



THE SCHOOL ZONE AND NUTRITION: COURSES OF ACTION FOR THE MUNICIPAL SECTOR

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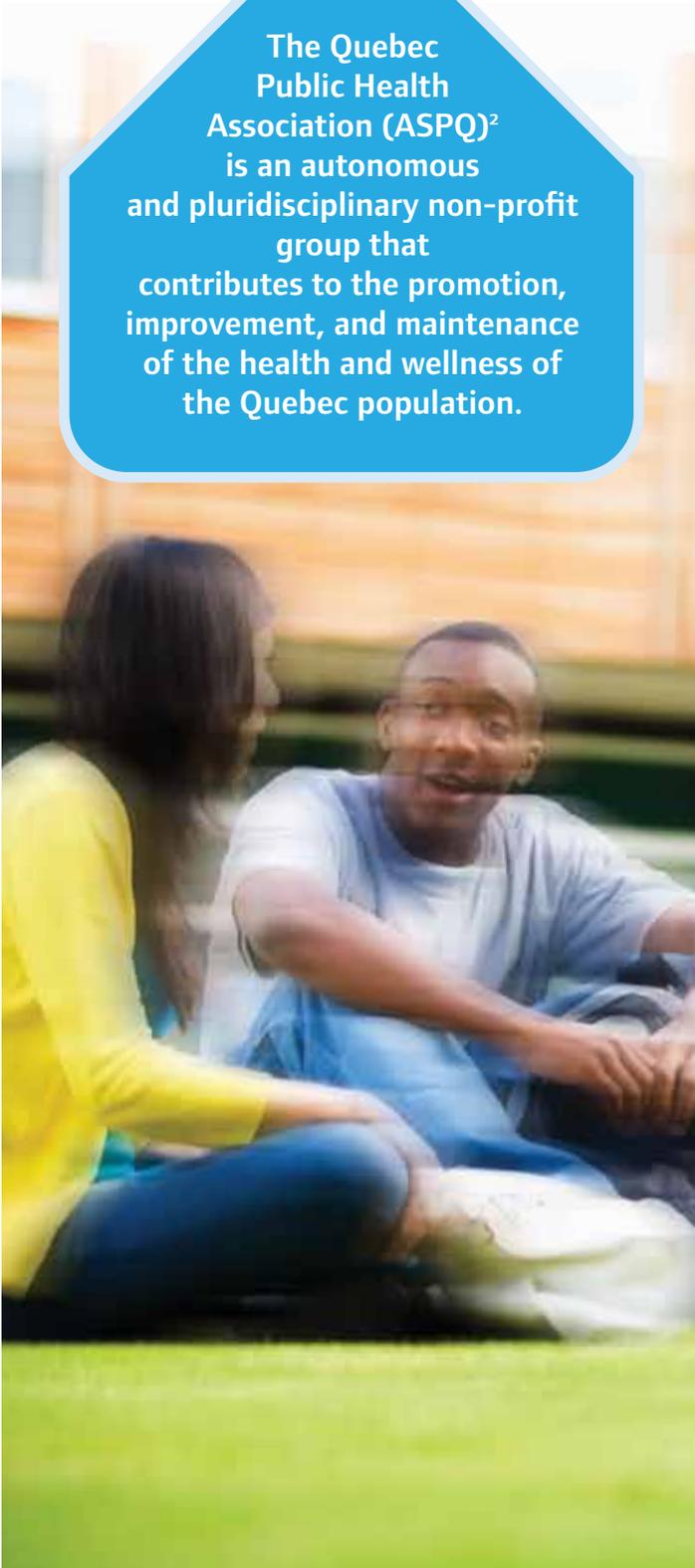


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The views expressed in this document do not necessarily reflect the official positions of the Public Health Agency of Canada.

¹ Free translation of: Urbanisme et environnement alimentaire autour des écoles

Preface



The Quebec Public Health Association (ASPQ)² is an autonomous and pluridisciplinary non-profit group that contributes to the promotion, improvement, and maintenance of the health and wellness of the Quebec population.

Every day, we are faced with a mounting threat that is ailing our societies: the global obesity epidemic. As early as 2003, the World Health Organization (WHO) announced that obesity would be this century's epidemic³ in light of the increase in obesity rates observed in numerous countries.

What is especially alarming about the obesity epidemic is that it is now prevalent among children. In Quebec, nearly one out of four children is overweight or obese, a condition that often persists into adulthood and can result in serious illnesses such as diabetes, cardiovascular disease, and certain types of cancer.

Beyond the health problems caused by obesity, there is its cost: while the treatment of chronic illnesses mobilizes an increasing amount of public resources, other consequences such as absenteeism, loss of productivity or lack of self esteem also bear impact.

Necessary involvement

Faced with this reality, the Government of Quebec has called upon various ministries and organizations to help counter this current trend. The adoption of Quebec's Action Plan for the Promotion of Healthy Lifestyles and the Prevention of Weight Problems – Investing for the Future⁴ (PAG), represents an important stride for public health.

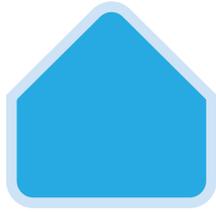
The PAG plans intervention among youth. It is in this specific context that the Ministry of Education, Recreation and Sports introduced, in 2007, a policy framework for healthy eating in all Quebec schools, in order to offer students healthy food environments.

Yet the effort is still insufficient: the presence of fast-food restaurants in proximity to schools reintegrates foods with poor nutritional value into our children's environments, attracted as youth are to the speed of service and low cost of foods.

² Free translation of: Association pour la santé publique du Québec (ASPQ)

³ World Health Organization. (2000). *Obesity: preventing and managing the global epidemic*. WHO Technical Report Series 894, Geneva.

⁴ Free translation of: Plan d'action gouvernemental de promotion des saines habitudes de vie et de prévention des problèmes reliés au poids 2006-2012, Investir pour l'avenir.



Even if it is not possible to entirely eliminate these businesses from school landscapes, it remains possible to limit the introduction of new fast-food establishments in proximity to schools.

Such an endeavour is motivated by values of sustainable development and founded on the principle of precaution, in which municipalities must play a key role.

The Health Network for Quebec's Cities, Towns and Villages (RQVVS)⁵ includes nearly 200 municipalities representing more than 70% of Quebec's population. Its mission is to promote and support the sustainable development of healthy living environments throughout Quebec.

Broadly recognized by Canadian courts, this principle originates from a fundamental tendency that appeared in 1926, when the Supreme Court of the United States delivered its famous judgment in the case of *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) and declared that the evolutionary approach of land use management is in the best public interest. Since then, the Supreme Court of Canada has handed down several rulings of similar nature, irrefutably stating the powers and obligations of municipalities on such matters.

In order to better understand how municipalities can intervene to improve our youth's food environment, the Quebec Public Health Association (ASPQ)², in partnership with the Health Network for Quebec's Cities, Towns and Villages (RQVVS)⁵ and the Quebec Coalition on Weight-Related Problems⁶ (Coalition Poids), conducted action research in three municipalities between 2009 and 2011. The municipalities of Baie-Saint-Paul, Gatineau, and Lavaltrie contributed to the development of the process, while identifying its obstacles and the conditions required for its success.

The lessons drawn from this experience have made possible the preparation of this guide, reviewing legal and urbanistic considerations, as well as the essential steps for the realization of a project of this nature.

⁵ Free translation of: Réseau québécois de Villes et Villages en santé (RQVVS)

⁶ Free translation of: la Coalition québécoise sur la problématique du poids

The Health Network for Quebec's Cities, Towns and Villages (RQVVS)⁵ includes nearly 200 municipalities representing more than 70% of Quebec's population. Its mission is to promote and support the sustainable development of healthy living environments throughout Quebec.

For Whom Is This Guide Intended?



This guide is intended for all who are concerned about the health of children. It presents, in a succinct fashion, a few possible courses of action for municipalities wishing to improve the food environment of children by limiting the presence of fast-food restaurants near schools, with the objective of promoting public health and well-being through sound land-use planning and an appropriate spatial distribution of commercial uses. This guide has an environmental and urbanistic vocation.

Municipalities represent the forum for decision-making closest to citizens and therefore play a primordial role on matters of quality of life. They already encourage physical activity through their sports and recreation programs. They build and maintain safe pedestrian paths and bike routes that facilitate active transportation. Several municipalities adopt intervention programs, such as a family and food policy, which also have a positive effect on the incidence of healthy lifestyles. Other opportunities exist for action in the same direction: this is the objective of this guide.

The first part of this guide will be devoted to the definition of environments favourable to healthy lifestyles, with particular interest for built environments in proximity to schools.

The second part of this guide will be devoted to **land use regulation** near schools. From both **legal** and **urbanistic** points of view, municipalities are fully empowered to consider health and well-being objectives for their populations, all within the framework of applying zoning regulations.

The experience has finally shown us that each context contains its own specific issues, but that real action can be taken in all cases. The guide will thus present the main steps for modifying the environment around schools, according to the context and particularities of each municipality.

Enjoy the read!

ENVIRONNEMENTS FAVOURING HEALTHY LIFESTYLES

Body weight is determined by both individual and environmental factors⁷. Although life choices and habits are controlled by the individual, the environment plays a fundamental role in the decision process. As such, our dietary habits and the practice of physical activity – to name only a few factors – are determined in part by our environment.

The Ministry of Health and Social Services defines an **environment favourable to healthy lifestyles** as being “the set of physical, sociocultural, political and economic elements exercising a positive influence on nutrition, the practice of physical activity and one’s self-esteem and body image”.⁸ This broad definition recognizes the determining influence of what surrounds us at the very moment we make a dietary choice or decide whether or to adopt a physically active lifestyle: price, proximity, diversity in the local supply, advertising and marketing, time available, the built environment in which we live and many others.

In order to effectively reduce the obesity epidemic, it is not sufficient to merely incite individuals to make healthy choices; we must also offer environments that facilitate these choices.

Environment and Obesity

Despite knowing that we need to eat healthier and exercise more, the reality is that the incidence of obesity is growing. Numerous campaigns aiming to promote a healthy diet or physical activity hail individuals to incite them to adopt better lifestyles, but these campaigns run into a serious obstacle: obesogenic environments.

Obesogenic environments are environments that facilitate the adoption of poor lifestyle choices and, as such, facilitate the propagation of the obesity epidemic. Examples include environments that favour the use of a car rather than active transportation, or those where there is easy access to rich foods with poor nutritional value; essentially these are environments where it is more tempting to make poorer choices.

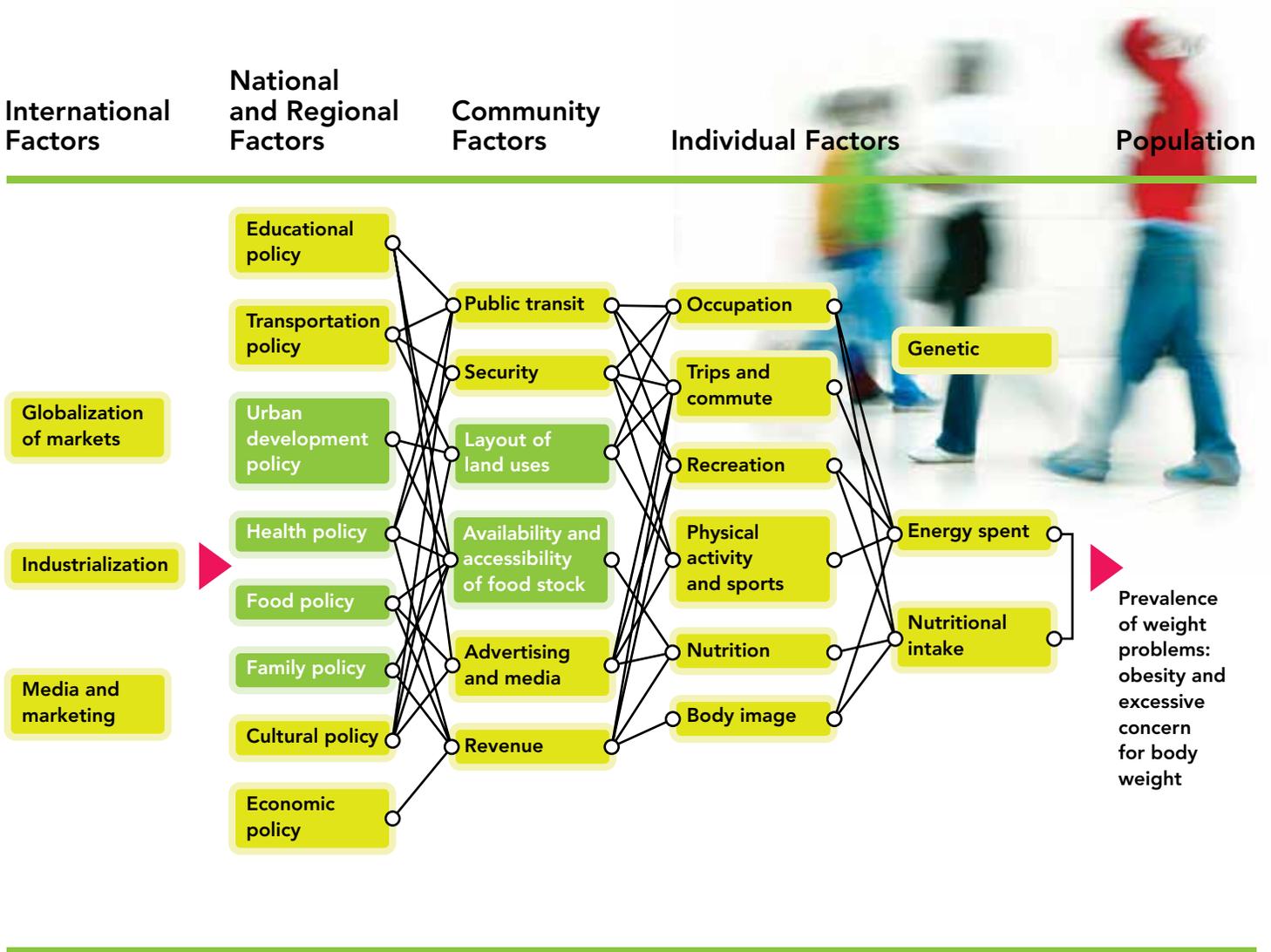
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⁷ Bergeron, P., Reyburn, S. et al. (May 2010). *L'impact de l'environnement bâti sur l'activité physique, l'alimentation et le poids*, Institut national de santé publique du Québec, Collection Politiques publiques et santé.

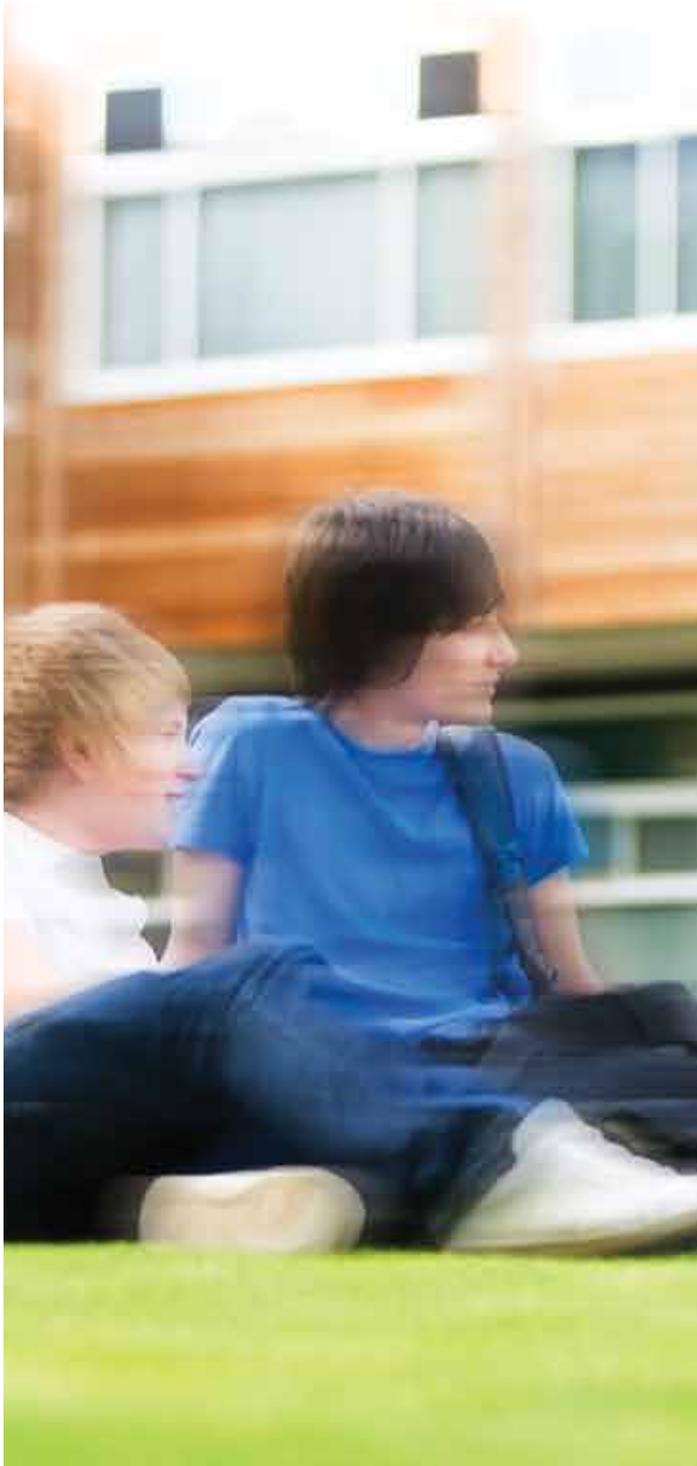
⁸ Mongeau, L. et al. (2011) *Pour une vision commune : Des environnements favorables aux saines habitudes de vie et à la prévention des problèmes reliés au poids*, Direction des communications du ministère de la Santé et des Services sociaux du Québec.



Web of Factors Influencing Weight Problems



Source: Groupe de travail provincial sur la problématique du poids. (October 2004) *Les problèmes reliés au poids au Québec: Appel à la mobilisation*. Page 12.



Modifying Environments With Urban Planning Regulations

The built environment, which notably includes transportation infrastructure, public spaces, and buildings, is a determining factor in our way of living. It results from the territory's spatial organization which is a process influenced by time, cultural heritage, geography, and successive planning visions. In all cases, it influences the time spent outdoors, modes of transport, paths taken, etc.

Recognizing the importance of the built environment for health, the WHO has expressed its preoccupation for the effects of land use planning on health. Several studies have shown that noise, air and soil pollution, security, sedentary lifestyles, lack of accessibility to food staples, tenure and spatial distribution of land uses are just as much factors that influence our health and well-being.

That is why municipalities are called upon more often to act on issues of public health. After long having been considered marginal stakeholders responsible mainly for sanitation and security, municipalities are now recognized for their fundamental role: land use planning for the betterment of its population's quality of life and general well-being. The urban planning tools at their disposal notably allow them to favour the practice of physical activity, active transportation, mixed land uses, better accessibility to businesses and services, etc.

According to Quebec's Court of Appeals, "Environmental protection is henceforth considered to be outside of the private realm, of approximation and of the good will of owners and users, but rather becomes a collective objective supported by legislation and civil, administrative and penal regulation, all symbols of the public nature and interest it represents."⁹

⁹ MRC d'Abitibi c. Ibitiba, [1993] R.J.Q., p. 5 (C.A.)

Fast-food Businesses Around Schools

The profusion and accessibility of fast-food restaurants around schools, in addition to their typical intensive marketing practices, greatly contribute to our youth's consumption of foods with poor nutritional value. The presence of these businesses is one of the elements that make our environments obesogenic. Municipalities, with their authority to intervene, are in the best position to favour the creation of healthy environments, therefore, contributing to resolve weight problems among our youth¹⁰.

Some would argue that fast-food establishments have always existed around schools without necessarily harming the health of children. Nothing could be further from the truth: several studies have shown that the presence of fast-food restaurants near schools significantly increases the risk of obesity, as children are therefore exposed to a food environment of lesser quality. As an example, an American study demonstrated that the presence of this type of restaurant within a radius of 160 metres of a school resulted in an increase of 5.2% of the child obesity rate at the school¹¹.

Quebec schools are not spared by the proliferation of fast-food restaurants in their immediate surroundings, nor from its associated obesity phenomenon. A study conducted by researchers at the Université de Montréal demonstrated that:

37% of public schools in Quebec are located within a 15-minute walk or less from a fast-food chain restaurant; 62% of public schools in Quebec are located within a 15-minute walk or less from a convenience store¹³.

- 37% of public schools in Quebec are located within a 15-minute walk or less from a fast-food chain restaurant;
- 62% of public schools in Quebec are located within a 15-minute walk or less from a convenience store¹³.

A survey¹⁴ conducted by the ASPQ among secondary students in the municipalities of Baie-Saint-Paul, Gatineau, and Lavaltrie clearly demonstrated to what extent these businesses draw youth. The results are conclusive:

- 95% of the children surveyed believe that fast-food restaurants are close enough to their school that they can go and eat there during lunch hour;
- 72% agree that the proximity of the restaurants is a reason to eat out.

It goes without saying that the current problem cannot be instantaneously corrected. It is, however, municipal decision-makers that can intervene right away, notably through their urban planning regulations, so that the situation may improve in the years to come.

¹⁰ Montréal c. Arcade Amusements Inc., [1985] 1 R.C.S. 368

¹¹ Austin, S.B., Melly, S.J., Sanchez, B.N., Patel, A., Buka, S., Gortmaker, S.L. (September 1995). Clustering of fast food restaurants around schools: a novel application of spatial statistics to the study of food environments, *American Journal of Public Health*, 1575-81, 2005.

¹² Currie, J., Della Vigna, S., Moretti, E., Pahtania, V. (2009). *The Effect of Fast Food Restaurants on Obesity*, National Bureau of Economic Research – NBER, working paper #4721.

¹³ Robitaille, E., Bergeron, P., Lasnier, B. (2009). *Analyse géographique de l'accessibilité des restaurants-minute et des dépanneurs autour des écoles publiques québécoises*. Quebec City: Institut national de santé publique du Québec.

¹⁴ Results of the survey on the everyday dietary habits of 2nd cycle high school students conducted by the ASPQ among 1033 individuals surveyed. September 2010. Results analyzed by the SOM agency.

LEGAL AND URBANISTIC ASPECTS

Urban Planning and Public Health: Municipalities Can Intervene

In order to limit the introduction of fast-food establishments around schools, municipalities can modify their urban planning by-laws, in compliance with the powers attributed to them by law.

Land use planning is clearly established as a power belonging to municipalities. In accordance with article 113 of the Act respecting Land use planning and development¹⁵, a municipality may establish land uses and determine, with the aid of adequate cartography, locations where these land uses can be carried out:

Article 113.

The council of a municipality may adopt a zoning by-law for its whole territory or any part thereof.

This by-law may include provisions regarding one or more of the following objects:

1. for the purposes of regulation, to classify structures and uses and, in accordance with a plan forming an integral part of the by-law, to divide the territory of the municipality into zones;
2. (...)
3. to specify, for each zone, the structures and uses that are authorized and those that are prohibited, including public uses and buildings, and the land occupation densities; (...)

Municipalities are also empowered to regulate for the “general welfare of [their] population”, as confirmed by article 85 of the Municipal Powers Act¹⁶.

¹⁵ L.R.Q. c. A 19.1

¹⁶ L.R.Q. c. C 47.1

¹⁷ (2001) C.S.C. 40



Article 85.

In addition to the regulatory powers under this Act, a local municipality may adopt a by-law to ensure peace, order, good government, and the general welfare of its citizens.

This notion of “general welfare” may seem imprecise, but jurisprudence indicates that it is increasingly interpreted to encompass the protection and promotion of the health and well-being of the population. These preoccupations must be included in the guiding principles governing all municipal decisions in the best “public interest”.

In a judgment handed down in 2001, the Supreme Court of Canada recognized that the Town of Hudson has the right to limit use of pesticides on its territory, stating that it is acceptable for a municipal council to consider health and its protection as a collective need and that the objective of improving the health of inhabitants of the Town is a legitimate objective¹⁷. It is as a result of this ruling that the National Assembly adopted article 85 mentioned here above, which came into force on January 1st, 2006.



Several other examples in Québec and Canada support this approach, and it is interesting to discover that the interpretation is the same south of the border. The notion of public interest and the scope of this concept were interpreted in 2005 by the Supreme Court of the United States in the case of *Kelo v. City of New London*. The Court recognized that the notion of public interest could be invoked in urban planning (in this case, on the matter of expropriation for an urban redevelopment project). Even if this is an American case, we have included an excerpt of the ruling here below, which clearly expresses the evolution of urbanistic principles that we can observe in the United States, Quebec and Canada.



Excerpt from the case of *Kelo v. City of London* 545 U.S. 469 (2005):

As with other exercises in urban planning and development, the City is endeavoring to coordinate a variety of commercial, residential, and recreational uses of land, with the hope that they will form a whole greater than the sum of its parts. To effectuate this plan, the City has invoked a state statute that specifically authorizes the use of eminent domain to promote economic development. Given the comprehensive character of the plan, the thorough deliberation that preceded its adoption, and the limited scope of our review, it is appropriate for us, as it was in *Berman*, to resolve the challenges of the individual owners, not on a piecemeal basis, but rather in light of the entire plan. Because that plan unquestionably serves a public purpose, the takings challenged here satisfy the public use requirement of the Fifth Amendment.(...)

Viewed as a whole, our jurisprudence has recognized that the needs of society have varied between different parts of the Nation, just as they have evolved over time in response to changed circumstances. Our earliest cases in particular embodied a strong theme of federalism, emphasizing the “great respect” that we owe to state legislatures and state courts in discerning local public needs. See *Hairston v. Danville & Western R. Co.*, 208 U.S. 598, 606—607 (1908) (noting that these needs were likely to vary depending on a State’s “resources, the capacity of the soil, the relative importance of industries to the general public welfare, and the long-established methods and habits of the people”). For more than a century, our public use jurisprudence has wisely eschewed rigid formulas and intrusive scrutiny in favor of affording legislatures broad latitude in determining what public needs justify the use of the takings power.



General Context for Urban Planning Interventions

In Quebec, rules relating to land use planning and urban planning are established in the Act concerning Land use planning and Development (R.S.Q., c. A-19.1) (hereafter “LUPDA”)¹⁸. Before exploring the avenues available to municipalities for limiting the locating of fast-food establishments around schools, it is important to thoroughly understand the specific role of municipalities on matters of urban planning.

On one hand, the government devises orientations which reflect its expectations in terms of regional planning, and guides regional county municipalities (RCMs) in the preparation of their regional plans or RCM plans.

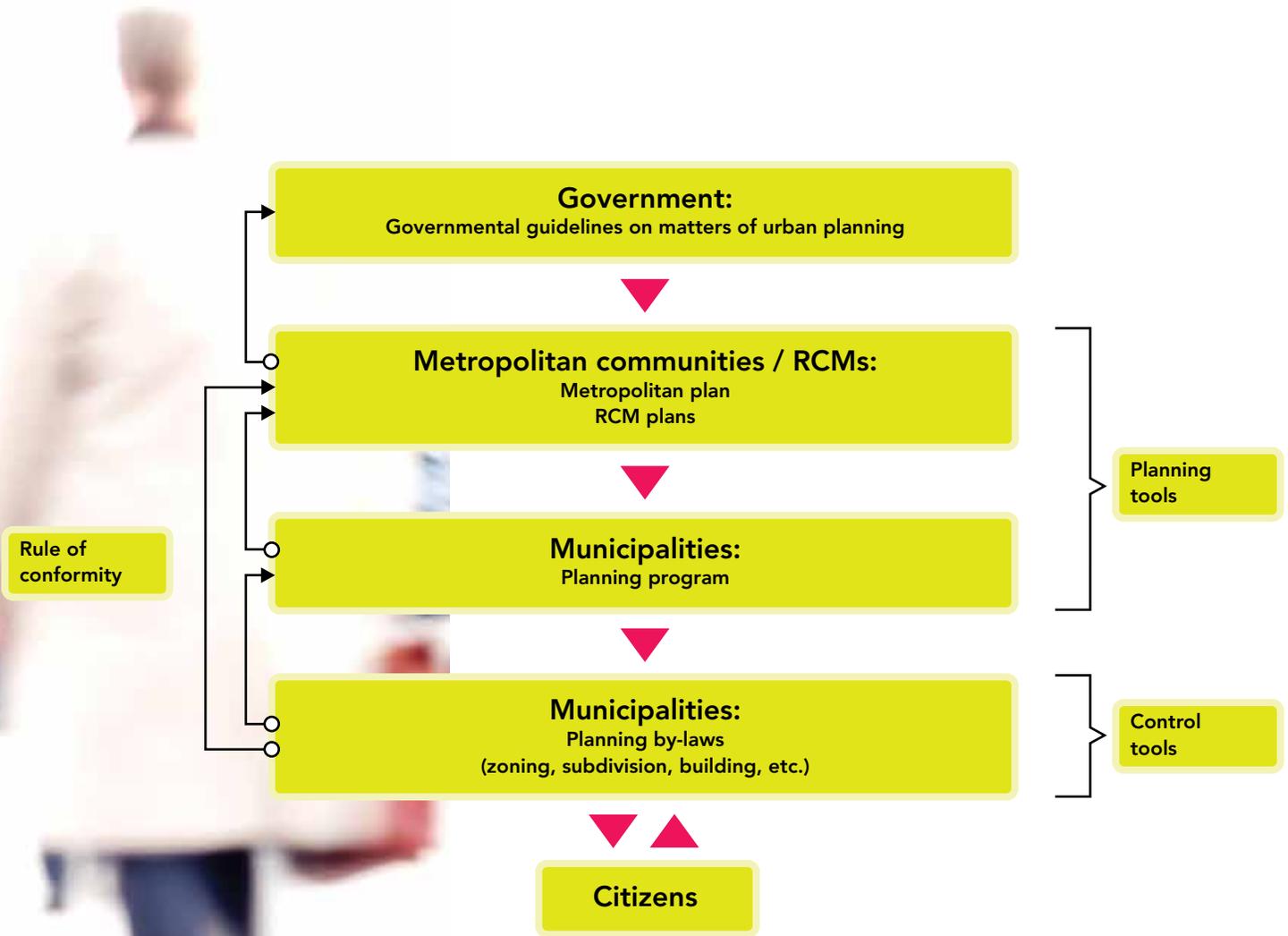
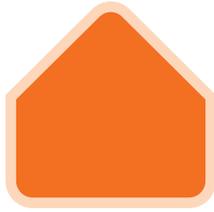
On the other hand, local municipalities and regional county municipalities ensure implementation of the LUPDA through the adoption of planning tools (e.g. RCM plans or regional development plans, and planning programs) which define a planning vision, development and planning orientations, and the guiding rules for land use organization of regional and local territories.

To ensure implementation, municipalities also adopt control tools for their territories in the form of urban planning by-laws such as zoning, subdivision, and building by-laws.

Under the law, a rule of conformity is in turn required to ensure concordance between this territorial planning and the tools that will set it in place.



¹⁸ Adopted in 1979, this law applies to the government, to metropolitan communities, regional county municipalities (RCMs), and to local municipalities and boroughs. For the purpose of the present text, we shall dwell on the roles of RCMs and municipalities only. As this guide is being prepared, the National Assembly is in fact reviewing the LUPDA.





The Zoning By-law

Zoning rests first and foremost on a classification of uses in order to authorize or prohibit them by zones, by categorizing different possible uses within municipal limits (housing, commercial sectors, industry, etc.). We generally encounter a classification of uses identified as main uses (e.g. a restaurant) and others referred to as accessory or complementary uses (e.g. a food concession inside an arena or a gas station).

The zoning by-law aims to authorize or prohibit certain specific uses for each given location (“discrimination of land uses”). For example, it can define the use “fast-food establishment” and authorize it – or ban it – in certain zones.

However, a zoning by-law cannot discriminate against persons or a business enterprise: it is not possible to specifically ban a fast-food chain or to discriminate against a type of restaurant based on its menu.

However, a zoning by-law cannot discriminate against persons or a business enterprise: it is not possible to specifically ban a fast-food chain or to discriminate against a type of restaurant based on its menu.

The classification shall instead be based on parameters such as density, the nature and finality of a use, the impact on the neighbourhood, etc. Within zoning’s framework, a municipality could decide to regulate specific forms (e.g. waiter service, drive-through, food counter, cafeteria, mobile food stands, etc.).

This intervention can take the form of a normative by-law (enforced by a municipal official and leaving little to interpretation) or a discretionary by-law (in which certain criteria are evaluated case by case). In the case of a normative by-law, one must ensure that the definitions of different restaurant types be clear and precise, whereas a discretionary by-law allows to evaluate a use on the basis of complementary criteria indicated in the by-law. A conditional uses by-law that would only authorize these uses under certain conditions could be employed.

Certain municipalities have developed interesting systems for use classification. The Town of Falmouth, Massachusetts¹⁹ has applied a point system to analyze restaurant projects, which could serve as a reference in order to adapt it, if need be, to the legislative context in Quebec. Each restaurant project receives a global score; in order to be authorized in a given zone, a project must reach the minimum score required in that zone. As a consequence, the municipality can be more stringent or more permissive depending on the zone and on favoured land use planning concepts.

¹⁹ In the Town of Falmouth’s zoning by-law, points are attributed, as an example, on the type of service (waiter, counter, drive-through), type of order (waiter or at the counter), the type of container used for the food (wrapped or not), etc.



Limiting Fast-Food Establishments: Available Options

There is more than one mechanism to limit the locating of fast-food establishments in proximity to schools. The adoption of new regulations must take into account variables such as the intervention's setting, the by-laws in force, etc.

In the planning of new neighbourhoods, prohibiting new fast-food establishments is relatively simple (by authorizing only residential uses complementary to the school environment), but the situation becomes much more complex in neighbourhoods that are already all built up and established.

Depending on the area of intervention, a municipality will also be able to employ several types of planning tools to reach the objective of limiting the locating of fast-food establishments around schools. As an example, a municipality can opt for a complete prohibition in proximity to schools located in residential neighbourhoods, whereas it could employ other means in sectors where mixed land uses already exist. We will elaborate on these means, such as the fixing of quotas or conditional uses, in the pages that follow.

In all cases, a clear orientation from municipal council on matters of public health and welfare will be imperative to justify municipal intervention. In fact, the rule of conformity authorized under the LUPDA supports municipal intervention on food offerings around schools, so long as it rests on a clear land use planning vision concerned with public health. This integrated approach is necessary so that public health and welfare can be clearly identified as an objective of regulation and criteria subsequently chosen may refer to this objective.

Normative By-laws

The Prohibition of a Main Use or of an Accessory Use

Through its zoning by-laws, a municipality can specify, for each zone, the uses that are authorized and those that are prohibited (LUPDA, art. 113, par. 1 (3)). This is a simple and effective solution for the development of new neighbourhoods and for predominantly residential sectors. The zoning plan can delimit zones corresponding to a reasonable walking distance from schools, in which restaurants will be prohibited (e.g. in one or more zones encompassing lots located within a distance of 500 meters from schools). If these zones already comprise businesses whose uses become non-compliant, a system to recognize acquired rights adapted to the context can be integrated into the new zoning by-law.

The predominant critique of the complete prohibition approach is that it opposes, to a certain extent, the growing trend by which new development and urban redevelopment favour a mix of land uses (e.g. TOD, Smart Growth, New Urbanism). However, mixed land use in the vicinity of schools can otherwise be achieved so that a sustainable development approach may be preserved for communities (i.e. multifunctional residential hub, institutional and municipal, all while allowing certain commercial activities).

A municipality can also regulate accessory uses by prohibiting food offerings as an accessory use to another main use.



In the planning of certain commercial concepts grouping several distinct uses within a single building that will be in proximity to schooling establishments, the municipality could prohibit certain main or accessory uses within the project (LUPDA, art. 113, par. 2 (20)(22)).

Relative Distances

Another possibility based on normative regulation would be to prescribe relative distancing between different uses, such as between a school and a fast-food restaurant within a given zone or in a contiguous zone (LUPDA, art. 113, par. 2 (4)). This method avoids complex classifications.

As an example, the by-law could authorize certain types of restaurants to establish themselves only if they respect a minimum distance from schools. This distance must rely on an accurate evaluation of students' walking routes and of the type of school (elementary or high school). This regulatory method happens to be frequently used by municipalities wishing to limit the offer of restaurants or bars in urban settings.

Fixing Use Quotas

Lastly, a final normative option exists in fixing food offering quotas (article 113, par. 1 (4.1), LUPDA). This approach, recently added in the legislation, allows the fixing of a maximum number of locations where identical or similar uses can occur, by zone or by groups of contiguous zones, even those uses occurring in a given building. The minimal distance required between such locations or the maximum built area or lot area where these uses occur can also be specified in the by-law.

As an example, the municipality could restrict the number of restaurants to 2 within zones that are adjacent to schools.

In such a case, a zone where 5 restaurants already exist could not receive a new establishment, even if one of the existing restaurants were to close down, as long as the quota is filled. The restaurants would of course be subject to applicable acquired rights, as established in the by-law.

A Complementary Intervention: Standards Relating to Buildings and Layouts

The municipality can complete its intervention by integrating standards in its zoning by-law pertaining to construction and site design.

For example, the land use area or the building footprint, the building's volume, architectural standards, exterior appearance of buildings, lot access and landscaping, parking areas, and finally standards concerning signage could all be the object of particular attention.



Discretionary By-laws

As far as discretionary by-laws are concerned, the most promising is a new technique introduced in the LUPDA in 2002: the conditional uses by-law.

Conditional Uses

The conditional uses by-law defines the criteria to be respected so that a use may be authorized on one or more zones identified by the by-law, such as zones contiguous to an educational facility. According to the Ministry of Municipal Affairs, Regions and Land Occupancy (MAMROT), “the conditional uses technique brings flexibility to regulation as to allow, following an evaluation procedure, the occurrence of uses deemed acceptable by the population and compatible with their setting without having to modify regulations each time”.²⁰

Experts have elaborated on the flexibility applied to uses. In an article published in the journal *Urbanité* in 2009, Marc-André LeChasseur and Marie Bourdeau, two lawyers specialized in municipal law, claim that from the examples provided by the MAMROT, “we can extrapolate that a municipality can freely and lawfully regulate the presence of restaurants in proximity to schools on the basis of conditions that satisfy the requirements of healthy eating”.²¹ When reading this statement, one must keep in mind that the conditions and requirements referred to are in direct relation with the site design, layout and characteristics of establishments that are directly associated with a type of food offering.

The conditional uses by-law must first identify each zone any conditional use that may be authorized. In addition to establishing the procedure required for an authorization request, the by-law must set out the criteria for the evaluation of an authorization request for a conditional use (LUPDA, art. 145.32). Compatibility and complementarity of the use with the school environment are criteria that can be employed, in order to fulfill objectives for public health and healthy dietary habits in the vicinity of educational facilities. The criteria could be evaluated through a scoring system as the Town of Falmouth has implemented, or can be those proposed by the MAMROT²². Before it can come into force, a conditional uses by-law adopted by a municipality must be subjected to the approval process by which persons able to vote may request a referendum on the matter.

²⁰ Ministry of Municipal Affairs, Regions, and Land Occupancy. *La prise de décision en urbanisme, Règlement sur les usages conditionnels*. Consulted at : www.mamrot.gouv.qc.ca

²¹ M^e Marie Bourdeau et Marc-André LeChasseur. (2009). *La malbouffe chez les jeunes, une solution municipale à un problème social*, *Urbanité*.

²² On this topic, the examples of criteria proposed by the Ministry can be consulted (French only) : Ministry of Municipal Affairs, Regions, and Land Occupancy, *La prise de décision en urbanisme, Règlement sur les usages conditionnels*. Consulted at : www.mamrot.gouv.qc.ca.

A CUSTOMIZED APPROACH

The adoption of urban planning regulations to limit the locating of fast-food establishments around schools is a process that requires broad knowledge of the setting and collaboration of several stakeholders. Aside from municipal decision-makers, these means also call upon representatives from the education and health sectors, the business community, and community services. We will present the broad strokes of a customized approach that can ensure that each representative's specific expertise be applied to its full potential.

1. Analyzing the Local Situation

Before undertaking a modification of the regulation in force, it is important to clearly identify needs, as well as the decision-making authorities that will be called upon to intervene.

Defining the Targeted Sector

For most municipalities, the targeted sectors include all their territorial jurisdictions. The targeted sector could, however, be just a part of the municipality's territory, depending on the size of municipality and of its administration (e.g. the existence of boroughs).

Identifying Existing Municipal Initiatives

Over the course of the last few years, municipalities have become increasingly proactive on matters of public health. In addition to sporting activities that have been offered for a long time, several municipalities have adopted family policies, food policies or other initiatives seeking to improve quality of life. These measures are all complementary to interventions limiting the presence of fast-food establishments near schools.

Portraying Schools and Their Environments

The following step consists in building an inventory of educational facilities on the territory in question, and another for the fast-food establishments that border them. Several maps available at the municipality, such as the zoning plan, can also be useful to understand how schools fit into their immediate environment. The creation of such charts can provide insight on the situation and can clearly communicate the issue and its impacts on public health.





Eventually, it may also be useful to assemble a statistical portrait of the population. Statistics made available to citizens by Statistics Canada or by the *Statistics Institute of Quebec*²³ can provide useful insight on the health of the population in the region, by supplying data on the incidence of obesity, on dietary habits, etc. In certain regions, Quebec's Public Health Authority²⁴ also has accurate data on these topics.

Understanding Regulations

Each municipality has a vision for its local and regional planning orientations; knowledge of these orientations is essential in determining how to prepare a regulatory proposition that will contribute to creating environments that are favourable to healthy lifestyles.

Furthermore, these orientations and by-laws are subject to periodic revisions. The planned timetable for revisions should be considered, given it is generally much easier to propose new regulations upon revision of the planning program.

2. Identifying Support

In principle, the RCM plan and the planning program correspond to a specific planning and development vision for the municipality. We must therefore ensure that regulations correspond to local expectations on the improvement of quality of life.

Among the most important stakeholders, we identify local elected officials, municipal administrators – notably the urban planning department – school and health administrations, as well as the parents of concerned students. Furthermore, considering that the by-law proposition can impact businesses that are already established, it may be advisable to solicit support among the local business community.

locating of fast-food establishments around schools. In a survey conducted by the agency Ipsos Descarie in 2010 for the ASPQ, 72% of respondents claimed they were favourable to the proposed measures. The support increases when the people surveyed are faced with the possibility of actually adopting the regulatory measures. In fact, the survey conducted in September 2010 among residents of the three cities participating in the ASPQ's action research demonstrates that support for the restriction on fast-food around schools is greater than the general 2010 survey indicated, reaching 87% support in the cities of Gatineau and Lavaltrie, and 83% in Baie-Saint-Paul.

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²³ Free translation of: Institut de la statistique du Québec

²⁴ Free translation of: Direction de la santé publique



3. Evaluating Regulatory Options

We have seen several regulatory options, both normative and discretionary, to reach the stated goal. Those spearheading the intervention may tend toward certain regulatory options from the outset; yet, it is preferable to go through the motions and evaluate all options. To achieve this, the collaboration of the municipality's urban planning department is essential. In certain cases, seeking out expertise in this type of regulation may prove to be valuable.

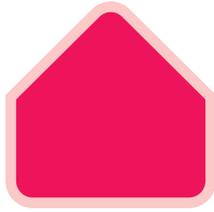
4. Identifying the Procedure for By-law Modification

The steps leading to by-law modification may vary slightly from one municipality to the next based on the structures and uses already in place, and on the type of by-law. A preliminary presentation to an *ad hoc* committee of elected officials and municipal administrators can often serve to set the process in motion. In all cases, the municipal administration will determine the applicable process to reach approval and adoption of the by-law, as well as which authorities must be consulted and the corresponding delays.

In several municipalities, the proposed by-law amendment would first be reviewed by the Planning Advisory Committee (PAC), whose mandate lies in formulating opinions on the various urban planning and development requests brought to its attention. Comprised of local elected officials and residents, the PAC also benefits from the support of urban planning professionals to evaluate its files.

Following a favourable recommendation by the PAC, the municipal council is then ready to consider the proposition. The newly proposed by-law could first be presented to a plenary committee (an informal meeting of elected officials for an in-depth revision), and later be the object of a formal discussion by the municipality's council or executive committee. In the case of certain smaller municipalities, the proposal could come from the municipal administration and then be transferred directly to municipal council. Once the by-law draft has been adopted at a public meeting of the municipal council, it would then be presented to citizens at a public consultation meeting.

The rest of the adoption procedure varies depending on whether the regulatory option selected is a planning program, a zoning by-law, a conditional uses by-law, etc. The drafted by-law can either be adopted or subject to the approval of citizens based on the specific procedure authorized by the LUPDA.



A Summary of the Approach

1. Assembling a Work Team

- Consultants in municipal law and urban planning support the members of a local task team in analyzing the possibilities and different propositions for by-law modifications, while recognizing the applicable urbanistic and legal limitations.

2. Analyzing the Local Situation

- Identifying which decision-makers to implicate
- Defining the targeted territory, be it the whole or a part of the municipality
- Determining the city's orientations and the existing municipal initiatives to promote healthy lifestyles
- Compiling maps of schools and their environments

3. Identifying the Stakeholders

- Elected municipal officials
- Contributors from municipal, health and educational spheres
- Contributors from Québec en Forme
- Parents of concerned students
- Local business community

4. Evaluating the Regulatory Options

A) Normative by-laws

- Prohibition of main use or accessory use
- Relative distances
- Fixing use quotas

B) Discretionary by-laws

- Conditional use by-laws

5. Identifying the Procedure for Municipal By-law Modifications



APPENDIX 1

SUMMARY OF EXPERIENCES IN THE FIELD

Baie-Saint-Paul's Experience

Located approximately 100 km east of Quebec City, Baie-Saint-Paul is part of the administrative region of Quebec's capital city. It is a central hub for services on a regional scale.

The Initial Situation

The municipality already enforces a by-law that seeks to limit fast-food restaurants in certain commercial zones of the city center. The by-law applies to a few small zones and its purposes lies primarily in the preservation and development of the municipality's tourist industry.

On site, we observed the presence of two mobile food stands located near two schools and the arena. These food stands are not governed by the urban planning by-laws because they do not carry out a use in a single zone on a permanent basis.

Very much committed to the promotion of healthy lifestyles, the Town of Baie-Saint-Paul won the RQVVS's Prize of Excellence for its activities in the framework of Agenda 21 in 2006.

Very much committed to the promotion of healthy lifestyles, the Town of Baie-Saint-Paul won the RQVVS's Prize of Excellence for its activities in the framework of Agenda 21 in 2006. The municipality also adopted a family policy that values safe and active transportation and promotes healthy lifestyles.

The Action Research Path

The urban planning department of Baie-Saint-Paul prepared maps showing the existing situation around schools in order to identify the various fast-food establishments in their vicinities, and then considered the available regulatory options.

After the analysis, the municipal council decided to emphasize the optimal management of land uses tied to food offerings around schools, bringing forth a by-law based on conditional uses.

In its decision process, the municipal council had to ensure that there would be coherence between the type of by-law selected and the municipal priorities already identified for the Baie-Saint-Paul's town centre. The by-law had to account for the Town's desire to preserve the architectural heritage of its urban environment, promote healthy eating for youth, and encourage the local agri-food economy. By offering local products and produce to the town centre's clientele, restaurants contribute to the development of agritourism in Baie-Saint-Paul.

Finally, the urban planning department was mandated to create a conditional use by-law which is expected to be in force and applied by the municipality before the end of 2011.

The project received much support from the community, notably from the Mayor of Baie-Saint-Paul, Mr. Jean Fortin. The project team had also identified a number of organizations that it hoped to have as project associates, including the *Commission scolaire de Charlevoix*, the *Association des gens d'affaires de Baie-Saint-Paul* and Charlevoix's Chamber of Commerce to name a few.



Photo Credit: François Rivard

Project Team

Composed of various stakeholders involved with the local food environment and education, the project team was lead by the following persons:

Martin Bouchard

Director General, *Ville de Baie-Saint-Paul*

Sara Coulombe

Social Worker, *CSSS de Charlevoix*

Roxane Duby

Coordinator, *Énergie Charlevoix*

Martine Dufour

Principal, *École polyvalente Saint-Aubin*

Vincent Duquette

Urban Planner, *Ville de Baie-Saint-Paul*

Jean Fortin

Mayor, *Ville de Baie-Saint-Paul*

Nathalie Fortin

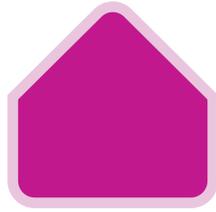
Project Manager, *Association pour la santé publique du Québec*

Patrick Fregni

Representative for the *Association des gens d'affaires de Baie-Saint-Paul*, Culinary Chef at *Culinarium du 51*

Diane Lemire

Director of urban planning, heritage and culture
Ville de Baie-Saint-Paul



Gatineau's Experience

The Initial Situation

Spanning a large territory comprised of five sectors (Aylmer, Buckingham, Gatineau, Hull, Masson-Angers), the municipality of Gatineau is recognized for its leadership and its initiatives on matters of quality of life. It already has a family policy and a social development policy, the first food policy implemented in Quebec and it has been a member of the RQVVS for nearly 10 years. Innovative initiatives are also under way in Gatineau, including the mandatory inclusion of interior parking spaces for bicycles in certain cases.

As in other settings, the presence of fast-food establishments in proximity to schools is a reality. Despite the fact that 10 of the city's 13 high schools have a fast-food establishment within a distance 500 meter radius, only 4 of them have fast-food establishments that are accessible within a 500-meter walk.

In addition, the City of Gatineau is currently revising its RCM plan, a project that began in 2010 and that will span until 2013; it is also continuing to review its structure for business development which will be completed in 2011.

The City of Gatineau is currently revising its RCM plan, a project that began in 2010 and that will span until 2013. It is also continuing to review its structure for business development which will be completed in 2011.

The Action Research Path

The project team recognized that the situation of schools in Gatineau, in regards to their food environments, differed considerably from one sector to the next. Elementary schools and high schools in particular, had very different realities. For these reasons, the adoption and application of a single by-law over the entire municipality was not a foreseeable regulatory option.

The project team recognized the necessity to adapt regulations to the various sectors, but was also very interested in by-law revision processes currently underway in Gatineau, notably the revision of the RCM plan and the revision of the structure for business development.

The quality and diversity of the project team members, enabled them to tackle complex issues with enriching discussions. It is expected that municipal authorities will value and apply principles aiming to improve food environment around schools, upon revision of the RCM plan.



Project Team

Composed of various stakeholders involved with the local food environment and education, the project team was lead by the following persons:

Claude Beaulieu

Representative, *Table des directions des établissements d'écoles secondaires de l'Ouest du Québec*

Clothilde Béré-Pelletier et Frédérick Bilodeau

Urban Planners, Planning Regulation Agents, *Ville de Gatineau*

Linda Chénier

Dietician-Nutritionist, *Équipe de promotion des saines habitudes de vie, CSSS de Gatineau*

Magdalena Dudek

Planning Regulation Agent, *Ville de Gatineau*

Anick Fortin

Clerk, *Commission Gatineau Ville en santé*

Nathalie Fortin

Project Manager, *Association pour la santé publique du Québec*

Gilbert Gagnon

Urban Planner – Head of Planning Regulations, *Ville de Gatineau*

Denise Laferrière

Municipal Councillor
Présidente de la Commission Gatineau Ville en santé

Véronique Ouellet St-Denis

Dietician-Nutritionist, *Prévention et Promotion des saines habitudes de vie, CSSS de Papineau*

Michel Parenteau

Commissioner, *Commission scolaire des Draveurs*

Richard Sévigny

Development Officer, *Conférence régionale des élus de l'Outaouais*

Gilles St-Louis

Arena Coordinator, *Ville de Gatineau*

Annick Tremblay

Lawyer and Legal Consultant in Urban Planning, *Ville de Gatineau*



Lavaltrie's Experience

The Initial Situation

Having experienced an important population increase, with residents that are in fact significantly younger than the Quebec average, the Town of Lavaltrie is home to approximately 2 400 households with children over a total population of more than 12 500 habitants. Located 50 km east of Montreal, a good part of its citizens devote 3 hours of the day for their commute to work.

However, the Town of Lavaltrie is conscious of the challenge and is providing constant efforts to improve the quality of life of its citizens. The recent adoption of a family policy in 2008 has established new collaboration with the school board for more intensive use of sporting and cultural facilities. Lavaltrie's commitment to the adoption of healthy lifestyles also takes form with the Lavaltrie Health Committee²⁵, created in 2008 to promote physically active lifestyles and healthy eating.

The efforts provided by the Town and the community are confronted by serious obstacles. The presence of several fast-food establishments with low-cost menus undeniably draws in youth, and their parents who often are hard-pressed to balance professional and family life.

As a consequence, each of the 5 elementary and high schools in the Town has at least one fast-food establishment within less than 500 meters. A survey conducted among students at De la Rive High School²⁶ irrefutably confirms the situation: more than 60% of students questioned confirmed that they consumed their lunches from time to time, or most of the time, in a fast-food establishment.

A survey conducted among students at *école secondaire de la Rive*²⁶ irrefutably confirms the situation: more than 60% of the students questioned confirmed that they consumed their lunches from time to time, or most of the time, in a fast-food establishment.

The Action Research Path

Thanks to the active participation of the members of Town Council, the director general's office and the urban planning department of the Town of Lavaltrie, the project team first prepared maps showing schools and neighbouring zones before examining the regulatory options available.

With the objective being to prohibit fast-food establishments around schools within a radius of 500 meters, the team proposed a classification of food offerings which allowed a distinction between fast-food establishments, convenience stores, and other types of restaurants. Given the existence of such businesses within the bounds of the municipality, the project team also proposed to revise the acquired rights system to support the orientations chosen.

Narrow collaboration between the municipal and educational sectors and authorities for social issues and hygiene, as well as the commitment of the director general's office and the elected officials of Lavaltrie, have led to tangible propositions for the modification of zoning standards. These modifications will be brought forth by the municipality in the revised planning program and zoning by-law expected in the coming months.

²⁵ Free translation: Comité Santé Lavaltrie

²⁶ Free translation: École secondaire De la Rive



Project Team

Composed of various stakeholders involved with the local food environment and education, the project team was lead by the following persons:

Marc-Olivier Breault

Assistant Director General, *Ville de Lavaltrie*

Anne-Marie Brochu-Girard

Coordinator, *Comité Santé Lavaltrie*

Dominique Corbeil

Planning and Programming Clerk

Dossier Nutrition

Direction de santé publique et d'évaluation

Agence de la santé et des services sociaux de Lanaudière

Nathalie Fortin

Project Manager, *Association pour la santé publique du Québec*

Carol Rivest

Urban Planner

Hélène Robillard

Principal, *École secondaire de la Rive*

Sabine Roblain

Liaison Officer – food security

Table des partenaires du développement social de Lanaudière

Mélanie Roch

Communications Officer, *Ville de Lavaltrie*

References Consulted

- Driezen, P., Fraser, S. N., Hanning, R. M., Lambraki, I. A., McCargar, L. J., Storey, K. E. (2009). Determinants Diet Quality Among Canadian Adolescents. *Canadian Journal of Dietetic Practice and Research*, 70(2), 58-65.
- Harrison, M. & Jackson, L. A. (2009). Meanings That Youth Associate With Healthy and Unhealthy Food. *Canadian Journal of Dietetic Practice and Research*, 70(1), 6-12.
- Garriguet, D. (2004). *Overview of Canadians' Eating*. Ottawa: Statistics Canada. Consulted at <http://www.statcan.gc.ca/pub/82-620-m/82-620-m2006002-eng.pdf>
- Morin, P. & al. (2009). *Portrait des jeunes Sherbrookoises de 4 à 17 ans en matière d'alimentation et d'activité physique et sportive*. Consulted at http://www.quebecenforme.org/media/6155/2010-04_portrait_jeunes_sherbrookoises.pdf
- Bédard, B., L. Dubois, R. Baraldi, N. Plante et autres (2010). *Les jeunes québécoises à table : regard sur les repas et collations. Enquête sur la santé dans les collectivités canadiennes – nutrition (2004)*. Québec : Institut de la statistique du Québec. Consulted at http://www.stat.gouv.qc.ca/publications/sante/pdf2010/nutrition_jeunes_queb.pdf
- Heymsfield, S. B., Keller, K. L. & St-Onge, M.-P. (2003). Changes in childhood food consumption patterns : a cause for concern in light of increasing body weights. *American Journal of Clinical Nutrition*, 78(6), 1068-1073. Consulted at <http://www.ajcn.org/content/78/6/1068.full.pdf+html>
- Batada, A., Marchlewicz, E. & Wootan, M. G (2008). *Kids' meal : Obesity on the Menu*. Washington : Center for science in the Public Interest. Consulted at <http://www.cspinet.org/new/pdf/kidsmeals-report.pdf>
- Brownell, K. D., Harris, J. L., Schwartz, M. B., Henderson, K. E. & Puhl, R. M. (2009). The Need for Bold Action to Prevent Adolescent Obesity. *Journal of Adolescent Health*, 45(3), S8-S17. Consulted at <http://download.journals.elsevierhealth.com/pdfs/journals/1054-139X/PIIS1054139X09001074.pdf>
- French, S. A., Harnack, L. J., Jeffery, R. W., Oakes, J. M., Rydell, S. A. & Story, M. (2008). Why Eat at Fast-Food Restaurants : Reported Reasons among Frequent Consumers. *Journal of the American Dietetic Association*, 108(12), 2066-2077. Consulted at [http://www.adajournal.org/article/S0002-8223\(08\)01728-8/abstract](http://www.adajournal.org/article/S0002-8223(08)01728-8/abstract)
- Sandy, R., Liu, G., Ottensmann, J., Tchernis, R., Wilson, J. & Ford, O. T. (2011). Studying the Child Obesity Epidemic With Natural Experiments. Dans M. Grossman & N. H. Mocan (Dir.), *Economic Aspects of Obesity* (pp. 181-221). Chicago : University of Chicago Press.
- Bowman, S. A., Ebbeling, C. B., Gortmaker, S. L., Ludwig, D. S. & Pereira, M. A., (2004). Effects of Fast-Food Consumption on Energy Intake and Diet Quality Among Children in a National Household Survey. *Pediatrics*, 113(1), 112-118. Consulted at <http://pediatrics.aappublications.org/content/113/1/112.full.pdf+html?sid=57da6b22-5cdb-4d8f-845e-2c71ec745f77>
- Beydoun, M. A. & Wang, Y. (2009). Parent-child dietary intake resemblance in the United States : Evidence from a large representative survey. *Social Science and Medicine*, 68(12), 2137-2144.
- Neilsen, S. J., Popkin, B. M. & Siega-Riz, A. M. (2002). Trends in Food Locations and Sources among Ado and Young Adults. *Preventive Medicine*, 35(2), 107-113.
- Ball, K., Crawford, D. A. & Timperio, A. F. (2006). Understanding environmental influences on nutrition and physical activity behaviours : where should we look and what should we count? *International Journal of Behavioral nutrition and physical activity*, 3(33). Consulted at <http://www.ijbnpa.org/content/pdf/1479-5868-3-33.pdf>
- Van Der Horst, K. (2009). *Environmental determinants of overweight in Rotterdam schoolchildren* (Thèse de doctorat, Erasmus University Medical Center, Rotterdam). Consulted at http://publishing.eur.nl/ir/repub/asset/16933/091007_Horst-Nachtegaal,%20Klazine-Anja%20van%20der.pdf
- Sigfúsdóttir, I. D., Kristjánsson, Á. L. & Allegrante, J. P. (2007). Health behaviour and academic achievement in Icelandic school children. *Health Education Research*, 22(1), 70-80. Consulted at <http://her.oxfordjournals.org/content/22/1/70.full.pdf+html>

Proximity to businesses with food offerings (24 studies):

- Bilette, J.M., Calhoun, M., He, J., Hole, D., Kristjansson, E., Leclair, S., McKinnon, J., Prince-Ware, S., Russell, K., Sawada, M. (2010). *Neighbourhood and individual characteristics that predict healthy eating and overweight/obese Body Mass Index*. Consulted at http://137.122.133.36/neighbourhoodstudy.ca/pubs/Forum_FoodEnvironmentbkj.pdf
- Cutumisu, N., Edwards, J., Raine, K. D., Smoyer-Tomic, K. & Spence, J. C. (2009). Relation between local food environments and obesity among adults. *BMC Public Health*, 9(192). Consulted at <http://www.biomedcentral.com/content/pdf/1471-2458-9-192.pdf>
- Daniel, M., Kestens, Y. (2007, mai). *Éliminer la malbouffe et remplir les McDo? Étude du paysage alimentaire autour des écoles montréalaises*. Communication présentée au 75^e congrès de l'ACFAS, Trois-Rivières, Québec.
- Robitaille, É. (2009). *Indicateurs géographiques de l'environnement bâti et de l'environnement des services influant sur l'activité physique, l'alimentation et le poids corporel*. Québec: Institut National de Santé Publique du Québec. Consulted at http://www.inspq.qc.ca/pdf/publications/1001_IndGeoEnvBati.pdf
- Bergeron, P., Lasnier, B. & Robitaille, É. (2009). *Analyse géographique de l'accessibilité des restaurants-minute et des dépanneurs autour des écoles publiques québécoises*. Québec: Institut National de Santé Publique du Québec. Consulted at http://www.inspq.qc.ca/pdf/publications/964_AnalyAccessRestau_Depan.pdf
- Laguë, J., Paquette, M.-C., Plamondon, L. & Strecko, J. (2009). *Analyse sommaire d'initiatives favorables à l'amélioration de l'environnement alimentaire des restaurants*. Québec: Institut National de Santé Publique du Québec. Consulted at http://www.inspq.qc.ca/pdf/publications/1023_AnalInitiativesAmeliorationEnvironnRestau.pdf
- Larson, N. I., Nelson, M. C. & Story, M. T. (2009). Neighborhood Environments: Disparities in Access to Healthy Foods in the U.S. *American Journal of Preventive Medicine*, 36(1), 74-81.
- Nielsen, S. J., Popkin, B. M. & Siega-Riz, A. M. (2002). Trends in Food Locations and Sources among Adolescents and Young Adults. *American journal of Preventive Medicine*, 35(2), 107-113.
- Diez Roux, A. V., Morland, K. & Wing, S. (2006). Supermarkets, Other Food stores, and Obesity: The Atherosclerosis Risk in Communities Study. *American Journal of Preventive Medicine*, 30(4), 333-339.
- Brug, J., Crawford, D., Oenema, A., Roberts, R., Timperio, A. & Van Der Horst, K. (2008). The School Food Environment: Associations with Adolescent Soft Drink and Snack Consumption. *American Journal of Preventive Medicine*, 35(3), 217-223.
- Bryn Austin, S., Buka, S., Gortmaker, S. L., Melly, S. J., Patel, A. & Sanchez, B. N. (2005). Clustering of Fast-Food Restaurants Around Schools: A Novel Application of Spatial Statistics to the Study of Food Environments. *American Journal of Public Health*, 95(9), 1575-1581. Consulted at <http://ajph.aphapublications.org/cgi/content/full/95/9/1575?maxtoshow=&hits=10&RESULTFORMAT=&fulltext=Clustering+of+fast-food+restaurants+around+School+A+Novel+Application+of+Spatial&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT>
- Curriero, F.C., Feng, J., Glass, T.A., Schwartz, B.S., Stewart, W.F. (2009). The built environment and obesity: a systematic review of the epidemiologic evidence. *Health and Place*, 16(2), 175-190.
- Powell, L.M., Zenk, S.N. (2008). US secondary schools and food outlets. *Health and Place*, 14(2), 336-346.
- Baxter, J., Jeffery, R., Linde, J., McGuire, M. (2006). Are fast food restaurants an environmental risk factor for obesity? *The International Journal of Behavioral Nutrition and Physical Activity*, 3(2). Consulted at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1397859/>
- Currie, J., DellaVigna, S., Moretti, E., Pathania, V. (2009). The effect of fast food restaurants on obesity. *National Bureau of Economic Research*. Consulted at <http://www.nber.org/aginghealth/2009n01/w14721.html>
- Gittelsohn, J., Kumar, M.B. (2007). Preventing childhood obesity and diabetes: is it time to move out of the school? *Pediatric Diabetes*, 8(Supp 9), 55-69.
- Borradaile, K. E., Sherman, S., Vander Veur, S. S., McCoy, T., Sandoval, B., Nachmani, J., Foster, G. D. (2009). Snacking in Children: The Role of Urban Corner Stores. *Pediatrics*, 124(5), 1293-1298.
- Angelescu, A., Fielding, J.E., Kwan, D., Shih, M., Simon, P. A., (2008). Proximity of fast food restaurants to schools: do neighborhood income and type of school matter. *Preventive Medicine*, 47(3), 284-288.

- Chehimi, S., Mikkelsen, L. (2007). - *The Links Between the Neighborhood Food Environment and Childhood Nutrition*. Consulted at <http://www.rwjf.org/pdf/foodenvironment>.
- (2009, 17 juin). Living Near Fast Food Outlet Not A Weighty Problem For Kids. Science News. Consulted at http://www.sciencedaily.com/releases/2009/06/090616122115.htm?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+sciencedaily+%28ScienceDaily%3A+Latest+Science+News%29
- Day, P., Pearce, J., Walton, M. (2009). Examining the interaction between food outlets and outdoor food ads with primary school food environments. *Health and Place*, 15(3), 811-818.
- Bentley, R. J., Kavanagh, A. M., Thornton, L. E. (2009). Fast food purchasing and access to fast food restaurants: a multilevel analysis of VicLANES. *The International Journal of Behavioral Nutrition and Physical Activity*, 6(1).

Municipal powers and policies (15 studies)

- Paquin, S. (2009). *Le zonage municipal un outil contribuant à créer un environnement bâti favorable aux saines habitudes de santé*. Institut national de santé publique du Québec. Consulted at http://www.inspq.qc.ca/pdf/publications/912_ZonageMunicipi.pdf
- Arcand, L., Choinière, C., Martin, C., Palluy, J., Roberge, M.C. (2010). *Réussite éducative, santé, bien-être - agir efficacement en contexte scolaire : Synthèse de recommandations*. Institut national de santé publique du Québec. Consulted at http://www.inspq.qc.ca/pdf/publications/1065_ReussiteEducativeSanteBienEtre.pdf
- Ashe, M., Galaz, R., Jernigan, D., Kline, R. (2003). Land use planning and the control of Alcohol Tobacco Fire arms and Fast Food. *American Journal of Public Health*, 93(9), 1404-1408.
- Mair, J. M., Pierce, M. W., Teret, S. P., (2005). *The City Planner's Guide to the Obesity Epidemic Zoning and Fast Food*. Consulted at <http://www.publichealthlaw.net/Zoning%20City%20Planners%20Guide.pdf>.
- Mair, J. M., Pierce, M. W., Teret, S. P., (2005). *Zoning To Restrict Fast Food Outlets A Potential Strategy*. Consulted at <http://www.publichealthlaw.net/Zoning%20Fast%20Food%20Outlets.pdf>.
- Collins, J., Dietz, W., Frieden, T. R. (2010). Reducing Childhood Obesity Through Policy Change, *Health Affairs*, 29(3), 357-363.
- Burns, A. C., Parker, L., Sanchez, E. (2009). *Local Government Actions to Prevent Childhood Obesity*. Washington, D.C.: The National Academy Press.
- Spacht, A.C. (2009). The Zoning Diet Using Restrictive Zoning to Shrink American Waistlines. *Notre Dame Law Review*, 85(i), 391-418.
- (2009). *NYC Lawmaker Proposes Fast Food Zoning Law for Schools*. Consulted at <http://www.rwjf.org/childhoodobesity/digest.jsp?id=10405>
- Wiggins, O. (2010, 26 janvier). *Pr. George's leader wants to curb county's fast-food eateries*. Washington Post. Consulted at <http://www.washingtonpost.com/wp-dyn/content/article/2010/01/25/AR2010012503078.html>
- Freudenberg, N., Libman, K., O'Keefe, E. (2010). A tale of two obesCities: the role of municipal governance in reducing childhood obesity in New York City and London. *Journal of Urban Health*, 87(5), 755-770.
- Chaloupka, F. J., Johnston, L. D. (2007). Bridging the Gap: research informing practice and policy for healthy youth behaviour. *American Journal of Preventive Medecine*, 33(Suppl 4), 147-161.
- London Borough of Barking and Dagenham. (2009) - *Consultation Draft Supplementary: Planning Document - Addressing the health impacts of hot food takeaways*. Consulted at http://consult.lbbd.gov.uk/portal/planning_policy/draft_spd/hft?pointId=884525
- Guldbbrandsson, K., Rasmussen, F., Wennerstad, K. M. (2009). Municipal policies and plans of action aiming to promote physical activity and healthy eating habits among schoolchildren in Stockholm, Sweden: a cross-sectional study. *Implementation Science*, 4-47.

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