

EVIDENCE BRIEF

The **Social Sciences and Humanities Research Council** in collaboration with **Infrastructure Canada**

SSHRC's Imagining Canada's Future initiative mobilizes social sciences and humanities research to address emerging economic, societal and knowledge needs for Canada, and help guide decision-making across all sectors toward a better future. This evidence brief addresses the Future Challenge Area of: **Mobility and Public Transit**

Evaluating transportation policies and practices in Canada's largest municipalities

About the project

Land use planning and transportation planning are linked and influence each other in complex ways, but they continue to be treated as separate in practice. Successful integration of land use and transportation can lead to decreased traffic congestion, improved public transit and reduced greenhouse gas (GHG) emissions, while weak connections can result in sprawling patterns of land development, increased automobile dependence and poor air quality.

The purpose of this project is to investigate leading practices used to integrate land use and transportation planning in Canada's largest municipalities. This is accomplished through a systematic review of the land use and transportation planning scholarship, and content analysis of municipal official plans. Official plans are particularly useful for mainstreaming transportation concerns into the local development planning and decision-making processes, as they are long-range

documents that identify the major challenges facing communities and articulate strategies to address them, including through general land use provisions.

A literature review of transportation planning best practices is used to inform the content analysis of official plans for 30 of the largest English-speaking municipalities in Canada based on a plan quality evaluation framework. Plan quality is used to systematically assess the contents and quality of different types of plans using a common set of characteristics, including plan fact base; goals and policies, and provisions around implementation, monitoring and evaluation; and organizational coordination. These characteristics are used to assess the integration of transportation content in municipal official plans, and for measuring the success of transportation provisions found in plans.

Key findings

The literature review revealed five main themes in the transportation planning scholarship: (1) transportation system effectiveness, (2) environmental sustainability, (3) human health and well-being, (4) social justice and equity, and (5) economic sustainability. To assess the degree of integration of the transportation planning best practices in land use planning documents, the study team conducted a plan quality evaluation of municipal official plans. Key results of the plan quality evaluation are summarized below:

- **Fact base:** Most official plans included information on how transportation planning can help achieve land use goals (n=26, 87%), and discussed the need to integrate transportation and land use planning (n=24, 80%). Few official plans discussed the factual basis for improving equity and social justice through transportation planning (n=2, 7%).
- **Goals:** All plans included some goal related to improving transportation system effectiveness (n=30, 100%), and most sought to improve environmental sustainability (n=24, 80%) and human health and well-being (n=23, 77%). Few plans (n=9, 30%) had goals related to increasing equity and social justice.
- **Policies:** Most official plan policies were focused on improving transportation system effectiveness, while a handful of policies sought to improve economic sustainability and social equity in the transportation system.
- **Implementation:** While most official plans included a section addressing implementation (n=29, 97%), few contained specific details on how implementation would occur.

- **Monitoring and evaluation:** About two thirds of plans included a section discussing monitoring and evaluation (n=20, 67%); however, most did not provide details on specific indicators needed to measure performance (n=4, 13%), including data sources (n=1, 3%).

Three key themes emerged from the results of the plan quality evaluation:

- **Disconnect between the land use and transportation scholarship and transportation content in official plans**

Our analysis of official plans revealed that social justice and equity and economic sustainability were rarely discussed in relation to transportation and land use planning, despite being prominent in the planning literature.

- **Absence of data informing the fact base of official plans and data for monitoring and evaluating transportation goals and policies**

There was an absence of rigorous data to inform the fact base of official plans, as well as a lack of data for monitoring and evaluating transportation goals and policies.

- **Challenges to implementation**

While most municipal official plans included a broad section dedicated to implementation, few provided detail on how, when and by whom transportation-related policies would be implemented.

Policy implications

The implications for land use and transportation planning include:

- **Addressing equity concerns in transportation and land use planning.** Transportation and land use professionals should enhance their analysis of the winners and losers of transportation and land use planning decisions, including producing clear and accurate data about the impacts on specific groups.
- **Using data to support land use and transportation decisions.** Municipal official plans should contain a comprehensive empirical foundation that informs transportation goals and policies, including analysis of how transportation planning can help meet land use goals and a review of existing and future state of municipal transportation systems and the impacts of transportation on environmental and economic sustainability, human health and well-being, and equity and social justice.
- **Identifying appropriate indicators to support effective monitoring and evaluation of plan progress and success.** Municipal official plans should include indicators that are sensitive to changes in transportation systems and land use, and be readily interpretable and communicable.
- **Using an integrated approach to land use and transportation planning.** Transportation and land use planning should be integrated and mutually reinforcing, recognizing that decisions around land use will have an impact on current and future demand for transportation services.

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FURTHER INFORMATION

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