



Digital Infrastructure Plan Community Advisory Group

digitalfeedback@toronto.ca | toronto.ca/connectedcommunity



Land Acknowledgement

We acknowledge the land we are meeting on is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis.

We also acknowledge that Toronto is covered by Treaty 13 with the Mississaugas of the Credit.



Meeting Agenda

4:00 p.m.	Welcome, Introductions, Agenda Review	(10 mins)
4:10 p.m.	Meeting 2 recap	(5 mins)
4:15 p.m.	 Presentation Context Setting: DIP Consultation Process and Approach Draft Content: Digital Autonomy 	(30 mins)
4:45 p.m.	Questions of Clarification	(15 mins)
5:00 p.m.	Engagement (breakout groups)	(45 mins)
5:45 p.m.	Report back	(10 mins)
5:55 p.m.	Wrap up & Next Steps	(5 mins)
6:00 p.m.	End of Session	





Context Setting



Background

- Digital infrastructure is changing the way we access information, work, and connect with each other.
- Digitized municipal services are leading to increased efficiencies, improved decision-making and the better management of public assets as well as concerns about issues like privacy, security and equity.
- As the use of digital technologies increases, the City is developing a
 Digital Infrastructure Plan.



What is digital infrastructure?

Digital infrastructure means infrastructure that creates, exchanges or uses data or information as a part of its operation.

Digital infrastructure includes physical structures, cabling and network systems, software systems, data standards and protocols.

Examples:

- sensors (e.g. cameras, GPS sensors, microphones, etc.),
- broadband and telephone networks,
- Wi-Fi,
- Apps,
- open data standards, etc.



On the Digital Infrastructure Plan (DIP)

- In February 2019, City Council directed staff to develop a City-wide Digital Infrastructure Policy Framework and Governance Model.
- In January 2020, City Council adopted 5 Working Principles and Vision Statements as guiding framework for the DIP.
- Council directed the City Manager to ensure that digital infrastructure initiatives are in compliance with all five of the DIP Working Principles, in addition to all existing policies, standards, and processes.



Why we are here today

Seeking public input in directions from City Council:

- January 2020, Council directed staff to consult with appropriate stakeholders on the inclusion of a commitment to the City's control and autonomy of its core digital infrastructure and a commitment of support to laws that protect the City's and its citizens' data, in development of the DIP.
- 2. March 2021, Council directed staff to complete public and stakeholder consultation on building and procuring digital infrastructure, and related policies for the DIP, and to report to Committee by end of the second quarter of 2021.



What is the Digital Infrastructure Plan?

- Principles and vision for the use of digital tools and data collection;
- Description and definition of the City's digital infrastructure;
- Governance model, including the roles of key groups and individuals; and
- Set of **regulations and policies** to guide decision making about Toronto's digital realm.



Digital Infrastructure Plan Working Principles



Equity & Inclusion



A Well-run City



Social, Environmental, & Economic Benefits

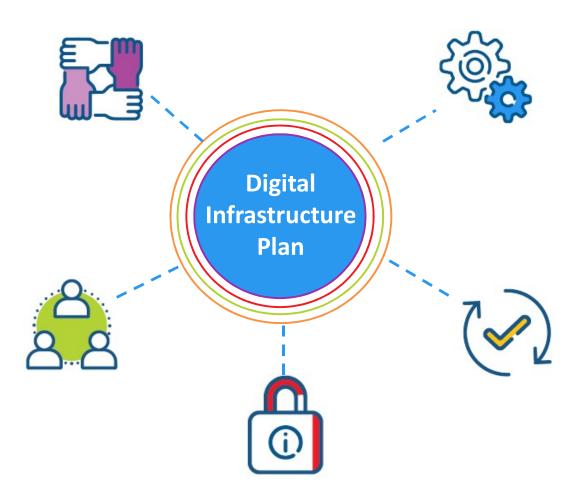


Privacy & Security



Democracy & Transparency





DIP: Taking shape

1. Well-run City



Digital Infrastructure will enable high quality, resilient and innovative public services, and support evidence-based decision-making.

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1.1. Digital City

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Policy Statements

The City will:

- Perficite, developed per digital infrastructure sit ut eventus in pro habitant focorum:
- activare accessum ad publica officia per digital est diducta oratio, et cogitationes platforms
- Evolvere a digital amet publica officia et munera quae pro digital marketplace digital vel publicam, quae quadrata posita est, et inclusive

Principle

Vision Statement

Themes and descriptive text

Policy statements



How will the DIP be used?

- Many existing regulations and policies already address a number of related topics: personal information and privacy, security, data management, procurement, intellectual property, consumer protection and others.
- The **Digital Infrastructure Plan will build on these existing regulations** to enable a consistent approach for the City to evaluate digital infrastructure policies and proposals.
- Proposals received before the Digital Infrastructure Plan is complete will be examined in light of both these existing processes and DIP principles to determine the appropriate evaluation process.
- Guidelines have been developed to facilitate evaluation by staff.



What is this consultation about?

This consultation is about "Digital Autonomy": what it is, what it means, when it applies, and how it is related to the DIP. Through public feedback, the City is hoping to understand:

- Do you agree with the proposed approach and scope?
- What new policies and/or procedures are needed?
- What topics require further discussion and consideration?
- What suggestions do you have for strengthening the proposed approach?



Consultation Process

June 21, 2021

Webex Event 2:00pm – 4:00pm.

Online Questionnaire

2-week Comment period (June 22 – July 6)

September 2021

Additional consultations

The current consultation is focussed on Digital Autonomy. Broader consultation on the draft Digital Infrastructure Plan will take place in September 2021.

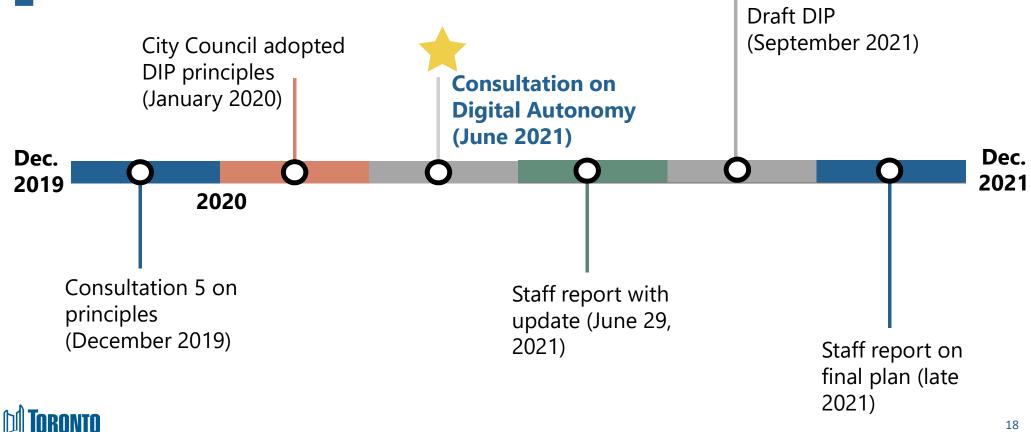
An online questionnaire will be available at toronto.ca/connectedcommunity — where you can provide feedback.

Comments, questions and feedback can also be submitted by email to digitalfeedback@toronto.ca.



Consultation on

Roadmap



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Digital Autonomy



What is it? Draft Definition...

Digital Autonomy

Digital Autonomy refers to the City's ability to develop, maintain and control the selection, use and design of its digital infrastructure to deliver public services and advance the public interest, as informed by legislation and community consultation.



Why does it matter?

- Growing concern that the City is becoming dependent on technology companies (vendor lock-in, product options, repairs, upgrades, maintenance etc.).
- This dependence could affect the City's ability to make decisions (i.e. control, influence) on public assets that reflect public interest.
- "Digital autonomy" is an approach that would provide the City with greater control over its emerging digital infrastructure.
- Pursuing digital autonomy as this evolution occurs requires a concerted, aligned effort centered on the DIP.



How are we approaching it?

- Creation of a 6th "Digital Autonomy" Principle for the DIP.
- Accompanying definition and Vision Statement.
- Identification and exploration of themes related to Digital Autonomy.
- We are presenting these to you today for your feedback.
- The content is based on research from other jurisdictions, and advice from subject experts.
- Further research, analysis and consultation is needed to understand the implications and implementation approaches.



Proposal: Digital Autonomy as 6th DIP Principle



Equity & Inclusion



A Well-run City



Social, Environmental, & **Economic Benefits**



Privacy & Security

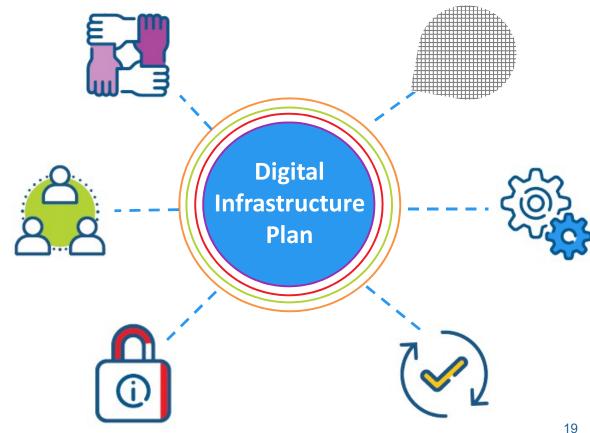


Democracy & Transparency



Digital Autonomy





Digital Autonomy: draft vision statement

The City will maintain control in the selection, use and design of its digital infrastructure, so that it can act in an autonomous self-determined manner within the digital realm. Digital Autonomy and public control will be achieved by implementing policies and requirements related to Open Source, Open Standards, Open Contracting, Data Residency, and Right to Repair, in combination with community consultation.



What is included in Digital Autonomy?

- 1. Open Source
- 2. Open Standards
- 3. Open Contracting
- 4. Data Residency in Canada
- 5. Right to Repair Technology
- 6. Indigenous Data Governance



1. Open Source

What's under consideration?

Creation of a City of Toronto open source and intellectual property policy.

What does this mean?

- This would encourage the purchasing and use of software under *open source licenses* as opposed to *proprietary licenses*.
- This would also mean the gradual release of computer code the City makes, buys and uses to the general public, and the general public will have rights to use and modify that code for their own use.

- For the public: an ability to witness, comment on and participate in how the City uses its computer code, including in a commercial manner.
- **For the City government:** when buying software, the City would also buy the right to receive, modify, distribute and use the source code, and whenever possible transfer those rights to the public. This may also permit new methods of software development and *open source procurement*.



2. Open Standards

What's under consideration?

Creation of a City of Toronto open standards policy.

What does this mean?

- At a minimum, new policy to require the technologies the City uses to comply with standards set by international standards bodies (e.g. ITU, ISO, IETF, W3C).
- ITU = International Telecommunication Union; ISO = International Organization for Standardization; IETF = Internet Engineering Task Force; W3C = World Wide Web Consortium.

- **For the public:** it becomes easier to understand City bids, technical documentation, and operations if it speaks using a common technical language.
- For the City government: common standards are necessary for interoperability and compatibility between the City's technologies and data sets, both in the City and between the City and external systems. Open standards are more widely adopted however, and encourage technological neutrality.



3. Open Contracting

What's under consideration?

- Using the Open Contracting Data Standard (OCDS) for digital infrastructure procurements.
- Reviewing and comparing the Open Procurement Standard and Open Contracting Global Principles in relation to existing Purchasing Policies and Procedures.

What does this mean?

- The existing City of Toronto Procurement Process follows leading public procurement practices for open, fair and transparent processes and were shaped out the MFP Inquiry and based on applicable trade agreements.
- Conducting this review will identify opportunities for improvement to the process.

- **For the public**: provides transparency for City technology contracting with other jurisdictions.
- For Bidders: can assist in lowering barriers to entry.
- For the City government: May provide fairer competition and a level playing field for smaller firms, resulting in more bids and more choices for the government.



4. Data Residency in Canada

What's under consideration?

 Creation of a data residency policy, so digital information is stored and transferred securely in Canada.

What does this mean?

- "Data residency" refers to the physical or geographical location of an organization's digital information while at rest and in-transit.
- The City policy would require digital information it controls to be collected, processed, stored, and/or transferred using local area networks and encryption standards within Canada.

- For the public: the ability to advocate for laws and policies to Canadian government/s on how data are collected, processed, stored and/or transferred, and to have those laws apply to information about Torontonians.
- For the City: ensures the City is the sole custodian of the digital information it holds on behalf of the public; and stronger ability to advocate on behalf of the public on matters about their information.



5. Right to Repair

What's under consideration?

• Ensuring the City maintains a *right to repair* any digital infrastructure it uses, including software (e.g. SaaS / Software as a Service).

What does this mean?

- Any digital infrastructure the City uses is able to be repaired with minimum difficulty using common tools. The City could reserve the right to fix the infrastructure itself or hire whomever it wishes.
- The City could also purchase the right to view all schematics, blueprints, documentation, etc. which would be helpful to fix the digital infrastructure.

- For the public: an opportunity to engage with the City's technology through bids on maintenance contracts.
- For the City government: gives the City the ability to plan how the technology will be used throughout its entire life, and decide the degree of involvement of the original vendor in maintenance and support.



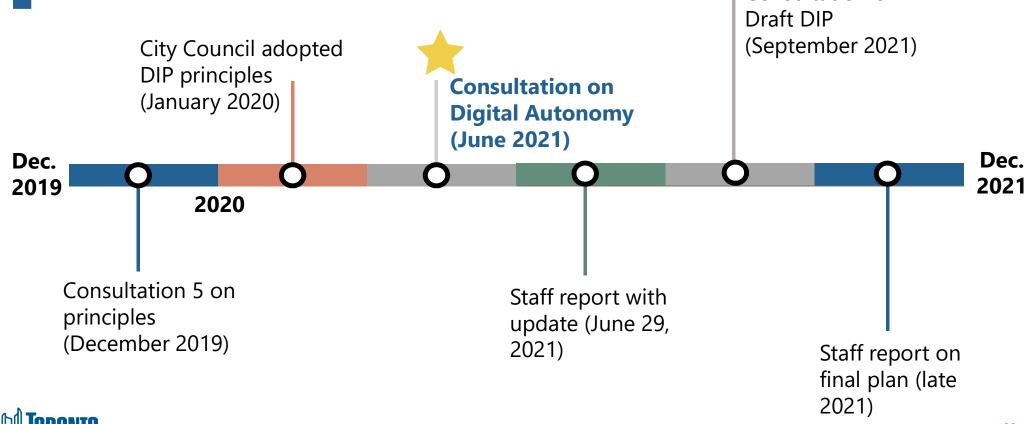
How would it be applied?

- The benefits of Digital Autonomy apply to many types of digital infrastructure.
- The Digital Autonomy principle would be rolled out progressively to new digital infrastructure initiatives, enabling gradual and iterative change.
- This approach recognizes that the process of change takes time and resources (policy development, change management, implementation).
- Community consultation would be integrated into the decision-making process to identify suitable initiatives.



Consultation on

What are the Next Steps?



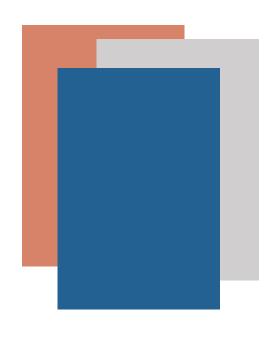


Reminder: what is this consultation about?

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- Do you agree with the proposed approach and scope?
- What new policies and/or procedures are needed?
- What topics require further discussion and consideration?
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Questions of clarification (15 mins)

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Note: 45 min breakout discussion to follow

