

Toronto's Digital Infrastructure Plan: Equity & Discrimination Considerations

Presentation to Confronting Anti-Black Racism Advisory Committee
Connected Community, Technology Services Division





Outline

- About the Digital Infrastructure Plan (DIP)
- Equity, bias and discrimination policies in the DIP
- Upcoming public consultations

What is a Connected Community?

A 'Connected Community' empowers a city to use processes, tools, data, and technology to optimize resources and enhance the quality, accessibility and performance of urban services, increase economic competitiveness, and engage residents, businesses and visitors more effectively.

This approach leads to greater use of digital infrastructure.

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.



Digital Infrastructure Plan

- 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**.



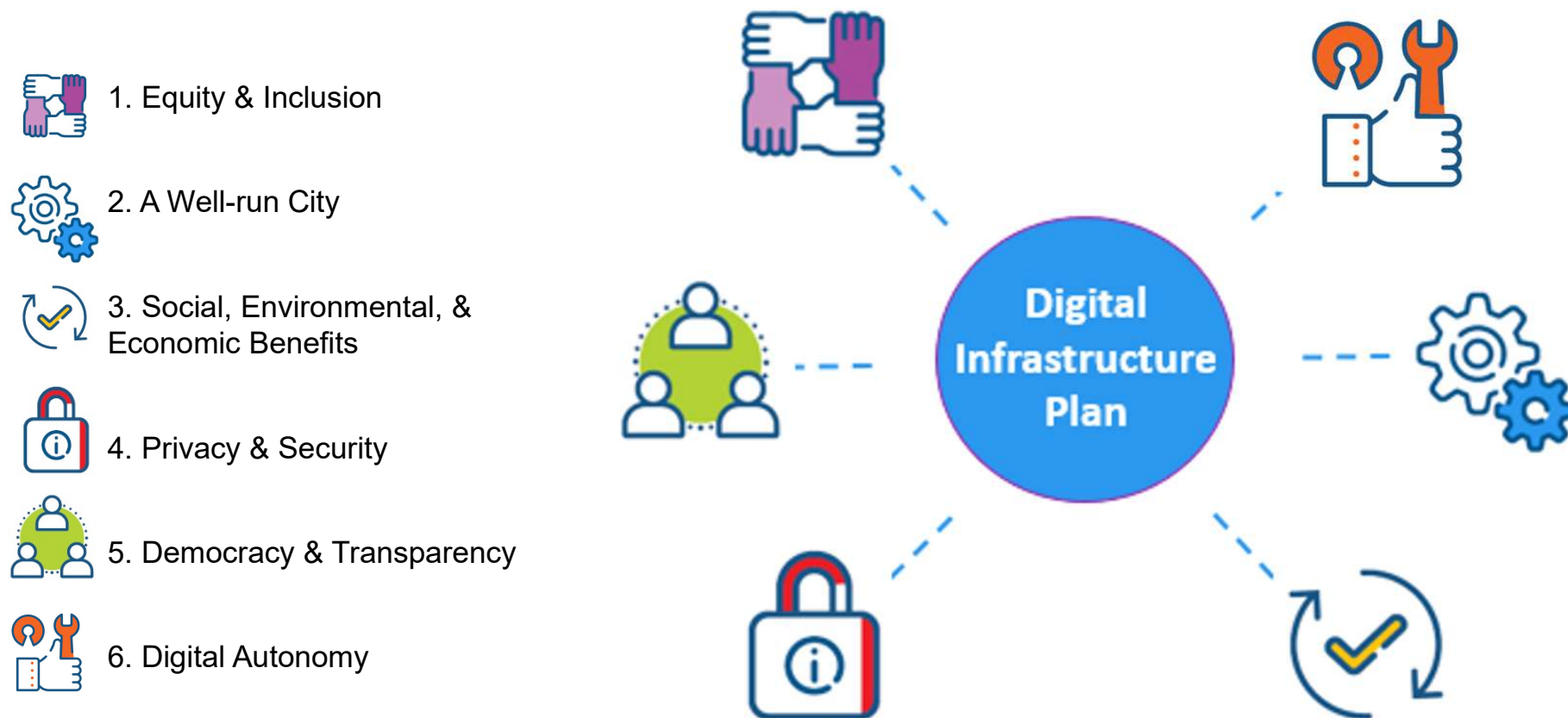
What is the Digital Infrastructure Plan?



Responding to Opportunities & Challenges

- DIP will guide decision-making associated with increased use of digital infrastructure
- In addition to existing policies and standards, guidance is needed on:
 - Digital rights
 - Equity, bias, and discrimination considerations
 - Consent and the collection of youth data
 - When and how to engage the public
- Formalized governance

Digital Infrastructure Plan Principles





Equity and Inclusion

Digital infrastructure will be used to create and sustain equity, inclusion, accessibility, and human rights in its operations and outcomes. Digital infrastructure will be flexible, adaptable and responsive to the needs of all Torontonians, including equity-deserving groups, Indigenous People, those with accessibility needs, and vulnerable populations.

Policy Areas

1. Equity, Inclusion, & Human Rights
2. Accessible Digital Infrastructure
3. Responsive Digital Infrastructure



A Well-run City

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

Policy Areas

1. Digital Transformation
2. Data Governance
3. Digital Literacy & Adoption
4. Asset Management
5. Toronto Public Service as a Connected Community



Social, Economic, and Environmental Benefits

Digital Infrastructure will contribute to positive social, economic and environmental benefits by supporting the success of Toronto's residents, businesses, academic institutions and community organizations.

Policy Areas

1. Social Benefits
2. Economic Benefits
3. Environmental Benefits



Privacy and Security

Toronto's Digital Infrastructure will operate in a way that protects the privacy of individuals in accordance with legislative requirements, and be safe from misuse, hacks, theft or breaches.

Policy Areas

1. Security
2. Privacy
3. Consent



Democracy and Transparency

Decisions about Digital Infrastructure will be made democratically, in a way that is ethical, accountable, transparent and subject to oversight.

Torontonians will be provided with understandable, timely, and accurate information about the technologies in their city, and opportunities to shape the digital domain.

Policy Areas

1. Public Engagement
2. Access to Information & Transparency
3. Algorithmic Transparency & Responsibility



Digital Autonomy

The City will maintain control in the selection, use and design of its digital infrastructure, so that it – and its residents - can act with autonomy and in a self-determined manner within the digital realm.

Policy Areas

1. Open Source
2. Intellectual Property
3. Open Standards & Interoperability
4. Data Residency in Canada
5. Maintenance & Repair
6. Control



Equity and Inclusion (Repeat Slide)

Digital infrastructure will be used to create and sustain equity, inclusion, accessibility, and human rights in its operations and outcomes. Digital infrastructure will be flexible, adaptable and responsive to the needs of all Torontonians, including equity-deserving groups, Indigenous People, those with accessibility needs, and vulnerable populations.

Policy Areas

1. Equity, Inclusion, & Human Rights
2. Accessible Digital Infrastructure
3. Responsive Digital Infrastructure



Policy Area: Equity, Inclusion & Human Rights

Policy Statements

The City will:

1. Build digital infrastructure using equity as a lens, emphasizing human dignity, human rights, and shared ethical values
2. Identify and address systemic barriers that restrict the full participation of Toronto's diverse communities in the digital realm
3. Proactively consider and respond to the potential or realized consequences of digital infrastructures, including potential harms such as bias, discrimination, or privacy breaches
4. Ensure that safeguards are in place to detect, prevent, and remedy discrimination and inequity that could arise through the use of digital infrastructure



Policy Area: Equity, Inclusion & Human Rights (continued)

Policy Statements

The City will:

5. Ensure that communities facing systemic barriers and discrimination have access to affordable high speed internet connectivity and internet-enabled devices that meet user needs
6. Improve residents' digital literacy, awareness, skills and reinforce their ability to act and make informed decisions in the digital realm
7. Collect socio-demographic and disaggregated data to identify, monitor, and address inequities in public services, including digital services



Democracy and Transparency (repeat slide)

Decisions about Digital Infrastructure will be made democratically, in a way that is ethical, accountable, transparent and subject to oversight.

Torontonians will be provided with understandable, timely, and accurate information about the technologies in their city, and opportunities to shape the digital domain.

Policy Areas

1. Public Engagement
2. Access to Information & Transparency
3. Algorithmic Transparency & Responsibility



Policy Area: Algorithmic Transparency & Responsibility

Policy Statements

The City will:

1. Foster responsible, accountable and human-centred development and use of transparent and explainable AI.
2. Develop a public AI registry, providing understandable and up-to-date information about how algorithms are used, and how residents may interact with them
3. For all algorithms, the City will:
 1. Make source code open source
 2. If the algorithm has been trained, provide sufficient information about the training data used to permit analysis for potential bias; and
 3. Provide information about how the algorithm operates in a fair and non-discriminatory manner



Policy Area: Algorithmic Transparency & Responsibility (continued)

Policy Statements

The City will:

4. Ensure that necessary safeguards are in place to prevent, detect and remedy unlawful discrimination through the use of AI systems
5. Establish data governance mechanisms to provide appropriate levels of oversight (including human, if necessary) over AI systems

Summary of existing input

We have consulted, or will consult, the following groups:

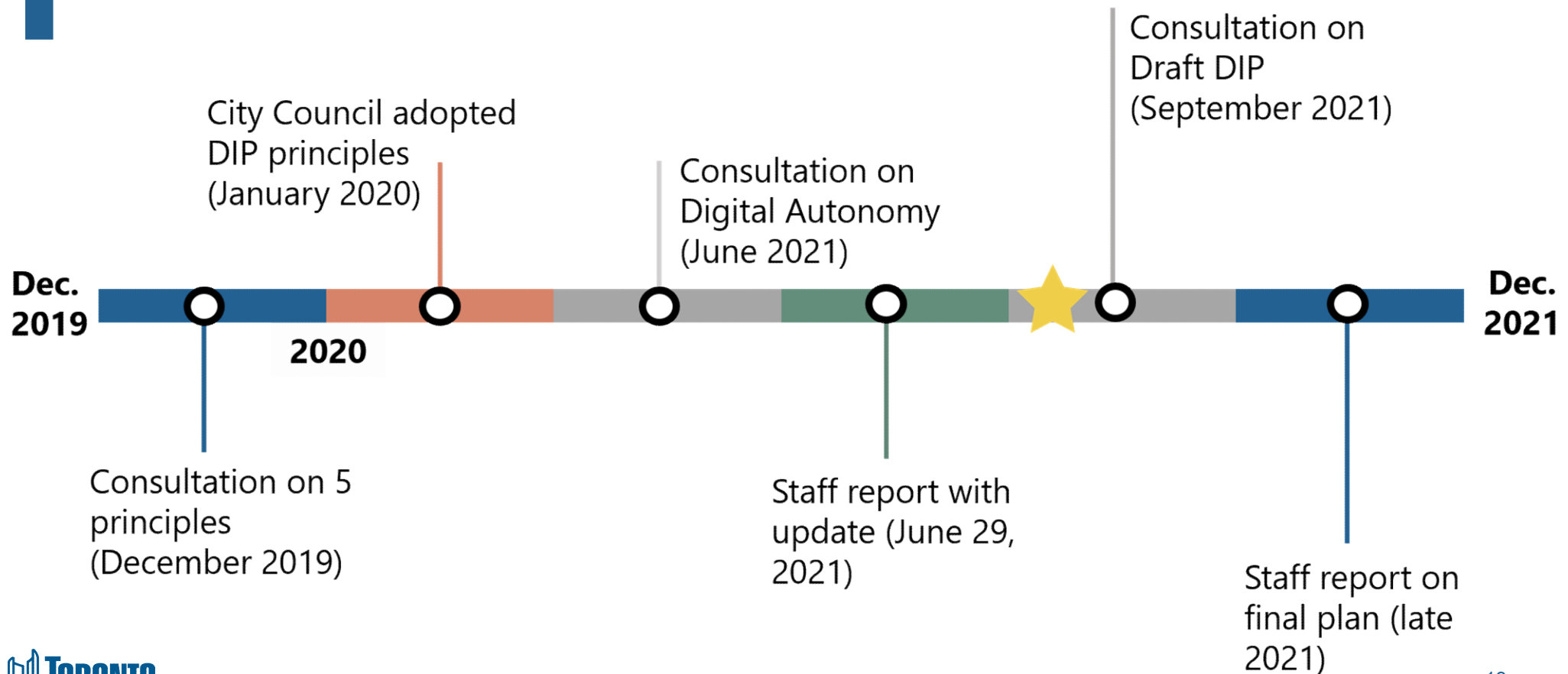
- Equity Unit, City of Toronto
- Indigenous Affairs Office, City of Toronto
- Cities Coalition for Digital Rights

Note: This list is not exhaustive.

Legislation & policies that have been consulted include:

- Ontario Human Rights Code
- Accessibility for Ontarians with Disabilities Act
- City of Toronto Corporate Accessibility Policy
- Toronto Accessibility Design Guidelines

Roadmap of DIP Development





Discussion

- How can we build upon the policy statements to ensure issues of equity, bias and discrimination are appropriately addressed?
- What elements should be considered as we develop a Digital Equity policy?
- Are there key groups or organizations we should meet as we carry out public consultations?