COMMITTEE REPORT

CITY OF Guelph
Making a Difference

TO	**Governance Committee**
SERVICE AREA	Corporate and Human Resources, City Clerks Department
DATE	November 13, 2012
SUBJECT	**Open Government Framework**
REPORT NUMBER	CHR-2012-55

SUMMARY

Purpose of Report:
To provide historical context and a rational for Open Government and to outline a proposed Open Government Framework from which to build an Open Government Action Plan for the City of Guelph.

Committee Action:
To recommend to Council the approval of an Open Government Framework for the City of Guelph.

RECOMMENDATION

That the Open Government Framework for the City of Guelph, enclosed as part of the November 13, 2012 report entitled *Open Government Framework*, be approved.

BACKGROUND

Through the City's development of a [Corporate Technology Strategic Plan](#) (approved by Council on September 24, 2012), it was identified that the IT pillar of Open Government was a component of a much larger strategic objective. As a result, it was determined that staff would further consider Open Government by way of developing a conceptual framework for the City. Open Government is also supported by the Corporate Strategic Plan Framework (approved by Council on June 25, 2012) as it directly relates to several strategic directions under the focus areas of Organizational Excellence, Innovation in Local Government and City Building.

This report will provide a high level summary and overview of the proposed Open Government Framework. The *Survey of Open Government* (Attachment 1) will provide for a more detailed account in relation to the historical evolution of Open

Government and its current context. It also illustrates related initiatives which have been successfully led by a number of jurisdictions. The context included in the paper will serve to provide greater clarity in regards to the proposed Open Government Framework below.

The proposed Open Government Framework can be used as the basis from which to develop an Open Government Action Plan for the City. An Action Plan is necessary as it will allow for a focused use of resources in the preparation of a work plan and implementation schedule. The work plan will propose several new initiatives built on best practice and industry trends in order to supplement existing City programs and services which already support the principles of Open Government. As a long-term strategic focus for the City, Open Government has the potential to be transformational. The proposed framework is a foundational element to inform a strategic roadmap to achieve this vision.

Drivers

As part of an [Open Government Summit in 2010](), the Organization for Economic Cooperation and Development (OECD) published the following as the key benefits of Open Government:

- Establishing greater trust in government
- Ensuring better outcomes at less cost
- Raising compliance levels
- Ensuring equity of access to public policy making
- Fostering innovation and new economic activity
- Enhancing effectiveness by leveraging knowledge and resources of citizens

Further detail regarding the context and rationale for Open Government can be found in the attached paper.

REPORT

Open Government is a movement which seeks to enhance the overall transparency and accountability of government. It is also an attempt to improve the connection between government and citizens - not only to increase democratic participation but also to encourage and support innovation and economic development. Open Government is facilitated by technology but is being driven through public expectation. Related changes are evident in the private sector and in the formation of grassroots and global partnerships focused on moving the agenda forward. Government at all levels have already begun to embrace this new reality, but progress is most apparent at the local levels, especially in Canada.

The implementation of Open Government requires a strategic approach. There are a number of interrelated directions that must be in place to support the overall principles and vision. Consultation with the community around action planning is a key component to the success of any Open Government program. In order to consider an Action Plan, it is necessary to first provide a conceptual account of Open Government through the development of a framework. Within the proposed

framework, the vision of Open Government is supported by four interrelated principles driven through four key directions. There are a number of action areas tied to these directions, however, these are not meant to be exhaustive lists - they are identified only to provide central themes which may be used to inform further development.

The following section provides a summary of the proposed Open Government Framework for the City of Guelph. The attached paper references various examples in an attempt to better operationalize the concepts below.
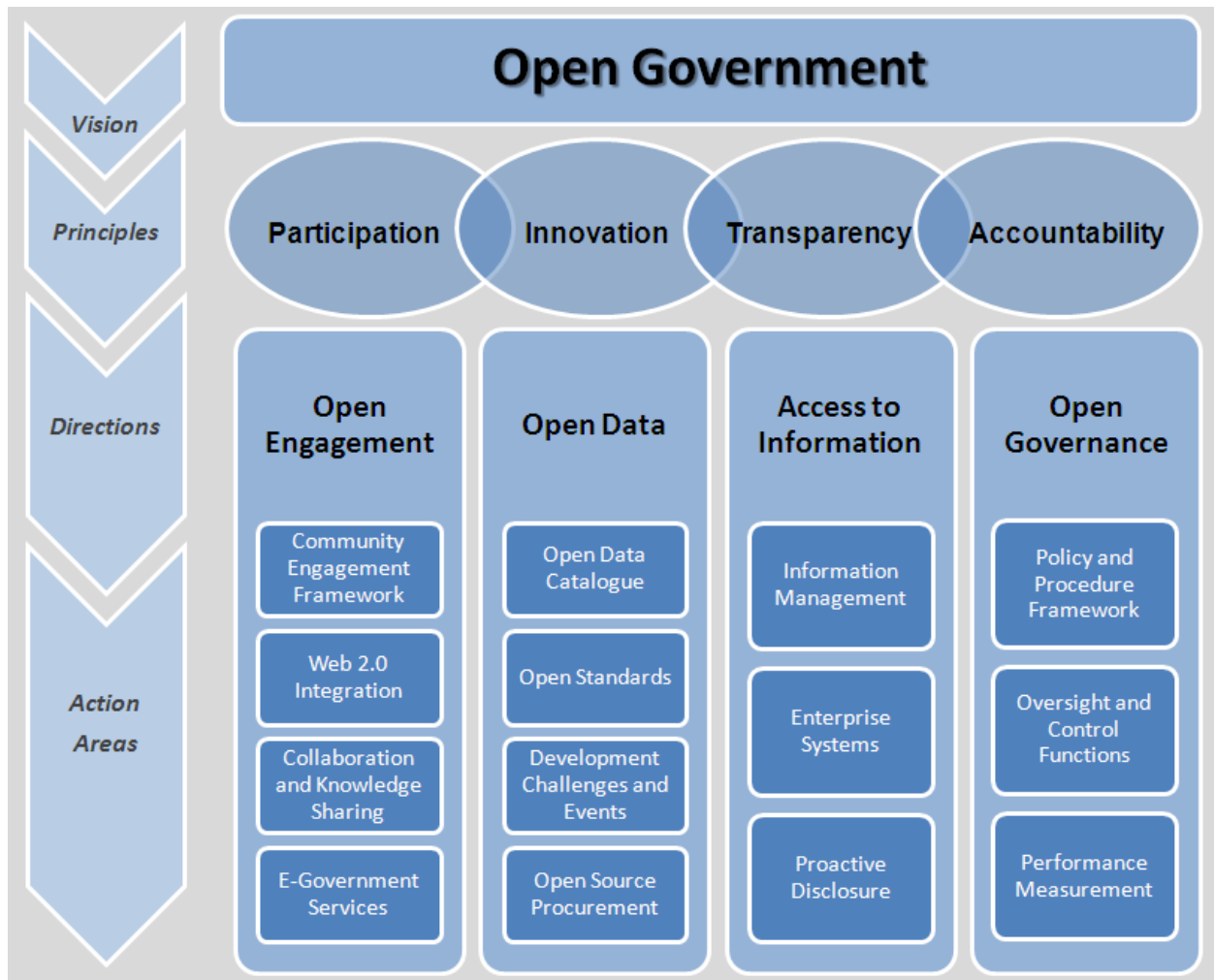
Vision
The following definition attempts to classify Open Government as a broad and dynamic concept for the City of Guelph.

OPEN GOVERNMENT: To create a fully transparent and accountable City which leverages technology and empowers the community to generate added value as well as participate in the development of innovative and meaningful solutions.

Principles

The vision of Open Government is underpinned by four principles, established in order to provide further clarity and to more fully inform the development of an Open Government Action Plan.

PARTICIPATION: To present the community with an opportunity to contribute to the development of public service, policy and legislation which best serves the common interest. The City of Guelph is committed to the proactive engagement of the community by using a variety of mechanisms to support an open and inclusive dialogue.

INNOVATION: The creation of value through the provision of solutions co-created for the purpose of realizing a shared reward. The City of Guelph is committed to collaborating and partnering with the community in a creative way to inspire a new approach to providing better public service and added value.

TRANSPARENCY: To ensure that the community has access to information with respect to the business and affairs of the City, with limited exceptions, in a timely manner and in open formats without limits on reuse. The City of Guelph is committed to the development and maintenance of information systems designed to manage, safeguard and disseminate civic data in an efficient and meaningful way.

ACCOUNTABILITY: An obligation for the City to account for its activities, accept responsibility for them and disclose the results to the community in a transparent manner. The City of Guelph is committed to supporting a legislative and administrative environment where governance mechanisms manage oversight and drive a commitment to continuous improvement.

Directions

The principles of Open Government are driven through four key directions. Within each direction there are a number of action areas which can encompass a myriad of related initiatives. The attached report references a handful of these initiatives in an attempt to better clarify these areas.

OPEN ENGAGEMENT: To build on the traditional and legislative foundation of public consultation to realize a transformative approach to the way in which the City can inform, consult, collaborate and empower the community.

OPEN DATA: To encourage the use of public data to be made available in practical formats for the purpose of facilitating the development of innovative and value added solutions.

ACCESS TO INFORMATION: To subscribe to best practices and support the necessary tools with respect managing civic information for the purpose of enhancing the transparency of City business and the enrichment of information assets.

> **OPEN GOVERNANCE:** To develop a management and control framework as well as the necessary policy instruments to define expectations and verify the performance of strategic initiatives related to Open Government.

CORPORATE STRATEGIC PLAN

The proposed Open Government Framework establishes a conceptual foundation with which to develop a comprehensive Open Government Action Plan in support of several strategic directions within the Corporate Strategic Plan Framework (2012-2016):

Organizational Excellence
1.2 Develop collaborative work teams and apply whole systems thinking to deliver creative solutions
1.3 Build robust systems, structures and frameworks aligned to strategy

Innovation in Local Government
2.2 Deliver Public Service better
2.3 Ensure accountability, transparency and engagement

City Building
3.2 Be economically viable, resilient, diverse and attractive for business
3.3 Strengthen citizen and stakeholder engagement and communications

FINANCIAL IMPLICATIONS

An expansion request of $100,000 is included as part of the 2013 budget process in order to retain the services of a subject matter expert to work with the City Clerk and a Collaborative Work Team to develop a comprehensive Open Government Action Plan for the City of Guelph. The Action Plan would set out a strategic implementation program for various Open Government initiatives based on the proposed framework, a best practice review and an internal state readiness assessment. It will address project management, governance, and resourcing when considering deliverables and a related project timetable. The Action Plan will also reference the City's strategy and policy framework to ensure that future initiatives are aligned appropriately.

DEPARTMENTAL CONSULTATION

The following interim collaborative work team was struck in order to provide input and support to the development of the proposed Open Government Framework:

- City Clerk (Chair)
- Deputy Clerk
- Manager of Information Technology

- Corporate Manager, Strategic Planning and Corporate Initiatives
- Manager of Communications

- Senior Communications and Issues Management Coordinator
- Manager of Integrated Services, Community & Social Services
- Deputy City Solicitor
- Access, Privacy and Records Specialist

- Economic Development Marketing Coordinator
- Supervisor, Financial Planning
- General Manager, Planning and Building Services
- Manager, Development Planning

Subject to Council's approval, members of this group will be used as a resource in the development of an Open Government Action Plan. Community engagement will also be a key component to inform the plan. As part of the strategic development process, further consideration will be given to work teams and governance structures which are required to support implementation.

COMMUNICATIONS

Corporate Communications will assist in the development of a communications plan to support an Open Government Action Plan (subject to approval). The plan's communications tactics may include:

- Dedicated web pages on guelph.ca
- Messaging through a variety of social media channels
- Media relations
- Internal communications
- Public engagement opportunities
- Advertising and promotion

ATTACHMENTS

- Attachment 1: *A Survey of Open Government*, November 13, 2012, Blair Labelle, City Clerk

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A Survey of Open Government

November 13, 2012 Governance Committee
Blair Labelle, City Clerk

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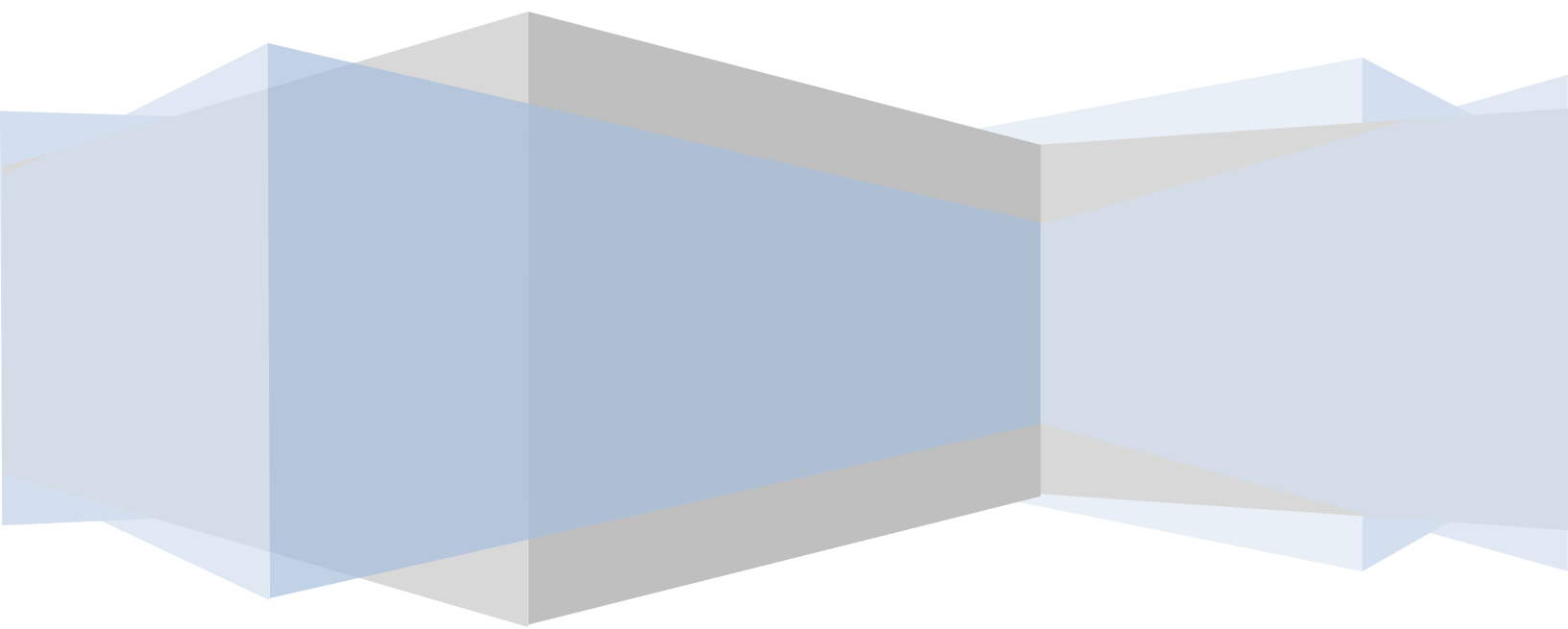
Summary

This paper was drafted in order to provide further context in relation to the Open Government Framework proposed for the City of Guelph. It provides background information with respect to the historical evolution and rationale for Open Government. It also attempts to further define the many interrelated concepts and definitions. The proposed Open Government Framework is incorporated below and is examined through the depiction of initiatives led by the City and other jurisdictions. It should be noted that these examples exist only to provide some insight into what is a vast and rapidly evolving landscape.

History

Open Government is a term used in reference to initiatives which relate, in some way, to enhancing the overall transparency, accountability and value of government. Its roots are founded in Freedom of Information (FOI) legislation which mandates the right to access government held information subject to exemptions designed to protect individual privacy. Since the enactment of related statutes and regulations, many have lobbied for a more proactive mechanism for governments to provide information. Some argue that information in the custody and control of the public sector is, by its very nature, civic information which should be made easily accessible to the public. More recently, however, the term Open Government has grown to encapsulate a new way of thinking about the role of government. Over the last decade there has been mounting support for the public sector to better leverage emerging technologies in order to employ a new and revitalized approach to citizen engagement, service delivery and governance.

Advocacy and support efforts have grown exponentially since 2009 when the U.S. administration issued an [Open Government Directive](#) to all Federal Departments and Agencies. This strategic direction instructed the executive to take specific actions to implement measures in order to improve transparency, participation and collaboration - all of which are considered to be key principles of Open Government. Since then, many jurisdictions have followed suit to formalize a strategic direction to support these principles. In 2011, the Government of Canada issued an [Action Plan on Open Government](#) which commits to fostering three central activity streams; open information, open data and open dialogue.

The Open Government movement has also led to the creation of several international collectives such as the [International Open Government Partnership](#), a global consortium of governments committed to promoting transparency, empowerment and harnessing new technologies to strengthen governance. Notwithstanding these developments, it is difficult to overlook the fact that the success of Open Government has largely been led by local jurisdictions. As noted in the many examples below, governments at the local levels have implemented a wide range of successful initiatives which have inspired others to do the same.

Advancements in technology, particularly in relation to mobile connectivity and Web 2.0 are key drivers for Open Government initiatives. These advancements provide the ability for individuals to connect and carry on conversations in a variety of different ways, a trend furthered by the current demographic shift. This segment of

new workers and consumers have been shaped by technology - not by computers as simple desktop processors or the web as the "information superhighway", but by technology as an assumed means with which create, communicate and enrich all aspects of life. This attitude and approach has proliferated the mainstream to establish an expectation that individuals ought to be able to participate in, and directly shape their environments.

There are obvious parallels to be made between this evolution and the changing context of democracy. Many have suggested that government would be wise to take more direct cues from certain private sector organizations who have revised their modus operandi with respect to doing business within a changing landscape. There are several examples of business models which have been adjusted to better suit a market where value and success can be achieved through openness and collaboration. In *Wikinomics: How Mass Collaboration Changes Everything,* Don Tapscott and Anthony Williams propose that the internet has grown beyond a system with which to simply access information into a complex network to support a dynamic dialogue. In effect, this transformation has resulted in the inception of Web 2.0, which is not considered a new technology but rather a repurposing of the web to facilitate a more user-centric, collaborative experience. This revival has created an approach to business which extends beyond the use of traditional e-business models to embrace new approaches for engaging potential consumers. Rather than simply providing information and a means to acquire goods and services on the web, businesses are now embracing collaboration as a means to develop their products and create an ongoing dialogue around them to inform continuous improvement and marketability.

Individuals now directly participate in the development of the products and services they consume. The term prosumer was first coined in the 1980's in order to describe the blurring and merging role of consumers and producers - this has never been more evident than it is today. It is now commonplace for individuals to have an ability to submit product reviews directly on a manufacturer's website as well as compare and comment on competing services through online marketplaces. Consumer communities are now a vital way for companies to listen and participate in customer conversations in order to gather and act on their feedback. Some technology providers have opened up Application Programming Interfaces (APIs) in order to facilitate the creation of third parties applications to run on their operating platforms. Apple is a case in point. The technology company initially developed a handful of applications for their iPhone product, but instead of focusing on the internal development of additional applications they opened up access to their operating platform to allow for third party development. The Apple App Store now consists of over 500,000 applications which have been downloaded over 10 Billion times. Apple secured market share by allowing its consumer community to focus development on their own individual needs. Apple was certainly not the first to adopt an open, collaborative approach to development, however, its success in doing so is quite possibly unparalleled.

Another important example which further exemplifies the concept of an open and collaborative framework is the Linux computer operating system. The software was

created by Linus Torvalds in 2002 as a means with which to access data on his university server. Once in beta, he released the software code to the development community at large to suggest potential improvements. Through Usenet (an online discussion network forum) and other engagement and development tools, the Linux code was modified through an iterative process by thousands of developers to become what is today – a fully featured computer operating system. Linux is distributed as open source software, licensed under the GNU General Public License (a free software copyleft licence). This allows the software to be used, modified and/or distributed either commercially or non-commercially by anyone who wishes to do so. Since its inception, Linux has grown in popularity in order to become a direct competitor to proprietary software solutions like Microsoft Windows and Mac OS.

Similar to transitioning within the private sector, government can also be transformed from its traditional focus of being a service and solution provider to an institution that seeks to engage and inspire change. Tim O'Reilly, founder of O'Reilly Media and supporter of the free software movement, argues that government should serve as a platform to encourage innovation and creativity. He suggests that government should be run much *like* a computer operating system - a framework to host a multitude of interoperable applications bound by a basic set of rules. This analogy views government as an enabler, or a framework to provide raw materials and support in order to encourage the development of value added solutions. It is important to note that this concept does contemplate the "privatization" of government, nor does it seek to replace its core legislative function, it merely offers a new business for government – one which seeks to enhance transparency, build internal efficiency and promote ingenuity.

Drivers

This new business model for government, often referred to as "Government 2.0", has grown to serve as a foundational concept to support a myriad of knowledge sharing efforts. There are numerous conferences, seminars, workshops and information exchanges led by the public sector in concert with Gov 2.0 agencies and advocates. As part of an Open Government Summit in 2010, the Organization for Economic Cooperation and Development (OECD) published the following as the key potential benefits of Open Government:

- *Establishing greater trust in government. Trust is an outcome of Open Government that can reinforce government performance in other aspects.*

- *Ensuring better outcomes at less cost. Co-design and delivery of policies, programs and services with citizens, businesses and civil society offers the potential to tap a broader reservoir of ideas and resources.*

- *Raising compliance levels. Making people part of the process helps them to understand the stakes of reform and can help ensure that the decisions reached are perceived as legitimate.*

- *Ensuring equity of access to public policy making by lowering the threshold for access to policy making processes for people facing barriers to participation.*

- *Fostering innovation and new economic activity. Public engagement and Open Government is increasingly recognised as a driver of innovation and value creation in both the private and public sectors.*

- *Enhancing effectiveness by leveraging knowledge and resources of citizens who otherwise face barriers to participation. Public engagement can ensure that policies are better targeted and address the needs of citizens, eliminating potential waste.*

Involve, a London based advocacy group produced a working paper entitled *Open Government: Beyond Static Measures* in an attempt to classify Open Government and support its characterization through various case studies. A key concept articulated in this paper is that Open Government can lead to the development of a "FAST" public sector - namely governments which are flatter, more agile and streamlined as well as more tech-enabled. The following is a summary description of this concept as it appears in this paper:

> *FAST governments develop innovative public services, effectively meet citizens' needs, care for scarce natural resources and create new public value. FAST does not necessarily mean speedy, although the time frame for many decisions may be shortened with the help of collaboration platforms, tools and analytics; nor does FAST mean ignoring the core government values of merit, equity, checks and balances, accountability and jurisdiction.*

Framing Open Government

Although there is a surplus of academic and practical work which can be used to define Open Government, it still means different things to different people. Code for America is a non-profit organization which sponsors and supports the development of civic start-ups in an effort to help better connect government with technologists. A recent application process targeting potential developers of civic apps was also used to canvass for language associated with the success of Open Government. The following word cloud was created as a result of this survey:

Clearly, technologists see data and information as a crucial component of Open Government. This is not surprising given that the respondents in this case are those which use information in order to develop technology solutions. Many make the assumption that open data equates to Open Government, however, it needs to be considered more broadly.

The other important terms which were highlighted by the technology community which was surveyed are those which relate to collaboration and stakeholder engagement. Providing access to information is important, but leading community engagement in relation to that data will serve to harness creativity, expand capacity and promote innovation. Success with Open Government can be sustainable by framing this commitment to community engagement as fundamental component of an organization's strategic objectives.

The concept of Open Government is transformational by nature, it replaces the [government vending machine model](#) with a notion that the public sector can empower and support a marketplace of ideas to directly participate in finding solutions to problems which effect the community at large. The willingness for governments to explore this new business model is still yet to be determined, however, as illustrated by the numerous examples below, there seems to be a growing commitment to do just that.

The implementation of Open Government requires a strategic approach as there are a number of interrelated directions that must be in place to support the overall principles and vision. Chris Kemp, Chief Technology Officer for IT at NASA (an agency that has fully embraced the U.S. Open Government Directive), adeptly describes the future potential of Open Government;

> *The future of open government is allowing seamless conversations to occur between thousands of employees and people. You can't divorce open government from technology. Technology enables and supports the conversation. We're finding that if we don't stand in the way of that conversation, incredible things can happen.*

Proposed Open Government Framework

The proposed Open Government Framework for the City of Guelph is supported by four interrelated principles driven through four key directions. There are a number of action areas tied to these directions, however, these are not meant to be exhaustive lists - they are identified only to provide central themes which may be used to inform further development. As noted above, the intention of the proposed Open Government Framework is to provide a conceptual foundation which can be used as the basis for creating a comprehensive Open Government Action Plan for the City.

The following divides the components of this framework in an effort to provide further detail related to each. Where applicable, a brief description and reference to related Open Government initiatives has been inserted. The implementation of similar initiatives for the City of Guelph may be contemplated through the

development of an Action Plan. Where practical, there is also reference made to City projects which already subscribe to the principles of Open Government.
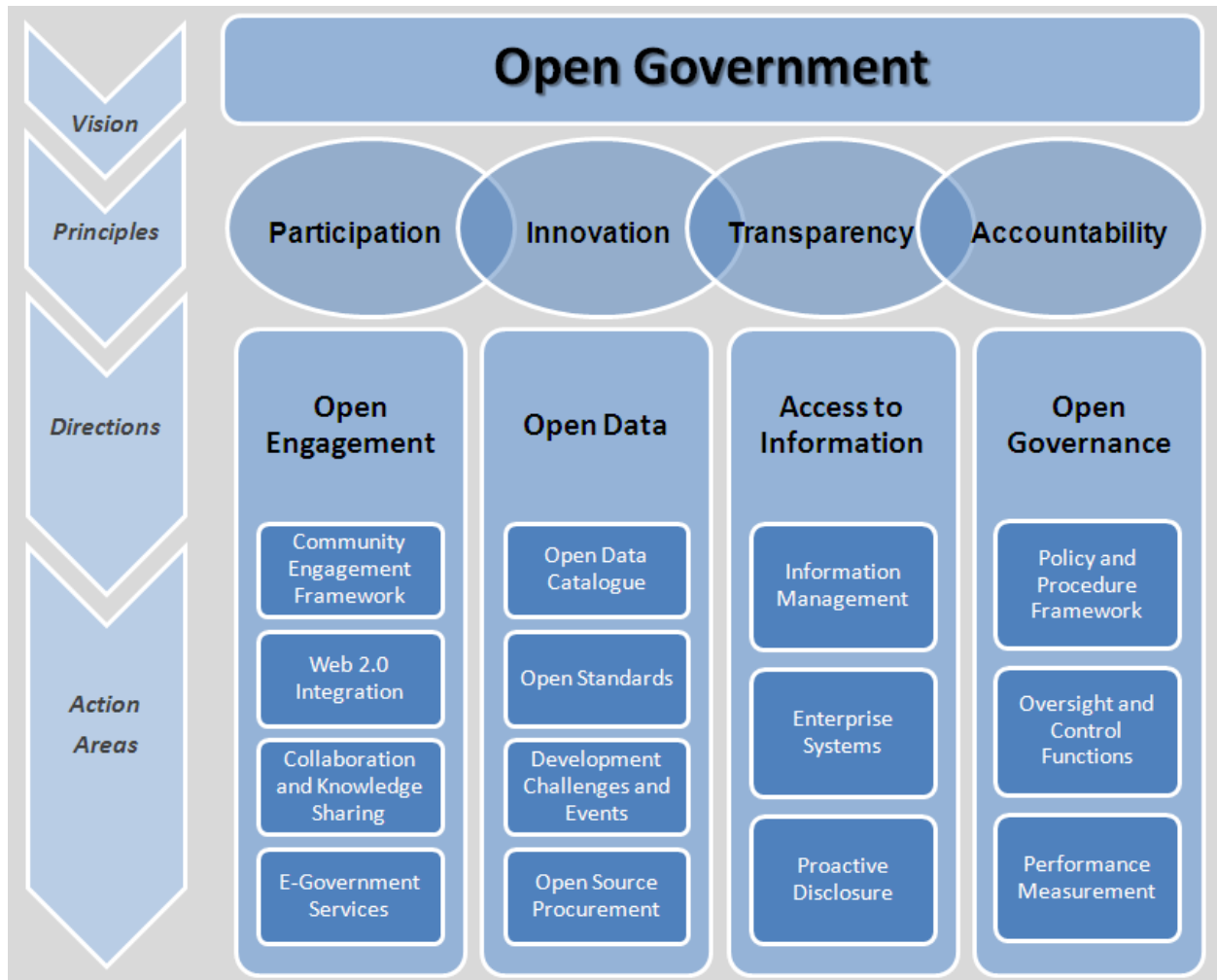
Vision
The terminology associated with Open Government has been variably applied to fit the circumstance of the moment. Over time, use of this term seems to relate less to the strategic commitments around enhanced transparency and public participation to focus almost solely on the implementation of open technologies. There is no question that value can be driven through the latter, but by losing sight of the former, there is a risk in assuming that the challenges facing government today can simply be solved by implementing technology solutions. The following definition attempts to classify Open Government as a broad and dynamic concept for the City of Guelph.

OPEN GOVERNMENT

To create a fully transparent and accountable City which leverages technology and empowers the community to generate added value as well as participate in the development of innovative and meaningful solutions.

Principles

The vision of Open Government is underpinned by four principles, established in order to provide further clarity and to more fully inform the proposed development of an Open Government Action Plan.

PARTICIPATION

To present the community with an opportunity to contribute to the development of public service, policy and legislation which best serves the common interest. The City of Guelph is committed to the proactive engagement of the community by using a variety of mechanisms to support an open and inclusive dialogue.

INNOVATION

The creation of value through the provision of solutions co-created for the purpose of realizing a shared reward. The City of Guelph is committed to collaborating and partnering with the community in a creative way to inspire a new approach to providing better public service and added value.

TRANSPARENCY

To ensure that the community has access to information with respect to the business and affairs of the City, with limited exceptions, in a timely manner and in open formats without limits on reuse. The City of Guelph is committed to the development and maintenance of information systems designed to manage, safeguard and disseminate civic data in an efficient and meaningful way.

ACCOUNTABILITY

An obligation for the City to account for its activities, accept responsibility for them and disclose the results to the community in a transparent manner. The City of Guelph is committed to supporting a legislative and administrative environment where governance mechanisms manage oversight and drive a commitment to continuous improvement.

Directions

The section below provides an explanation with respect to the four directions and provides various example initiatives related to each action area within the proposed framework. As noted above, this is not an exhaustive list but does serve to operationalize the indentified action areas. Consideration regarding the implementation of similar initiatives would be considered through the development of a comprehensive Open Government Action Plan for the City.

OPEN ENGAGEMENT

To build on the traditional and legislative foundation of public consultation to realize a transformative approach to the way in which the City can inform, consult, collaborate and empower the community.

Community Engagement Framework

A Community Engagement Framework (CEF) for the City of Guelph is currently being developed in response to both internal and external demands, both from the community and from City Staff, with respect to enhancing the level of support for the process of engaging the community. The CEF will provide staff with a toolkit of engagement activities which can be used to interface with the community. There are a vast number of tools available to inform, consult, involve, collaborate and empower the public. Alternative modes of dialogue include such things as; Open Space Technology (OST), unconferences, change camps, Delphi decision groups, and world cafes.

The City of Guelph Community Wellbeing Initiative (CWI) is a good illustration of the use of innovative ways with which to engage the community. The CWI is a dynamic conversation between the City and a wide range of community partners for the purpose of developing a shared vision for the City. In addition to using various alternative approaches to community engagement, the CWI also focuses on inspiring individuals to take action within their own neighbourhoods for the purpose of improving the wellbeing of the City.

Web 2.0 Integration

Web 2.0 technologies allow users to interact and collaborate with each other in a social media dialogue as co-creators of their own content. Networking applications such as Facebook, Twitter, YouTube, Flickr, Google+, Linkedin and tools such as Rich Site Summary (RSS) feeds, blogs and mashups (just to name a few) support thousands of virtual communities which allow participants to share and collaborate through the internet. The City of Guelph has been an early adopter of social media and has enthusiastically embraced the web as a platform for transparency. The City's Facebook page, Twitter account, YouTube channel and the Mayor's blog are all great examples of this.

The previous U.S. administration reached out numerous times to the public via social media. The Twitter Town Hall with the President was one of the most followed Twitter events in history. The #askobama hashtag has continued to exist long after the July 6, 2011 event. Although internet based collaborative technologies are at the heart of Web 2.0, teleseminars are also a proven and effective mechanism to remotely engage a large number of participants. In relation to the CWI, Mayor Farbridge hosted Guelph's first telephone Town Hall meeting on September 25, 2012 where hundreds of residents joined a real-time conversation about their community.

Web 2.0 also relates to the development of online portals - websites which can be personalized for individual users. Web portals are designed to be interactive and provide access to online services that are specific to the user. The Planning Portal is a website supported by the UK Government (as part of their very progressive Directgov platform) in an attempt to provide a "one-stop-shop" for services and information related to the planning process for England and Wales. The portal provides access to interactive guides and information with respect to regulations and fees - all of which can be customized by the user to relate to their specific

jurisdiction. It also allows users to submit planning applications for their areas or purchase plans from a list of accredited suppliers. Search capabilities allow users to view the details of development applications in progress, provide commentary on them and/or submit formal appeals. Bizpal is a similar initiative which is managed by a partnership of Canadian governments focused on simplifying the permitting and licensing process for entrepreneurs, businesses, governments and third-parties. In latter stages, the Corporate Technology Strategic Plan would provide the digital platform with which to implement similar services.

Collaboration and Knowledge Sharing
The internet has been used to facilitate the exchange of ideas since the early 1980's, however, the recent proliferation of collaborative technologies and the growing acceptance that *there are more knowledgeable people outside your organization than inside* has created a relatively novel approach to problem solving - crowdsourcing. Crowsourcing, in the context of Open Government, can be defined as a process where government outsources a challenge to the community in order to generate a number of responses. This can be done using social media or in a more structured way supported by a communications plan. Regardless of the methodology applied, the intent is the same - to generate a high number of responses which then are reviewed collectively in order to inform alternative solutions.

It is now becoming standard practice for organizations to leverage technology in order to support collaboration and knowledge sharing efforts. GCPEDIA is an internal wiki which can be accessed and updated by Government of Canada employees. The intent of the site is to provide an opportunity for 250,000 users from over 150 departments and agencies to modify and share content in order to strengthen cross-area knowledge and collaboration efforts. This same principle also applies to Govloop which is the largest government social network of its kind operated by an organization out of Washington, D.C. This forum allows employees from any level of government to share information and ideas with other public sector professionals. MuniGov 2.0 is a similar initiative but involves a more focused conversation on the government adoption of Web 2.0 principles. Beyond the context of government, the Open Knowledge Foundation (OKF) is a not-for-profit agency that provides a forum for the public to exchange ideas and advocate for "free and open knowledge". Through an open partnership with academics, public sector employees, entrepreneurs, data experts, archivists, web developers and independent activists, the OKF co-develops support tools which can be used in order to facilitate independent knowledge sharing efforts.

Collaborative technologies also allow organizations to collect and share information with a broad base of respondents. The Wellbeing Toronto initiative was launched in 2011 as way to collect information from residents by allowing them to rank their neighbourhoods in relation to criterion such as crime, the economy, health, education and housing markets. The format used to report this information is geo-based with overlay controls which can be applied by the user to create a customized map of the City. The City of Guelph's ongoing Cultural Mapping Project is a comparable initiative designed to collect data for the purpose of building a

cultural inventory for Guelph. The gathered information will be compiled and made accessible through an online public portal (to be launched in 2013) which will serve as a valuable planning tool for cultural, economic and tourism development. A cultural mapping project launched for the City of Mississauga is a good reference point to demonstrate the end result of such a project.

E-government Services
Like Open Government, the term e-government is often adapted to fit a particular circumstance. For the purposes of the proposed framework "e-government service" can be referred to as an alternative approach to service delivery where technology is used to enhance the accessibility of City services and improve the efficiency of transactions. The City of Guelph currently provides a number of online services. Residents are able to register for overnight parking exemptions, pay parking tickets, register for community programs and apply for building permits online. ServiceOntario is another example which demonstrates that government services can be delivered through multiple channels. Individuals can renew their driver's license or health card information or apply for a business license either online or by visiting an automated public kiosk.

Initiatives such as on-line voting and alternative approaches to providing services to persons with disabilities demonstrate that by leveraging technology, government can define a new level of service delivery. In addition to mechanisms which are geared towards individuals, there are also a number which can be used by government to deliver services to the business community. The UK's Department for Business, Innovation and Skills (BIS), the Canada Business Network and BC OnLine all exist to create an efficient way to service prospective clients, entrepreneurs and businesses. As the context of local government continues to grow more competitive, e-government services designed to attract and retain business will be an important area of focus.

OPEN DATA

To encourage the use of public data to be made available in practical formats for the purpose of facilitating the development of innovative and value added solutions.

Open Data Catalogue
Launched in 2009 and maintained by the Executive Branch of the U.S. Federal Government, data.gov is one of the largest open data catalogues available online consisting of nearly 400,000 independent datasets. The primary goal of data.gov is to improve access to Federal data in order to enhance transparency and encourage innovative ideas *beyond the walls of government*. Aside from simply offering raw data for download, the website also allows public access to geospatial data and metrics, an interface to visually represent data through online charts and graphs, as well as an open API and other resources to assist users in the development and publication of applications. A similar open data catalogue in the same order of magnitude is data.gov.uk which is maintained by the Government of the United Kingdom.

To date, hundreds of jurisdictions manage open data catalogues, all of which vary in scope and scale. The Government of Canada recently launched an Open Data pilot project which, at the time of this report, contained approximately 13,000 datasets. A number of Canadian municipalities such as Edmonton, Toronto, Vancouver, and Ottawa have also published and maintain open data catalogues. In fact, the local government sector is considered to be at the leading edge of open data efforts, especially in Canada. In 2011, the cities of Edmonton, Toronto, Vancouver and Ottawa collaborated as the "G4" in order to share their experiences with open data, consider common standardized formats, develop an accepted terms of use and provide leadership and support to other jurisdictions considering the development of open data catalogues. Many municipalities have followed suit based on this work including the Region of Waterloo, Hamilton, London and Mississauga (to name only a few).

Open Standards
The development of open standards is an essential component to facilitate the publication of open data. Without the standardization of data, it is difficult and time consuming for users to be able to mine and exploit the information. There are numerous organizations such as the W3C, OpenStandards, and OASIS which advocate for a set of principles which can be used by government to guide the development of their open data catalogues. Although the semantics of the principles can vary somewhat, opengovdata established what has been referred to as the *de facto standard*. The group concluded that open government data should be; complete, primary, timely, accessible, machine processable, non-discriminatory, non-proprietary and license-free.

In 2009, the Council of the City of Vancouver passed an Open City Resolution which formally launched several Open Government initiatives including the adoption of open standards for the organization. Other jurisdictions have also adopted open standards through policy development related to their open data programs. The City of Toronto adopted Open311 which allowed certain mobile applications a direct communication channel with their existing 311 service technology. This decision led to the development of various smartphone applications which allow residents to directly report issues like potholes and graffiti in real-time while they commute through the City. The applications are maintained by the third parties who developed them and are available to the public free of charge.

Development Challenges and Events
One of the motivating factors to open data for unrestricted use is to harness creative capacity in order to realize added value. In order to achieve this end, organizations have to publish the data but they also have to advertise, and in some cases, incentivise its use. A common approach to profiling open data has been to sponsor development contests and events which frame challenges around building applications using the data. Apps for Democracy is one of the most commonly referenced development contests. It was led by the District of Columbia in 2008. The D.C. made an initial investment of $50,000 in order to administer the contest and reward the winners. The end result of this endeavour yielded 47 web, smartphone and social media applications which demonstrated a shared value to

the organization of approximately $2.3 million dollars. Needless to say, this model has been adopted and used by many other jurisdictions since then. Participation in development contests can be restricted by jurisdiction like the Open Data Challenge or framed around a specific theme as seen with the EPA's Apps for the Environment contest. The most common method used, however, are unrestrictive challenges like apps4edmonton and apps4ottawa which simply seek to reward participants for their overall creativity, ingenuity and value added.

ChallengePost is an organization which enables the public and private sector to define a problem, profile a related challenge then crowdsource for potential solutions. It provides a plug-and-play platform where organizations can easily interface and connect to thousands of people with great ideas. Recently, the US General Service Administration (GSA) in conjunction with ChallngePost, created Challenge.gov, a format specifically designed to profile and crowdsource solutions to problems affecting all levels of government in the U.S.

Another frequently used method to publicize the existence of open data resources are Codefest or hackathon events. Organizations who lead these events will either target certain development communities or open an invitation to anyone interested. These events are not restricted to just developers and/or data experts, many others attend in order to provide alternative contributions. The objective of hosting a challenge-based event is to create an environment where participants have an opportunity to meet, collaborate and use open data in order to build value added solutions. An event can run anywhere from a few hours to weeks on end and, subject to the agenda, is typically focused on development using a particular platform, programming language or API. The events are also an opportunity for advocates of open data to network and socialise. Technology start-ups, the public sector and other agencies will often support challenge-based events as a means of crowdsourcing a challenge or generating new ideas which could then be the focus of further development.

PennApps is the largest student driven hackathon event in the U.S. Its last event was hosted by the University of Pennsylvania's computer science club but was sponsored by a number of prominent technology companies including Facebook, Google, Yahoo and Microsoft. The second place winner in a recent event was activist.io who developed a widget built on open data which allows users to access contact information for their congressional representatives. The development philosophy behind the app was focused on creating a solution which could be easily integrated into an advocacy-based website in order to provide users immediate access to their political representatives (phone numbers and social media contact information). This app was developed in less than two days and was awarded $1,500.

The number of value added applications designed using open data is immense. A quick browser search on "open data applications" provides an easy confirmation of this. It is important to note, however, that the quality of innovation realized through the development of applications is directly proportional to the quality of the data made available. In other words, information must be kept accurate and

provided in a useable format. It must also be what the development community wants. This last point was the focus for an event led by the Toronto Transit Commission called Transit Camp. Using an unconference framework, TTC staff met with members of its ridership and local activists to brainstorm ideas to improve transit services. This led to the City's release of real-time GPS data for transit services which then led to the development of Rocket Radar, a smartphone application which allows users to instantly locate a bus or streetcar heading in their direction. The application was developed by a 27 year old Toronto resident and is available for purchase for $.99 cents on the Apple App store.

In 2010, the City of Guelph IT Department published five static datasets in varying formats consisting of information already made available to the public. This initiative was undertaken as a pilot project in response to a request from a local developer group who wanted to work with data that was pertinent to Guelph. Aside from consulting with this group when the data was first published, there has been no communication of the datasets since they were published. In April, 2012 this data was found and then used by a local developer to build a Windows Phone 7 application designed to find the locations of parks, arenas, pools and leash-free areas within the City. The concept of scraping information from government websites is a testament to the enthusiasm that exists with respect to open data.

Open Source Procurement

Open source software is computer software which is available in source code for use free of charge. Open source procurement is a purchasing model which allows for the consideration of open source solutions along with proprietary products. An open-source license essentially permits users to modify and redistribute the software as they see fit. The adaptive use of open source software is now a fairly common practice within the private sector - the Apache HTTP Server and the Linux operating system are both prominent examples of this. Some public sector organizations have also incorporated this procurement model in order to adopt open source solutions as part of their enterprise platforms. In these cases, policy was developed to help evaluate open source alternatives and to provide a cost-benefit analysis.

The United Kingdom Cabinet Office first adopted an open source procurement model in 2004 as a component of their policy entitled Open Source, Open Standards and Re-Use: Government Action Plan. Since then, they have produced an Open Source Procurement Toolkit in order to provide best practices for governments considering the adoption of open source solutions. A number of local jurisdictions have also adopted resolutions to support and encourage open source procurement including San Francisco, Portland and Vancouver.


ACCESS TO INFORMATION

To subscribe to best practices and support the necessary tools with respect managing civic information for the purpose of enhancing the transparency of City business and the enrichment of information assets.

Information Management

Information Management (IM) best practice is supported by an appropriate infrastructure with which to accept, classify, manage, retrieve and share data. Nowadays, information is available in a variety of different formats (paper, raw data, electronic documents, audio video etc.) requiring organizations to employ a multi-channel approach to IM. As discussed in the City's Corporate Technology Strategic Plan, current information in the custody and control of the City of Guelph is not *consistently stored, catalogued or electronically searchable*. This requires most of the sourcing of information within the organization to be completed manually. Moreover, information can be lost and/or duplicated as there are no standardized IM practices in place or a system designed to manage corporate and civic information.

As part of a memorandum issued to support the U.S. Open Government Directive entitled *Digital Government: Building a 21st Century Platform to Better Serve the American People,* a conceptual model (right) was presented in order to illustrate the various layers associated with what is referred to as *digital service*. As noted in this model, citizens as well as employees are seen as the beneficiaries of an information management system. In order to drive forward this new service delivery model, the following strategic principles were established:
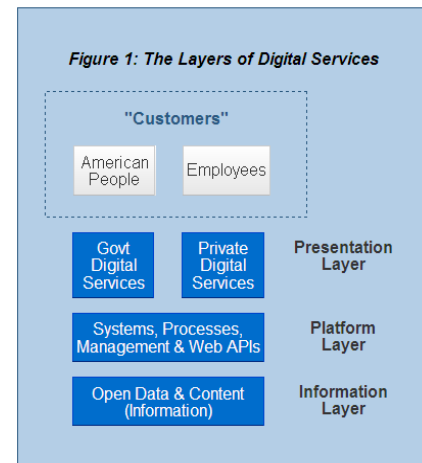
- An *"**Information-Centric**"* approach – *Moves us from managing "documents" to managing discrete pieces of open data and content which can be tagged, shared, secured, mashed up and presented in the way that is most useful for the consumer of that information.*

- A *"**Shared Platform**"* approach – *Helps us work together, both within and across agencies, to reduce costs, streamline development, apply consistent standards, and ensure consistency in how we create and deliver information.*

- A *"**Customer-Centric**"* approach – *Influences how we create, manage, and present data through websites, mobile applications, raw data sets, and other modes of delivery, and allows customers to shape, share and consume information, whenever and however they want it.*

- A platform of *"**Security and Privacy**"* – *Ensures this innovation happens in a way that ensures the safe and secure delivery and use of digital services to protect information and privacy.*

In order to realize the many benefits associated with the concept of information management, it is necessary to transform the culture of an organization. The

Technological infrastructure may be in place to support the transition to becoming a "FAST" organization, however, if mindset does not change, the transformation will undoubtedly stall - as noted in the Corporate Technology Strategic Plan;

> *Effectively leveraging technology for organizational transformation requires a mindset change that embraces technology, digitization, the Internet AND agency openness as being central to service delivery. This requires a change in thinking about how the City designs and delivers its services.*

Enterprise Systems

Information Management requires technology solutions that enable a digital platform. Enterprise systems are implemented in order to collect standardized data, manage it, and then process it for presentation to the customer. The City of Guelph maintains a wide range of business systems which provide operational support for the corporation. The Corporate Technology Strategic Plan recommends that the *City focus on fully utilizing the capabilities of its existing enterprise systems in order to support new business processes*. The development of a Records and Information Management (RIM) program for the City is a key recommendation of the IT Corporate Strategic Plan. In June, 2012, Council approved funding to support the first phase of this program which will focus on the development of an inventory of City records and current records and information management practices. The findings of this assessment review will be used to inform the future development of a broad-based RIM strategy for the City. A RIM strategy will articulate the needs of the organization with respect to information management and will provide a roadmap for the future.

Aside from developing standardized best practices, one of the objectives of a RIM strategy for the City will be to implement productivity tools such as an Electronic Records and Document Management System (ERDMS). An ERDMS can enhance the efficiency of the organization as a whole and improve service delivery to customers. A review by the Information and Privacy Commissioner (IPC) of Ontario concluded that an ERDMS also greatly increases public access to information which serves to enhance the overall transparency and accountability of government.

Good information management practices, and the enterprise systems designed to support them, will lead to the effective and efficient dissemination of information. A principle way with which to present this information to users is through the internet. The form and function of websites are transforming from simple, static reference points to sites which use dynamic and interactive tools to engage and encourage participation. There are numerous examples of websites which not only provide quick and easy access to information and services but also engage visitors to explore and participate in the content. Several noteworthy examples are the NASA, US Air Force, the City of Seattle, the City of Vancouver and the City of Toronto.

As a component of latter, the City of Toronto has developed a Meeting Management Information System (TMMIS) which allows users to track agenda items as they flow

through the legislative process. Users can access real-time meeting agendas, bookmark items of interest and immediately email them to individuals within their own social networks. The Clerk's Office also uses social media to provide real-time information with respect to the business of Council and its Committees. The City of Toronto, like the City of Guelph, also provides easy access to [RogersTV](#) where users can find live streams and video archives of Council meetings. Some municipalities such as the [City of Oakville](#) and the [City of Santa Barbara](#) host their own video stream solutions which also allow users to automatically download the meetings as regular podcast updates.

Proactive Disclosure

[The Municipal Freedom of Information and Protection of Privacy Act (MFIPPA)](#) establishes a general right of access to records held by municipal government and local agencies, boards and commissions. The purpose of the Act is to ensure the transparency and accountability of government by providing civic information while also ensuring that an individual's right to privacy is protected. MFIPPA provides for a [Freedom of Information process](#) whereby individuals can request access to information in the custody and control of the municipality. Upon receipt of a request, a municipality has time to collect the information and, in accordance with MFIPPA, redact that which would inappropriately disclose personal information.

Proactive disclosure is a self-imposed mandatory publication requirement for jurisdictions to automatically release information in order to enhance the transparency and oversight of public resources. The protection of privacy is built into a proactive disclosure model to ensure that which is released does not contain personal information. Dr. Ann Cavoukian, Information & Privacy Commissioner of Ontario released a [paper](#) which presents seven fundamental principles for *Access by Design,* an initiative developed to encourage public institutions to take a proactive approach to releasing information. A similar sentiment is echoed in a [resolution](#) passed by Canada's Information and Privacy Commissioners. As a result of these calls to action, some jurisdictions have instituted routine and/or proactive disclosure practices. The [Canadian Treasury Board of Canada Secretariat](#), the [Government of British Columbia](#), the [City of Toronto](#) and the [City of Barrie](#) are just a few noteworthy examples.

OPEN GOVERNANCE

To develop a management and control framework as well as the necessary policy instruments to define expectations and verify the performance of strategic initiatives related to Open Government.

Policy and Procedure Framework

As part of the development of an Open Government Action and Implementation Plan it is important to undertake a review of existing policies, procedures and practices in order to ensure that they support the principles of Open Government. Along with a gap analysis to identify areas where further policy development is required, there is often an opportunity to refresh the existing policy framework to better support the underlying principles. When undertaking this work it is vital for

organizations to ensure that the necessary safeguards exist to protect themselves and the public. Although regulating Open Government does present a bit of an awkward paradigm, lead organizations have a responsibility to ensure that terms of use are explicit and policies are in place to protect against a wide range of potential liabilities.

Oversight and Control Functions

Accountability and transparency, two principles of Open Government, can be reinforced through various oversight and control functions. Within the context of local government, many of these are mandated by way of statutory requirements, however, others are self-imposed and administered in order to fortify good governance practices. There are a number of good examples which already exist to demonstrate effective oversight and control in relation to open governance.

As part of their legislated responsibility, Councils of municipalities in Ontario are required to subscribe to the closed meeting provisions of the *Municipal Act*. The Act provides that individuals are able to submit a complaint for an investigation of a meeting, or part thereof, which was allegedly closed to the public in contravention to the rules. Oversight of this investigation is to be led by an independent oversight body that is responsible for reporting the results directly to Council. To date, most of the reports generated by Closed Meeting Investigators have focused recommendations to support continuous improvement efforts related to the transparency of the legislative process.

Two comparable oversight bodies established by the City of Toronto in relation to the *City of Toronto Act* are the Office of the Lobbyist Registrar and the Office of the Ombudsman. The former provides a mechanism for the public disclosure of individuals and groups who lobby Members of Council. Toronto's Lobbyist Registry is an online searchable index which was the first public online municipal registry in Canada. The Registrar, who reports independently to Council, also provides support, guidance and interpretation of the City's Lobbying By-law. The City of Toronto Ombudsman is an officer of the Toronto City Council who is an impartial investigator of complaints submitted in relation to the administration of City government. The Office of the Ombudsman commits to leading and reporting on formal investigations where required, however, intervention and conflict mediation are also tools employed to resolve grievances. Both the Registrar and Ombudsman report annually to Council regarding their work.

In relation to several discretionary appointments contemplated through the Bill 130 revisions to the Act in 2006, the Council of the City of Guelph approved a Code of Conduct and appointed an Integrity Commissioner to oversee the ethical behaviour of Members of Council. The Integrity Commissioner reports to Council directly and provides advice to Members in order to support a common basis for ethical behaviour. The City also hired an Internal Auditor to provide objective assurance and support as well as to add value and improve the City's overall operational capacity. In relation to this function, the Internal Auditor also provides leadership with respect to risk management best practice. Further accountability and

transparency measures including other control functions can be found on the City's accountability and transparency webpage.

Open data efforts have enhanced the overall transparency of government by facilitating better public oversight. The Sunlight Foundation, a non-profit, non-partisan advocacy group has supported the development of a large number of applications which focus on providing public access to the actions and influence on government. These tools are dedicated to tracking influence on government, the development of legislation and public policy and government spending. Checking Influence is one such application which permits an individual to monitor their own personal purchasing statements to uncover how the companies they do business with influence political parties through lobbying efforts and campaign contributions. Another unique application is Scout, which permits a user to search and bookmark any matter to be considered by Congress. The Scout database is powered by another application called Open States which extends the search capabilities to proposed legislation in all 50 states. The majority of the Sunlight supported applications were built using open data published by the government.

Performance Measurement
In order to assess the overall effectiveness of an Open Government program, it is important to establish metrics which can be used to measure performance. Metrics for the City of Guelph would be established along with the development of an Open Government Action Plan. A common approach to reporting on the progress of Open Government is to first work with community stakeholders to co-create a measurement dashboard to define what to measure, and how to report on it. The Involve report suggests that *surveying and assessing citizens' needs, preferences and satisfaction is key to delivering public value.* This demand-side approach to developing performance indicators is a logical one as it establishes a reporting model that presents information in a format directly requested by the end user.

In response to the U.S. Open Government Directive, the Chief Information Officer developed a White House Open Government Dashboard used to assess the progress of the Executive Branch in its ability to execute the US Open Government Plan. The dashboard provides a high level measurement of each executive department and agency in relation to criteria such as Open Data, an open website, public consultation efforts and in relation to the execution of their own divisional plans. Users can click on any department and/or agency to view more detailed information relating to the divisional plan as well as the related strategic objectives and achievements.

Aside from measuring the effectiveness of Open Government specifically, high performing organizations often establish a broad performance measurement program to gauge the overall efficiency and effectiveness of their operations. In relation to the development of the City of Guelph's Corporate Strategic Plan, Council recently adopted Key Performance Indicators (KPIs) to do just that. The City's performance management system will monitor the progress with respect to established strategic goals and objectives and inform continuous improvement

efforts. A measurement dashboard has been developed to clearly and publically share the City's progress.

Some jurisdictions leverage technology in order to enhance the overall accessibility of their performance data. The City of Boston launched an initiative entitled Boston About Results (BAR) which provides an online tool to report on the success of various community services. The website is divided into categories such as Parks, Police, Public Works, Treasury, Transportation etc., all of which can be visited directly to understand the strategic objectives associated with that division and a measurement of their success in relation to their KPIs. TracDC, an online profile tool administered by the District of Columbia advances this concept even further. The TracDC concept allows users to visit a website dedicated to each internal agency in order to view a plethora of information including an overview of that agency's leadership and mandate, links to related media coverage, a measurement of overall financial performance (which can be subdivided by KPIs), budget and operational information including a real-time footprint of agency spending and customer service statics. Each agency portal also provides the information in open data formats and embeds social media links allowing users to immediately share the information with their own personal networks.

Conclusion

Open Government is a vast agenda which requires a strategic approach to implementation. A proposed Open Government Framework was tailored specifically for the City of Guelph in order to establish a conceptual foundation to focus future efforts. Many of the principles of Open Government have been in practice by the City of Guelph for some time, therefore, the proposed framework serves to reference this ongoing work as well as to account for new directions to strengthen and support the overall vision.

Open Government will require an investment. Physical resources will be essential to supporting implementation. Equally important, however, will be the need to invest in rethinking the business model of government. Moving beyond statutory requirements in relation to the provision of service, engaging in meaningful participation with the public and driving innovation through the platform of government are all necessary landmarks on the roadmap to Open Government.