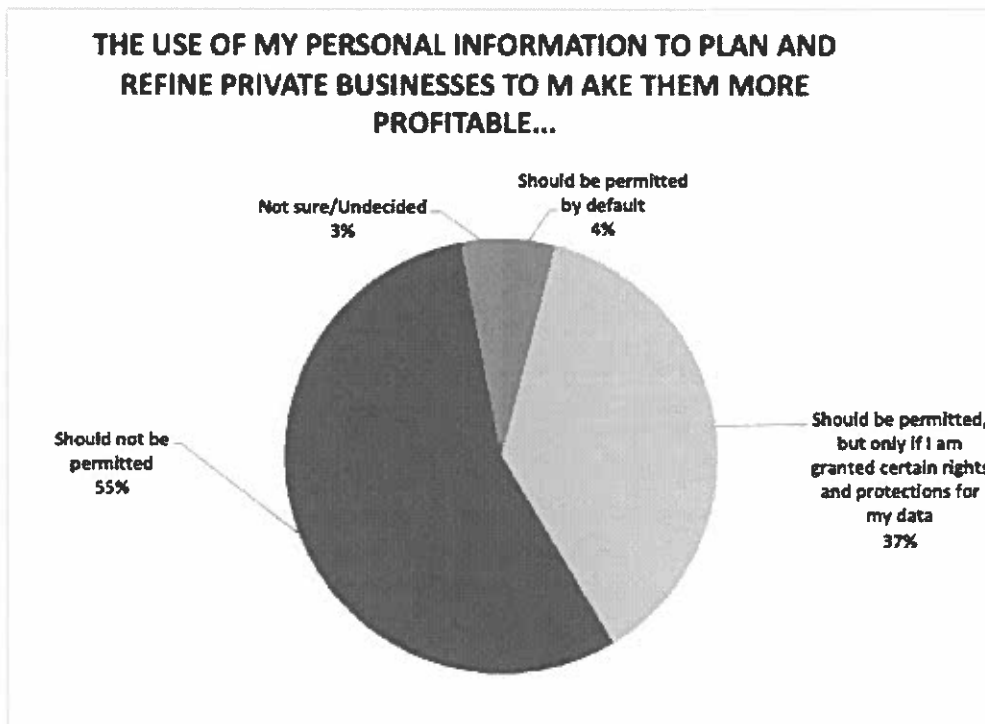


These findings are consistent with studies generally showing a higher level of concern about privacy among women (Youn and Hall 2008; Jensen, Potts, and Jensen 2005; Bartel Sheehan 1999), and possibly a higher level of awareness of the risks associated with the sale of personal information among university-educated Canadians.

³ Results are not considered representative of Canadians who are visible minorities or Indigenous people as a whole; the margin of error is +/- 9.85 19 thes out of 20 for this group.

Private Business Use

Survey respondents were asked to complete the sentence, “Use of my personal information to plan and refine private businesses to make them more profitable should be permitted, as long as....” “For example,” the survey explained, “your taxi usage data could be analyzed to adjust services or prices.” Fifty-five percent of



respondents felt this type of data collection should not be permissible. By contrast, 37 percent felt that it should be permissible but with rights and protections, while only four percent felt it should be permissible by default. Similar to the sale of data, these results demonstrate a substantial degree of concern over the usage of data to service private business interests.

Surprisingly, participants aged 35-44 were more likely (65 percent) than the average (55 percent) to be unwilling to permit use of personal data for profit. University educated Canadians were more permissive, and more

likely to allow their personal data to be used with certain rights and protections (42 percent, versus 37 percent on average). Unemployed Canadians were more willing to allow their data to be used in this manner by default (six percent, compared to four percent on average).

It is possible that university-educated Canadians were, again, more confident in the protection that could be provided by “certain rights and protections” than their high school and college-educated counterparts. It is also possible that unemployed Canadians hoped or believed that permitting uses of personal data to make businesses more profitable might improve employment opportunities.

Data control

Following the initial questions, those who agreed that their data could be collected with certain rights, restrictions, and privileges for the purposes of targeted ads, behavior modification, traffic and transit planning, policing, sale, or profitability, were given a subset of questions to measure *under what conditions* this should be permitted.⁴ The response field offered the following provisions within which respondents could indicate what

⁴ The findings in this section are not considered representative of all Canadians; the margin of error is +/- 5.94 19 times out of 20.

they felt were appropriate measures to ensure appropriate collection of personal data. They were instructed to select all of the conditions that should apply:

- I'm notified somewhere in the fine print when I agree to use a service;
- I can opt in;
- I can opt out;
- I can view my data;
- I can correct my data;
- I can delete my data;
- I can download my data for my own use;
- My data is aggregated with other data or masked such that my identity is not revealed; and/or
- Don't know/ No response.

	Crime	Traffic	Ads	Sale	Business	Behavior	Total
My data is aggregated with other data or masked such that my identity is not revealed	61%	72%	55%	58%	61%	58%	61%
I can opt out	34%	52%	67%	58%	51%	61%	54%
I opt in	32%	46%	58%	59%	51%	58%	51%
I can view my data	42%	44%	49%	45%	40%	55%	46%
I can delete my data	25%	38%	50%	40%	42%	47%	40%
I can correct my data	30%	31%	41%	36%	28%	40%	34%
I can download my data for my own use	26%	31%	30%	28%	30%	43%	31%
I'm notified somewhere in the fine print when I agree to use a service	24%	25%	34%	35%	26%	30%	29%
Don't know/ No response	5%	1%	1%	0%	3%	1%	2%

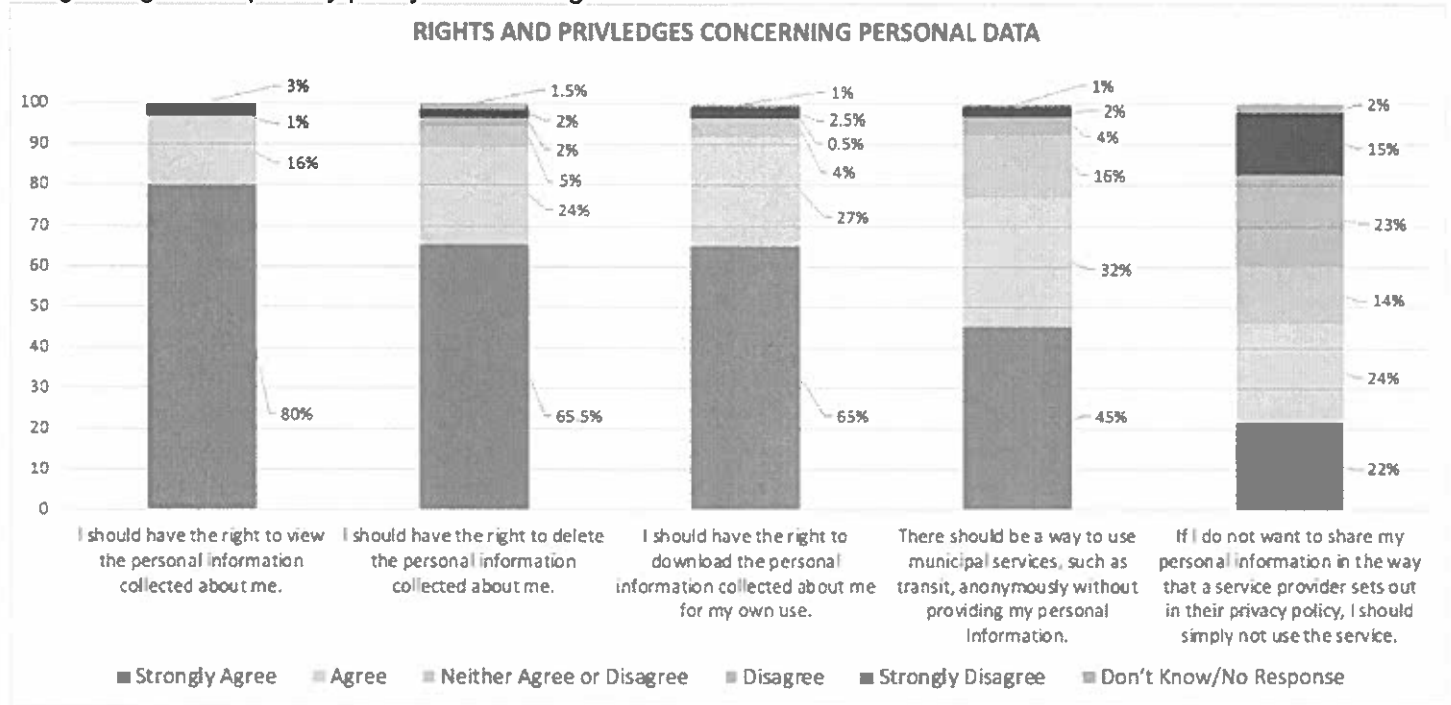
Our survey results suggest that the aggregation and masking of personal information is the most desired type of data control, with 55-72 percent of respondents selecting this option in every category. Opting out was also frequently selected, mostly in the context of targeted advertisements (67 percent), behaviour prompting (61 percent), and sale of personal data (58 percent). Notification in the fine print was the least-selected option (24-34 percent). These results suggest a high level of concern for data anonymity among survey participants, as well as a preference for opting in and out of the collection of personal information. They also suggest that nominal consent, where one is notified somewhere in the fine print that one's personal information will be used in a particular way, is prompted to click on "I agree," is not sufficient in the eyes of many participants.

Participants wished to see greater levels of control over private uses of their data. In the case of targeted ads, 69 percent of respondents thought that the use of their personal information "should not be permitted." Of the 27 percent of participants who would permit targeted advertising if certain rights and protections were granted, 67 percent wished to be able to opt out, 58 percent to be able to opt in, and 50 percent to be able to delete their data. Fewer participants expected to have such control over their data for public uses such as crime prevention and traffic planning, but many participants (42-44 percent) still wished to be able to view their information, and some also wished to have other types of controls, such as the ability to opt out, opt in, delete their data, correct their data, and download their data.

Rights and Privileges

With regards to the kinds of rights and privileges expected over personal data collection, the survey suggested specific data control mechanisms and asked respondents to gauge their agreement on a five-point Likert scale, from "Strongly Agree" to "Strongly Disagree". A strong majority of Canadians strongly agreed that they should

have the right to view the personal information that has been collected on them (80 percent). A majority of Canadians also strongly agreed that they should be able to delete that data (66 percent), as well as download it (65 percent). Interestingly, many Canadians (37 percent) did not agree with the statement “if I do not want to share my personal information in the way that a service provider sets out in their privacy policy, I should simply not use the service.” Not using the service is currently, in many cases, the only option available to Canadians who do not agree with a company or service provider’s privacy policy. This survey finding suggests that Canadians are not satisfied with the current model of notice and consent which often provides only the options of agreeing with a privacy policy or not using a service.



Conclusions

Overall, our survey findings suggest that Canadians are concerned about their privacy in the development of smart cities. Other findings indicate that many Canadians desire broader protection and control over their personal data. While many did not want to have their personal information collected at all, those who would permit the use of their personal information wished to have levels of control over that data that are, often, not currently available, such as the ability to opt out, view, correct, download and delete their data. This was particularly true regarding data use by private businesses, as opposed to public data uses, but many Canadians wished to see greater levels of control in a public context as well.

The survey also demonstrates that the intended purpose and use of data gathering influences respondents’ attitudes towards its collection. The sale of personal data is the most strongly opposed use that we examined. Canadians also objected strongly to the use of personal data for targeted advertising and behaviour modification, while data collection for public uses such as transit and city planning is not as strongly opposed.

With respect to demographic characteristics, older adults may be less concerned about smart-city privacy, possibly due to a lower awareness of privacy risks (Elueze and Quan-Haase 2018; Advocis and The Financial

Advisors Association of Canada 2006). Visible minority and Indigenous people, and college-educated working-class people, may be less concerned about smart-city privacy, possibly due to habituation to higher levels of surveillance by public and workplace authorities or lower levels of awareness about privacy risks (Eubanks 2018) or the privacy risks associated with smart-city technologies in particular.⁵ Awareness-raising about the privacy risks associated with smart-city technologies may be worthwhile among these groups. However, in the context of policing, the potential privacy risks associated with smart-city technologies may be more apparent to those often affected by surveillance; visible minorities and Indigenous groups, as well as men in general, may be more concerned about data collection in the context of policing and crime prevention.⁶

These findings suggest privacy and digital literacy are important factors to consider as smart-city technologies roll out. Moreover, due to the high degree of concern over the privacy, data collection in the smart-city context should look beyond de-identification measures as a first strategy, towards data control and self-management mechanisms baked into the technologies themselves. Self-management can include granting to users the ability to opt in; opt out; delete, download, correct, and manage their data. Canadians want control of their data that goes beyond simple notice of how their data is used somewhere in the fine print. They want the options to opt out, opt in, view, delete, correct, and download their data.

This research demonstrates that Canadians are wary of smart cities, as well as of the collection and use of their personal information more broadly. Canadians are more open to government uses of information such as in traffic and city planning, especially if they are granted rights and protections in their data. They object strongly to private business uses of their personal information, such as the sale of their personal information, its use to target them with ads, and even to its use to make businesses more profitable. This should cause municipalities to think twice about instituting smart-city projects that are profit-motivated or business-led. Municipalities should tread carefully and engage in as much public consultation as possible as they re-conceptualize and remodel infrastructures around digital platforms.

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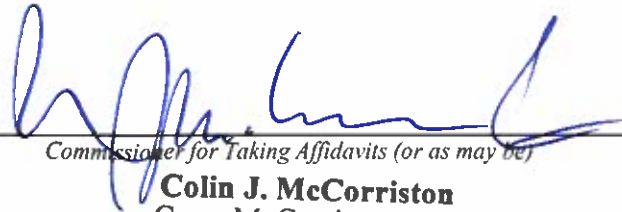
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⁵ Results are not considered representative of Canadians who are visible minorities or Indigenous people as a whole; the margin of error is +/- 9.85 for this group. The margin of error for college-educated Canadians is +/- 5.37.

⁶ Again, results are not considered representative of Canadians who are visible minorities or Indigenous people as a whole; the margin of error is +/- 9.85 for this group.

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This is Exhibit "3" referred to in the Affidavit of SARA
BANNERMAN sworn June 3rd, 2019



Commissioner for Taking Affidavits (or as may be)

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**ONTARIO
SUPERIOR COURT OF JUSTICE
(DIVISIONAL COURT)**

B E T W E E N:

**CORPORATION OF THE CANADIAN CIVIL LIBERTIES ASSOCIATION
and LESTER BROWN**

Applicants

and

**TORONTO WATERFRONT REVITALIZATION CORPORATION, CITY OF
TORONTO, HER MAJESTY IN RIGHT OF ONTARIO as represented by the
MINISTER OF INFRASTRUCTURE, HER MAJESTY IN RIGHT OF
CANADA as represented by the MINISTER OF COMMUNITIES AND
INFRASTRUCTURE, AND THE ATTORNEY GENERAL OF CANADA**

Respondents

APPLICATION under sections 2 and 6(1) and 6(2) of the *Judicial Review Procedure Act*, R.S.O. 1990, c. J.1, as amended, and sections 2, 7, 8 and 24 of the *Charter of Rights and Freedoms*.

ACKNOWLEDGEMENT OF EXPERT'S DUTY


1. My name is Sara Bannerman. I live in Ottawa, in the Province of Ontario.
2. I have been engaged by or on behalf of the Corporation of the Canadian Civil Liberties Association and Lester Brown to provide evidence in relation to the above-noted court proceeding.
3. I acknowledge that it is my duty to provide evidence in relation to this proceeding as follows:
 - (a) to provide opinion evidence that is fair, objective and non-partisan;

(b) to provide opinion evidence that is related only to matters that are within my area of expertise; and

(c) to provide such additional assistance as the court may reasonably require, to determine a matter in issue.

4. I acknowledge that the duty referred to above prevails over any obligation which I may owe to any party by whom or on whose behalf I am engaged.

Date 3 JUNE 2019



Signature

CORPORATION OF THE CANADIAN CIVIL LIBERTIES
ASSOCIATION et al.
Applicants

-and-

TORONTO WATERFRONT REVITALIZATION
CORPORATION et al.
Respondents

Court File No. 211/19

**ONTARIO
SUPERIOR COURT OF JUSTICE
(DIVISIONAL COURT)**

PROCEEDING COMMENCED AT
TORONTO

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