INTEGRATING HEALTH INTO PLANNING PROCESSES

A Case Study of the City of Ottawa's Draft *New Official Plan*

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ABSTRACT

Chronic diseases are a major public health concern in Canada. Researchers argue that the design of cities is partially responsible for the increasing rates of chronic conditions like diabetes and heart disease. Factors such as the density and mix of land-uses as well as the layout of the street network indirectly influence the health and wellbeing of residents. While there are many studies highlighting the importance of incorporating health into planning, few studies focus on the processes or mechanisms that allow municipalities to successfully accomplish this goal.

This case-in-point project highlights how the City of Ottawa integrated health goals and policies into its draft *New Official Plan*. The project explores how the City incorporated health into policies related to the design of neighbourhoods, transportation networks, natural environments, food systems, and housing across the city. The project also analyzes the process the City used to overcome the disciplinary 'silos' and incorporate public health into its municipal planning process. Two employees from Ottawa Public Health co-located in the City of Ottawa's planning department and provided guidance on the integration of health into the New Official Plan. This was possible in part because of the unique legislative and administrative frameworks governing public health in Ontario.

1.0
INTRODUCTION

Chronic diseases are a major public health concern in Canada. As of 2016, nearly half of Canadians over the age of 20 had at least one chronic health condition. Eleven percent of Canadian adults had diabetes, 8 percent had cancer, 8 percent had heart disease, and 7 percent had dementia.[1] Physical activity is proven to reduce the likelihood of developing these chronic conditions. However, only 20 percent of Canadian adults regularly exercise for the recommended 150 minutes per week. These chronic conditions are also linked to other factors like sedentary behavior, poor diets, and social isolation.[2]

Researchers argue that the design of cities is partially responsible for the increase in chronic diseases in automobile-dependent countries like Canada. Factors such as the density and mix of land-uses as well as the layout of the street network influence individuals' transportation decisions. The availability of safe and connected active transportation infrastructure also impacts how people decide to move around cities. For example, high-density, mixed-use neighbourhoods with a gridiron street network can decrease the distance between trip origins and destinations, encouraging more people to be physically active by walking or biking. In contrast, low density, single-family residential neighbourhoods with limited commercial services and active transportation options can result in automobile dependency.[3]

In recent years, some cities have started to address this issue by incorporating health goals and policies into their planning processes. This Case-in-Point project will explore and analyze how the City of Ottawa integrated health into their draft *New Official Plan*.[i] This project is based off a larger research report developed by Urban Systems and funded by Health Canada, which explores how planning practitioners can integrate health into their work. The project included an analysis of 20 community plans from municipalities across Canada. Based on this analysis, the authors selected Ottawa's *New Official Plan* as the best example of a plan that integrates health throughout the report. Two of the authors also conducted an interview with planners from Ottawa Public Health to learn more about the planning process.

i. *The plan we reviewed was a draft from November 20, 2020. The final version of the plan will reflect some changes based on public and industry consultation.*

FIGURE 1 | Ottawa, Ontario. Source: Shutterstock.

2.0
BACKGROUND

In the nineteenth century, the rapid urbanization of cities led to overcrowded and unsanitary living conditions, which caused major health issues. Infectious diseases like tuberculosis, typhoid, and cholera spread quickly in these settings. In response to these challenges, early planners, engineers and health practitioners developed water and wastewater systems, created parks and green spaces, and established zoning systems to separate industrial and residential land uses. These innovations drastically improved living conditions in cities and led to the establishment of the fields of urban planning and public health.[4]

Despite these early collaborations, the focus of two fields diverged during the twentieth century. In general, public health practitioners shifted their attention towards individual factors that impact an individual's health like exercise, smoking, and diet. At the same time, urban planners began focusing on new suburban developments and large infrastructure projects. The result, Coburn argues, was "by the late twentieth century, the fields of planning and public health were largely disconnected from their original mission of social betterment and from working collaboratively to address the health or urban populations."[5]

In the 1980s, a renewed interest in the concept of healthy cities emerged among planning and health professionals. The World Health Organization developed the Healthy Cities Project in 1986, which aimed to integrate public health principles into urban planning processes. The project initiated a broader movement to reconnect the fragmented fields of urban planning and public health.[6] In the 2010s, the Canadian Institute of Planners (CIP) committed to supporting healthy cities and developed a *Policy for Healthy Community Planning*, which states that "all planners have a responsibility to plan and support the development of healthy communities."[7]

However, there are still barriers to this work. According to a 2013 survey by the CIP, 'silos' between planning and health departments prevent planners from integrating health into their work. Limited resources and a narrow understanding of what 'healthy' communities involve were also obstacles.[8] Another survey by the CIP from 2014 identified additional barriers to integrating health into planning. These included a lack of government or political support, the existence of other competing issues, and a lack of support among land developers. Some respondents also noted that a lack of tools, knowledge, time, and measurement mechanisms prevented them from integrating health into their work.[9]

3.0
THE CASE

At the time of writing, the City of Ottawa was in the final stages of completing the *New Official Plan*, which will provide the City with direction for the next 25 years. As part of the planning process, the City developed a series of discussion papers including one specifically focused on health, which was called *The Building Blocks for a Healthy Ottawa*.[10] This discussion paper was largely based on a framework developed by the BC Centre for Disease Control called the *Healthy Built Environment (HBE) Linkages Toolkit*, which is divided into five themes: Neighbourhood Design, Transportation Networks, Natural Environments, Food Systems, and Housing.[11] Many of the ideas from Ottawa's discussion paper are incorporated into the draft *New Official Plan*.

The draft *New Official Plan* is organized around five 'Big Policy Moves' that frame the overall plan. One of these policies is embedding "environmental, climate and health resiliency and energy into the framework of our planning

policies."[12] The draft plan also includes six cross-cutting issues that are embedded throughout the report. 'Healthy and Inclusive Communities' is one of these issues. The draft plan acknowledges that the "the city's physical layout and design play an important role in shaping health and well-being by enabling Ottawa's diverse population to thrive and live their lives to the fullest."[13]

> "The city's physical layout and design play an important role in shaping health and well-being by enabling Ottawa's diverse population to thrive and live their lives to the fullest."
> — **The City of Ottawa's Draft *New Official Plan***

The City of Ottawa's draft *New Official Plan* includes four overarching strategies to enhance public health. The first is to encourage the development of compact, diverse '15-minute' neighbourhoods where residents can easily walk to many of the services they use on a daily basis. To achieve this, neighbourhoods must be dense and contain a mixture of housing options, shops, services, schools, greenspaces and employment opportunities. The second strategy in the plan is to develop inclusive and age-friendly communities that are accessible to older adults and children. The third strategy is to promote health through sustainability initiatives such as incorporating trees and trail systems into the built environment. More broadly, the plan also seeks to acknowledge the connections between public health and various aspects of the built

FIGURE 2 | Ottawa, Ontario. Source: Shutterstock.

environment, including transportation systems, housing, public spaces, and the natural environment.

To achieve these strategies, the draft plan includes embedded policies throughout the document to enhance public health (see Appendix A for a list of all policies related to the 'Healthy and Inclusive Communities' theme). For example, there are detailed policies related to the 'Healthy and Inclusive Communities' theme within sections on Mobility, Housing, Parks and Recreation Facilities, Urban Design, School Facilities, among others. The draft plan also includes a number of area-specific policies related to the 'Healthy and Inclusive Communities' theme.

4.0
DISCUSSION

Planners at the City of Ottawa successfully integrated health into their draft *New Official Plan*. As shown in **Figure 3**, Ottawa's Plan addresses nearly all of the recommended policy ideas in the HBE Linkages Toolkit. The plan encourages pedestrian friendly neighbourhood design, prioritizes active transportation in urban areas, and commits to ensuring all residents have access to green spaces. It also encourages a diverse range of housing types and makes it easier to open a grocery store or develop a community garden in most neighbourhoods.

FIGURE 3 | Comparison of Policies in the HBE Linkages Toolkit and the City of Ottawa's New Official Plan		
	Policies in the *Healthy Built Environment Linkages Toolkit*	**Policies in the City of Ottawa's Draft *New Official Plan***
Neighbourhood Design	• Encourage a mix of residential and commercial land uses • Support the development of compact, dense communities • Increase connectivity by prioritizing street grids over cul-de-sacs and creating multi-use paths • Encourage infill development and brownfield reclamation	• Create '15-minute' neighbourhoods with dense mix of local amenities • Includes a Growth Management Strategy to promote infill development, with a target of new developments being 60% by 2060 • Enhance street connectivity in urban and suburban neighbourhoods
Transportation Networks	• Prioritize active transportation with dedicated infrastructure and traffic calming measures • Ensure active transportation facilities are safe and welcoming for all through physical separation and signage • Create convenient connections between multiple transport modes including walking, busing, and busing • Make active transportation networks aesthetically appealing	• Prioritize the mobility of pedestrians, cyclists and transit users in urban areas • Implement Transportation Demand Management strategies to encourage active transportation • Ensure large facilities and institutions are within 400 metres of high-quality transit • Invest in high-quality public spaces and streets that encourage active transportation
Natural Environments	• Connect and preserve natural spaces • Ensure green spaces are easily accessible to all residents • Incorporate natural elements like tress, urban agriculture, and water bodies into the built environment	• Develop new parks in inner-city neighbourhoods and larger parks in suburban areas • Develop an urban forest canopy of 40% • Ensure all residents are within 400 metres of greenspace
Food Systems	• Increase access to affordable and healthy food • Support and protect local agricultural systems • Support local food programs	• Classify grocery stores, community gardens, and greenhouses as Generally Permitted Uses within most land-use designations • Protect farmland in rural areas
Housing	• Encourage the development of diverse housing types and tenures • Ensure everyone has access to adequate housing with heating and venting systems • Develop specialized housing for disadvantaged community members • Reduce residential exposure to industrial or hazardous areas	• Promote housing with diverse types, tenures, and sizes • Support the development of 'missing middle' or low-rise, multi-unit housing options • Protect the city's rental stock and encourage more rental developments • Permit affordable options for individuals including rooming homes, group homes, etc.

In addition to integrating policies to promote public health throughout the plan, Ottawa's draft *New Official Plan* includes a short section explicitly focused on the 'Healthy and Inclusive Communities' cross-cutting theme. This section connects physical inactivity, sedentary behaviour, and poor dietary habits to the design of the built environment, and acknowledges these factors contribute to chronic diseases including cancer, dementia and heart disease. Research suggests this section was crucial to the success of the overall plan. For example, in a review of seven comprehensive plans, researchers found that including a chapter focused on health in urban planning documents "ensured that there was a greater emphasis placed on public health throughout other chapters."[14]

As well, it was important for planners at the City of Ottawa to integrate health policies into the official plan rather than in a separate planning document. According to the Government of Ontario's Planning Act—and comparable provincial legislation across the country—all secondary plans and municipal by-laws must conform to the municipality's official plan. This means that the City of Ottawa cannot enact a by-law that contradicts policies in their *New Official Plan*. If the City had created a separate strategy to promote healthy living through the built environment, the strategy would not have had the same 'teeth.' For example, the City of Vancouver has a *Healthy City Strategy* that is separate from the City's Official Community Plan. The strategy emphasizes the importance of affordable housing, healthy food, and neighbourhood designs that encourage physical activity.[15] However, the policies in Vancouver's *Healthy City Strategy* are not binding in the same way as policies in the City's official community plan.

The City of Ottawa was able to successfully integrate health policies into the *New Official Plan*, in part, because of Ontario's provincial legislation. In most provinces, health care is a primarily a provincial responsibility. The one exception is Ontario, where municipal governments play a key role in the provision of health services, including public health. In Ontario, there are 35 public health units funded by both the provincial and municipal governments, which may make it easier for municipal employees to work with public health professionals.[16] For example, in the *Legislative Comparison Survey Report* by the CIP, one interview participant from Ontario said many regional councils "are in charge of both regional planning and (public) health delivery, so the connection is automatically made at that level."[17] This makes it easier for public health and planning practitioners to integrate their professional silos, which planners noted is a barrier to integrating health into the planning process.

> Many regional councils in Ontario "are in charge of both regional planning and (public) health delivery, so the connection is automatically made at that level."
> — The Canadian Institute of Planner's *Legislative Comparison Survey Report*

In this case, Ottawa Public Health oversees all public health planning in the city and receives funding from both the provincial and municipal government. One of the organization's strategic goals in 2019 was to support the creation of healthy communities by integrating public health into the City's official plan.[18] To accomplish this, Ottawa Public Health and the City of Ottawa established a staff co-location initiative. One planner and one environmental and health specialist from Ottawa Public Health were physically co-located within the City of Ottawa's Planning, Infrastructure and Economic Development department. These employees were able to provide guidance and input on various planning processes, including the integration of health into the *New Official Plan*. This co-location was possible because Ottawa Public Health is part of the City of Ottawa's administrative structure.[19] The Public Health employees may have also been able to successfully break down the disciplinary 'silos' between planning and health because one of them was a professional planner who was familiar with urban planning processes and lexicon.

5.0
LESSONS LEARNED & CONCLUSION

The City of Ottawa's draft *New Official Plan* highlights how cities can incorporate public health goals and policies into their official community plans. The case study highlights three lessons for professional planners:

1. Planning largely moved away from its original goal of improving the health and well-being of residents in the twentieth century. In recent decades, there has been a movement to reintegrate the fields of public health and planning. This case study highlights one potential mechanism for integrating the fields.

2. In addition to acknowledging the importance of healthy communities, planners and public health practitioners should integrate detailed health policies throughout official community plans. Examples of these policies are included in Figure 1. This will ensure that the municipality's secondary plans and by-laws conform to and support the broader public health goals.

3. The legislative and administrative frameworks that govern the provision of public health services matter. In the case of Ottawa, public health professionals were able to co-locate and help integrate health in the official plan partially because Ottawa Public Health is administratively part of the City of Ottawa.

While this project highlights one mechanism that municipalities can use to integrate health into municipal planning processes, more research is needed on other successful processes and administrative frameworks. This research could help ensure that health goals and policies are incorporated into urban planning processes across the country.

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APPENDIX A: HEALTH POLICIES IN OTTAWA'S DRAFT *NEW OFFICIAL PLAN*

Category	Policies related to the 'Healthy and Inclusive Communities' Cross-Cutting Theme
City Wide Policies	
Growth Management	• 3.2 Support Regeneration • 3.3 Design new communities to be 15-minute neighbourhoods • 3.5 Meet Employment Needs
Mobility	• 4.1.1 Provide mobility options to safely and equitably navigate the city • 4.1.2 Promote healthy 15-minute neighbourhoods • 4.1.3 Support growth management and a greener and more resilient city • 4.1.4 Support the shift towards sustainable modes of transportation
Housing	• 4.2.1 Enable greater flexibility and an adequate supply and diversity of housing options throughout the city • 4.2.3 Protect existing rental housing stock and support the production of more rental units • 4.2.4 Direct attention to the needs of those at and below the 6th income decile, as well as other vulnerable groups
Large Scale Institutions & Facilities	• 4.3.1 Ensure Large-scale Institutions and Facilities are within 400 metres of rapid transit or along a Corridor with frequent street transit • 4.3.2 Design Large-scale Institutions and Facilities to coordinate with the existing urban fabric
Parks and Recreation Facilities	• 4.4.1 Identify park priorities within Ottawa's growth areas • 4.4.3 Provide new parks in the Downtown Core and Inner Urban Area • 4.4.4 Emphasize larger parks in Outer Urban and Suburban Areas • 4.4.5 Locate new rural parks in villages • 4.4.6 Design parks that contribute to quality of life and respond to climate change to the satisfaction of the Department responsible for recreation
Cultural Heritage and Archaeology	• 4.5.1 Conserve properties and areas of cultural heritage value
Urban Design	• 4.6.1 Promote design excellence in Design Priority Areas • 4.6.3 Ensure capital investments enhance the city's streets, sidewalks, parks, and other public spaces supporting a healthy lifestyle • 4.6.4 Apply innovative design practices and technologies in site planning and building design • 4.6.5 Ensure efficient site planning that supports the vibrancy of Ottawa's Hubs and Mainstreets that respects the character of our neighbourhoods, villages and rural landscapes. • 4.6.6 Enable the compatible development of low-rise, mid-rise and high-rise buildings to ensure Ottawa meets its regeneration targets while considering livability for all
Drinking Water, Wastewater and Stormwater Infrastructure	• 4.7.1 Provide adequate, cost-effective drinking water, wastewater and stormwater infrastructure, and assist in meeting growth targets in the urban area
Natural Heritage, Greenspace, and the Urban Forest	• 4.8.1 Protect the City's natural environment through identification of a Natural Heritage System, natural heritage features, and related policies • 4.8.2 Provide residents with equitable access to an urban forest canopy • 4.8.3 Provide residents with equitable access to an inclusive urban greenspace network.
Water Resources	• 4.9.1 Protect, improve or restore the quality and quantity of surface water features and groundwater features

Category	Policies related to the 'Healthy and Inclusive Communities' Cross-Cutting Theme
School Facilities	• 4.10.1 Make it safe and easy to walk, bike or take a bus to school through supportive site and neighbourhood design • 4.10.2 Locate schools and other community uses close together to provide convenient access to residents • 4.10.3 Make trees an important component of a school's outdoor space
Protection of Health and Safety	• 10.1 Prevent injury, loss of life and property damage • 10.2 Minimize incompatible land-uses • 10.3 Build resiliency to the impacts of extreme heat • 10.4 Enhance personal security through design
Area Specific Policies	
Downtown Core Transect	• 5.1.1 Maintain and enhance an urban pattern of built form, site design, and mix of uses • 5.1.2 Prioritize walking, cycling and transit within, and to and from, the Downtown Core
Inner Urban Transect	• 5.2.1 Enhance or establish an urban pattern of built form, site design and mix of uses • 5.2.2 Prioritize walking, cycling and transit within, and to and from, the Inner Urban Transect
Outer Urban Transect	• 5.3.2 Enhance mobility options and street connectivity in the Outer Inner Urban Transect • 5.3.3 Provide direction to the Hubs and Corridors located within the Outer Urban Transect
Suburban Transect	• 5.4.2 Enhance mobility options and street connectivity in the Suburban Transect • 5.4.3 Provide direction to the Hubs and Corridors located within the Suburban Transect • 5.4.4 Provide direction for new development in the Suburban Transect • 5.4.5 Provide direction to Neighbourhoods located within the Suburban Transect
Greenbelt and Rural Transect	• 5.5.1 Recognize a rural pattern of built form and site design
Hubs	• 6.1.1 Define the Hubs and set the stage for their function and change over the life of this Plan • 6.1.2 Set out the direction for Protected Major Transit Station Areas (PMTSAs)
Corridors	• 6.2.1 Define the Corridors and set the stage for their function and change over the life of this Plan
Neighbourhoods	• 6.3.2 Guide the evolution of neighbourhoods based on their context, location, age, maturity and needs, generally toward the model of 15-minute neighbourhoods • 6.3.3 Ensure that neighbourhoods form the cornerstone of liveability in Ottawa
Traditional Industrial Freight and Storage	• 6.4.2 Ensure adverse impacts on sensitive uses are minimized
Non-Traditional Industrial Mixed	• 6.5.2 Act as a transition between neighbourhoods and industrial areas • 6.5.3 Permit small scale neighbourhood-based uses along the edge of NTIM areas where they interface with neighbourhoods
Special Districts	• 6.6.1 Strengthen the role of Special Districts as places that define the city, and increase their contribution to Ottawa's culture
Greenspaces	• 7.1 Provide convenient, inclusive access to a variety of greenspaces across the city • 7.2 Design and animate certain types of publicly owned greenspace to enhance their contributions to healthy, active communities • 7.3 Protect the ecosystem services of natural features and recognize their role in building resilience to future climate conditions

Category	Policies related to the 'Healthy and Inclusive Communities' Cross-Cutting Theme
Greenbelt	• 8.4 Ensure development is compatible with the surrounding area and maintains the landscape characteristics of the Greenbelt
Rural Designation	• 9.1.1 Protect farmland from uses that would impede productive farming operations
Village	• 9.4.1 Consider villages as rural communities that should evolve into 15-minute neighbourhoods, particularly those that are fully serviced • 9.4.2 Ensure all development maintains rural and village character, and to facilitate the use of active transportation for short trips within each Village