

Re: Digital Infrastructure Plan

Summary of Advice from the Planning Review Panel, December 7, 2019

Executive Summary

The Planning Review Panel is a representative group of 32 randomly selected Torontonians that help the City Planning Division guide growth and change in Toronto. They have been asked by the Chief Planner to work together over the course of two years to provide City Planning with informed public input on major planning initiatives. Members are tasked, in particular, with helping to ensure that these initiatives are aligned with the values and priorities of all Torontonians.

Advice re: Digital Infrastructure Plan

The City of Toronto is currently developing a new Digital Infrastructure Plan. The Plan would help the City regulate and make decisions on the use of digital technology and data in city operations, as well as applications from the private sector that involve the use of digital technology in urban spaces. The project team requested the Panel's feedback on the Plan's draft guiding principles and any opportunities and concerns that the Plan should address.

Most Panelists agreed that the advent of new digital technologies and data usage in city life presents opportunities to make services and infrastructure more efficient, effective, personally tailored, and accessible. However, Panelists also noted that these technologies present possible pitfalls in the forms of exclusion, bias, and privacy concerns. Panelists urged the City to ensure that the Plan's components are communicated to the public with more detail and specificity, and that it is clear what the Plan will apply to and what the City has jurisdiction over. Several Panelists also encouraged the City to include measures to improve public literacy about technology and data to help ensure that the public can engage meaningfully on this issue and help provide necessary democratic oversight of these new technologies.

Panelists broadly felt that the Plan's draft guiding principles were a good start, but had suggestions on how to improve them. Most Panelists specifically noted that there will likely be instances when the draft principles are in conflict with each other — for example, economic benefits could conflict with environmental benefits, and privacy could conflict with the desire to provide efficient City services. They suggested that the Plan include a framework for weighing and resolving these challenging trade-offs. Panelists also provided specific feedback on how to make the guiding principles more clear, such as defining key terms like 'ethical' and 'timely', including more specific examples of how the principles may be applied, and being clear about jurisdictional authority over different digital infrastructure issues. Panelists also suggested including more detail on how the guiding principles can support important City priorities like accessibility and affordability.

Detailed Summary

The City is currently developing a Digital Infrastructure Plan to help regulate the use of digital technologies and data use in city life. This Plan would apply both to the internal decisions and policies of the City, as well as to external applications received by the City that are related to the digital realm. Michael Noble, Senior Planner at the Waterfront Secretariat, presented to the Panel about the forthcoming Plan and asked the Panel for their input on the Plan's draft guiding principles.

The draft guiding principles provided to the Panel were:

- **Equity and Inclusion.** *Digital infrastructure will be used to create and sustain equity and inclusion in its operations and outcomes. Digital infrastructure will be flexible, adaptable and responsive to the needs of all Torontonians, including equity-seeking groups, Indigenous people, those with accessibility needs, and vulnerable populations.*
- **A Well-run City.** *Digital infrastructure will enable high quality, resilient and innovative public services, and support evidence-based decision-making.*
- **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.*
- **Privacy Security.** *Toronto's Digital Infrastructure must operate in a way that protects the privacy of individuals in accordance with privacy laws, and be safe from misuse, hacks, theft, or breaches.*
- **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.*

Discussion

Following the presentation, the Panel discussed two questions:

1. Are these guiding principles sufficient to guide the City's approach to managing data and technology?
2. What opportunities and concerns related to data and technology should the City address in the new Digital Infrastructure Plan?

Feedback on the draft guiding principles

Most Panelists agreed that the guiding principles presented by the project team were headed in the right direction, but had many comments and suggestions on how they could be improved.

- Most Panelists noted that there may be instances where the principles are in conflict with each other. Some Panelists argued that the third principle — which is about promoting social, economic, and environmental benefits — may not always provide a clear path forward for the City. There may be instances where economic benefits are in conflict with environmental benefits, for example. Another group cited a possible scenario where prioritizing improved services may lead to trade-offs in terms of user privacy. Panelists suggested the City

preemptively develop a framework to manage these inevitable competing priorities and trade-offs to ensure that the Plan can help the City effectively manage technology and data.

- Most Panelists also thought the City could improve their explanation and communication about the Plan, and that they could make the guiding principles more specific and clear.
 - Many Panelists suggested being more clear about what types of projects and policies the Plan will apply to, and what the City's precise jurisdiction over this issue is.
 - Several Panelists suggested the Plan provide a more specific definition for each guiding principle, including examples of ways the Plan and the guiding principles might be used in the future.
- A few Panelists suggested the City consider changing the order the principles are presented in so that principles four and five (Privacy and Security, and Democracy and Transparency) come first and second. These Panelists suggested this because they felt these principles are likely to be the most immediately important to most Torontonians.
- Related to Principle 1 (Equity and Inclusion), several Panelists suggested that the City emphasize accessibility more, and make sure to include, whether in the guiding principles or elsewhere in the Plan, how the Plan will incorporate AODA standards and encourage accessibility more broadly through the use of technology and data.
- Related to Principle 2 (Well-run City), several Panelists suggested that the City broaden its definition of a well-run city to include affordability, in that digital infrastructure should support improved affordability for all Torontonians.
- Related to Principle 3 (Social, Economic, and Environmental Benefits), many Panelists suggested that this principle may be too broad. Some Panelists noted that lumping social, economic, and environmental benefits together overlooked the ways in which these benefits may be in conflict with each other at times. A few Panelists also suggested that the City should expand its definition of social benefits to include health and safety. A few other Panelists also suggested that the language of "supporting the success of Toronto's residents...etc" potentially made the principle sound too focused on economic benefits over other benefits.
- Related to Principle 5 (Democracy and Transparency), Panelists suggested the City provide more detail on what is meant by terms like 'ethical' and 'timely', since these can be subjective.

Feedback on opportunities and concerns

Panelists also had broader feedback on the different opportunities and concerns that should be addressed elsewhere in the Digital Infrastructure Plan.

- Most Panelists agreed that the advent of digital technologies and data collection in city life presented opportunities to make services and infrastructure more efficient, effective, personally tailored, and accessible, and that the Plan should address and maximize these opportunities.

- Panelists pointed to opportunities to use data to better understand community well-being, to address traffic congestion and improve transit service, to track and understand the economic development of local businesses, to better predict and act on city maintenance and infrastructure repairs like street lights and potholes, and to evaluate and assess the effectiveness of city programs. Several Panelists also expressed an interest in the opportunity to use data to improve pedestrian safety.
- Several Panelists suggested the Plan include a substantive education and outreach element. Panelists felt that there is not a widely-shared understanding among the public of how this technology works, how data is collected and used and why, and how to interpret data. Panelists felt this lack of understanding could negatively impact the public's ability to engage in a meaningful conversation about the trade-offs inherent in new technologies, and would also hamper the City's ability to ensure democratic oversight of these technologies.
- Several Panelists were concerned about the possibility of bias when data is driving decisions. Panelists noted that not all data is objective and inclusive, and that relying too much on data can present limitations or challenges. Panelists suggested going forward, Torontonians would want to know how their data might be collected, processed, portrayed and presented. This would also include providing more transparency around how data is used to inform City decision-making.
- Several Panelists suggested privacy would be a major concern for Torontonians, and that the benefits of data and technology would need to be balanced against this issue. Panelist suggested the City could address this further in the Plan by:
 - Establishing a broader set of guidelines or values related to how the City will manage privacy and security. Panelists felt that this would help the City to prepare for unforeseen circumstances in a rapidly changing landscape, where legislation and policy might not always keep up with new technological developments;
 - Ensuring best practices for data collection are followed, that people are informed and educated about their rights regarding technology and data use, including consent, and that all of this is communicated in a way that is easy for people to understand;
 - Including a framework to address data sharing and to clarify under what circumstances this will be permitted, (for example, in what scenarios will the City consider data-sharing to be a worthwhile trade-off for other benefits?)
 - Providing more detail about how data ownership will be handled and under what circumstances the City will permit data collection.
- Several Panelists were concerned with the issue of how the Plan would be enforced, and how projects would be held accountable to the guiding principles and standards, particularly projects that are not City-run.
- A few Panelists specifically wanted the Plan to be clear about when project applications would be required to be made available to the public to ensure transparency.
- A few Panelists suggested that as the City moves towards introducing new technology and providing more digital public services, that the Plan should consider how to include people who are not digitally connected.

- A few Panelists suggested that the Plan be sure to address data quality, noting the possible negative impacts of poor-quality data collection on City decision-making.