

Open Data and Government Liability

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Abstract

This chapter introduces different aspects of liability laws as they relate to government policies on releasing open data through open data portals. The chapter reviews potential liability that the government could incur from open data actions and omissions. We consider liability issues from a range of perspectives: governments that want to reduce their liability risks with respect to open data, open data advocates who are looking for strategies to spur open data release, and the general public who would like more useful open data and open data that do not infringe individual rights such as privacy. A better appreciation of how liability law intersects with open data will strengthen frameworks for the management of open data, as it will provide clarity in rights and obligations for users of open data, creators of open datasets, managers of open data portals, and advocates of open data. We explain how negligence liability will apply to government actions and omissions arising from open data. We then argue that, rather than the incremental development of common law negligence to set open data principles, the enactment of a specific statutory framework for open data would address government concerns over liability and would be in the public interest. We conclude by recommending that open data statutes be enacted for each level of government, with clear open data duties by the government,

clear scope for liability, and clear rights of action for individuals to litigate when governments fail to comply with these duties.

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In the current environment of data-driven government, and in citizen and industry activities alike, the importance of “open” data as a public good has grown. The role of datasets as they are held and generated by government, and in turn released to citizens through open data portals, reflect principles of good governance and capture added value for the public. Open data, which are generated by government processes, facilitates transparency and accountability, and encourage citizen-government interaction (Johnson & Sieber, 2012). Open data also promises economic and social benefits, as open data represents existing publicly funded value that can fuel innovation and new markets.

Although interest in open data has grown, there is also a growing critique of the utility of the open data that have been made available and the slow speed with which open data initiatives have been implemented. Government collects data across a wide variety of sectors. However, the type and number of datasets made available so far have been disappointing. Few open datasets have been made available relative to the volume of public-sector data held by the government, and those that have often concern subjects that garner little public interest. The release of a given dataset or type of data is not guaranteed. Further, once a dataset is released, the completeness, accuracy, and continuing availability of a given dataset in an open data portal are not certain. Open data advocates have called for the release of open datasets that are of wider interest and more comprehensive. From the perspective of civil society, there are valuable datasets that could be used to improve

citizen-centric government processes or to support advocacy efforts that are not currently released through open data portals.

The democratic principles at the heart of the open data movement are important, and to succeed they require a clearer allocation of rights and responsibilities to ensure the release of meaningful data. To implement a detailed public-interest strategy in the management of open data, liability issues should be considered as a central part of open data planning. Perhaps counterintuitively, a better appreciation of how liability law intersects with open data will strengthen frameworks for the management of open data, as it will provide clarity in rights and obligations for users of open data, creators of open datasets, managers of open data portals, and civil-society advocates for open data. In order to fully and correctly consider rights and responsibilities in the use of open data, we recommend that each level of government enact a statute in order to provide clarity and predictability on liability and to provide incentives for open data release. An open data statute should detail clear open data duties by the government, the scope for liability, and clear rights of action for individuals to litigate when governments fail to comply with these duties. Our recommendation of a specific open data statute, as opposed to waiting for the incremental development of negligence principles to be applied to open data, addresses both ongoing liability uncertainty and imposes a positive obligation to release open data so that open data avoidance as a risk-mitigation strategy is no longer a rational response. The enactment of an open data statute would provide better clarity and predictability to government on liability for both acts and omissions related to open data. An open data statute would also set out administrative oversight, judicial enforcement, and remedies for the public. Accordingly, such a statute would provide incentives for governments to proactively release open data in the public interest.

In Section 1, we describe the public demand for open data and governmental support for open data policies. Section 2 examines the deterrents to open data, including limited resources and fear of infringing rights such as privacy and intellectual property. Section 3 presents reasons why faster and more complete open data could be feasible despite these obstacles. Section 4 highlights that government's real and perceived liability risk remains an obstacle to a more complete release of open data. Although liability is often portrayed in obstructionist terms, we explain how the efficient

allocation of responsibilities could support rather than deter the release of open data in the public interest. Section 5 describes the legal tests for applying negligence law to government activities around open data, but stresses that many legal uncertainties remain which make negligence liability unpredictable for governments and the public alike. Section 6 examines ways that governments shield themselves from open data liability, such as waivers and disclaimers, and Section 7 outlines how open data advocates might use liability as a sword to spur open data initiatives. In Section 8, we argue that a specific statutory framework for open data that specifies duties and responsibilities for government and citizens would provide more clarity and predictability than common law negligence, and we highlight what a model open data statute should include. We conclude in Section 9 with the recommendation that governments at all levels in Canada enact an open data statute to provide incentives for government to release open data proactively and in the public interest.

1. The Demand for Open Data

As interest in open data as a governance and accountability tool has gained traction and developed in government systems, the requirements for open data have increased. The advent of data-driven processes in government and industry requires that available data be robust, meaningful, and of good quality. In order to create strong open data processes and to balance what are sometimes competing interests in open data, the objectives for open data need to be defined in advance. For the most effective utilization of open data with the greatest added value, the objective should not simply be the release of any data in the most expeditious manner; rather, the objective should be to release data in the public interest (Sunlight Foundation, n.d.b). This entails the meaningful release of good-quality data that will satisfy public objectives and reduce liability risks.

Open data has support from many different perspectives. This includes government bodies who have shared their support for open data by establishing open data policies and portals. Ontario, for example, legislatively created a data-officer position to promote the availability of government data in “useful forms” and to create a provincial data-action plan (*Simpler, Faster, Better Services Act*, 2019), and the province has issued the *Digital and Data Directive* (Government

of Ontario, 2021) to support transparency and access to government data. Canadian municipal governments, in particular, have embraced the principles of open government, which are so closely tied to open data processes. By illustration of the datasets held by each level of government that would be relevant to citizen engagement, federal government data include information about national museums, memorials, and national parks;¹ provincial and territorial governments have data about water quality, education, and roadways;² and municipal governments have highly localized data such as lighting in public spaces, the management of potholes, waste removal, pet licences, and transit.³ Access to the scope and variety of data collected by government, however, is partial and varied.⁴ For example, in 2016, when the authors sought to receive open data access to the City of Ottawa's traffic cameras through the city's open data portal, access required registration and submission of a form with an email address in order to receive an access certificate. Currently, registration is required in order to access live updated information on related traffic-map content, including construction work, special events, and incidents (City of Ottawa, n.d.). There are, of course, many

¹ The federal Open Government Portal contains a variety of datasets, such as an "inventory of Canadian Military Memorials," "National Historic Sites of Canada," "Bankruptcy and Insolvency Records," "Postal Code Database," and "Outdoor Recreational Spaces"; see https://open.canada.ca/data/en/dataset?portal_type=dataset.

² The Ontario Data Catalogue (<https://www.ontario.ca/search/data-catalogue>) contains open datasets related to education, including "college enrolment," "average OSAP debt," and "enrolment by grade in elementary schools." The BC Data Catalogue (<https://data.gov.bc.ca>) contains open datasets on topics such as motor vehicle accidents and hospitalizations by road-user type: "BC HighwayCams," "Ministry of Transportation Safety Features."

³ For examples in municipal open data portals, the City of Edmonton's contains datasets on "potholes filled" (<https://data.edmonton.ca/browse>), the City of Toronto's contains datasets on "TTC Ridership Analysis" (<https://open.toronto.ca/dataset/ttc-ridership-analysis/>), and the City of Halifax's contains datasets on "solid waste collection areas" (<http://catalogue-hrm.opendata.arcgis.com>).

⁴ For example, the Edmonton open data portal contains information on potholes, but those datasets begin with the year 2012. In addition, there is information about the amount of monthly payments made by the city ("Risk Management – Pothole Payout Claims") going back to 2010, and information about the amount of potholes filled by the city going back to 2007. This is indicative of the lack of uniformity across these datasets in terms of years that they cover. It is also important to note that users do not know what available data on potholes have not been shared in open data format.

examples of datasets that can be downloaded without registering, as is the requisite standard for open data format (McKinney et al., n.d., s. 1.2). But open data may be included in portals with other types of data that make them harder to find. For example, some data portals mix different data types in their catalogues, use other terminology such as “open information” (GoC, n.d.a), place data “under review” or include “restricted data” (Province of Ontario, n.d.), where the user must filter results in order to locate data that are in open data format.

2. Slow Down, Don't Move Too Fast: Deterrents to Open Data

Despite the positive support on all sides for open data, there are lingering concerns by government, which have impeded a full implementation. From the government perspective, while there may be strong internal support for creating open data portals, there are also a host of competing considerations that may explain the slow and partial implementation of open data initiatives in Canada. The slow adoption of open data has been attributed to governmental organization culture, which emphasizes conservative action (Sangiambut et al., n.d., pp. 9–10). Governments are concerned that open data initiatives are too expensive, too risky, and unnecessary because there are other legal mechanisms for the public to obtain the data. According to these concerns, open data initiatives require too much technical expertise, are too labour intensive, duplicate existing laws for access to information, and may incur litigation costs if the “wrong” data are released.

From a resource perspective, open data portals require technical and financial resources to create the portals and identify and manage datasets. With the vagaries of government budgeting, open data may not be a priority and may not have continuing budgets to support maintenance, which could result in poor data quality and incomplete datasets. Qualified staff with the required technical and policy skill sets may not be available. There may be a lack of continuity and institutional memory as personnel are transferred (who may or may not be replaced), making it difficult for governments to build and maintain open data expertise. Historic datasets that were not created digitally originally need to be identified, scanned, and converted to machine-readable formats, which is resource intensive. Further, data pertaining to a particular topic may be spread across

government departments and may need to be classified and integrated.

From the legal perspective, governments are concerned that the release of open data could subject the government to liability. This perception of liability, regardless of whether it is fully accurate or not, may result in the slow and partial implementation of open data releases even where technical and staff resources exist. First, governments are concerned that data releases could violate intellectual property rights if data initially categorized as “open” are actually protected by intellectual property rights (e.g., copyright) held by third parties. Relatedly, the release of data could inadvertently include proprietary corporate information that is protected from disclosure by confidential information rights. Second, the release of data could infringe individual privacy rights if data are insufficiently de-identified or contain sensitive personal information. Third, the release of data could be a cyber-security risk if they contain information that could be used for identity theft, hacking, or disinformation. Fourth, the release of data could be defamatory where data could harm someone’s reputation. Fifth, the release of data could lead to injuries arising from poor spatial data quality. “Open data” is not a pre-existing category that simply needs to be uploaded to an open data portal; rather, whether there are third-party claims and whether other rights would be infringed must be evaluated for the information that is created or held by the government, and these decisions require legal and technical expertise.

The liability concerns regarding intellectual property, privacy, cybersecurity, defamation, and spatial quality are valid from the government, and it is also in the public’s interest to ensure that data in open data portals do not infringe other rights and are of good quality. It is in the public interest to ensure that publicly held data are made available expeditiously and completely, *and* in a manner that does not infringe other rights. However, identifying which data are actually “open” and not infringing other rights may be time consuming and costly for the government. Excessive caution may also unnecessarily delay this objective due to potentially exaggerated fears of liability, as well as a failure to recognize that *not* releasing data can also potentially incur liability for the government.

Governments may also refrain from creating open data portals under a mistaken belief that open data initiatives are redundant because the public already has an established way to access the same

data by requesting them through existing access-to-information laws. Governments could argue that they do not need to expend the effort to proactively post comprehensive open datasets because if the public is interested in a particular dataset they can simply use access-to-information mechanisms to get it.

3. Hurry Up, Open It Up: Rebuttals for Open Data

Increasingly, open data constitutes an important element of open-governance movements (Cerrillo-i-Martinez, 2012; Yu & Robinson, 2011; Peixoto, 2012), which call for greater transparency by government through the release of government information.⁵ In Canada, open data advocates call for open data as a means to promote openness, accountability, and responsiveness from the government (Open Government Partnership, 2019). For advocates, the existence of open data is a touchstone requirement for modern forms of governance, although open data in itself does not equate to or constitute open government (Yu & Robinson, 2011). In order to promote good governance, advocates argue for government that is “open by default,” which entails the proactive release of all public-sector information.⁶ Civil society advocates argue that open data are essential to citizens as they promote citizen engagement, increase opportunity for innovation, and promote accountability. As the network of interested parties who work in and with open data is growing, public access to good-quality data is increasingly important (Verhulst, 2017). Civil society advocates argue that without continued efforts to develop open data, broaden the variety of data, and maintain oversight over the quality of data released, the good-governance aspects of open data are undermined (Powered by Data, 2015; Furnas, 2013; Bhushan and Bond, 2013). Thus, it is important to acknowledge and address government concerns that impede the release of open data.

With respect to the resource costs associated with open data, these costs may decrease over time as expertise can be shared

⁵ See “The Open Government Partnership” (<http://www.opengovpartnership.org>), a multinational network of NGOs that advocate for public-sector transparency and accountability. See also the work of Open North (<http://www.opennorth.ca>), a leading Canadian NGO in the field of data and technology, and member of the implementation working group of the International Open Data Charter.

⁶ See, for example, an open-data proponent objecting to any limitation: <http://gijn.org/2014/09/22/open-data-is-not-open-for-business/>.

intra-governmentally and technical requirements can be standardized. Liability risks exist but can be mitigated through mechanisms such as licences, waivers, and disclaimers. Furthermore, liability can also arise from a failure to act, and hence the government likewise has risk if it does not post open data. Inaction does not necessarily mean that the government is free from liability. Finally, while it is true that open data by definition are public information, and as such would also be subject to access-to-information mechanisms, in practice this is not an efficient framework and has multiple and often repetitive transaction costs associated with it. Access-to-information procedures require significant time and costs both for requestors of information, who prepare the requests and submit them, and for government staff who search, compile, and prepare information for release to comply with access-to-information obligations. As such, proactively posting open datasets could actually reduce the labour, time, and material costs associated with individual access-to-information requests.

4. Liability and Efficient Allocation of Duties

Government's real and perceived liability concerns are perhaps the most significant obstacle to a more complete embrace of open data by government. Open data advocates, scholars, and government alike have recognized that liability concerns by government are partly to blame for the slow and partial release of open data. Liability refers to the legal responsibility for an activity. Laws imposing liability assign rights and responsibilities, and they are used to remedy people against harm caused by another party. Laws that impose liability provide mechanisms for individual parties, or for large groups of people through a class action, to seek compensation from another person or entity that is at fault. The most common remedy imposed by courts is monetary damages, but courts can also order the defendant to stop the activity or require the defendant to take specific actions to remedy the injury.

Legal research focused on the management of open data processes has identified multiple ways in which government handling of open data could raise legal issues. Areas of concern include privacy, particularly concerning the reidentification of personal data (Conroy & Scassa, 2015; Borgesius et al., 2015; Finch & Tene, 2014); intellectual property infringements, most commonly copyright and

confidential information, which conflict with the sharing of data in a publicly accessible and open format (Judge, 2010); defamation if data containing personal information have not been verified or lack veracity and where they are damaging to a person's reputation (Judge, 2005); product liability if inaccurate data, particularly for spatial data, render downstream products unfit for purpose (Chandler & Levitt, 2011); contract if data do not satisfy warranties for use;⁷ and cybersecurity if data lead to hacking, identity theft, or the spread of disinformation (Kesan & Hayes, 2019). In addition to these, there is also the possibility of actions based on general negligence principles if the release of open data does not meet standards of reasonable care.

The Sunlight Foundation, an early advocate for the adoption of open data, recognizes that liability concerns could be a deterrent and provides several recommendations to allay government fears through various measures to limit liability. They recommend that governments limit the scope of open data by tautologically and restrictively defining it as data that will not cause liability. Hence, according to Sunlight, governments should begin "by defining 'data to be released' as referring only to information that's under the authority of their jurisdiction and as not including information otherwise protected by law, including local right-to-know law exemptions, privacy, security, and accessibility laws and otherwise legally privileged information" (Sunlight Foundation, n.d.a). Second, they recommend that multiple and layered disclaimers be included in an open data policy and terms of use, with "exclusions of any express or implied warranties, relieving governments of responsibility for consequential damages, and indemnity clauses." They note that "[i]deally the disclaimers are not overbroad," should "include a right to access (save for narrowly defined emergencies)," and "are coupled with a policy that also has a strong process to ensure data quality." Third, Sunlight recommends governments build in "multiple opportunities to review data," and add legal checks into the procedures for release (Sunlight Foundation, n.d.a). These recommendations are pragmatic and rational given the context that governments face of uncertain liability. Yet their effect is

⁷ Some advocates recommend that governments make no warranty in the data at all; see, for example, Open Knowledge International's blanket disclaimer against creating a warranty for the use of the "open data commons licence" (Open Knowledge International, n.d.a).

to delegate concerns about liability and data quality to the public. Multiple layers of checks can slow the release of open data. Further, the value-added benefits of open data may not be realized if downstream users are concerned that the “as is” nature of the data makes it hard to rely upon or potentially subjects them to liability.

A European Commission report on “Open Data and Liability” similarly recognizes that liability has been “an open data showstopper” (de Vries, 2012, p. 4). The report observes that public-sector bodies get “bogged down by (perceived) lurking risks of liability” and attributes this to overly cautious government lawyers, who “tend to warn of risks that may occur when data are opened up, arguing that (a) the data may not be public or (b) it may be incorrect or (c) free use may create unfair competition” (de Vries, 2012, p. 4).

The report, however, nonetheless concludes that the liability risks around open data can be managed. It offers pragmatic responses that third-party infringements are no different than when data are released by individual request, that risks related to incorrect data can be handled by releasing them “as is” with “proclaimers” that keep end-user expectations in mind, and that risks related to unfair competition are limited unless there are contracts in place or other expectations. Again, as with Sunlight’s advice, the report tries to allay government concerns about releasing data by promoting the use of broad disclaimers, which may limit subsequent uses. It is also important to note that the report arises in a context of reassuring EU member states who are required by an EU directive to release public-sector information (EU, 2003).

In the United States, the 2019 *Open, Public, Electronic, and Necessary (OPEN) Government Data Act* mandates federal agencies to publish government information in open format by default and to establish and maintain comprehensive data inventories. Further, half of the states in the US have open data mandates through legislation or executive orders (National Conference of State Legislatures, 2021) that apply to executive agencies. By contrast, in Canada, there is policy support but no legislative mandate for the government to release open data, apart from limited statutory requirements in Ontario (*Simpler, Faster, Better Services Act*, 2019). Without a comprehensive statutory framework for open data, governments lack regulatory directives to provide clarity on the rights and responsibilities around open data efforts.

The threat of liability, real or perceived, on the development of open data processes and activities is an important factor for

successful implementation of open data initiatives, but disclaimers and defining open data narrowly are at best partial solutions and at worst counterproductive. One objective of tort law is the idea that the possibility of liability changes behaviour (Linden, 1973, 1995).⁸ Although the risk of liability can be negatively characterized as something that obstructs or aborts good ideas, it can also be characterized as a societal benefit because it spurs proactive measures, so harmful behaviours are avoided. The tort system is designed to balance risks and benefits so that activities are carried out safely and so that the entity best placed to shoulder responsibility for avoiding bad behaviour or for adding safety features does so. Economic analysis is commonly used in tort law to determine who should bear the risk of liability by determining who best can bear the costs and whether it is efficient to take steps to prevent an injury (Posner, 1972). The classic negligence calculus considers the possibility of risk versus the utility of a given action, by balancing the probability of injury, the gravity of any injury that occurs, and the burden of having adopted adequate precautions to prevent the injury (*U.S. v. Carroll Towing*, 1947). Under an economic analysis, to determine what level of precautions should be taken, the cost of the precaution is weighed against the benefit that the precaution will provide (Chayes et al., n.d.).

The impact of tort processes is not solely focused on litigation losses and monetary damages. Instead, there can also be a deterrent effect in the negative public perception of actions in liability being filed, the costs involved in defending liability actions, and the increased government oversight that can result from liability actions (Linden, 1973). Public choice theory is the application of economics to explain and predict decisions by collectives or groups (Ostrom, 1975). Applying public choice theory to government decision-making suggests that governments faced with unpredictable or unquantifiable liability risk for actions will make what they perceive to be an economically efficient decision to forego that action. In the context of open data, that would support the view that liability concerns could delay or derail open data initiatives by government; by corollary, clarifying and simplifying liability could invigorate them.

⁸ Tort experts extensively debate whether tort law is based on a normative/moral or instrumental/utilitarian foundation.

Tort scholar Allen M. Linden (1973, p. 156) recognized this potential re-balancing of power through tort liability, stating “[t]he law of torts may still serve in the years ahead as an instrument of social pressure upon centres of governmental, financial and intellectual power.” Accordingly, under an instrumentalist view of tort law (as opposed to normative views), tort law serves the objectives of compensation, punishment, and deterrence. Deterrence is a particularly salient motivation for groups who are aware in advance of the possibility of tortious action against them and who accordingly take proactive steps to avoid it (Osborne, 2015, pp. 13–16). Government is an example of such a knowing party who is acutely aware of and sensitive to the potential liability that could arise from government action (Johnson & Sieber, 2012). Applied to government activity, the theory is that the possibility of liability can act as an incentive for governments to implement actions at the outset that are in the public interest and to do so safely; liability can also act as a deterrent to prevent unsafe activities from going forward; finally, it can act as a punishment after the fact, enabling citizens to address harms caused by government behaviours and to reduce the likelihood of such harms reoccurring (Foong, 2010; Phegan, 1976; Hardcastle, 2012; Rosenthal, 2007).

5. Negligence and Public Authority Liability

A tort is a “private or civil wrong or injury, other than breach of contract, for which the court will provide a remedy in the form of damages,” or, more generally, “a violation of a duty imposed by general law” (*Black’s Law Dictionary*, 1979).⁹ Actions in tort law include both intentional torts, which are based on an intentional act, and negligence, which is based on a failure to exercise reasonable care.¹⁰ When negligence is applied to government bodies, it is called “public authority liability.” Public authority liability is the subset of negligence

⁹ While this is a conventional definition, “it is perhaps impossible to give an exact definition of ‘a tort,’ or ‘the law of tort’ or ‘tortious liability,’ and as a corollary, it is certainly impossible to give a definition [that] will satisfy every theorist who has taken any interest in the topic” (TE Lewis, *Winfield on Tort* 1, 6th ed 1954, as cited in Garner, 1995).

¹⁰ Examples of intentional torts include stalking, harassment, discrimination, assault, battery, and trespass.

actions brought by private citizens against the government. The term “public authority” is used to refer to the Crown and any other public governmental bodies, including municipal governments.¹¹

The categories of negligence-based torts are neither fixed nor closed, and hence are flexible enough to adapt to harms from new types of activities (Linden & Feldthusen, 2011, p. 113; *Donoghue v. Stevenson*, 1932, p. 619). Indeed, there is a long history of arguments for using negligence to address harms arising from new technologies, particularly in transitional periods when the activity has begun but before legislatures have implemented specific legislation to regulate it (Judge, 2005; Rustad & Koenig, 2004). New technologies to which negligence has been applied range from injuries resulting from the industrial age, such as the deployment of trains and cars, up to the more inchoate harms resulting from information technologies (Warner, 1919; Morris, 1967; Kaczorowski, 1990; Schultz, 2014; Strachan, 2011; Blackman, 2009; Blagg, 2008). General principles of negligence thus may be used to address harms arising from digital activities, including open data.

For a negligence action related to open data, a plaintiff must show the government had a duty of care, a subsequent breach of that duty, and resulting damage (*Cooper v. Hobart*, 2001). The test for a duty of care has three elements. First, there must be foreseeable harm to the plaintiff and proximity between the parties to establish a *prima facie* duty of care (*Cooper v. Hobart*, 2001, paras. 30–31). If this first part is established, then, second, the court will undertake a consideration of residual policy concerns that may prevent the creation of a duty of care between the parties (*Cooper v. Hobart*, 2001, para. 37). Once a duty of care has been found to exist from the defendant to the plaintiff, the court then considers whether the activity complained of amounts to negligence. According to the Supreme Court of Canada, “conduct is negligent if it creates an objectively unreasonable risk of harm” (*Ryan v. City of Victoria*, 1999, para. 28). Furthermore, “to avoid liability, a person must exercise the standard of care that would be expected of

¹¹ There are statutory rules that prevent government bodies from being sued in negligence under certain circumstances under a general principle of sovereign immunity. However, this principle does not prevent negligence actions in all circumstances. See, for example, the *Crown Liability and Proceedings Act* (1985), which enables liability to be imposed on the Canadian government for the actions of its employees in some circumstances.

an ordinary, reasonable and prudent person in the same circumstances” (para. 28).

The measure of what is reasonable depends on the facts of each case, including the likelihood of a known or foreseeable harm, the gravity of that harm, and the burden or cost that would be incurred to prevent the injury (*Ryan v. City of Victoria*, 1999, para. 28). The particular type of negligence and the subsequent class of relationships that could give rise to a duty of care is open-ended and constantly evolving (*Cooper v. Hobart*, 2001, paras. 31, 35). Categories of relationships that have been found to have sufficient proximity to give rise to a duty of care include where the defendant’s act foreseeably causes physical harm to the plaintiff or to the plaintiff’s property (*Alcock v. Chief Constable of South Yorkshire Police*, 1991), negligent misstatements (*Hedley Byrne & Co. v. Heller & Partners Ltd.*, 1963), and failing to warn of the risk of danger (*Rivtow Marine Ltd. v. Washington Iron Works*, 1974). Courts consider how close the relationship is between the parties and how fair it is to impose a duty on the defendant in the circumstances of the relationship (Feldthusen, 2017; *Cooper v. Hobart*, 2001).

There are policy debates as to whether governments should be held liable in negligence for actions that harm citizens, with those in favour emphasizing that governments should be under the same law that applies to private citizens, and those against emphasizing that large damage awards could drain public resources away from other positive initiatives and could make governments liable for discretionary and subjective policy decisions (Phegan, 1976; Feldthusen, 2013; Siebrasse, 2007; Cohen & Smith, 1986). Public authority liability has been limited to claims of negligence in relation to operational negligence only (Hogg et al., 2011; Daly, 2014; Klar, 2012). Governments cannot be liable in negligence in relation to higher-level government policy decisions. Actions in public authority liability are an important tool to address the impact of government activity on individuals where the government negligently provides services (Linden, 1973; Feldthusen, 2012).

For negligence to apply to activities arising from open data, a duty of care by government to citizens must first be shown (*Cooper v. Hobart*, 2001, para. 15; Linden & Feldthusen, 2011, p. 292). Courts have found that governments can owe a duty of care to citizens in some contexts (*Swinamer v. NS*, 1994), with examples including municipalities having a duty to prospective buyers of real estate to inspect housing developments (*Kamloops [City of] v. Nielsen*, 1984) and

municipalities having a duty to maintain roads in a non-negligent manner (*Just v. British Columbia*, 1989). Whether there could be a duty of care by government bodies that release open data and maintain open data portals to users of open data is currently unknown. Potential plaintiffs include parties that use the data for commercial activities, private-sector parties involved in public–private partnerships, interest groups that use open data in advocacy, software creators that rely on open data in hackathons, and those who use open data for reporting purposes (Robinson & Johnson, 2016; Johnson & Robinson, 2014).

In the current data-driven climate, there are many types of activities in which parties use open data. Ascertaining relationships between people in a possible act of negligence would be complicated, but analyzing complicated relationships and the related duty of care is something that courts often do, and especially so when negligence relates to a new activity. As an analogy, examples of relationships that courts have found are close enough (proximate) to give rise to a duty of care include a duty by police to victims in criminal investigations (*Hill v. Hamilton-Wentworth Regional Police Services Board*, 2007), and a duty by government safety inspectors to protect workers from criminal conduct perpetrated by others (*Fullock v. Pinkerton's of Canada*, 2010). Conversely, there are examples in which the judiciary has *not* adopted new relationships as giving rise to a duty of care. For example, the courts have not recognized an action for negligent breach of a provincial government's statutory duty to enforce a statutory decree (*Holland v. Saskatchewan*, 2008).

Assessing the types of activities for which a government may be found negligent in its activities turns on the distinction between policy decisions and operational decisions. If something is considered a policy decision, then there is no possibility of bringing an action in public authority liability. If, however, an action is negligent because of *how* it is done, then there is the possibility of bringing an action (Hogg et al., 2011, pp. 226–227). Policy decisions refer to high-level government decisions, such as allocation of budgets or the creation of government programming, while operational decisions refer to the day-to-day implementation of government policy (*R. v. Imperial Tobacco*, 2011, para. 90). The reasoning behind this distinction is largely based on efforts to keep political decision-making in the hands of government and to prevent second-guessing of each decision by individual citizens. A government body will have the technical expertise

to establish their policy objectives and implement them, and will be better positioned to have information about their financial resources and staff capacity (*R. v. Imperial Tobacco*, 2011, para. 90). The prohibition on imposing public authority liability for discretionary policy-making allows government the freedom to make subjective decisions within the limits of their power without the risk of liability or harm (Hogg et al., 2011, p. 226). This is particularly important for the complex give and take involved in budget prioritization.

In the context of open data, a municipal government may be liable in negligence for the management of data, depending on whether the manner in which a dataset is managed is considered to be an operational decision (*Just v. British Columbia*, 1989, pp. 1237–1238). Alternatively, a government may have immunity if “open data” is characterized as a discretionary governmental decision-making process and a policy choice. However, given the complexity of data frameworks, it is difficult to imagine that every decision made would be a matter of policy. It is more likely that decisions about open data portals contain a mixture of policy decisions made to create the system, which are then implemented through a series of operational decisions (following the analysis in *Just v. British Columbia*, 1989). In that case, governments would not be immune from liability for all their actions that arise from open data. The requirements for a successful action in public authority liability have simply not been tested thus far for government handling of open data. The public authority liability criteria do, however, underscore the uncertainty of liability concerns as they apply to open data, and support the idea that liability uncertainty might be stalling open data efforts. If governments are worried about liability costs from bad decisions around open data, they might “rationally” act by not making a decision or by not releasing open data. This is counterproductive for the government bodies, as well as for the broader community that has an interest in open data. If open data adds value, then all sides should be in favour of mechanisms that facilitate release of “good” open data.

6. Government Strategies: Shields from Liability

Liability avoidance and mitigation tactics by government are in some respects a logical response for governments to adopt in the face of concerns about both real and perceived liability risks arising from open data. Liability could indeed arise where data lead to

infringements of privacy, intellectual property, defamation, product liability, or cybersecurity, or where there is negligent handling of data. Whether, and to what degree, governments may be liable for open data activities is uncertain. Government open data activities have not been the subject of litigation in Canada, and hence the likelihood of governments being found liable and the assessment of damages are difficult to quantify. However, a perception of liability can nonetheless result in governments taking more conservative positions on open data implementation, with the idea that it is better from a liability perspective to go slow and release fewer datasets that are less controversial.

Thus far, governments have adopted licences almost as the sole mitigation strategy to the perceived and uncertain liability risk for open data. Standard licence agreements detail the terms and conditions under which a dataset may be accessed and used by downstream users. Licence agreements contain waivers concerning the veracity of the data, and often are accessible through click-wrap agreements (Judge & Scassa, 2010). For example, the Government of Canada open data licence contains a “no warranty” section. This confirms that “information is licensed ‘as is,’ and the Information Provider excludes all representations, warranties, obligations, and liabilities, whether express or implied, to the maximum extent permitted by law” (GoC, 2017). In relation to activities of third parties, the licence further clarifies that “the Government of Canada is not liable for any damage caused by the use of the data, nor for how the data is used” (GoC, n.d.b). Similar terms and conditions are found in municipal government open data portals throughout Canada.

However, data licences do not address all the issues around liability. The European Commission report, which recommends that government adopt licences to limit liability, also acknowledges that a contractual model does not allow the government to exonerate itself from all potential liabilities (de Vries, 2012, p. 11). For example, contract laws may incorporate threshold good faith and fairness terms, or consumer protections, which can in turn limit the applicability of terms and conditions contained in a contract (de Vries, 2012, p. 11).¹² Urging that governments release datasets through the blanket use of

¹² De Vries is referring to the 1993 Unfair Contract Terms Directive, Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts. (1993). Official Journal of the European Union, L 095, pp. 0029–0034.

licences addresses the most obvious risks arising from data that are released. It does not, however, cover all potential harms, including notably harms from *not* releasing data in a timely manner or not releasing comprehensive datasets. Licence restrictions do not capture the opportunities lost to the public in economic, cultural, and innovative value. A licence-based liability approach is also not sensitive to the possibility that liability fears can result in fewer datasets, or even in no open data program existing at all when there is no open data mandate to proactively release open data. For that, a comprehensive statutory scheme addressing the objectives, rights, and responsibilities for open data would better support the public interest and would clarify liability.

7. Advocate Strategies: Liability as a Sword

While governments may react to liability by adopting defensive strategies that deter open data activity, advocates for open data may react to liability by using it as a sword to initiate greater activity. Civil-society advocates potentially could use a range of public-interest strategies to spur government to action. For example, open data advocates could file court actions based in negligence as part of a broader effort to get an ever-greater number of meaningful datasets in open data format and better-quality data, which allege that government did not exercise reasonable care in the creation of open data portals. Public-interest strategies aimed at promoting open data may include advocacy groups requesting specific open datasets from government to draw attention to the limited nature of the datasets and to shift the cost-benefit analysis to favour wider proactive release of open data. Ground-up advocacy strategies by NGOs that focus on municipal governments might be particularly effective for garnering public support and media attention, as the datasets held by cities most directly affect people's daily activities, from recreation to commutes. Civil-society advocates could track the added value from the release of specific open datasets and use that information to build economic arguments that more open data would be worth the cost to government of creating and maintaining open data portals. By establishing the breadth of users' reliance on open datasets, civil-society advocates could strategically deploy general principles of negligence to argue that government has a duty of care to improve the quality and quantity of open data.

An action in negligence could also be filed directly by an individual who has suffered harm relating to open data—for example, due to negligent release of private personal information, negligent release of copyrighted material, or negligent release of data that were submitted to government under a non-disclosure agreement. In addition, there is the possibility of an individual who has a compelling claim in negligence receiving support from interest groups, such as NGOs, who wish to bring a test case against the government. Such test cases are commonly brought to clarify existing issues in relation to new situations or to address emerging legal issues. A test case could provide an opportunity to test the strength of a negligence action in relation to open data. It would require a strong set of facts, which show that harm has been caused by the release of open data. In addition to individual claims of negligence, public-interest groups or law firms could bring a class-action lawsuit, in which a large number of people have the same complaint against the same defendant—in this case, those who claim injuries arising from negligent handling of open data by the government. For a class action to proceed, the class of claimants must be ascertainable and have similar issues. The benefit of bringing a class-action suit is that it provides an opportunity to address a legal harm that has been suffered by many people, but where the transaction costs would make it prohibitively expensive and time consuming for individuals to bring hundreds of individual lawsuits—for example, where the harm suffered by any one person is of low monetary value. Class actions can also be helpful where the litigation involves highly technical issues that might be cost-prohibitive for one party to cover the legal expenses.

These processes allow claimants to use the law of negligence as a sword in advocacy strategies. This is an important opportunity for considering rights and responsibilities in the complex open data environment, which involves different types of open data, many different circumstances according to which open data are released and utilized, and many actors involved in open data processes. However, there are also drawbacks to individuals or civil society groups using negligence as a vehicle for obtaining government action. Negligence actions are based in the common law, where courts decide cases based on the parties before them and their particular facts. Negligence actions will be shaped by the interests of the plaintiffs bringing the claims and may not be responsive to the myriad issues that interest the larger public. A negligence action may not be sensitive to all the

policy considerations that governments face and to government's finite resources. A more detailed, holistic, and nuanced approach for open data should reflect the complex relationship of duties and responsibilities between government and citizens. It may take a long time for the application of negligence principles to open data to be established, as courts may take different approaches or reach different conclusions about government liability for open data. A statutory framework, hence, might be better suited than a common law negligence approach to setting and implementing open data priorities.

One overlooked aspect of the growing interest in open data is the potential for negligence based on a *failure* by government to act. As citizens become more aware of open data, have positive experiences with the open data that are available, and more open data portals are developed, it is foreseeable that there will also be an increase in expectations for expanded open data availability. The principle of public authority liability provides a tool for individuals or civil-society groups to bring an action against a government body for negligently acting, and also for negligently failing to act. A possible case based on public authority liability for an omission might argue that datasets of a certain type ought to be available, and that it was negligent for the government not to release them.

Another avenue for advocates is to argue that governments are liable for releasing, or failing to release, open data because they cause *future* harm (Porat & Stein, 2011). For example, a plaintiff could argue that open data containing personal information causes injury with respect to the future harm of possible identity theft even where there is no evidence now of identity theft (Solove & Citron, 2018).

8. Statutory Scheme for Open Data Clarity

Public authority liability requires that operational (not policy) choices of government negligently impact a claimant and that a government failure to act causes harm. This avenue for litigation is unexplored for open data, and hence it is uncertain whether and how public authority liability would apply to open data activities. In particular, it is not known whether open data activities would give rise to a duty of care owed from government to the user of open data. Additionally, it is not known how a court would assess the nature of open data and the various choices made by government and administrative officials, and at what points the steps that government took are policy choices

(which would be immune) or operational (which could be subject to liability). Further, it is unclear what liability the government might incur for failing to act with respect to open data.

The Canadian government has already adopted an open data policy, as have some provinces and many municipalities across the country. The federal Directive on Open Government affirms Canada's commitment to open government, and one of the core aspects of that is open data (GoC, 2014). These open data policies are welcome and have enabled growth in the release and use of open data. The rhetorical commitment to a policy supporting open data is strong and well established in Canada. As a legal right or obligation, however, the scope of open data remains uncertain, and which activity (or inactivity) might incur liability for the government is unpredictable. It is certain that liability laws are applicable in some manner to open data activities. This may be through actions in negligence as public authority liability or through specific torts such as defamation, privacy, or intellectual property infringements. Common law negligence is designed to be flexible and applicable to new situations, so its general principles should adapt to apply to open data activities. However, there are still many open questions around the extent of government liability, namely which open data activities by government might incur liability, whether government could incur liability for failures to act with respect to open data, whether government activities would be characterized as "policy decisions" that are immune, and the degree to which licences will protect government from negligence arising from open data actions or omissions. Common law principles over time will clarify these questions as case law develops, but that process is incremental, fact-specific, and shaped by the interests of the parties.

Accordingly, in order to better manage open data and to provide greater predictability around the application of liability principles, we recommend that open data statutes be enacted at all levels of government to specify open data duties and rights for both government and citizens. The statutes, directives, and executive orders from jurisdictions such as the EU and US that have mandated government information be made available in open format, although laudable in policy, lack clear liability provisions and fall short of being comprehensive schemes outlining the rights and responsibilities of various actors. By developing a framework that assigns rights and responsibilities in open data and clarifies liability issues, a statutory scheme

will encourage thoughtful open data release and spur governments to develop a robust open data framework.

A statutory framework for open data could also serve many other public policy goals beyond liability. A statutory scheme would have the impact of clarifying data activities broadly. It could specify what constitutes “open” (e.g., whether a Canadian-specific policy would allow user registration requirements, waivers, or downstream obligations to be imposed), how intellectual property and privacy will be balanced and protected, the criteria for data quality, specifications for which data will be made open and which data will presumptively not be made open, details for how data will be presented, which governmental body will be in charge, what licensing will be used, how often data will be updated, and third-party data rights. A statutory scheme could also support public–private partnerships through processes of crowdsourcing to create more open datasets. Since open data is, by definition, not confidential, historic datasets could be made available to private partners for data entry and digitization. A statutory scheme could also aid in the broader development of open data processes by implementing a shared resource bank of information.

Of course, for many of the statutory provisions we suggest below, civil society groups or open data consortia have already put forth detailed schemes—for example, definitions of “open data” and the criteria for satisfying an “open” release. The definition of “open data” from Open Knowledge International, for instance, requires that data be “freely used, modified, and shared by anyone for any purpose” (Open Knowledge International, n.d.b). These existing definitions and guidelines are important contributions and should be strongly considered when legislatures are debating an open data statute. However, there may be instances where a comprehensive and Canadian-focused scheme for open data will select different requirements for openness and different pathways to “open.” A model open data statute should consider the following criteria.

An open data statute should detail governmental responsibilities with respect to open data, such as detailing the types of datasets that ought to be released and processes for citizens to request datasets. It should delineate that governments can incur liability by negligently releasing data *and* by negligently failing to release open data in a timely manner where release of open data is in the public interest. Liability for omissions would obviate risk-averse governments falling

back on inaction as a safe haven from liability and a litigation-avoidance strategy. A statutory framework should define a clear statutory duty to affirmatively create open data portals and proactively release open data. It should define open data principles and objectives and define “open data” broadly by setting out the types of data that must be included and the format in which data should be generated and published. The statute should set out mandatory timelines for the release of historic datasets and timelines for the release of newly created data. It should establish a framework for creating and maintaining open data portals, including technical requirements, administrative processes, maintenance schedules, and control processes to ensure data quality. The statute should also provide a framework for intra- and inter-governmental sharing of data to facilitate user-friendly access to complete datasets, and it should prioritize centralized open data repositories.

For the public, a statutory scheme should provide a clear framework of rights and responsibilities that would describe how people can access and use open data, while also reflecting an understanding of government processes in this area. Oversight and monitoring for open data could follow a similar approach to privacy and access-to-information schemes by creating an office of an open data commissioner or ombudsperson. However, the statute should also incorporate an individual right of action against the government for negligent activity with open data. This will be beneficial for individuals, public-interest groups, and class actions, as a clear right to litigation will allow these groups to monitor and to sue government for failure to release open data or for release of infringing or poor-quality data. The statutory framework would both provide tools for citizens to monitor open data activities through a commissioner or ombudsperson and accord a legal recourse if administrative avenues are ineffective.

As the statutory framework will provide greater certainty in the rights that citizens hold in this area, it will also reciprocally detail their responsibilities. For example, for volunteered information where citizens can upload data, they should have a responsibility to ensure that copyright or privacy rights have not been infringed and that up-to-date and good-quality data are used. The statutory framework could encourage users of open data to report on downstream uses to better capture this added value for the public. Users could be required to acknowledge the government as the original data source whenever there is Crown-sourced data use. A statute could require that open

data users share alike by requiring that further uses developed from government open data are likewise shared in an open format, under the model of a “Crown Commons licence” (Judge, 2010).

The rationale for a statutory scheme is that, if explicit statutory directives for open data are enacted, then governments will more readily implement comprehensive open data schemes. A statutory scheme could take a carrot-and-stick approach by setting out limits on government liability where there have been good-faith efforts to release open data or, conversely, good-faith efforts to protect data from disclosure that is infringing, but pairing that with a right of action so individuals or civil-society groups could enforce these rights in court.

9. Conclusion: Incentives to Open

Recent years have seen an explosion in public interest in open data, and overwhelming support for it. These calls for open data are predicated on assumptions about open data as part of a democratic process. Public availability of data held by public bodies is understood to increase the transparency and accountability of the public sector and enable public participation. It increases communication flows across sectors and helps citizens to identify where information gaps may exist. There is a growing need for an increased use of open data and a broadening of the variety of open data available to obtain these benefits. Yet, uncertainty about the scope of liability that governments might incur for open data activities and the general failure to account for potential liability that governments might incur for open data inactivity may stall further progress by governments on open data. The development of a statutory framework to support open data efforts can provide a structure for rights and obligations and can provide clarity for government bodies that may otherwise behave conservatively in order to mitigate risk.

We have focused on a statutory open data scheme to address liability incentives and disincentives. As we have argued, an open data statute would reduce uncertainty for both government and individuals around open data obligations and expectations, which could be unnecessarily deterring governments at all levels from making more data open. With greater predictability and certainty on the scope of liability, and on which activities will incur liability, it is hoped that governments would release open data more thoughtfully,

more comprehensively, more proactively, and faster. A statutory framework would not provide immunity. Instead, it would provide a clear limitation on the liability risks so governments that are imagining a worst-case scenario of unending liability will have their liability fears sufficiently allayed to begin working on the higher-hanging fruit on the open data tree. Arguably, open data efforts have stalled now, after the low-hanging open data fruit has been picked, as governments seek cover in inactivity to avoid real and perceived liability risks. A statutory liability provision could help get efforts going on the harder cases of open data release.

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