PUBLIC ACCOUNTABILITY IN SMART CITY PROJECTS:

Analysing proposals for Canada's Smart Cities Challenge

Dominique Camps — Master of City Planning Capstone

EXECUTIVE SUMMARY

In 2017, the Federal Government launched the Smart Cities Challenge (SCC), calling for municipalities, local and regional governments, and First Nations across Canada to submit proposals addressing their communities' most pressing issues through innovation, data, and connected technologies. This research investigates the extent to which proposals for the SCC address issues of public accountability. The literature on smart cities identifies public accountability as a major challenge resulting from the multi-actor collaboration that typically drives such projects.

As a model for promoting and funding smart city projects, the SCC differs greatly from the corporate-led smart cities most critiqued in the literature, thus warranting research into how it may have mitigated the identified challenges.

Overall, this study suggests that, despite the accountability challenges commonly associated with smart city projects in the literature, the SCC's requirements, structure, and process steered the proposals towards adopting a high standard of public accountability.

CASE STUDIES

This research analyses the SCC competition guidelines and proposals from three of the SCC finalists: the city of Richmond, a joint proposal from Vancouver and Surrey, and the South Island Prosperity Partnership (SIPP) in the Greater Victoria Region.
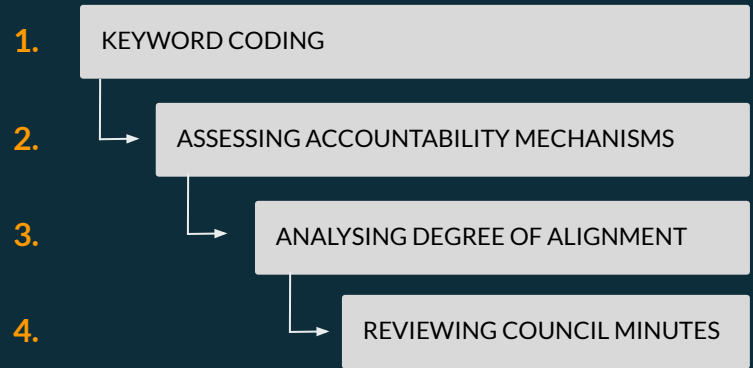
RESEARCH QUESTIONS

1. How do the proposals address accountability and transparency?

2. How do the strategies / directions in the proposals align or diverge from those communities' pre-existing plans and frameworks?

3. What do the findings of this study reveal about the implications of government-sponsored innovation competitions for smart city project planning?

METHODS

Using four methods of content analysis, the SCC guidelines and proposals are evaluated for how they address public accountability, the proposals' alignment with existing planning directions, and their adherence to standard planning procedures.

1. | KEYWORD CODING |
2. | ASSESSING ACCOUNTABILITY MECHANISMS |
3. | ANALYSING DEGREE OF ALIGNMENT |
4. | REVIEWING COUNCIL MINUTES |

1.   KEYWORD CODING

Method: The proposals were first coded for explicit mentions of accountability and transparency. The findings were coded based on concepts identified in the literature and by the context in which they were mentioned.

Results: All of the documents mentioned both accountability and transparency at least once, but transparency was mentioned more frequently than accountability across all documents. Accountability was referred to most frequently as a mechanism, while transparency was used most frequently as a virtue.

Accountability as a virtue: Used as a synonym for good governance practices (Bovens, 2010)

Accountability as a mechanism: Refers to "a relationship between an actor and a forum, in which the actor has an obligation to explain and justify his or her conduct, the forum can pose questions and pass judgement, and the actor may face consequences" (Bovens, 2007, p.450).

Transparency as a virtue: Used as a synonym for good governance practices.

Active transparency: Refers to when the government voluntarily makes information available to the public (Mabillard, 2016).

Keyword Coding: Accountability and Transparency

■ Accountability: Virtue   ■ Accountability: Mechanism   ■ Transparency: Virtue   ■ Transparency: Active
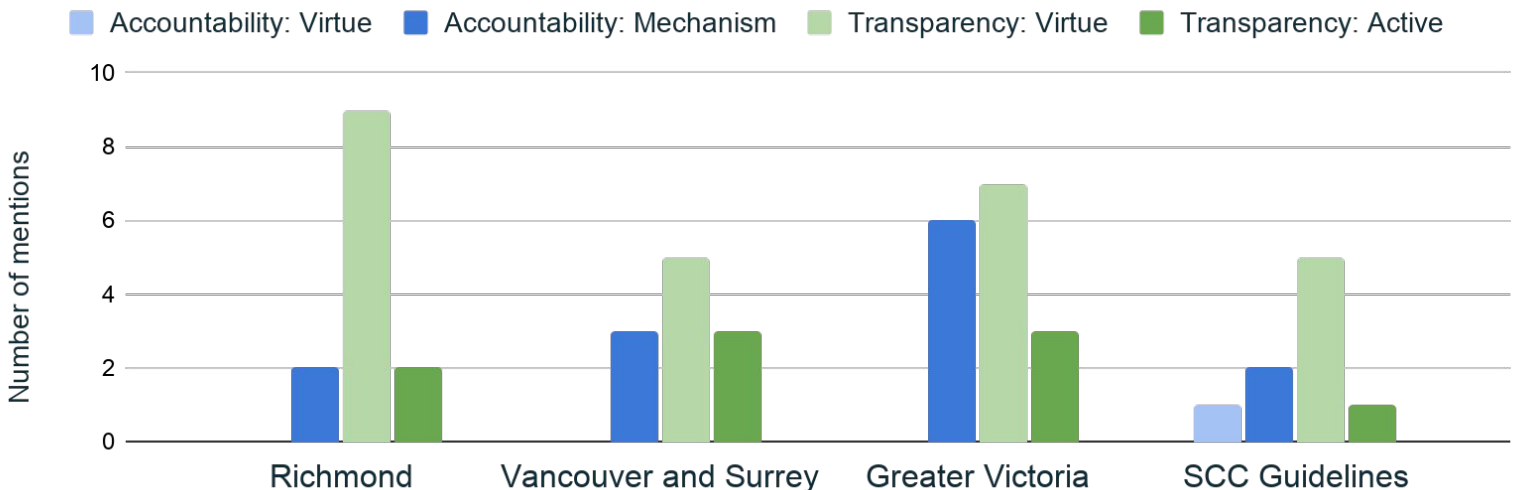
2. ASSESSING THE PREVALENCE OF ACCOUNTABILITY MECHANISMS

Method: The second method was to assess the prevalence of specific accountability mechanisms in the SCC proposals and guidelines.

This analysis used a framework developed by Mees and Driessen (2019) for evaluating public accountability in local governance arrangements. The framework uses a three point scale to evaluate the prevalence of five accountability mechanisms, based on accountability challenges commonly cited in the literature.

MECHANISM	INDICATORS FOR DEGREE OF PREVALENCE	RICHMOND	VANCOUVER & SURREY	GREATER VICTORIA	SCC GUIDELINES
Clear responsibilities and mandates	**LOW**: There is clarity of responsibilities. Each partner has specific responsibilities and these are laid down in written form				LOW
	MEDIUM: There is clarity of responsibilities and mandates of the network, and the network is authorized to do what it has been created for by the partners in the network, so that that those constituencies can hold the network accountable			MEDIUM	
	HIGH: There is clarity of responsibilities and mandates of the network; and the network is mandates not only be the partners in the network, but also by elected politicians	HIGH	HIGH		
Transparency	**LOW**: The network provides regular narrative accounts of its decisions				
	MEDIUM: There is transparency of rules and produces for decision-making and of goals and performance standards of the network			MEDIUM	
	HIGH: There is transparency of rules and procedures for decision-making, and the network provides justifications for their decisions. The goals and performance standards, sources of funding and spending outcomes are disclosed	HIGH	HIGH		HIGH
Political oversight	**LOW**: Politicians are informed of the decisions of the network in a timely manner, and have a set of performance standards by which they can hold the network accountable				
	MEDIUM: Elected politicians can ratify the key decisions of the governance network	MEDIUM	MEDIUM		MEDIUM
	HIGH: Elected politicians are part of the governance network and are able to co-decide on key decisions			HIGH	

MECHANISM	INDICATORS FOR DEGREE OF PREVALENCE	RICHMOND	VANCOUVER & SURREY	GREATER VICTORIA	SCC GUIDELINES
Citizen control	**LOW:** Citizens can hold the governance network accountable by asking questions to monitor the progress				
	MEDIUM: Citizens can hold the governance network accountable by asking questions to monitor the progress, and by passing judgments on a limited range of decisions	MEDIUM	MEDIUM		MEDIUM
	HIGH: Citizens can ask questions, pass judgment and define corrections to ensure responsiveness			HIGH	
Additional checks and sanctions	**LOW:** There are means of control within the organizations of each partner in the network, and for the projects as a whole from the side of the local public officials and/or external auditors				
	MEDIUM: Next to internal control within the partner organizations, the network has developed and agreed upon self-evaluations, peer assessments and professional codes of conduct for mutual checks and balances	MEDIUM	MEDIUM	MEDIUM	MEDIUM
	HIGH: Next to internal control within the partner organizations and self-evaluations of the network, there is a strong threat from naming and shaming as a/ corrective mechanism				

(Mees and Driessen, 2019)

ASSESSING THE PREVALENCE OF ACCOUNTABILITY MECHANISMS (continued)

Results: This assessment found that all three proposals had a high or medium prevalence of each accountability mechanism. The high prevalence is remarkable because, according to the literature, these accountability mechanisms are all common shortcomings of the complex, multi-partner collaboration that often supports the development of smart city projects.

With one exception, the proposals scored the same as, or higher than, the competition guidelines. This suggests that the strong performance of the proposals might have been in response to the expectations established in the competition guidelines. For example, the SCC guidelines received a high score for the transparency mechanisms because they required "[the provision of] a financial plan for the implementation phase, including: Comprehensive project budget with a detailed breakdown of projected revenues... and expenses by year, source, and cost type" (Infrastructure Canada, 2018). In response, the proposal from Richmond also scored highly for transparency because it included tables detailing the budget per SCC project, prior contributions from the City towards supporting initiatives, and contributions from private partners (City of Richmond, 2019).

3. ANALYSING DEGREE OF ALIGNMENT

Method: The third method of analysis examines the alignment between the proposals and the relevant planning documents from each city. This method aimed to identify whether the proposals were diverging from planning directions already established by city planners and council. The relevant plans from each city (see Table) were reviewed for commonalities with the challenge statements, main projects and main project outcomes from each of the three SCC proposals.

Results: This method found that the proposals were all reasonably aligned with the established planning directions for each city. This suggests that, contrary to concerns raised in the literature (Dameri, 2016), the private partners involved in the proposals were not swaying city policies away from established directions.

CITY OF RICHMOND

Official Community Plan (2012)
Flood Mitigation Strategy Update (2019)
City Centre Transportation Plan Update (2009)

CITY OF VANCOUVER & CITY OF SURREY

City of Vancouver Official Development Plan (2013)
City of Vancouver Transportation 2040 (2012)
City of Surrey Official Community Plan (2013)
City of Surrey Transportation Strategic Plan (2008)

GREATER VICTORIA

Regional Growth Strategy (2018)
Regional Transportation Plan (2014)
SIPP Vision 2040 (2018)

4. REVIEWING COUNCIL MINUTES

Method: The fourth method entailed reviewing council minutes from May 2017 to 2019 for each city to find relevant mentions of the SCC proposals. For this research, the frequency of the mentions of the SCC in council meetings, and whether they were for information or for decision, would have implications about the democratic legitimacy behind the proposals.

Results: The results were variable, with Richmond presenting only once to council, while the SIPP consulted with the City of Victoria's Council six times, for information and decision, and at meaningful points in the competition process.

Mentions of the SCC in council meetings
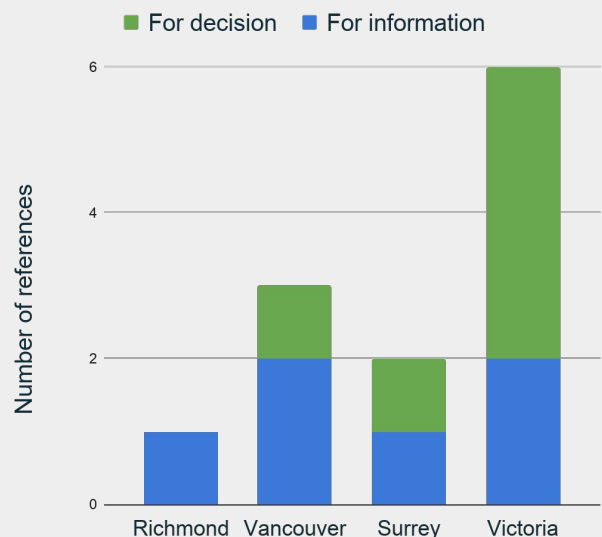
SUMMARY OF FINDINGS

Initial analysis for explicit mentions of accountability and transparency finds that both terms are directly addressed in the SCC proposals and the guidelines. The framework developed by Mees and Driessen (2019) found that the proposals all showed a high or medium prevalence of the five studied accountability mechanisms. Through comparing the SCC proposals with those communities' pre-existing planning documents, this research finds that the strategic directions of the proposals are generally aligned with their communities' high-level planning priorities. A review of the council minutes for each community found variable levels of consultation between the SCC project teams and their respective city councils.

DISCUSSION

Through the findings synthesized from all four research methods, and compared with the literature review, this paper finds that despite the extensive challenges associated with smart city governance, the structure of the SCC enabled the development of proposals with a high prevalence of public accountability. Future research should expand on the potential role of national governments in local smart city planning, follow up on the results of the winning proposals, and further operationalize nuanced frameworks for evaluating public accountability in complex governance arrangements.

In the near term, the SCC guidelines can be used as a valuable resource for planners interested in developing smart city initiatives. Specific requirements for meaningful public engagement, clear governance and project management structures, and financial transparency are highly transferable best practices. Furthermore, the process of establishing planning directions through community consultation prior to locking in to specific projects with private partners was likely instrumental to the SCC proposals, and is applicable to a variety of planning processes beyond just those focused on smart cities.

Government-sponsored innovation competitions:
This research found the SCC competition structure to have played an essential role in incentivizing the proposals to adopt a high standard of public accountability. Despite the ubiquity of government-sponsored smart city competitions, there is limited discussion in the literature about the implications of this model.

The legacy of the Smart Cities Challenge:
A limitation of this study was its focus on proposals to the SCC, instead of the implemented winning projects. Future research should explore whether the trends identified in this study are present in the completed projects in Montreal (QC), Bridgewater (NS), Nunavut (NT), and Guelph and Wellington County (ON). Further study of the implemented SCC projects would be valuable not only to understand how the prevalence of accountability mechanisms may differ in a completed project versus a project proposal, but also to understand how the mechanisms may function differently in the implemented state.

Expanding the accountability literature:
Future research should continue to build on efforts to operationalize methods and frameworks for evaluating public accountability. This would be highly valuable beyond application to smart city projects. The proliferation of public-private collaboration in urban planning and decision-making (Doberstein, 2013) calls for nuanced and adaptable frameworks to evaluate the public accountability of these arrangements.

REFERENCES

Bovens. (2007). Analysing and Assessing Accountability: A Conceptual Framework. *European Law Journal*., 13(4), 447–468.

Bovens. (2010). Two Concepts of Accountability: Accountability as a Virtue and as a Mechanism. *West European Politics*, 33(5), 946–967.

City of Richmond (2019). City of Richmond Submission to the Government of Canada Smart Cities Challenge. http://smartcity.richmond.ca/wp-content/uploads/2019/03/COR-SC-PROPOSAL-FINAL-2019.pdf

Dameri, R. (2016). The Conceptual Idea of Smart City: University, Industry, and Government Vision. In *Smart City Implementation*. Springer International Publishing AG.

Doberstein, C. (2013). Metagovernance of urban governance networks in Canada: In pursuit of legitimacy and accountability: Metagovernance of Urban Governance Networks. Canadian Public Administration, 56(4), 584–609.

Impact Canada. (2017). *Applicant Guide*. https://impact.canada.ca/en/challenges/smart-cities/applicant-guide

Infrastructure Canada. (2018). Smart Cities Finalist Guide. https://impact.canada.ca/en/challenges/smart-cities/finalist-guide

Mabillard. (2016). The complex relationship between transparency and accountability: A synthesis and contribution to existing frameworks. *Public Policy and Administration*., 32(2), 110–129.

Mees, H. & Driessen, P. (2019). A framework for assessing the accountability of local governance arrangements for adaptation to climate change. *Journal of Environmental Planning and Management*, 62(4), 671–691.